

Take Care of  
Your Mind

# SACHEM HEALTH EDUCATION

Take Care of  
Your Body

Get Regular Health Screenings



It's Okay to  
Ask for help

Exercise  
Your Mind

Health is Wealth

## HIGH SCHOOL WORKBOOK 2023-2024

Avoid Injury

eat healthy fat

Less Stress

This book belongs to:

Don't skimp on sunscreen

Daily dose of Vitamin D

Reach out for Support

Be Kind to Yourself

Check Your Blood Pressure



# Table of Contents

## **Introduction to Health**

<i>What is Health? The Health Triangle Worksheet</i>	<b>1</b>
<i>The Health Triangle Worksheet Dimensions of Wellness</i>	<b>2</b>
<i>Dimensions of Wellness</i>	<b>3</b>
<i>Wellness Wheel &amp; Reflection Questions</i>	<b>4-5</b>
<i>Perception vs. Reality</i>	<b>6</b>
<i>The Norm</i>	<b>7</b>
<i>Risk &amp; Protective Factors / Analyzing Influences</i>	<b>8-9</b>
<i>Parent Teen Communicator</i>	<b>10-11</b>
<i>Values Clarification</i>	<b>12-13</b>
<i>Media &amp; Branding</i>	<b>14-15</b>
<i>Tips for Assessing Risk</i>	<b>16</b>
<i>Images: Self &amp; Culture</i>	<b>17</b>
<i>Social Media</i>	<b>18-20</b>
<i>C.R.A.A.P.</i>	<b>21</b>
<i>Media &amp; Health</i>	<b>22</b>
<i>Family Interview</i>	<b>23-24</b>
<i>Self-Esteem</i>	<b>25-27</b>
<i>Planning and Goal Setting</i>	<b>28-30</b>
<i>Thinking About your Own Goals</i>	<b>31-33</b>
<i>SMART Goals</i>	<b>34-35</b>
<i>The Art of Assertiveness</i>	<b>36-37</b>
<i>Taking Charge</i>	<b>38</b>
<i>I-Statements</i>	<b>39</b>

## **Stress / Mental Health**

<i>Stress: Introduction Notes; What is Stress?</i>	<b>40-43</b>
<i>Managing Stress &amp; Other Emotions</i>	<b>44-47</b>
<i>Stress Test</i>	<b>48</b>
<i>Effects of Stress</i>	<b>49</b>
<i>Causes of Stress</i>	<b>50</b>
<i>Time Stress Questionnaire</i>	<b>51-52</b>
<i>Mindfulness</i>	<b>53-56</b>
<i>Mental Illness Pretest</i>	<b>57</b>
<i>Mental Health</i>	<b>58-61</b>
<i>Eating Disorders</i>	<b>62-63</b>
<i>Mental Health Chart</i>	<b>64</b>
<i>The Mind Explained: Anxiety</i>	<b>65</b>
<i>Mental Health Warning Signs</i>	<b>66</b>
<i>Mental Health Cheat Sheet</i>	<b>67</b>
<i>Taking Control</i>	<b>68-69</b>

## **Communicable & Non-Communicable Diseases**

<i>Communicable &amp; Noncommunicable Diseases</i>	<b>70</b>
<i>Leading Causes of Death</i>	<b>71</b>
<i>Communicable Disease Notes</i>	<b>72-73</b>
<i>The Immune Response</i>	<b>74</b>
<i>COVID-19 &amp; Influenza</i>	<b>75-76</b>
<i>NYS Immunizations</i>	<b>77</b>
<i>Communicable Disease Progression Diagram</i>	<b>78</b>
<i>Lyme Disease</i>	<b>79</b>
<i>West Nile Virus</i>	<b>80</b>

<i>Foodborne Illness</i>	<b>81</b>
<i>Sexually Transmitted Infections &amp; Questions</i>	<b>82-84</b>
<i>HIV/AIDS</i>	<b>85-86</b>
<i>Family Health History</i>	<b>87-88</b>
<i>Noncommunicable Diseases</i>	<b>89</b>
<i>Cancer, Skin Cancer &amp; Sunscreen, Breast &amp; Testicular Cancer</i>	<b>90-96</b>
<i>Cardiovascular Disease</i>	<b>97-102</b>
<i>CPR</i>	<b>103</b>
<i>Diabetes</i>	<b>104-105</b>
<i>Noncommunicable Disease Review</i>	<b>106-107</b>

### ***Intro to Drugs / Substances***

<i>Introduction &amp; What is Worth Knowing?</i>	<b>108-109</b>
<i>Substances Chart</i>	<b>110-111</b>
<i>Drug Vocab Crossword</i>	<b>112</b>
<i>Tobacco / Vaping</i>	<b>113-115</b>
<i>Alcohol</i>	<b>116-122</b>
<i>Marijuana</i>	<b>123-126</b>
<i>Over the Counter Medications</i>	<b>127-129</b>
<i>Misuse &amp; Abuse</i>	<b>130-131</b>
<i>Prescription Drugs</i>	<b>132</b>
<i>Heroin, Opioids, Fentanyl, MDMA</i>	<b>133-138</b>
<i>Substances Review</i>	<b>139</b>

### ***Nutrition***

<i>Building a Healthy Meal / Plant Based Diets</i>	<b>140-145</b>
<i>Nutrition Vocabulary Terms &amp; Quiz</i>	<b>146-147</b>
<i>Six Basic Nutrients</i>	<b>148-149</b>
<i>The Food Label</i>	<b>150</b>
<i>Portion Sizes</i>	<b>151</b>
<i>Physical Activity</i>	<b>152-155</b>
<i>Nutrition Review</i>	<b>156</b>

### ***Relationships***

<i>Sexual Harassment</i>	<b>157</b>
<i>Values &amp; Relationships, Healthy &amp; Unhealthy Signs</i>	<b>158-160</b>
<i>Relationship Health / Evaluating a Relationship &amp; Circle</i>	<b>161-163</b>
<i>Relationship BINGO, Equality Wheel</i>	<b>164-165</b>
<i>Power &amp; Control Wheel, Relationship Continuum</i>	<b>166-167</b>
<i>Music / Relationships</i>	<b>168</b>
<i>Sexting</i>	<b>169-170</b>
<i>Puberty / Reproductive Systems / Conception &amp; Childbirth</i>	<b>171-174</b>
<i>Parenting</i>	<b>175-177</b>
<i>Family Living / Statistics</i>	<b>178-179</b>
<i>Abstinence</i>	<b>180-181</b>

### ***Miscellaneous***

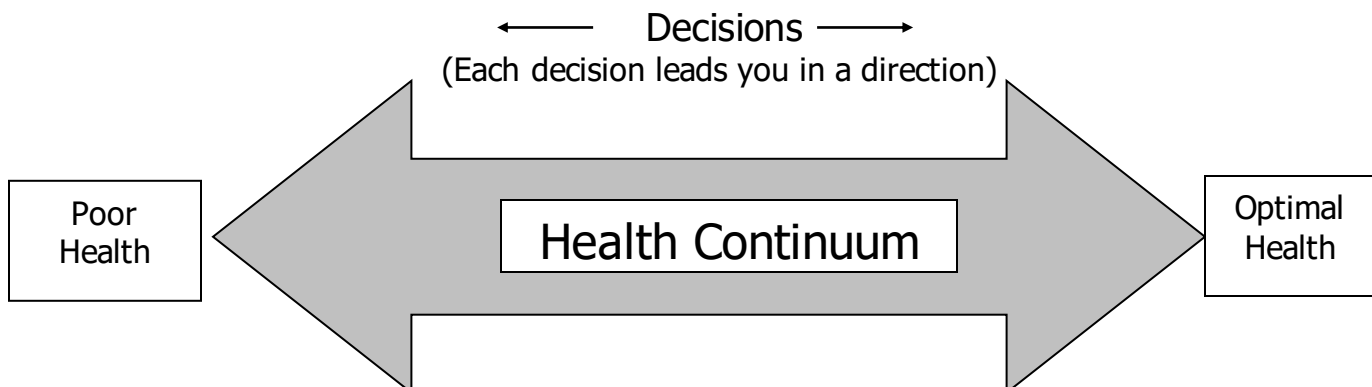
<i>Health Ed &amp; the WWW</i>	<b>182</b>
<i>Medical Professionals</i>	<b>183-185</b>
<i>Health Final Project / Reflection</i>	<b>186-191</b>
<i>Final Exam Review</i>	<b>192-197</b>
<i>Mandalas</i>	<b>198-201</b>

# What is Health?

**Health is a combination of your physical, mental and social well-being, not merely the absence of disease or infirmity.**



- Health is the combination of your physical, mental/emotional, and social well-being.
- These three elements of health are interconnected.
- To be truly healthy, all sides of your health triangle must be in balance.
- Your health is on a sliding scale with many degrees of health and wellness.
- Your health fluctuates along a continuum... from day to day and year to year, depending on different factors, many of which are **your** choices.



## Making Changes for Health

Health professionals have studied the process of behavior change and have come to the conclusion that there are four important steps:

- Awareness (recognizing the problem)
- Knowledge (reliable fact based information)
- Decision Making
- Apply the skill

# THE HEALTH TRIANGLE WORKSHEET

Self assessment of the three aspects of your health (physical, mental & social)

## 1 ASSESS YOUR HEALTH

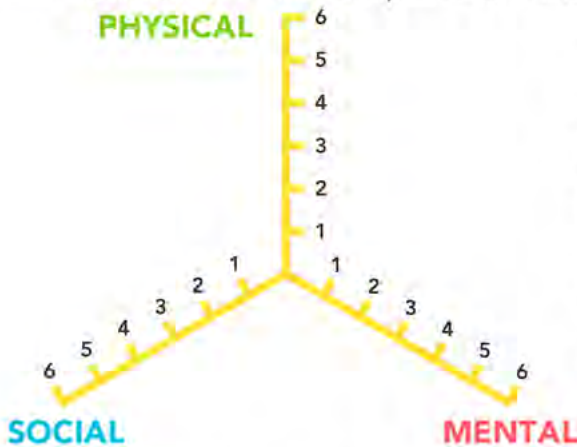
Answer YES or NO to each question, circle your answer, and total the number of "YES."



		YES   NO	TOTAL
<b>PHYSICAL</b>	1. I get seven to nine hours of sleep each night	YES   NO	6
	2. I eat a well-balanced diet, which includes breakfast	YES   NO	
	3. I keep my body, teeth, and hair clean daily	YES   NO	
	4. I do at least 30 minutes of physical activity daily	YES   NO	
	5. I avoid the use of tobacco, alcohol, and other drugs	YES   NO	
	6. I see a doctor and dentist for regular checkups	YES   NO	
<b>MENTAL</b>	1. I generally feel good about myself and accept who I am	YES   NO	6
	2. I can express my feelings clearly & calmly	YES   NO	
	3. I accept constructive criticism	YES   NO	
	4. I have at least one activity that I enjoy doing by myself	YES   NO	
	5. I have awareness of my thoughts and emotions	YES   NO	
	6. I like to learn and develop new skills	YES   NO	
<b>SOCIAL</b>	1. I have at least one close friend I keep in contact with	YES   NO	6
	2. I show respect and care for my family and friends	YES   NO	
	3. I can disagree with others without getting angry	YES   NO	
	4. I am a good listener and able to communicate clearly	YES   NO	
	5. I get support from others when I need it	YES   NO	
	6. I say no if I feel uncomfortable with something	YES   NO	

## 2 ILLUSTRATE YOUR HEALTH TRIANGLE

Draw a line from the center with a length equal to the total from step 1 for each aspect. Connect the three endpoints to make your health triangle.



## 3 ANALYZE RESULTS

Reflect on your triangle and describe what your overall health looks like.

Think about and comment on the following:

1. Does your health triangle have equal sides?
2. Is there an area you are strong in?
3. Is there an area you need to improve on?

## 4 STRENGTHS & WEAKNESSES

List strengths and weakness for each aspect. Identify how you can continue to maintain your strengths and actions to improve your weaknesses.

	HEALTH TRIANGLE <i>Physical, Mental, Social</i>	DESCRIPTION OF STRENGTH/WEAKNESS	ACTION TO MAINTAIN OR IMPROVE
<b>WEAKNESSES</b>	STRENGTHS		

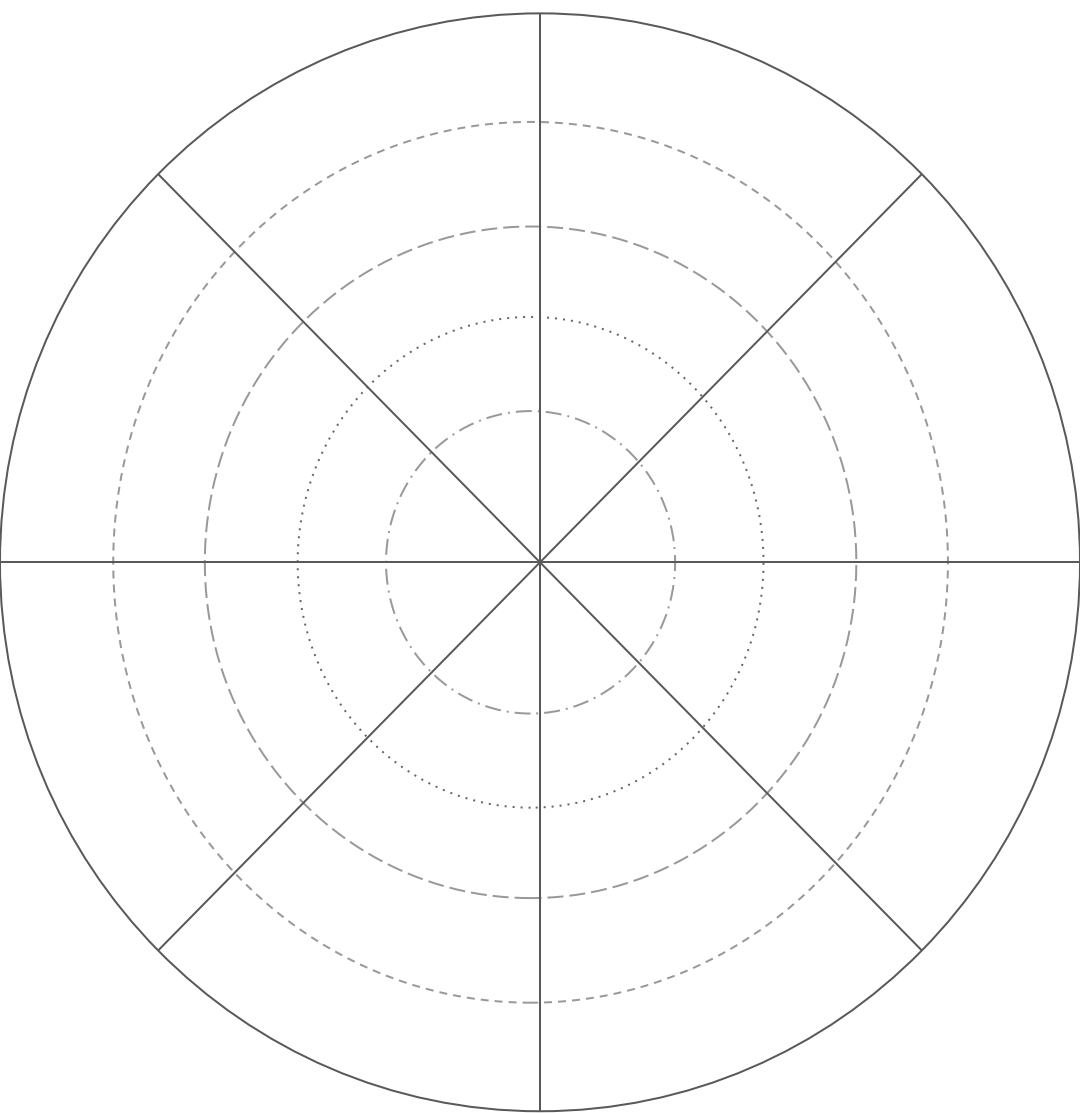
# Dimensions of WELLNESS

Match each of the following dimensions of wellness to the description that fits best.

WORD BANK: Multicultural. Creative. Sexual. Social. Intellectual. Physical. Emotional.  
Digital. Financial. Occupational. Spiritual. Environmental

- \_\_\_\_\_ 1. Involves the maintenance of a healthy body, good physical health habits, good nutrition and exercise, and obtaining appropriate health care.
- \_\_\_\_\_ 2. Involves lifelong learning, application of knowledge learned, and sharing knowledge.
- \_\_\_\_\_ 3. Involves being and feeling physically safe, in safe and clean surroundings, and being able to access clean air, food, and water. Includes both our microenvironment (the places where we live, learn, work, etc.) and our macro-environment (our communities, country, and whole planet).
- \_\_\_\_\_ 4. Involves having meaning and purpose and a sense of balance and peace.
- \_\_\_\_\_ 5. Involves having relationships with friends, family, and the community, and having an interest in and concern for the needs of others and humankind.
- \_\_\_\_\_ 6. Involves the ability to express feelings, enjoy life, adjust to emotional challenges, and cope with stress and traumatic life experiences.
- \_\_\_\_\_ 7. Involves the ability to have financial resources to meet practical needs, and a sense of control and knowledge about personal finances.
- \_\_\_\_\_ 8. Involves participating in activities that provide meaning and purpose, including employment.
- \_\_\_\_\_ 9. Considers the impact of virtual presence and use of technology on their overall well-being by taking steps to create sustainable habits that support their values, goals, community and safety.
- \_\_\_\_\_ 10. Values and actively participates in a diverse range of arts and cultural experiences as a means to understand and appreciate the surrounding world.
- \_\_\_\_\_ 11. Includes sexual identity, healthy intimate partner relationships free of violence or coercion.
- \_\_\_\_\_ 12. Awareness and understanding of others and the ability to recognize the importance of tolerance, acceptance, and justice.

Identify and highlight the 8 dimensions from above that are most significant in your life at this point in time.  
You will use these 8 to complete your own personal wellness wheel.





# WELLNESS WHEEL REFLECTION QUESTIONS

## INSTRUCTIONS:

Please answer the following questions based off of the wellness wheel that you completed.

**Question 1:** How would you describe your current level of health and wellness... are you "surviving" or are you "thriving"? Explain

Answer:

**Question 2:** What are your strengths (areas you have high levels of wellness)?

Answer:

**Question 3:** What are your weaknesses (areas you have low levels of wellness)?

Answer:

**Question 4:** Based on your prior knowledge of health, what do you predict are the benefits of continuing to practice the behaviors that are your strengths? And what do you predict could happen if you don't begin to improve on the areas of weakness?

Answer:

**Question 5:** After reviewing the resources related to this activity, **identify 3 things** you would like to begin trying to do more of in order to achieve better levels of wellness.

Answer:

# Perception vs Reality

In the perceived write the % of teens you believe engage in each of the risk behaviors listed.

USED ALCOHOL IN THE LAST MONTH

USED A VAPE IN THE LAST MONTH

USED MARIJUANA IN THE LAST MONTH

USED CIGARETTES IN THE LAST MONTH

EVER TRIED SYNTHETIC MARIJUANA

EVER TRIED PRESCRIPTION OPIODS

EVER TRIED COCAINE

EVER TRIED HEROIN

EVER BEEN SEXUALLY ACTIVE

RODE WITH A DRIVER WHO HAD BEEN DRINKING ALCOHOL

DROVE WHILE THEY HAD BEEN DRINKING ALCOHOL

TEXTED WHILE DRIVING

Perceived %	Actual %

# The Norm

## HOW PERCEPTIONS INFLUENCE OUR DECISIONS

---

WHAT ARE YOUR THOUGHTS ABOUT THE STATISTICS YOU JUST DISCOVERED?

---

HOW DO OUR BELIEFS ABOUT USE IMPACT OUR PERSONAL DECISIONS TO USE OR NOT TO USE?

---

ACCORDING TO THE STATISTICS, CIRCLE THE STATEMENT THAT IS TRUE.

**MOST TEENS MAKE HEALTHY DECISIONS**

**MOST TEENS MAKE UNHEALTHY DECISIONS**

# RISK AND PROTECTIVE FACTORS

Reflect on risk and protective factors from each category. Consider which apply to you. How may these factors impact your choices and therefore your health and happiness?

## RISK FACTORS

Risk Factors increase the chance of negative outcomes.

## PROTECTIVE FACTORS

Protective Factors decrease the risk, or protect us from, negative outcomes

INDIVIDUAL

- Poor impulse control
- Low harm avoidance
- Lack of self-control/regulation
- Aggressiveness
- Anxiety and depression
- Hyperactivity/ADHD
- Antisocial behavior
- Favorable attitudes toward drugs
- Rebelliousness
- Early substance use

- Mastery of academic skills
- Following rules for behavior
- Ability to make friends
- Good peer relationships
- Positive physical development
- Emotional self-regulation
- High self-esteem
- Good coping and problem-solving skills
- Engaged in school with peers, athletics, employment, religion, or culture

FAMILY

- Permissive parenting
- Low parental warmth
- Lack of/inconsistent discipline
- Parental hostility/Harsh discipline
- Low parental aspirations for child
- Child abuse/maltreatment
- Substance use among parents/siblings
- Lack of adult supervision
- Poor attachment with parents

- Consistent discipline
- Language-based, rather than physical, discipline
- Family provides rules, structure, limits, monitoring, and predictability
- Supportive relationship with family members
- Clear expectations for behavior and values

OTHER

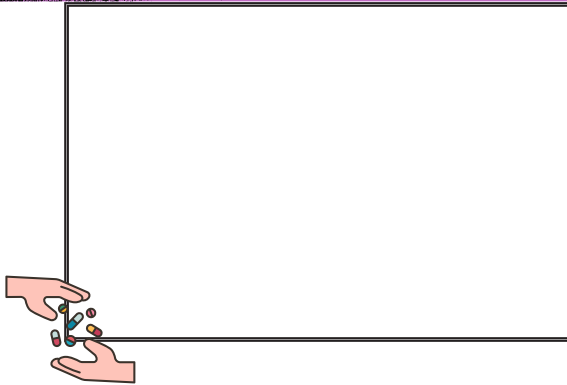
- Peer rejection
- Laws and norms favorable towards use
- Deviant peer group
- Interpersonal alienation
- Extreme poverty
- School failure
- Low commitment to school
- Associating with drug using peers
- Not college-bound
- Aggression toward peers
- Accessibility/availability

- Healthy peer groups
- Positive teacher expectations
- Effective classroom management
- Positive partnering between school and family
- School policies and practicing to reduce bullying
- High academic standards
- Presence of mentors
- Opportunities for engagement in community
- Positive/protective norms
- Clear expectations for behavior
- Physical and psychological safety

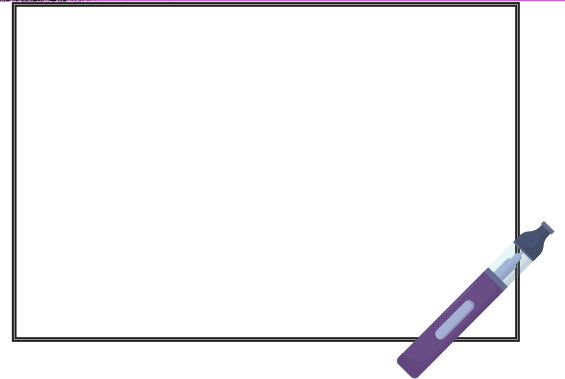
# ANALYZING INFLUENCES

**WHAT IS THE MOST POWERFUL INFLUENCE ON  
YOUR DECISIONS ABOUT...**

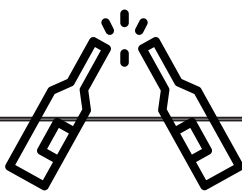
**ILLEGAL DRUG USE**



**VAPING**



**ALCOHOL USE**



**YOUR DIET**



**SLEEP**



**SEXUAL ACTIVITY**



# Parent-Teen Communicator

Dear Parents or Guardians:

This is our first “Parent-Teen Communicator!” My goal for these assignments is that you enjoy talking with your teen while helping them get class credit! I hope this current communicator on **VALUES** will give you a chance to reinforce your own family’s values.

Here is your assignment to do together: (Nothing discussed needs to be written down, only the confirmation sheet needs to be signed and shown in class.)

1. **Parent:** Please circle 7 values that you feel are the **most important** values to possess.

Joyful	Kind	Honest
Hard-working	Polite	Mature
Spiritual	Committed	Peaceful
Responsible	Helpful	Unique
Trustworthy	Sensitive	Patient
Sense of humor	Self-controlled	Respectful
Loving	Giving	Forgiving

2. **Teen:** Please do the same for the list on the second page.
3. **Parent:** Read out loud to your teen the top 7 words your circled. As you are saying your words, if you and your teen both circled the same values, **both** you and your teen should put a star (\*) by that value. (So words you both have in common will be starred.)
4. **Both:** Discuss what values you both felt were important. Talk about what those values mean to you. Do you think it is a coincidence that you feel the same about these values? Is there any experience, influence, or event in your lives that you can think of that has caused both of you to feel the same about these traits?
5. **Teen:** Now look at the words you didn’t have in common. Were there any values which you had circled which your parent didn’t? (They will be the circled words with no star). Read out loud to your parent the words which you had circled but they hadn’t circled. Explain to your parent why these values are important to you.
6. **Parent:**
  - a. Discuss with your teen why the values that you had circled but they hadn’t circled are significant to you. Can you give any real-life examples of how those values (or lack of those values) have changed your life or someone’s life who you know?
  - b. Doing what we feel is right is sometimes hard to do. Can you relate a time in your life when you or someone you know followed one of your circled values (although it may have been a difficult thing to do) and it was a positive experience in the end.

7. **Teen:** Can you relate a time in your life when you or someone you know follow one of the value words you circled and although it was hard to do, it turned out to be a positive experience?
8. **Parent:** Pick two if the listed positive values you see in your own teen’s character. Tell them why you appreciate those traits.
9. **Teen:** Pick two of the listed positive values you see in your parent’s character. Tell them why you appreciate those traits. You are done! Don’t forget to get a parent to sign below.

**Teen:** Please circle 7 values that you feel are the **most important** values to possess.

- |                |                 |            |
|----------------|-----------------|------------|
| Joyful         | Kind            | Honest     |
| Hard-working   | Polite          | Mature     |
| Spiritual      | Committed       | Peaceful   |
| Responsible    | Helpful         | Unique     |
| Trustworthy    | Sensitive       | Patient    |
| Sense of humor | Self-controlled | Respectful |
| Loving         | Giving          | Forgiving  |

---

X

Student Name (please print)  
Student

---

X

Parent Name  
Parent

## Values Clarification

**Our values are those things we regard as having ultimate importance, significance or worth.**

1. You will now spend some time identifying your own values. Choose one color and shade the 20 values that are most important to you.

Achievement	Friendships	Pleasure
Advancement and promotion	Growth (mental/emotional)	Power and authority
Adventure	Having a family	Privacy
Affection (love and caring)	Health	Public service
Arts	Helping other people	Purity
Challenging problems	Helping society	Quality of what I take part in
Change and variety	Honesty	Quality relationships
Close relationships	Independence	Recognition (respect from others)
Community	Influencing others	Religion
Competence	Inner harmony (happy/confident with yourself)	Reputation
Competition	Integrity (honesty and honor)	Responsibility and accountability
Cooperation	Intellectual status	Romance
Country	Involvement	Security (feeling safe)
Creativity	Knowledge	Self-respect
Decisiveness (making decisions)	Leadership	Serenity (calmness, tranquility)
Democracy	Location	Sophistication
Ecological awareness	Loyalty (devotion/faithfulness)	Stability
Economic (money) security	Meaningful work	Status (popularity)
Effectiveness	Merit (worth/value of self)	Supervising others
Efficiency	Money	Time freedom
Ethical practice (good morals)	Nature	Truth
Excellence	Being around people who are open and honest	Wealth
Excitement	Order (tranquility, stability, conformity)	Wisdom
Fame	Personal development	Work under pressure
Fast living	Freedom	Work with others
Financial gain	Physical challenge	Working alone



Step 2: Elimination

\_\_\_\_ Next, narrow your top 20 values down to the 10 which are most important to you. Draw a single line through the 10 that you are choosing to eliminate.

\_\_\_\_ Now that you have identified ten values, imagine that you are only permitted to have five values. Which five would you give up? Place a small X next to each of those, leaving the most important five.

\_\_\_\_ Now imagine that you are only permitted three. Highlight or place a check mark next to the three values that you are choosing to keep.

\_\_\_\_ **Now narrow your list down to two. Put the number '3' next to the one** you are choosing to eliminate.

\_\_\_\_ **Finally, eliminate one of your two remaining values and place a '2' next to this one. Which is the one item on the list that remains?**

\*\* \_\_\_\_\_ This is your most important value!\*\*

Discussion Questions

1. What is the link between values and health/wellness?

[Empty response box for question 1]

2. Did you know – before this activity – that this was your most important value? What role does it play in your life?

[Empty response box for question 2]

**3. Can you think of a time in your life when you had a values conflict? Where you needed to choose another?**

[Empty response box for question 3]

Name: \_\_\_\_\_

Grade: \_\_\_\_\_

**Branding of America-Guess Their Names!**



**Company Branding-Can you guess the name?**

Write the name of the company on the line below the image.



1. How does advertising influence health related decisions?
  
2. What other forms of media influence our health-related decisions?

# Tips for Assessing Risk

1. Know what kind of risk taker you are...do you live on the edge?
2. Be aware of group energy (peer pressure).
3. Watch out for the influence of alcohol and other drugs.
4. For some **behaviors**, there is no safe level of risk.
5. When in doubt, talk it out with someone you trust
6. Always measure the likely results against what you value.
7. If you've previous engaged in a risk behavior, your perception of the associated risk may change .

**Probability is a measure of the likelihood that something will happen.**

## Do It Now: Risky, Riskier, Riskiest

With your group, come up with conditions you think would raise or lower each risk in the chart below.

Low Risk	Medium Risk	High Risk
Riding a bike with a helmet	Riding a bike on a side-street without a helmet	Riding a bike without a helmet in heavy traffic
	Having a couple of cigarettes	
		Getting drunk with a friend
Getting a ride home from a party with a friend		
	Asking a friend for advice about medication to help you sleep	

# Images: Self and Culture

## Concepts

**Culture** is the shared ideas, activities, language, and social expressions (food, music, clothing, etc.) of the members of one group that distinguishes it from another. It is part of our self-image.

**Media influence** affects how we think about ourselves and our cultures.

## How the Media Can Influence Our Perceptions

**Information and Entertainment:** The media offer us abundant distractions. They dispense information and can entertain us 24 hours a day. They comprise valuable resources to help us learn and expand our worlds. But this valuable distraction has a downside. For example, the *Archives of Pediatrics and Adolescent Medicine* reported in 2015 that children with TVs in their bedrooms consistently score lower on math and language tests. And studies show that young people spend almost 45 hours a week with media - usually with more than one format at a time. Streaming through these multiple outlets are endless messages and images that shape our values and behavior.

**Health:** TV viewers may develop dangerous health attitudes from seeing characters eat and drink too much and live recklessly without suffering any ill effects, as reported in the *New England Journal of Medicine*. However, national surveys show that the Internet is an important source of information for youth, as 39% of 15 to 24-year-olds who have sought health information online say they have changed their personal behavior because of the information they found online (The Kaiser Foundation, 2011).

**Gender:** Some programs and ads in the media portray the sexes in nontraditional roles: a female executive or a male who stays at home to parent the children. Others reinforce more traditional female and male roles. While the media can portray unrealistic physical ideals for both females and males, research also shows that exposure to sports media can reinforce healthier body images for teens. A 2001 study at the University of Michigan found this was especially true of adolescent girls who regularly read sports magazines.

**Sex and Dating:** Teens report that the media are a primary source of information about sex, dating, and sexual health. It is common for a TV show to contain overt sexual content, but it is still rare for shows to discuss the risks and possible consequences of sexual activity. Fashion and beauty magazines targeting female teens can also be important sources of sexual health information - The Kaiser Foundation reports seven out of ten girls ages 12-18 read such magazines, and a large majority say the magazines contain information they don't get elsewhere.

## Concept

**Targeting** is shaping messages so that they attract a specific group of people who share individual or cultural interest beliefs and practices.

# SOCIAL MEDIA IS CHANGING YOUR BRAIN

What is the hormone responsible for making us feel good?

What happens to this hormone each time we look at social media?

How does social media become addictive?

In addition to altering our attention span, what else does social media change?

List tips to stop the negative effects of social media:

Why do people take selfies and post them on social media?

How does the selfie differ from having someone else take the photo of us?

How often do you post selfies to social media?

What kind of reactions do you get when you post them?

What positive things have you seen from people posting selfies on social media?

What negative things have you seen from people posting selfies on social media?

What happens to people who base their worth on how many likes they have on social media?

# SOCIAL MEDIA FAST

Fasting means to take a break from something. Your assignment is to stay off all social media for 24 hours. Then answer the questions below about your social media fast:

On a scale of 1-10 how hard was it to stay off social media?

What positive things did you notice as a result of your fast?

What negative things did you notice?

What app was the hardest to stay off of?

When you felt the urge to go on social media, what did you do instead?



# CRAAP Test



**Currency**

The timeliness of the information.



**Relevance**

The importance of the information for your needs.



**Authority**

The source of the information.



**Accuracy**

The reliability, truthfulness, and correctness of the content.



**Purpose**

The reason the information exists.

<p><b>CURRENCY</b></p>	<p>When was the information posted? Has it been updated? Do you need current information?</p>
<p><b>RELEVANCE</b></p>	<p>Does the information answer your questions? Is it easy for you to read and understand? Would this be an appropriate source to use?</p>
<p><b>AUTHORITY</b></p>	<p>Who is the author / publisher? What are their credentials? Is the URL .gov, .edu, .org, .com, or .net?</p>
<p><b>ACCURACY</b></p>	<p>Is the information supported or reviewed? Can you verify the information? Are there obvious errors?</p>
<p><b>PURPOSE</b></p>	<p>Is it meant to inform, entertain, sell? Is it opinion or fact? Is there potential bias or intent to persuade?</p>

## The Media and Health: Tuning In

Many popular songs have messages in them about health issues like violence, risky driving, substance use, nutrition, and even body image. Listen to the selected song or think of a song you already know and answer the following questions.

Song: \_\_\_\_\_

Artist: \_\_\_\_\_

1. What health behaviors do you hear about in this song?
2. What messages does the song give about those behaviors?
3. How does the song deliver those messages? For example, does it use certain images?
4. Do these messages match with what is popular or socially acceptable for you or the culture you identify with?
5. Which strategies for resisting messages do you think that you can use to resist messages that are not acceptable to you?

*If you would prefer you may use another type of media, such as TV show, movie, or internet site*

# Family Communications

## Make It Happen: Family Interview

1. Read over the interview questions on the next page. Add two more questions that you can think of on this topic to the worksheet.
2. Set up a time before your next class for your interview. Let your interviewee know that it will take about 30 minutes. Be sure to ask all of the questions on the next page, but remember to include the questions you added.
3. **Follow your teacher's instructions on how to complete and submit your Family Interview Worksheet and Reflection.**



### **Tips for Interviewing**

**There are a few points to keep in mind while doing your interview:**

- Find a time that's convenient for both of you.
- Use the verbal and non-verbal communication skills that you learned about in this unit.
- Ask if you can record the interview, since it will help you focus on the questions and answers. Try to take notes when reviewing the recording.
- **If you don't record, write down notes while you're interviewing that you can use to remind yourself later what the person said.**
- If you want to know more about what the person said, ask a follow-up question.

**Remember, an important part of this activity is to have fun! 😊**

# Family Interview Worksheet

\_\_\_\_\_  
Interviewer

\_\_\_\_\_  
Name of Interviewee

\_\_\_\_\_  
Relationship to You

\_\_\_\_\_  
Date

**"Thank you for agreeing to do this interview. I'd like to start by asking you some questions about when you were my age."**

1. What did you like to do when you were my age?

2. What did you want to be when you got older?

3. What rules and expectations did your family have?

4. What messages did you get from your parents about alcohol, tobacco, and other drugs?

**"Now I'd like to ask you some questions about your role as a caregiver."**

5. What are your rules and expectations for me about the use of alcohol, tobacco, and other drugs?

6. What are the consequences for me if I do not follow these rules?

7. Why do you think these rules are important?

8. What do you think is the most challenging part of taking care of a young adult?

9. What have you liked about participating in this interview?

## Sample Follow-Up Responses

"Tell me more."

"Can you give me an example?"

"Then what did you do?"

"Is there anything else?"

## How Can I Improve My Self-Esteem?

Steve's mind wanders as he does his homework. "I'm never going to do well on this history test," he thinks. "My dad's right, I'm just like him — I'll never amount to much." Distracted, he looks down and thinks how skinny his legs are. "Ugh," he says to himself. "I bet the football coach won't even let me try out when he sees what a wimp I am."

Julio is studying for the same history test as Steve, and he's also not too fond of the subject. But that's where the similarity ends. Julio has a completely different outlook. He's more likely to think, "OK, history again, what a pain. Thank goodness I'm acing the subject I really love — math." And when Julio thinks about the way he looks, it's also a lot more positive. Although he is shorter and skinnier than Steve, Julio is less likely to blame or criticize his body and more likely to think, "I may be skinny, but I can really run. I'd be a good addition to the football team."

We all have a mental picture of who we are, how we look, what we're good at, and what our weaknesses might be. We develop this picture over time, starting when we're very young kids. The term **self-image** is used to refer to a person's mental picture of himself or herself. A lot of our self-image is based on interactions we have with other people and our life experiences. This mental picture (our self-image) contributes to our **self-esteem**.

Self-esteem is all about how much we feel valued, loved, accepted, and thought well of by others — and how much we value, love, and accept ourselves. People with healthy self-esteem are able to feel good about themselves, appreciate their own worth, and take pride in their abilities, skills, and accomplishments. People with low self-esteem may feel as if no one will like them or accept them or that they can't do well in anything.

We all experience problems with self-esteem at certain times in our lives — especially during our teens when we're figuring out who we are and where we fit in the world. The good news is that, because everyone's self-image changes over time, self-esteem is not fixed for life. So if you feel that your self-esteem isn't all it could be, you can improve it.

### **Self-Esteem Problems**

Before a person can overcome self-esteem problems and build healthy self-esteem, it helps to know what might cause those problems in the first place. Two things in particular — how others see or treat us and how we see ourselves — can have a big impact on our self-esteem.

Parents, teachers, and other authority figures influence the ideas we develop about ourselves — particularly when we are little kids. If parents spend more time criticizing than praising a child, it can be harder for a kid to develop good self-esteem. Because teens are still forming their own values and beliefs, it's easy to build self-image around what a parent, coach, or other person says.

Obviously, self-esteem can be damaged when someone whose acceptance is important (like a parent or teacher) constantly puts you down. But criticism doesn't have to come from other people. Like Steve in the story above, some teens also have an "inner critic," a voice inside that seems to find fault with everything they do. And, like Steve, people sometimes unintentionally model their inner voice after a critical parent or someone else whose opinion is important to them.

Over time, listening to a negative inner voice can harm a person's self-esteem just as much as if the criticism were coming from another person. Some people get so used to their inner critic being there that they don't even notice when they're putting themselves down.

Unrealistic expectations can also affect a person's self-esteem. People have an image of who they want to be (or who they think they should be). Everyone's image of the ideal person is different. For example, some people admire athletic skills and others admire academic abilities. People who see themselves as having the qualities they admire — such as the ability to make friends easily — usually have high self-esteem.

People who don't see themselves as having the qualities they admire may develop low self-esteem. Unfortunately, people who have low self-esteem often *do* have the qualities they admire. They just can't see that they do because their self-image is trained that way.

### Why Is Self-Esteem Important?



**Beware the Perfectionist!**

Are you expecting the impossible? It's good to aim high, but your goals for yourself should be within reach. So go ahead and dream about being a star athlete — but set your sights on improving your game in specific ways.

How we feel about ourselves can influence how we live our lives. People who feel that they are likable and lovable (in other words people with good self-esteem) have better relationships. They are more likely to ask for help and support from friends and family when they need it. People who believe they can accomplish goals and solve problems are more likely to do well in school. Having good self-esteem allows you to accept yourself and live life to the fullest.

### Steps to Improving Self-Esteem

If you want to improve your self-esteem, here are some steps to start empowering yourself:

- **Try to stop thinking negative thoughts about yourself.** If you're used to focusing on your shortcomings, start thinking about positive aspects of yourself that outweigh them. When you catch yourself being too critical, counter it by saying something positive about yourself. Each day, write down three things about yourself that make you happy.
- **Aim for accomplishments rather than perfection.** Some people become paralyzed by perfection. Instead of holding yourself back with thoughts like, "I won't audition for the play until I lose 10 pounds," think about what you're good at and what you enjoy, and go for it.
- **View mistakes as learning opportunities.** Accept that you will make mistakes because everyone does. Mistakes are part of learning. Remind yourself that a person's talents are constantly developing, and everyone excels at different things — it's what makes people interesting.
- **Try new things.** Experiments with different activities that will help you get in touch with your talents. Then take pride in new skills you develop.
- **Recognize what you can change and what you can't.** If you realize that you're unhappy with something about yourself that you can change, then start today. If it's something you can't change (like your height), then start to work toward loving yourself the way you are.
- **Set goals.** Think about what you'd like to accomplish, then make a plan for how to do it. Stick with your plan and keep track of your progress.

- **Take pride in your opinions and ideas.** Don't be afraid to voice them.
- **Make a contribution.** Tutor a classmate who's having trouble, help clean up your neighborhood, participate in a walk-a-thon for a good cause, or volunteer your time in some other way. Feeling like you're making a difference and that your help is valued can do wonders to improve self-esteem.
- **Exercise!** You'll relieve stress, and be healthier and happier.
- **Have fun.** Ever found yourself thinking stuff like "I'd have more friends if I were thinner"? Enjoy spending time with the people you care about and doing the things you love. Relax and have a good time — and avoid putting your life on hold.

It's never too late to build healthy, positive self-esteem. In some cases where the emotional hurt is deep or long lasting, it can take the help of a mental health professional, like a counselor or therapist. These experts can act as a guide, helping people learn to love themselves and realize what's unique and special about them.

Self-esteem plays a role in almost everything you do. People with high self-esteem do better in school and find it easier to make friends. They tend to have better relationships with peers and adults, feel happier, find it easier to deal with mistakes, disappointments, and failures, and are more likely to stick with something until they succeed. It takes some work, but it's a skill you'll have for life.

Reviewed by: Barbara P. Homeier, MD/ April 2016

1. Define the term self-image as used in the article.
2. According to the article, what is self-esteem?
3. What two things have a big impact on developing problems with self-esteem?
4. How does self-esteem influence our lives?
5. List the ten steps to improving self-esteem.
6. What are some of the positive results of living with a high self-esteem?

## Skill Development: Planning and Goal Setting

Many years of research have shown that setting goals can help us improve our performance and our health.. Moreover, when we use science-based goal setting strategies, we make it more likely that we achieve the goals we set for ourselves and that these goals actually affect our lives in the ways we want them to.

For example, the SMART goal system (which we'll talk about more below), suggests that we set goals that are meaningful to us. When we do this, we're more motivated to work towards our goals and experience greater enjoyment while we do it. Overall, setting goals helps us gain the clarity we need to take the actions that get us to where we want to go.

### Goal-Setting Theory

Goal setting theories offer us some useful information on what goals do for us and how we can set goals that really work for us. To start, goals establish an endpoint so that we know which direction to go in. This goal-directed action includes four parts:

1. We must understand what is beneficial to our well-being
2. We must set goals to achieve this
3. We must decide on how we will attain these goals
4. We must choose to act on these insights

### SMART Goal Setting

SMART goal setting is a strategy used to help us set goals that we are more likely to reach. It involves thinking about different aspects of our goal and ensuring that it has some specific characteristics.

A SMART goal is:

- S - Specific
- M - Measurable/Meaningful
- A - Achievable
- R - Realistic / Reliable
- T - Time-Bound/Trackable

So when setting goals, make sure your goals are SMART. The questions and guidelines below can help:

#### Is your goal specific?

Ask yourself, does your goal include clear boundaries? James Clear, the author of [Atomic Habits](#), says we should set upper and lower limits for our goals. For example, we might set a goal to go to the gym at least twice per week but no more than 4 times per week. By setting these boundary conditions, we get clearer on exactly what our goal is and help prevent ourselves from burning out.



### **Is your goal meaningful?**

Ask yourself, why does this goal matter to you? Dig deep to make sure your goal is consistent with your values and is in alignment with your desired lifestyle. If your goal goes against your values or lifestyle, it'll be hard to stick to and hard to [build a habit](#).

### **Is your goal achievable?**

Ask yourself, is this goal possible? There are a lot of folks out there telling you that you can easily wish your way to being a millionaire. Although having positive expectations can indeed help you reach those expectations (Rasmussen, Scheier, & Greenhouse, 2009) and setting challenging goals helps us perform better than we might have expected, the science does not support the practice of setting impractical goals. For example, if your goal is to get rich, think carefully about the amount of effort you can exert and the likely results of that effort. Otherwise, you could be setting yourself up for disappointment.

### **Is your goal realistic?**

To my mind, a realistic goal includes time parameters. Ask yourself, is the timeline you've set for the goal realistic? Given the number of hours you have in a day, can you reach the goal in the time you expect to?

### **Is your goal trackable (see also: measurable)?**

Lastly, ask yourself, is the goal trackable? We are more likely to achieve goals when we [track them](#). Perhaps seeing our progress helps motivate or inspire us. Regardless, make sure your goal is trackable. For example, if your goal is to make the world a better place, how would you track this? Would you count the number of kind things you say to strangers, the number of times you volunteer, or something else? Whatever your goal is, break it down into trackable, measurable chunks. Also be sure to set a deadline for a check-in for completion - to motivate you to act - or to evaluate and see what needs to be adjusted.

### **How to Set Goals**

Very often, goal setting is described as a detached, mental, unemotional process. But when we leave a sense of emotional connection out of our goal-setting, we actually do ourselves a disservice. If we set goals that do not represent ourselves (namely, our values and interests), we set ourselves up for less satisfying experiences, and therefore, we reduce the likelihood that we actually stick to our goals (Sheldon & Elliot, 1999).

### **Goal setting is a tool to enhance well-being**

**Ultimately, happiness and well-being are the ultimate goals—we set the goals that we set because we think they will make us feel good in some sense.** Yet, so much of the goal-setting guides fail to consider the emotional ramifications of the goals we set. If I set a financial goal that requires me to work 80 hours per week, my goal might actually make me less happy. Or, if I have a goal to never go through a divorce despite being in a miserable marriage, my goal might actually hurt me.

The SMART goal system is a great tool for goal setting. But here are a few more tips that can help aid the goal-setting process.

- **Prioritize your goals.** If you have several goals, be sure to decide which ones have the highest priority. For example, if you have one goal to get straight A's and one goal to get six-pack abs, at

some point you'll have to prioritize one over the other. There are only so many hours in the day and it's okay to focus on some goals more than others.

- **Break long-term goals into small goal pieces.** Large goals can feel overwhelming and can lead to fear or inertia. So try to break your goals down into small pieces. Don't focus so much on getting the six-pack abs, for example, and instead focus on diligently exercising 5 days per week (or whatever the small goals are that make up your larger goal).
- **Write your goals down.** When you write your goals down, it can be easier to identify whether you've thought them through fully. Maybe a goal isn't as clear as you thought, or perhaps it requires something else to happen first that you need to plan for. For example, if your goal is to get a particular job but this job requires a particular degree. Writing your goals down can help you identify gaps in your thinking.
- **Commit to your goals.** Committing to our goals in writing provides extra accountability that can prevent us from giving up on our goals prematurely. So write up a little statement that says something like, "I commit to doing X", sign your name, and hang it on your fridge or wall.
- **Focus on your performance rather than the outcome.** There are many external factors that can prevent us from reaching our goals. To avoid blaming ourselves for these outside circumstances, it can help to focus on what we can control, and that is often our small goal pieces. If we continue to exercise 5 days per week but don't have six-pack abs in the time we hoped for, there is nothing we can do about that. Our genes decide what our body can do. Try to give yourself credit for your performance even if the outcome isn't quite what you expected.
- **Try habit stacking.** Another tip offered by James Clear, author of [Atomic Habits](#), is to use habit stacking. When we already have a habit that we are good at sticking to, we can more easily attach other habits to it, either right before it or right after it. For example, let's say you've got a habit of brushing your teeth. You might start flossing after every time you brush your teeth to get into a new good habit. I'm using habit stacking right now to get myself to exercise more. I already have a habit of going for a walk at lunch. Now I'm adding a goal of doing a 10-minute workout immediately after my walk.
- **Make your environment work for you.** There is a ton of research on how our environment can help or hurt our ability to stick to our goals (check out the book, [Nudge](#), for more). Basically, we can set up our surroundings to help us reach our goals. For example, if you want to go running each morning, you might leave your running shoes by your bedside. Then you'll see them right when you wake up and encourage yourself to go running. I do something similar by leaving my vitamins by my teacup. Then when I make my morning tea, I remember to take my vitamins.

## *Thinking about Your Own Goals*

*It can be challenging to know where or how to get started, so this page is here to guide you. It will not be collected - it's just space for you to gather your thoughts:*

- 1. What are some things you would like to work on/improve upon for better health and well-being?**
  
  
  
  
  
  
  
  
  
  
- 2. Of the things listed above (in #1), which are things that you have the POWER/CONTROL you need to make changes?**
  
  
  
  
  
  
  
  
  
  
- 3. Of the things listed above (in #2), which area do you feel most MOTIVATED to begin to take action?**
  
  
  
  
  
  
  
  
  
  
- 4. Sticking with that idea, have you ever tried to make changes in this area before? Were you successful? Why or why not? What, if anything, will be different this time?**

**Part I. Directions: Identify which part, or parts, of SMART are missing from each goal. Some have nothing missing & some have more than 1 answer.**

1. I will floss 2x.  
S M T None
2. I will sleep more by the end of this week.  
S M T None
3. For this first marking period, I will earn an 85 or better in Health class.  
S M T None
4. I will review my science notes for 10 minutes, 2x a week, for the next 2 weeks.  
S M T None
5. By March 1st, I will save money.  
S M T None
6. I will begin my homework by 4pm every night this week.  
S M T None
7. I will walk the family dog once.  
S M T None
8. I will stay after for extra help.  
S M T None
9. I will eat better.  
S M T None
10. I will take a 15 minute nap every day after school for the next two weeks.  
S M T None

**Part II. DIRECTIONS: Correct each of the following goals to make them SMART.**

1. **Practice my sport more.**
2. **Use my phone less.**
3. **Do better in school.**

## **Going the Extra Mile...**

So now that you know all of the details about what you want and by when, let's think about what you might need in order to get started. Some goals are simple enough where you do not need more information or materials and that is okay. But some goals require things - so think about that and maybe write about it here.

Let's take this example. Ms. Lawler wants to start working out. Her plan is to go from absolutely no structured workouts to three thirty minute workouts each week (specific, measurable, and attainable given her work/life schedule and the needs of her children).

In order to be successful Ms. Lawler knows that she needs to have a set plan of what workouts she would do on which days so that she did not have to waste any time thinking about it. She could just walk into her garage gym and start immediately. \*Less likely to give up or "run out of time" - more likely to just do it. So her "prep" work was to write up the plan ahead of time.

If your goal is about less screen time or more study time, maybe you need to work on setting timers or limits, or creating an optimal space for peace and work... If your goal is related to eating better, you'll need recipes or a meal plan or at the very least to have healthy food available in your home.

**So the question is, what do you NEED TO DO TO PREPARE to start achieving your SMART Goal?**

# MAKE YOUR GOALS



Setting goals can be a great way to challenge yourself to make healthy lifestyle changes. Set yourself up for success by making your goals SMART!

## SPECIFIC

What is your goal?

## MEASURABLE

How will you keep track of your progress?

## ATTAINABLE

How will you achieve your goal?  
Make a plan!

## RELEVANT

How will this goal help you?

## TIMELY

When will you achieve this goal?



**My goal is:** \_\_\_\_\_

*e.g. To drink more water! I will aim for 6 cups per day*



**I will track my progress by:** \_\_\_\_\_

*e.g. I will track my progress by logging how many glasses I drink each day in my phone or planner*



**I will achieve this goal by doing the following:** \_\_\_\_\_

*e.g. 1. Keep a clear bottle with me so I can tell how much I've had  
2. Set an alarm to remind myself to drink every 2 hours*



**This goal helps me because:** \_\_\_\_\_

*e.g. This goal will help me to be healthier, have more energy, and help my skin*



**I will complete this goal by (date):** \_\_\_\_\_

*e.g. I will achieve my goal by February 15th*

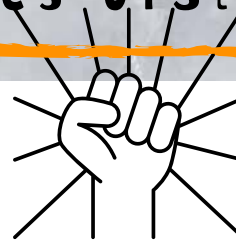
# My SMART Goal

WRITE YOUR GOAL AS A SMART GOAL:

*This goal is important to me because*

## Sources of Strength

PERSONAL QUALITIES THAT WILL HELP ME



PEOPLE WHO WILL HELP/SUPPORT ME



## OBSTACLES THAT MAY ARISE

## HOW I WILL RESPOND

①



②



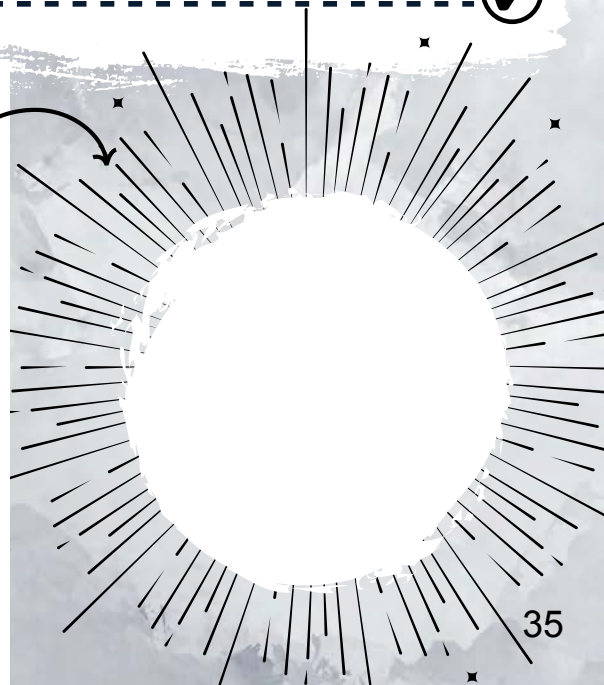
③



ACTIONABLE STEPS/PLAN FOR SUCCESS:

Blank area for writing actionable steps/plan for success.

*Reward With or Celebrate by*



# The Art of Assertiveness

## Concepts

**Asserting yourself** means standing up for yourself while simultaneously respecting the rights of others.

**The power of persuasion** involves convincing or urging someone to take an action and /or follow a belief. When you are persuaded by someone, you respond to their influence to think in a particular way and to behave in line with it.

Sometimes close relationships can challenge your boundaries and beliefs about who you are **and what is right for you. Sometimes you won't agree with the other person's beliefs, attitudes, or actions. Sometimes you'll feel let down or disappointed by your relationships.** Assertiveness is a skill that can help you keep your boundaries and get your needs met in a way that respects yourself and the relationships you value.

## Asserting Yourself

These techniques can help you maintain your boundaries and values and get your needs met in close relationships.

**Scene:** There's a party at the home of a girl whose parents are away for the weekend. Your parents don't allow you to go to parties if there's no responsible adult present. All of your friends are going and are pressuring you to go too. You know you'll get in trouble with your parents if you go, plus you're concerned about the reputation for trouble of some of the people who are going to be there.

1. State the problem.	"I really don't want to end up at a party where the police might show up."
2. Be understanding.	"I know that you all want me to go and that it's a big party. And we always have a good time together."
3. Ask for a change.	"But I really don't feel safe going to this one. Let's find something else to do."
4. Offer a suggestion or ask for their ideas.	"How about we rent some DVDs and watch them at my house? Or go to a late movie?" "What ideas do you have about something else we could do?"
5. Show your appreciation if your suggestion is accepted or need is met.	"Thanks. I really appreciate your being willing to come up with an alternative."
6. Express your regrets if the request isn't met and let the other person know what action you are going to take.	"I'm really sorry that we can't agree on what to do tonight. I'm going to go catch a late movie. I'll call you tomorrow to find out how the party was. Or call me later if you change your mind."
7. Follow through with what is right for you and respect the other person's choice.	



# Are You Assertive?

Directions: Take the Assertiveness Test below by writing YES or NO in the blank to the left.

- \_\_\_\_\_ 1. I have apologized for something that wasn't my fault.
- \_\_\_\_\_ 2. I have spoken to someone for longer than I wanted to because I didn't want to hurt the person's feelings by cutting him or her off.
- \_\_\_\_\_ 3. I feel uncomfortable or embarrassed if I receive compliments.
- \_\_\_\_\_ 4. I've been angry at someone just because my friends were.
- \_\_\_\_\_ 5. I've been out on a date with someone I didn't want to date because I felt bad about saying no.
- \_\_\_\_\_ 6. I've done something I shouldn't have done because I felt pressured to do it.
- \_\_\_\_\_ 7. I get really upset and hurt if someone is angry with me.
- \_\_\_\_\_ 8. If I received the wrong food at a restaurant, I would have a hard time asking the server to take it back.
- \_\_\_\_\_ 9. I've worn someone I didn't really like because others were wearing it.
- \_\_\_\_\_ 10. I've gone someplace that I didn't want to go to because I didn't want to start an argument.

# Passive, Aggressive, or Assertive?

Directions: Write aggressive, assertive, or passive in the blank to the left to describe the response to each question.

- \_\_\_\_\_ 1. Can you help me with my book report? I won't get a chance to read the whole book.  
**Why should I help you? You're too lazy! It's not my problem!**
- \_\_\_\_\_ 2. Can I borrow your new outfit? I won't ruin it.  
**Well.. I didn't get a chance to wear it yet, but... well, okay.**
- \_\_\_\_\_ 3. I need to borrow \$50 to pay a traffic ticket. How 'bout lending it to me?  
**I'm not really able to lend you the money. I can't help you out.**
- \_\_\_\_\_ 4. Let's go to the mall and hang out tonight. There's nothing better to do.  
**I don't want to go to the mall tonight. I'd prefer to go to the movies.**
- \_\_\_\_\_ 5. Can I be on your team for basketball?  
**No! You stink... besides, we have enough players already!**
- \_\_\_\_\_ 6. Let's have a few beers--no one is home and they'll never find out.  
**I'm not sure if that's such a good idea... but, okay, I guess it would be alright.**
- \_\_\_\_\_ 7. Let's skip school and go to the beach today.  
**I'm not taking a chance like that. I'm going to school**
- \_\_\_\_\_ 8. Can I stay at your house for the weekend?  
**Well.. I was having a friend from my old neighborhood stay over, but okay... I guess so.**
- \_\_\_\_\_ 9. Give me your homework to copy... I was on the phone all night.  
**No, do your own work, you idiot!**
- \_\_\_\_\_ 10. Can you babysit for me this weekend?  
**I made other plans with my friends. I won't be able to help you this particular weekend.**

# Taking Charge

**Directions:** For each situation, write one passive, one aggressive, and one assertive response. One example has been done for you.

You are at a friend's home and you would like something to drink:

Aggressive: "Get me something to drink."

Passive: Sit quietly and never ask for a drink.

Assertive: "Would you mind if I had a glass of water?"

You have been waiting in line for a long time at Six Flags for a roller coaster. A woman and her three children look to cut you in line.

Aggressive
Passive
Assertive

Your mother buys you a sweater that you really dislike.

Aggressive
Passive
Assertive

Your boyfriend or girlfriend wants you to go to a rock concert to hear a group you really don't want to hear.

Aggressive
Passive
Assertive

A person you have met before starts gossiping viciously about your best friend.

Aggressive
Passive
Assertive

Your circle of friends wants to have a party at your house while your parents are away.

Aggressive
Passive
Assertive

# I-Statements / Messages

Directions: An “I” statements is a statement of your feelings that does not blame or judge another person. The statements starts with “I feel...,” “I want...,” “I’m upset because...”  
Change the “You” statements below into “I” statements

<u>“You” Statements</u>	<u>“I” Statements</u>
You never call me when I ask you to.	I wish we could talk on the phone more often.
Will you turn down your stereo? I can't hear myself think!	
Will you clean your room? I've asked you to do it five times!	
You are so annoying when you tease me!	
Why don't you grow up and stop acting like a baby?	
Will you stop interrupting me?	
You're such a loud mouth.	
You can't play basketball, you are terrible. Play on a different team.	
It's your fault I got in trouble!	
You never listen when I give you directions.	
You always ignore me when we are with other people.	
You never let me do anything.	
Why don't you do your own work for once.	
You are so moody all the time.	
You never told us our assignment was due today.	

# Stress

**Stress** is a feeling that's created when we react to particular events. It's the body's way of rising to a challenge and preparing to meet a tough situation with focus, strength, stamina, and heightened alertness.

## A. **Categories of stress:**

- **Eustress** – \_\_\_\_\_
- **Distress** – \_\_\_\_\_

B. **Stressors are anything that causes stress. They can include people, events, situations and more.**

### **List your stressors:**

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## C. **Your body's reaction to stress:**

- Adrenaline is released by the body to give you a spurt of energy

The **flight-or-fight** response is a natural response in humans and animals. In times of danger the response is automatically activated and hormones, including adrenalin, are released into the blood stream. The hormones help the body prepare either to stay and fight the danger or to run away from it. This is the body's normal response to danger.

As the hormones move through our body it 'shuts down' the non-essential organs including the bowel, bladder and stomach. Our heart begins to beat faster and we begin to breathe more rapidly to increase oxygen and blood to the lungs, brain and muscles. This is all done so that we may either stay and fight the situation or get out of it quickly. Other physiological sensations of the fight-or-flight response include shaking, trembling, and excessive perspiration. As a result of the bowel and bladder being 'shut down', some people feel an urgent need to urinate or feel as though they are going to have an attack of diarrhea. Others may feel as though they are going to be sick.

### **Some signs of stress:**

1. Constipation or diarrhea
2. Depression
- 3.
- 4.
- 5.



## WHAT IS STRESS?

**THE FIRST STEP TO MANAGING STRESS IS TO KNOW WHAT CAUSES IT.**

### Causes of Stress (Stressors)

Different things cause stress for different people. Some might think that an upcoming math test is a big deal, while others won't give it a second thought. The same is true at different ages and stages of our lives. What bothers us at age 3 won't be the same as what gets us riled up at age 12, 20 or 50.

**Being aware of what causes you stress is one step in learning how to handle it well.**

### SYMPTOMS OF STRESS

There is so much pressure to "do and be your best" in school, at home, online, in after-school activities and your social life...just about everywhere. Yet many of the things people do to try to be their best actually work against them and cause stress. Stress, it turns out, is a HUGE BARRIER to almost everything.

We've all had times when our bodies react to stress. We can feel it. It's the sensation known as fight or flight. Our bodies' natural way of coping with being frightened or challenged is to release chemicals (epinephrine AKA adrenaline and cortisol) into our bloodstream that provide extra short-term energy and alertness. Our instincts take over and tell us that we are facing danger and we either need to defend ourselves (fight) or get away (flight).

In a short-term situation where we are actually in a danger, these changes can keep us safe. But when what we are feeling threatened by is something that cannot be resolved with these changes, or if there is no resolution, the chronic stress can negatively impact our health and wellness.



**AS SOON AS YOUR BRAIN (AMYGDALA) SENSES DANGER, THIS AUTOMATIC RESPONSE OCCURS. YOU CANNOT CHANGE THIS, SO WE MUST LEARN TO IMPLEMENT COPING STRATEGIES AND TO CHANGE OUR PERCEPTION OF WHAT IS THREATENING SO WE ARE NOT ALWAYS IN THIS STATE.**



#### EMOTIONAL SYMPTOMS OF STRESS MAY INCLUDE:

- Becoming easily agitated, frustrated, and moody
- Feeling overwhelmed, as if you are losing control or need to take control
- Having a hard time relaxing and quieting your mind
- Feeling bad about yourself (low self-esteem), and feeling lonely, worthless, and depressed
- Avoiding others

#### COGNITIVE SYMPTOMS OF STRESS INCLUDE:

- Constant worrying
- Racing thoughts
- Forgetfulness and disorganization
- Inability to focus
- Poor judgment
- Being pessimistic or seeing only the negative side



#### PHYSICAL SYMPTOMS OF STRESS MAY INCLUDE:

- Low energy
- Headaches
- Upset stomach, including diarrhea, constipation, and nausea
- Aches, pains, and tense muscles
- Chest pain and rapid heartbeat
- Insomnia
- Frequent colds and infections
- Nervousness and shaking, ringing in the ears, and cold or sweaty hands and feet
- Dry mouth and a hard time swallowing
- Clenched jaw and grinding teeth



#### BEHAVIORAL SYMPTOMS OF STRESS INCLUDE:

- Changes in appetite -- either not eating or eating too much
- Procrastinating and avoiding responsibilities
- More use of alcohol, drugs, or cigarettes
- Having more nervous behaviors, such as nail biting, fidgeting, and pacing

#### DID YOU KNOW

**If you can begin to interpret these changes as signals that you are READY and ABLE to take on a challenge, you are less likely to be negatively effected by stress?**

A little stress every now and then is not something to be concerned about. But ongoing, chronic stress can cause or worsen many serious health problems, including:

- Mental health problems, such as depression, anxiety, and personality disorders
- Cardiovascular disease, including heart disease, high blood pressure, abnormal heart rhythms, heart attacks, and strokes
- Obesity and other eating disorders
- Menstrual problems
- Skin and hair problems, such as acne, psoriasis, and eczema, and permanent hair loss
- Gastrointestinal problems, such as GERD, gastritis, ulcerative colitis, and irritable bowel syndrome

## WHAT KIND OF STRESS IS IT?

Stress impacts each of us in different ways.

The kind of stress you experience and how it affects you depends on:

- how capable you feel about handling the situation
- how much control you feel you have
- how much of an impact it's having on you
- how long it lasts
- the resources you have available to help you cope

### DID YOU KNOW

Even good things can stress you out? Stress can come from positive events in your life like holidays, graduations, parties, starting a new job and doing new things. Mental health providers call this kind of stress "eustress." It comes from events that can be enjoyable and take mental energy. Because of this, it's important to make time to relax and recharge after big, fun events.

### DAY-TO-DAY STRESS

**DAY-TO-DAY STRESS COMES FROM PREDICTABLE THINGS THAT YOU FACE.**

**THIS CAN INCLUDE:**

- **SCHOOL TESTS AND PROJECTS**
- **RELATIONSHIPS**
- **GETTING YOUR WORK DONE ON TIME**

**THE IMPACT OF THE STRESSOR IS DEPENDENT ON YOUR AVAILABLE RESOURCES AND HOW YOU PERCEIVE THE STRESSOR. EVEN THOUGH DAY-TO-DAY STRESSORS MAY NOT BE AS SEVERE AS EXCESSIVE OR TRAUMATIC STRESS, THEY CAN ADD UP AND BECOME OVERWHELMING IF YOU DON'T HAVE THE RESOURCES, TIME OR SPACE YOU NEED TO RECHARGE.**

The **resources** you have available to meet your needs and to live a happy life affect how you handle excessive stress.

**Resources can include:**

- money
- supportive friends and family
- access to healthcare
- access to a car or bus
- time to relax
- knowing how to do things such as applying to college or buying a house.

*The fewer resources available to you, the more likely you are to experience excessive stress.*



### EXCESSIVE STRESS

**STRESS IS EXCESSIVE WHEN IT OVERWHELMS YOUR ABILITY TO COPE WITH IT MENTALLY AND PHYSICALLY. THIS CAN HAPPEN WHEN YOU GO THROUGH A DIFFICULT EVENT, IF YOU LIVE THROUGH HARDSHIP OR WHEN YOU DEAL WITH DAY-TO-DAY STRESS IN AN UNHEALTHY WAY.**

**THERE ARE MANY CAUSES OF EXCESSIVE STRESS, INCLUDING:**

- **ABUSE**
- **EXPERIENCING RACISM OR DISCRIMINATION**
- **TROUBLE WITH FAMILY OR MONEY**
- **LIVING IN POVERTY**
- **LIVING WITH A CAREGIVER WHO:**
  - **EXPERIENCES RACISM**
  - **HAS GONE THROUGH DIVORCE**
  - **HAS BEEN INCARCERATED**
  - **LIVES WITH SUBSTANCE ABUSE**
  - **LIVES WITH MENTAL ILLNESS**
- **CHRONIC ILLNESS OF SELF, FRIEND, OR CAREGIVER**

## **HARMFUL DECISION-MAKING: AN EFFECT OF EXCESSIVE STRESS**

When you are experiencing a great deal of stress, it is harder to make decisions for a healthy future. Sometimes you make decisions that seem helpful in the moment but hurt you in the long-run. Some examples include spending versus saving money, eating junk food rather than good food, avoiding school work rather than studying, or using substances such as alcohol and other drugs.

Traumatic stress is the kind of stress no one should ever have to go through. Traumatic stressors include physical, emotional or sexual abuse, neglect, a disaster or major accident, and more. Your body and mind is not naturally equipped to deal with this kind of stress, but you can get the help you need to get through it.

### **WHEN TO ASK FOR HELP**

You should ask for help if:

- you experience symptoms of stress that you can't control
- you experience excessive stress that you feel like you can't handle anymore
- you experienced traumatic stress
- your basic needs aren't being met
- you do not feel safe at home or in other environments
- you are concerned for the safety of someone else
- you are experiencing anything else that feels stressful or overwhelming and you feel like you can't handle it alone.

### **WHO TO ASK FOR HELP**

When stress becomes overwhelming to you ask for help from:

- a trusted adult at home, at school or in your community
- a school counselor, psychologist or social worker
- a doctor or mental health care provider.

For more info visit:  
[www.changetochill.org/resources](http://www.changetochill.org/resources)

## **THE SCREEN-STRESS CONNECTION**

Screen time gets a lot of attention, and let's be honest: Time spent online and especially on our phones gets a pretty bad rap...especially from older folks. It's blamed for everything from bad posture to social isolation.

As a teen today, you are the first generation to grow up with nearly constant access to electronic media and social interaction. While there's no doubt there's a connection between screen time and stress, there are also lots of positive ways that screens help us communicate, learn, play, and participate in the world around us.

### **GIVE YOURSELF A BREAK BEFORE BED**

Forty three percent of today's teens get less than seven hours of sleep. That's not healthy. The National Sleep Foundation recommends not using screens right before bed or in bed, as it can interfere in a number of ways with your ability to fall asleep. We know a lot teens work on homework or read right up until bedtime, but challenge yourself to put your screens away as early as you can in the evening. Can you give yourself 15 minutes? 30? An hour? Try charging your devices in a room other than where you sleep to help avoid the temptation. Better yet, invest in an alarm clock to wake you up instead of your phone!

### **SET LIMITS**

Research shows a correlation between the rise in smartphone use and the rise in depression among your generation. Try to start noticing the emotions and even physical sensations you have when you're online or communicating through a device. Learn about the stress response and start trying to stay in tune to when you feel it coming on. What triggers you? Once you start to notice trends or patterns, make some positive adjustments, such as unfollowing certain people, only checking social media at certain times of the day, or deleting the accounts and apps that stress you most.

### **MOVE!**

Exercise is the best thing you can do for your brain in terms of mood, memory, and learning, according to Harvard Medical School psychiatrist John Ratey. Exercise can actually reverse the effects of stress and lift depression. Screen time tends to be sedentary, which means if you're doing a lot of it you may not be getting a lot of physical activity. Try to find a balance; get up and get moving regularly throughout the day, and make a point to get outside if you can. You can even watch a show on your phone or listen to music as motivation!

### **INTERACT IRL**

Social media posts can make up for time spent in face-to-face interaction. Making a point to connect with your friends and family in real life, not just online, can go a long way toward helping you be less negatively impacted by stress.

All of these things do more to get in our way than they do to help us live our best lives. Plus, significant stress that goes on for a long time can lead to more serious mental and physical health problems. So it's important to have some strategies ready for dealing with it and a few more for preventing it when you can.



# Managing Stress, Anger, and Other Emotions

When **stress** (anxiety) and/or **anger** are added to another emotion, they can create an unbalanced **emotional extreme** (irrational outlook). Look at the list of emotions on the board. Choose one positive and one negative emotion (emotional responses) that you often feel. Think about recent triggers that made you feel the emotions and what you did (reactions). Describe them below.

TRIGGER	WHAT I FELT	WHAT I DID
<b>Example:</b> Got a good grade	Relieved 😊	Told my friends

## Reflection



- Think about how you responded to the trigger and what happened as a result. Was the result healthy or unhealthy?
- What do you wish you had done differently, if anything?

### Tips for Managing Emotions

- Some triggers may be more challenging for others than for you.
- You are unique in your emotions, how you feel them, and how you respond to them.
- Learning to manage powerful emotions can help you think more clearly and make decisions that benefit your life.
- If you don't learn how to manage your emotions, you may make decisions that hurt yourself or others, damage relationships, develop physical illnesses, and make you feel unhappy about your life.
- When you experience stress and anger on top of another emotion, the original emotion is magnified and can feel more difficult to manage.
- Alcohol and other drugs increase the odds that you won't think clearly.
- A healthy emotional response to a trigger generates the appropriate level of emotion for the situation, balances feeling with thinking, and results in decisions that help you work more effectively toward what is important for you.



## How Vulnerable Are You to Stress?

- (1) Always
- (2) Almost Always
- (3) Sometimes
- (4) Almost Never
- (5) Never

- 1. I eat at least one hot, balance meal a day.
- 2. I get seven to eight hours of sleep at least four nights a week.
- 3. I give and receive affection regularly.
- 4. I have at least one relative within 50 miles on whom I can rely.
- 5. I exercise to the point of perspiration at least twice a week.
- 6. I smoke less than half a pack of cigarettes a day.
- 7. I take fewer than five alcoholic drinks a week.
- 8. I am the appropriate weight for my height.
- 9. I get strength from my religious beliefs.
- 10. I regularly attend clubs or social activities.
- 11. I have a network of friends and acquaintances.
- 12. I have one or more friends to confide in about personal matters.
- 13. I am in good health (including eyesight, hearing, teeth).
- 14. I am able to speak about my feeling when angry or worried.
- 15. I do something for fun at least once a week.
- 16. I am able to organize my time effectively.
- 17. I drink fewer than three cups of coffee(or tea or cola drinks) a day.
- 18. I take quiet time for myself a day.

**Total Score:-----**

**Interpretation: Add the score and subtract 20.**

0-24: Slightly vulnerable.

25-49: Somewhat vulnerable.

50-75: Seriously vulnerable.

Above 75: Extremely vulnerable.

# Stress Management Strategies

The goal of stress management is to bring your mind and body back into balance. By adopting a positive attitude, learning healthier ways to cope and changing the way you deal with stress, you can reduce its hold on your life.

## **Strategy #1: Avoid unnecessary stress**

- Learn how to say "no"
- Avoid people who stress you out

## **Strategy #2: Alter the situation**

- Express your feelings
- Be willing to compromise
- Be more assertive
- Manage your time better

## **Strategy #3: Accept the things you cannot change**

- Don't try to control what is uncontrollable
- Look for the upside
- Share your feelings
- Learn to forgive

## **Strategy #4: Adapt to the stressor**

- Look at the big picture
- Adjust your standards
- Focus on the positive

**For each of the following stressors, apply at least one of the stress reduction strategies from above that could be implemented.**

1. Having constant stress over homework and tests.

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2. Having a friend who criticizes you for what you wear, how you act in public, and the clubs you choose to be involved with.

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3. Having parents who fight often in the house.

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## **Stress Reduction Techniques**

Exercise  
Apologize  
Ask someone for help  
Challenge your assumptions  
Challenge your irrational self-talk  
Counseling  
Cry  
Dancing  
Engage in a hobby  
Get a massage  
Guided imagery  
Hug someone  
Join a club or self-help group  
Just listen  
Keep things in perspective  
Listen to music  
Make a list  
Meditation  
Play a musical instrument  
Problem solve  
Progressive relaxation  
Read  
Read or write poetry  
Recall a pleasant experience  
Relax your jaw  
Remember that tomorrow is a new day  
Seek a different perspective  
Self-affirmation  
Sing  
Stretch  
Take a break  
Take a warm bath  
Take a nap  
Take a walk  
Take slow, deep breaths  
Talk with someone you trust  
Visualize a calming scene  
Write a letter  
Write in a journal  
Laugh  
Yoga  
Experience nature  
Go outside  
Do something nice for others  
Bubble bath or long hot shower  
Be creative  
Play with a pet

## **Stress Prevention Techniques**

Avoid catastrophizing  
Avoid getting too wrapped up in yourself  
Avoid over commitment  
Avoid perfectionism  
Avoid putting yourself down  
Avoid unnecessary arguments  
Be an actor, not a reactor  
Be prepared  
Be thankful  
Choose to be happy  
Clarify your expectations  
Cultivate new relationships  
Decorate your environment  
Develop a support network  
Develop self-affirming habits  
Distinguish between needs and wants  
Do one thing at a time  
Eliminate self-defeating behavior  
Eat a healthy diet  
Eliminate needless worry  
Find time to be alone  
Forgive  
Get adequate rest/sleep  
Get organized  
Get up 10 minutes earlier  
Have a good belly laugh  
Have a pet  
Help others  
Keep a balance in your activities  
Keep a journal or diary  
Know and accept yourself  
Learn responsible assertiveness  
**Learn to say "no"**  
List your strengths and weaknesses  
Maintain a sense of humor  
Monitor your stress level  
**Reexamine your "shoulds" and "musts"**  
Regular exercise  
Remember to play  
Set long-range goals  
Set priorities  
Smile  
Stop to smell the roses  
Strive for an open mind  
Take time to relax  
Treat others with kindness  
Try to remain flexible  
Unclutter your life  
Volunteer for a worthy cause

# Stress Test

Never or Seldom = 1

Sometimes = 2

Often = 3

Always = 4

I have problems falling asleep or staying asleep.	
I am uptight and cannot seem to relax.	
I get angry if things do not go my way.	
I have difficulty concentrating.	
I have a hard time finding fun things to do.	
I feel tired during the day.	
I worry a lot about things going on in my life.	
I have had health problems because I work too hard.	
i use alcohol, cigarettes, vapes, caffeine, or drugs to cope with stress.	
I laugh or smile less than I used to.	
I feel sad or disappointed often.	
I like to be in control.	
I don't have enough time for all the things in my life.	
I have a habit of clenching my fists, cracking my knuckles, twirling my hair or tapping my fingers.	

**TOTAL:**

# Effects of Stress

When we are under stress, we typically experience changes in four different areas, our feelings, our body, our thoughts, and our behaviours. **Below, write how stress impacts you in each area:**

When I am stressed, I feel (emotions) ...

When I am stressed, my body...

When I am stressed, I think about...

When I am stressed, I notice more or less (behaviours)...

# Causes of Stress



When we deal with negative stress, or distress, it tends to come from two different sources, our **external stressors**, and our **internal stressors**.

**External stressors** are the events or situations that cause stress, but are out of our control. **My most common external stressors are...**

**Internal stressors** are the things we do to ourselves, or the choices we make that lead to or increase stress. **My most common internal stressors are...**

# Time Stress Questionnaire

The following list describes time-related difficulties people sometimes experience. Please indicate how often each is a difficulty for you, using the numbers shown.

0 = Seldom or never a difficulty for me

1 = Sometimes a difficulty for me

2 = Frequently a difficulty for me

- \_\_\_ 1. My time is directed by factors beyond my control
- \_\_\_ 2. Interruptions
- \_\_\_ 3. Chronic overload—more to do than time available
- \_\_\_ 4. Occasional overload
- \_\_\_ 5. Chronic underload—too little to do in time available
- \_\_\_ 6. Occasional underload
- \_\_\_ 7. Alternating periods of overload and underload
- \_\_\_ 8. Disorganization of my time
- \_\_\_ 9. Procrastination
- \_\_\_ 10. Separating home, school, and work
- \_\_\_ 11. Transition from work or school to home
- \_\_\_ 12. Finding time for regular exercise
- \_\_\_ 13. Finding time for daily periods of relaxation
- \_\_\_ 14. Finding time for friendships
- \_\_\_ 15. Finding time for family
- \_\_\_ 16. Finding time for vacations
- \_\_\_ 17. Easily bored
- \_\_\_ 18. Saying “yes” when I later wish I had said “no”
- \_\_\_ 19. Feeling overwhelmed by large tasks over an extended period of time
- \_\_\_ 20. Avoiding important tasks by frittering away time on less important ones
- \_\_\_ 21. Feeling compelled to assume responsibilities in groups
- \_\_\_ 22. Unable to delegate because no one to delegate to
- \_\_\_ 23. My perfectionism creates delays
- \_\_\_ 24. I tend to leave tasks unfinished
- \_\_\_ 25. I have difficulty living with unfinished tasks
- \_\_\_ 26. Too many projects going at one time

- \_\_\_27. Getting into time binds by trying to please others too often
- \_\_\_28. I tend to hurry even when it's not necessary
- \_\_\_29. Lose concentration while thinking about other things I have to do
- \_\_\_30. Not enough time alone
- \_\_\_31. Feel compelled to be punctual
- \_\_\_32. Pressure related to deadlines

**Scoring**

Add your scores and find your rating below.

- 0-9            Low difficulty with time-related stressors
- 10-19        Moderate difficulty with time-related stressors
- 20 or more   High difficulty with time-related stressors

Now go back and underline the five most significant time-related stressors for you. Identify two concrete strategies you can take to help relieve each of these key stressors:

Stressor 1: \_\_\_\_\_

1. \_\_\_\_\_

2. \_\_\_\_\_

Stressor 2: \_\_\_\_\_

1. \_\_\_\_\_

2. \_\_\_\_\_

Stressor 3: \_\_\_\_\_

1. \_\_\_\_\_

2. \_\_\_\_\_

Stressor 4: \_\_\_\_\_

1. \_\_\_\_\_

2. \_\_\_\_\_

Stressor 5: \_\_\_\_\_

1. \_\_\_\_\_

2. \_\_\_\_\_



# Mindfulness

## What Is Mindfulness?

Mindfulness means paying full attention to something.

It means taking your time to really notice what you're doing.

Mindfulness happens naturally sometimes. Let's say you're getting ready to take a foul shot in basketball. You carefully position your feet at the line. You look up at the hoop and feel the ball in your hands. Taking your time, you bounce the ball a couple of times. You tune out all the other sounds and take your shot. Swoosh — yes! That's mindfulness in action.

### BENEFITS OF MINDFULNESS

- improve attention and retention
- be less distracted
- learn more
- stay calm under stress
- avoid getting upset too easily
- slow down instead of rush
- listen better to others
- be more patient
- get along better
- gain self-control
- get tasks finished
- have better relationships
- get better sleep
- feel happier and enjoy things more



### HOW DOES MINDFULNESS WORK?

Training the mind takes practice. The more you practice mindfulness skills, the better you get at being mindful.

If you practice mindfulness skills, being mindful begins to come naturally when you need it in your everyday life. This can help you feel calmer when you're stressed, or more focused when you have to do something difficult or complicated.

When you practice mindfulness skills, you're training your attention.

Many reputable studies have shown that mindfulness-based therapies can reduce symptoms of anxiety and depression, in addition to ADHD, disordered eating, even chronic pain and illness.

Stress can cause us all to lose it sometimes. Let mindfulness give you the space you need to make better decisions for a more positive outcome. When we practice mindfulness, we are better able to notice when our feelings are building and CHOOSE how to cope or respond. When we practice mindfulness we are less likely to act in ways that could cause us more stress and less likely to be so overwhelmed that we choose an unhealthy way to resolve the feelings.

A 2017 study suggests that mindfulness training can cause significant increases in students' life satisfaction and significant decreases in depression and anxiety. The study also found mindfulness may decrease sleep issues and alcohol consequences.

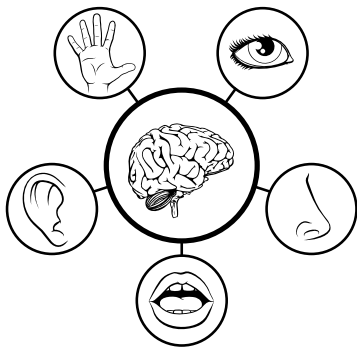
You don't have to do mindfulness for longer than one minute if it's hard. Engaging for even just 1 minute is more productive than not engaging at all. Over time, your capacity will build and the benefits will be even greater.

# Practicing Mindfulness

Developing a practice that feels right for you can take some time. Some people need movement and others need stillness, while many of us get the most out of a combination of both.

## 5 4 3 2 1 METHOD

When you can find your breath, try practicing the 5-4-3-2-1 technique. For that, you want to look around and focus on:



- 5 things you see
- 4 things you feel
- 3 things you hear
- 2 things you smell
- 1 thing you taste

The idea is that the 5-4-3-2-1 technique helps you shift your focus to what's currently happening around you instead of what's making you feel anxious.

## BODY SCAN



Pay attention to the physical sensations throughout your body without judgment. Start at the top of your head and move through each area with your mind, pausing to notice what you feel.

## CONTROLLED BREATHING

Resonant breathing focuses on breathing in a rhythmic pattern, so you don't need to worry as much about whether you are inhaling and exhaling out of your nose or mouth.

This makes it an ideal technique if you are new to controlled breathing. It's also simple to do and can be used in most situations.

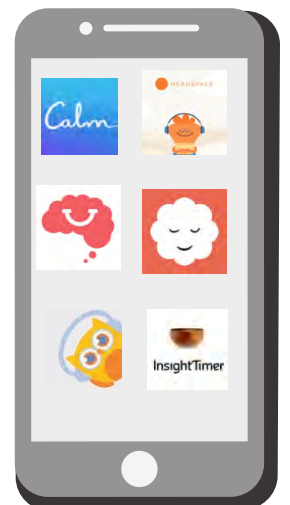
### Here's How:

1. While counting in your head to 5, slowly and mindfully inhale air to expand your lungs.
2. Exhale slowly and thoroughly as you count to 5 once again.

Repeat this pattern with a goal of breathing at a rate of about 3 to 7 breaths per minute. You can also modify this breathing rate to suit your needs and accommodate any health conditions you may have.

*Helpful Apps*

Calm  
Headspace  
MyLife Meditation  
Smiling Mind  
Dreamy Kid  
Insight Timer



While disconnecting from our devices is essential for our mental health, our devices can be used sometimes to access amazing resources and videos to help us practice mindfulness! If you search for "guided meditations" or "progressive muscle relaxation" on YouTube, you will find many amazing things.

# More Mindfulness Practices for Teens

## EXPECT STRESS

Stress is a given, but being stressed-out is optional.

We all face stress-inducing moments throughout our day, whether it's a presentation or a test in Biology. Stress is a normal reaction in the body that creates the necessary nervous system activation to handle a challenging task. It becomes a problem when we never allow that stress to be discharged (either through exercise, or some of the practices listed below). Research shows that people who expect stress are actually less stressed — when we disabuse ourselves of the silly notion that things will always be easy and our day will generally go as planned, we are more prepared to handle the curveballs life likes to throw at us. Your Stress is an entirely normal reaction to a challenge.



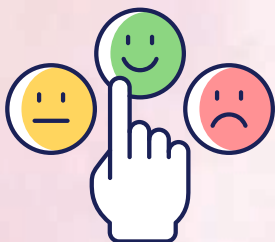
## WHAT'S THE STORY

**A big part of what stresses us out is the story we tell ourselves about what's happening.**

Encourage yourself to stop when you are stressed, and ask yourself, "What's the story?" Are you telling yourself you'll fail the test, or that no one likes you?

Can you drop that story, and just notice what is actually happening?

Thoughts are incredibly seductive, making us think they are completely true and vitally important. Teens, given their intense, developmentally-appropriate focus on the self, often believe the negative stream of self-critical thoughts in their heads. Thoughts are not facts.



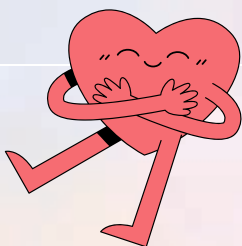
## NOTICE THE GOOD

When we're stressed, it puts the brain in a fearful state, and therefore we start to pay more attention to threats, which only makes the stress worse! Encourage yourself to notice the things that are good, or even just okay, right now. Challenge yourself to go through your day and notice ten things that are beautiful, helpful, kind, or pleasant. Keep track in a notebook or on your phone for an even deeper impact.

## MINDFUL MUSIC

Ben Sedley, author of *Stuff That Sucks* (a great book for teens!), encourages teens to practice mindfulness by listening to music and "get[ting] inside the song." Instead of focusing on the lyrics (which may not be very appropriate for stress reduction), **pay attention to the music itself: what instruments do you hear? is the song loud or soft? fast or slow? How do you feel when they listen, both mentally and physically: what emotions does the song create in you? where in your body do you feel them? can you feel the beat of the music in your body?**

Mindfully listening to music is a great stress reliever, AND a great way to practice being completely in the present moment.



## HUG YOURSELF!

**DID YOU KNOW:** Hugging yourself is as effective as getting hugged by someone? Your neurons don't know it's you — they're just dumb neurons, and when they get squeezed they activate and think, "Someone loves me!" and then oxytocin and other **happy hormones** start swirling in the brain and bloodstream. It's like "legal blood doping." **So go ahead and hug yourself** — it will make you feel better!

## NO EMOTION LASTS FOREVER

A major component of teen angst is the feeling that “I’ll ALWAYS be miserable.” With mindfulness, we come to understand that **no emotion lasts forever**. When you pay close attention to it, **an emotion is actually a constantly shifting combination** of sensations and thoughts and feelings and memories. No two seconds of your emotional experience are identical.

In Amy Saltzman’s *A Still Quiet Place for Teens*, she encourages teens to “**graph**” their emotional experience. For example, anger may spike quickly, and then fade slowly, while sadness is more of a gentle sine wave. By tracking their emotion, and attending more to the **contours** of the experience (how long it lasts, if it’s intermittent or continuous, etc.), as opposed to the **content** of it, teens come to understand the way that emotions play out in their own bodies. They can actually experience (as opposed to just “knowing”) that emotions are impermanent.



## TECH DETOX

Devices contribute to our stress in numerous ways: they distract us from our direct experience, the emails and notifications aggravate our worries, and social media contributes to FOMO and lots of unhelpful comparisons. Encourage yourself to pay attention to how spending time on your devices makes you feel. Take frequent breaks (minimum 20 minutes at a time) when there’s NO technology – no phone, no TV, no computer, no iPad. **Disconnecting from technology reconnects you to your experience!**

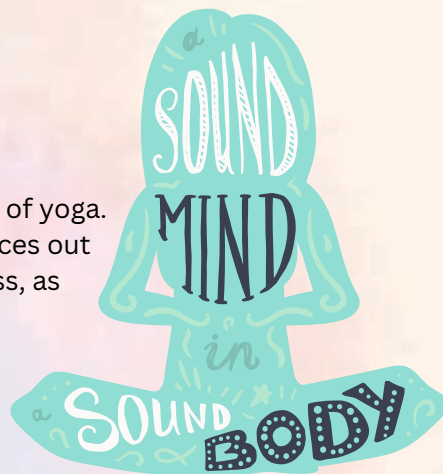
## MINDFUL POETRY

Reading poetry or lyrics (and writing it) can be a safe way for teens to discuss emotions and experiences. The two mindfulness-related poems that seem to resonate the most with teens are:

- “**The Guest House**” by Rumi: **what it would be like to welcome each emotion**. Have you ever had emotions that felt like unwelcome visitors that trashed the place? Have you ever had difficult experiences that you ultimately learned something from? What things do you do to avoid feeling your emotions? What happens when you avoid them? Can you try to welcome even your unpleasant emotions?
- “**Autobiography in Five Chapters**” by Portia Nelson: (and watch the video on YouTube) and consider: What holes do you often fall into? Why is it so easy to make the same mistakes over and over? **What new streets do you think you could walk down?** What changes could you make that will help you better take care of yourself?

## PRACTICE MINDFUL YOGA

Mindfulness has always been an essential aspect of the physical practice of yoga. The difference between Mindful Yoga and the wide variety of yoga practices out there is that with Mindful Yoga, the main focus is on mind-body awareness, as opposed to alignment details and the exact physical posture.



## RESOURCES FOR TEENS

There are lots of great mindfulness books and resources for teens. Here are a few of our faves:

*A Still Quiet Place for Teens: A Mindfulness Workbook to Ease Stress and Difficult Emotions* by Amy Saltzman  
*Stuff That Sucks: A Teen’s Guide to Accepting What You Can’t Change and Committing to What You Can* by Ben Sedley

*Brainstorm: The Power and Purpose of the Teenage Brain* by Dan Siegel

Change to Chill (website for teens)

TEEN Breathe Magazine

# Pretest Mental Illness

## Answer the following questions true or false.

- \_\_\_\_\_ 1. Serious mental illness can happen in any family.
- \_\_\_\_\_ 2. The suicide rate for people who suffer from mental illness is greater than the general public.
- \_\_\_\_\_ 3. Psychopath and psychotic mean the same thing.
- \_\_\_\_\_ 4. The great majority of people with mental illness are not violent.
- \_\_\_\_\_ 5. Abuse of drugs and alcohol may be a way people with mental illness medicate themselves to relieve their symptoms.
- \_\_\_\_\_ 6. Mental illness and mental retardation are the same thing
- \_\_\_\_\_ 7. People with mental illness can pull themselves together and be normal if they try hard enough.
- \_\_\_\_\_ 8. Mental illness strikes one in five people at some point in their lives
- \_\_\_\_\_ 9. Mental illness is a physical illness affecting the brain.
- \_\_\_\_\_ 10. All people with mental illness live in their own world and are out of contact with reality all of the time.

## Resources for Mental Health

### School:

My Guidance counselor \_\_\_\_\_  
School Social Worker \_\_\_\_\_  
School Psychologist \_\_\_\_\_  
Substance Abuse Counselor \_\_\_\_\_  
School Nurse \_\_\_\_\_

**Community:** Psychiatrist, Psychologist, Social Worker, Substance Abuse Counselor, Community  
<http://www.responsecrisiscenter.org/>  
(Response of Suffolk County (631)751-7500 HOTLINE)  
Dial 988 for Suicide and Crisis Lifeline



# Mental Health

**Mental health is more than just the absence of mental illness. It means you are in a state of wellbeing where you feel good and function well in the world.**

According to the World Health Organization, good mental health is when you can: cope with the normal stresses of life, work productively, realize your potential, and contribute to the community. If you have good mental health, you might have emotions including happiness, love, joy and compassion, and you feel generally satisfied with life. You might also have a sense of spiritual wellbeing, a sense of meaning or purpose, and feelings of peace. We all have to face challenges in life. People who have good mental health are more likely to be able to cope with the ups and downs.

**You probably have good mental health if:**

- you are confident when faced with new situations or people
- you feel optimistic
- you do not always blame yourself
- you set goals
- you feel good about yourself
- you have good self esteem

## RESILIENCE

An important part of having good mental health is building resilience. This is when you can cope with unexpected changes and challenges in your life through drawing on your inner strength and using the networks around you.

**Resilience is important for your mental health and can be learned.**

People who have resilience can manage stress better, which means they are less likely to develop mental illnesses like depression and anxiety. You can learn coping skills to build your resilience and ensure good mental health.

**Recent studies indicate that approximately one in five teens between ages twelve and eighteen suffer from at least one diagnosable mental health disorder.**

**A study published in the Journal of Abnormal Psychology in 2019 indicates the teen mental health crisis continues to grow. In fact, mental health professionals and members of the medical community have referred to the current rising trend in teens seeking (or needing) mental health treatment as an epidemic.**



**Do these numbers surprise you? Explain.**

**What do you think could be contributing to the mental health crisis among youth?**

## MENTAL HEALTH BY THE NUMBERS

- 1 in 5 U.S. adults experience mental illness each year
- 1 in 20 U.S. adults experience serious mental illness each year
- 1 in 6 U.S. youth aged 6-17 experience a mental health disorder each year
- 50% of all lifetime mental illness begins by age 14, and 75% by age 24
- Suicide is the 2nd leading cause of death among people aged 10-14
- Since 2009, mental health issues among teens has been increasing and is now considered an "epidemic"

# Let's Talk about Stigma

Asking for help or support can be difficult no matter the situation, but it can be especially hard when it comes to talking about mental health. Because of common misconceptions surrounding mental illness and addiction, many people find it uncomfortable to openly talk about mental health, creating a harmful stigma.

This mental health stigma is predominantly seen among youth because young people are often portrayed as worry-free, light-hearted and not easily burdened with the tasks of daily living. However, we know that 50% of all chronic mental illness begins by age 14 and 75% begins by age 24.

We may never know exactly how to end the stigma around mental health in our society, but we can work to form a sense of awareness around the issue and keep our loved ones informed. As people become increasingly more comfortable talking about mental health issues, we can normalize mental health.

## 4 Conversation Topics That Can Help End Youth Mental Health Stigma

### 1 What is stigma?

Sometimes it's hard to talk about our struggles with mental health because we don't know how to explain it or sometimes it doesn't feel safe to do so. **Stigma is anything that stereotypes, places a pre-judgment, or puts labels on a person, situation, or idea.** Let's focus on reducing stigma around stress, anxiety, depression and other related conditions that are common with teens.

#### Mental health conversation starters:

- What does stigma mean to you? What does it look like? What does it feel like?
- How have you experienced stigma before?
- How have you ever applied stigma to a person, situation or idea (It's okay, we all have!)?

### 2 What are stressors in your life?

Sometimes people apply stigma to those living with a mental illness, thinking they just can't "deal" with life and stress the way everyone else can. But no one has their life completely together. Everyone has their own unique stressors and life circumstances and their own unique ways of coping with them. Learning what stresses you out is beneficial to everyone and can help reduce stress and, ultimately, improve your mental health.

#### Identifying stressors as a mindfulness practice:

- Identify some of the main stressors in your life – these could be anything! If you are comfortable doing so, write them down and share them with a friend or peer. Discuss the differences and similarities on your lists and brainstorm some healthy ways to cope.

### 3 1 in 5 people will have a mental illness in their lifetime.

According to NAMI, 1 in 5 people have or will receive a mental illness diagnosis in their lifetime. That might sound pretty scary, but it doesn't have to be. Part of addressing stigma is taking the scary factor out of mental health. Mental illness is just like other chronic health conditions – think of acne, diabetes, high blood pressure, or celiac disease. We don't apply the same kind of stigma to people who have these types of health conditions as we do to those living with a mental illness, even though they are all common, manageable and treatable!

#### Mental health conversation starters:

- How does it make you feel to learn 1 in 5 people have or will have a mental illness at some point in their life? What are ways that you could talk about this with your friends or family?
- How does learning that mental illness is a health condition, just like any other health condition, change the way you think about mental illness?

### 4 Practice active listening

Often, there is a misconception that people who are having a hard time want to be left alone to deal with their issues by themselves. While this may sometimes be true for people living with mental illness, it is often challenging for people who are struggling to reach out for support – it's not always that they want to be left alone, it might just be that they don't know how to ask for support or know what kind of support they need!

#### Practice being a supportive listener using these tips:

Find a safe and comfortable place

- Ask questions that allow the person to talk about how they are doing openly
- Be an active listener – listen but don't interrupt
- Respond with understanding and empathy

# Mental Health: Use the Right Words

Slang words like “psycho”, “schizo” and “wacko” demean people who struggle to cope with serious treatable illnesses. Derogatory references to people with psychiatric symptoms are as inappropriate as for any other illnesses or disability. Labels like “looney bin”, “insane asylum” and “funny farm” are humiliating to those who require medical help from hospitals. “Hospital” or “psychiatric hospitals” are preferable. Labels that equate people who have a mental illness with their illnesses (e.g. schizophrenics, manic depressives) are dehumanizing and offensive. It is better to say “a person with ...” a specific condition.

“Psychotic” and “psychopathic” are NOT the same. “Psychotic” describes a period of disorientation in the course of an illness like schizophrenia, manic depression or depression. Psychotic symptoms are generally treatable with appropriate medication. “Psychopathic” disorders generally do not respond to medication. Schizophrenia, major depression, and manic depression are the most prevalent psychiatric conditions involving psychotic symptoms.

## Definitions:

**Bipolar Disorder:** (also known as Manic Depression) An illness in which periods of mania, depression, and normal moods alternate. Mania is typically characterized by overconfidence, delusions of grandeur, racing thoughts, recklessness and little need for sleep. During the depressive phase of the illness the person may feel worthless, helpless, lose interest in normally pleasurable activities, sleep a great deal of the time, and think about death or attempt suicide. Over 10 million people in America have bipolar disorder, and the illness affects men and women equally.

**Dissociative Identity Disorder:** (also known as Multiple Personality Disorder) Presence of 2 or more personalities (called subpersonalities) within 1 person. Symptoms include flashbacks, using “we” or “us” when referring to self, noticing drastic differences in handwriting from time to time, finding yourself someplace and not knowing how you got there, and sometimes hearing voices. Additionally, accents, ways of thinking, and attitudes may differ among personalities, as well as allergies, right or left-handedness, and the need for eyeglasses. Treatments usually include psychotherapy and medication. About 20% of those affected are male.

**Generalized Anxiety Disorder:** Symptoms: Chronic, exaggerated worry, tension, and irritability that appear to have no cause or are more intense than the situation warrants. Physical signs, such as restlessness, trouble falling or staying asleep, headaches, trembling, twitching, muscle tension, or sweating, often accompany these psychological symptoms. Formal diagnosis: When someone spends at least six months worried excessively about everyday problems. Approximately 4 million American adults ages 18 to 54 have GAD.

**Social Anxiety Disorder:** Symptoms: Anxiety or fear in situations where someone may be judged, scrutinized or evaluated. Physical signs, such as sweating, trembling, rigid body posture avoiding places where there are other people. Formal diagnosis: When someone spends at least six months worried excessively about everyday problems. Approximately 12.1% of the U.S. population experiences Social Anxiety Disorder.

**Major Depression:** Characterized by some or all of the following symptoms over an extended period of time: Difficulty sleeping or sleeping too much, constant fatigue, loss of interest in usually pleasurable activities, inappropriate guilt or feeling of worthlessness, difficulty concentrating or accomplishing tasks, recurrent thoughts of death or suicide, suicide attempts. Major depression is a serious medical illness affecting 15 million American adults, or approximately 5-8 percent of the adult population in a given year.

**Obsessive Compulsive Disorder:** Characterized by repeated, intrusive, and unwanted thoughts (obsessions) and/or rituals that seem impossible to control (compulsions). Adolescents may be aware that their symptoms don’t make sense and are excessive, but younger children may be distressed only when they are prevented from carrying out their compulsive habits. Compulsive behaviors often include counting, arranging and rearranging objects and excessive hand washing. Affects 2 – 3% of all Americans.



**Panic Disorder:** Characterized by panic attacks. Results in sudden feelings of terror that strike repeatedly and without warning. Physical symptoms include chest pain, heart palpitations, shortness of breath, dizziness, abdominal discomfort, feelings of unreality and fear of dying. Children and adolescents with this disorder may experience unrealistic worry, self-consciousness and tension. It is estimated that 2 percent to 5 percent of Americans have panic disorder.

**Phobias/Anxiety Disorders:** A disabling irrational fear of something that poses little or no real danger. Fear leads to avoidance of objects or situations and can cause extreme feelings of terror, dread and panic which can substantially restrict one's life. Specific phobias center around particular objects (e.g. certain animals) or situations (e.g. heights or enclosed spaces). Common symptoms for children and adolescents with "social" phobia are hypersensitivity to criticism, difficulty being assertive and low self-esteem. Affects 1% of all Americans.

**Insomnia:** A common sleep disorder: With insomnia you may have trouble falling asleep, staying asleep or getting good quality sleep. This can be caused by stress and can last for a few days or weeks at a time. Treatment includes cognitive behavioral therapy and medication. On average, 10% of adults in the U.S. meet the criteria for insomnia.

**Posttraumatic Stress Disorder:** This is a psychiatric disorder that may occur in people who have experienced or witnesses a traumatic event or series of circumstances. PTSD causes intense thoughts and feelings related to their experience that last long after the event has ended. Intrusive thoughts include repeated unwanted memories, distressing dreams, and flashbacks of the trauma. Flashbacks may be so vivid that people feel they are reliving the experience or seeing it before their eyes. About 5% of the U.S. population has PTSD any given year.

**Schizophrenia:** A thought disorder characterized by a false perception of reality. Typically people with schizophrenia experience auditory and/or visual hallucinations and delusions which are often paranoid in nature. Thinking can be illogical and emotions may be flat or inappropriate. Few, however, are totally out of contact with reality and symptoms are generally sporadic. Schizophrenia is a serious mental illness that affects 2.4 million American adults over the age of 18.

### **Neurobehavioral disorders:**

**Attention Deficit Hyperactivity Disorder:** (also known as ADHD) is a condition that becomes apparent in some children in the preschool and early school years. It is hard for these children to control their behavior and/or pay attention. The principle characteristics of ADHD are inattention, hyperactivity, and impulsivity. The Center for Disease Control and Prevention reports that ADHD affects an estimated 9 percent of children aged 3-17 and 2-4 percent of adults.

**Tourette syndrome (TS):** is a neurological disorder characterized by repetitive, stereotyped, involuntary movements and vocalizations called tics. The disorder is named for Dr. Georges Gilles de la Tourette, the pioneering French neurologist who in 1885 first described the condition in an 86-year-old French noblewoman. Symptoms can disappear for weeks or months at a time and severity waxes and wanes.

# Eating Disorders

## **Anorexia Nervosa**

Anorexia is characterized by an intense and irrational fear of body fat and weight gain even when markedly underweight; a misperception of body weight and shape to the extent of feeling or seeing fat even when emaciated. People who have anorexia develop unusual eating habits such as avoiding food, picking out a few foods and eating them in small amounts, weighing their food, and counting the calories of everything they eat. They may also exercise excessively as a method of getting rid of unwanted calories.

## **Bulimia Nervosa**

Bulimia is characterized by cycles of bingeing and purging. A person binges by rapidly consuming a large amount of food. The binge is then followed by attempts to rid the body of the food that was consumed by engaging in self-induced vomiting, use of laxatives, enemas, diuretics, excessive exercise, skipping meals, or dieting. People who suffer from bulimia eat an excessive amount of food in a single episode and almost immediately make themselves vomit or use laxatives or diuretics (water pills) to get rid of the food in their bodies. This behavior often is referred to as the "binge/purge" cycle. Like people with anorexia, people with bulimia have an intense fear of gaining weight.

## **Binge Eating Disorder (BED)**

The person diets, making herself or himself hungry, and then binges in response to that hunger. The person may also eat for emotional reasons: to comfort themselves, avoid uncomfortable situations, and numb feelings. People with this recently recognized disorder have frequent episodes of compulsive overeating, but unlike those with bulimia, they do not purge their bodies of food (NIMH, 2002). During these food binges, they often eat alone and very quickly, regardless of whether they feel hungry or full. They often feel shame or guilt over their actions. Unlike anorexia and bulimia, binge-eating disorder occurs almost as often in men as in women (National Eating Disorders Association, 2002).

## **Anorexia Athletica (Compulsive Exercising)**

Many people who are preoccupied with food and weight exercise compulsively in attempts to control weight in a misguided attempt to gain a sense of power, control, and self-respect.

## **Who has eating disorders?**

Research shows that more than 90 percent of those who have eating disorders are women between the ages of 12 and 25 (National Alliance for the Mentally Ill, 2003). However, increasing numbers of older women and men have these disorders. In addition, hundreds of thousands of boys are affected by these disorders (U.S. DHHS Office on Women's Health, 2000).

## **Psychological Factors that Contribute to Eating Disorders:**

- Low self-esteem
- Feelings of inadequacy or lack of control in life
- Depression, anxiety, anger, or loneliness

## **Interpersonal Factors that Contribute to Eating Disorders:**

- Troubled family and personal relationships
- Difficulty expressing emotions and feelings
- History of being teased or ridiculed based on size or weight
- History of physical or sexual abuse

### **Social Factors that Contribute to Eating Disorders:**

- Cultural pressures that glorify "thinness" and place value on obtaining the "perfect body"
- Narrow definitions of beauty that include only women and men of specific body weights and shapes
- Cultural norms that value people on the basis of physical appearance and not inner qualities and strengths

### **Other Factors that Contribute to Eating Disorders:**

- Scientists are still researching possible biochemical or biological causes of eating disorders. In some individuals with eating disorders, certain chemicals in the brain that control hunger, appetite, and digestion have been found to be imbalanced. The exact meaning and implications of these imbalances remains under investigation.

Eating disorders are complex conditions that can arise from a variety of potential causes. Once started, however, they can create a self-perpetuating cycle of physical and emotional destruction.

**All eating disorders require professional help.**

## Eating Disorder Questions

### **1. Anorexia Nervosa is a disease which can be partially attributed to**

- a. a. the media and social attitudes
- b. b. a high level of sugar in the blood
- c. c. food allergies
- d. d. too much insulin in the blood

### **2. Anorexia Athletica is a disease which is manifested by**

- a. a. excessive eating
- b. b. starvation
- c. c. excessive exercise
- d. d. excessive sleep

### **3. BED stands for**

- a. a. Bulimic Eating Disorder
- b. b. Binge Eating Disorder
- c. c. Bedtime Excessive Drowsiness
- d. d. Big Enormous Disaster

### **4. The majority of people with eating disorders are**

- a. a. females between the ages of 25-50
- b. b. males between 25-30
- c. c. males between 12-25
- d. d. females between 12-25

### **True or False**

\_\_\_\_\_ 5. Eating Disorders can be dealt with by a caring group of family and friends; no professional help is needed.

\_\_\_\_\_ 6. People with eating disorders often feel they have little control over other areas of their life.

# Mental Health Chart

Directions: Fill in the chart with the information provided.

Disorder	Description	Signs and Symptoms	Statistics
ADHD			
Bipolar Disorder			
Generalized Anxiety Disorder			
Social Anxiety Disorder			
Major Depression			
Obsessive Compulsive Disorder			
Panic Disorder			
Phobias/Anxiety Disorders			
Insomnia			
Posttraumatic Stress Disorder			
Schizophrenia			
Tourette Syndrome			
Autism			
Anorexia Nervosa			
Bulimia Nervosa			
Binge Eating Disorder			

# THE MIND EXPLAINED: *ANXIETY*

1. What are the symptoms of a panic attack?
2. When in danger, what instinct kicks in? -----  
What does this mean and how does the body react?
3. What fears and phobias are mentioned in the video?
4. According to the video, what did people in the past do to relax?
5. How do modern people relax?
6. Which of the responses from #4 and #5 would you consider to be healthy ways to relax or combat stress and anxiety and which would you consider to be unhealthy? Fill in the chart below and be prepared to explain.

HEALTHY WAYS TO RELAX	UNHEALTHY WAYS RELAX

7. Is anxiety something that is controllable? Use evidence from the video to support your answer.

# Teen Mental Health Problems: The Warning Signs

Mental health problems are real, painful and can be severe. They can lead to school failure, loss of friends, or family conflict. Some of the signs that may point to a possible problem are listed below.

## **Is troubled by feeling:**

- very angry most of the time, cries often or overreacts to things
- worthless or guilty a lot
- anxious or worried a lot more than other young people
- grief for a long time after a loss or death
- extremely fearful-has unexplained fears or more fears than most kids
- constantly concerned about physical problems or appearance
- frightened that his or her mind is controlled or is out of control

## **Experiences big changes, for example:**

- does much worse in school
- loses interest in things usually enjoyed
- has unexplained changes in sleeping or eating habits
- avoids friends or family and wants to be alone all the time
- daydreams too much and can't get things done
- feels life is too hard to handle or talks about suicide
- hears voices that cannot be explained

## **Is limited by:**

- poor concentration; difficulty making decisions
- inability to sit still or focus attention
- worries about being harmed, hurting others, or about doing something "bad"
- the need to wash, clean things, or perform certain routines dozens of times a day
- thoughts that race almost too fast to follow
- persistent nightmares

## **Behaves in ways that cause problems, for-example:**

- uses alcohol or other drugs
- eats large amounts of food and then forces vomiting, abuses laxatives, or takes enemas to avoid weight gain
- continues to diet or exercise excessively although bone-thin
- often hurts other people, destroys property, or breaks the law
- does things that can be life-threatening



# *Mental health Cheat sheet*

## **TIP #1: HANG OUT WITH PEOPLE WHO MAKE YOU FEEL GOOD ABOUT YOURSELF**

Who makes you feel good about who you are???

Spend more time with this person and less time with people who bring you down.

## **TIP #2: BE ACTIVE**

What's your favorite easy access physical activity?

Next time you're feeling low, go do this activity

## **TIP #3: TALK ABOUT YOUR FEELINGS**

Who do you trust and feel comfortable sharing your feelings with?

When you're struggling to process your feelings and deal with life, go talk to this person.

## **TIP #4: TAKE A BREAK**

Three things you can do to rest, relax, and recharge:

- 
- 
- 

Do one of these things next time you're feeling overwhelmed.

## **TIP #5: BE KIND TO YOURSELF**

Three things you love about you:

- 
- 
- 

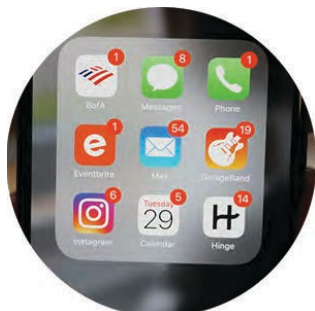
If you're feeling like you're not good enough, remember these things!

What is advocacy?

What would you be an advocate for?

## TAKE CONTROL

Here are a few important steps you can take right now to increase your digital well-being and regain control. Start with your own devices and invite friends or family to join you. Our collective individual actions are creating a powerful growing movement. Together, we can change the system.

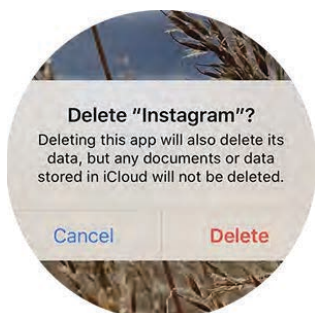


### **Turn Off Notifications**

Red is a trigger color that instantly draws our attention. Reclaim your time by turning off notifications.

### **Take Control**

- *Go to Settings > Notifications, or swipe left on any incoming notification and hit Manage > Turn Off*



### **Remove Toxic Apps**

Remove apps that profit off of addiction, distraction, outrage, polarization, and misinformation.

### **Take Control**

- *Remove Facebook → Message friends with [Signal](#)*
- *Remove TikTok → Send video messages by direct text or with [Marco Polo](#)*
- *Remove Snapchat → Get creative in Text instead*
- *Remove Instagram → Use [VSCO](#) for photography*

### **Download Helpful Tools**

While we can't solve tech with more tech, there are some tools out there that can help. Here's our short list (see our longer [list](#) at the bottom of this page).

### **Take Control**

- *Get more sleep and remove blue light → [Flux](#)*
- *Track your screen time & change habits → For [iOS](#) and [Android](#)*
- *Reduce distractions → [News Feed Eradicator](#)*
- *Stay focused on your goals → [Flipd](#)*
- *Block distractions across your devices → [Freedom](#)*
- *Practice mindfulness → [Insight Timer](#)*



### **Follow Voices You Disagree With**

Social media serves us content we already agree with to keep us online longer, eroding our ability to engage with people who don't share our views. To solve problems from poverty to racism to climate change, we have to come together and expose ourselves to different perspectives.

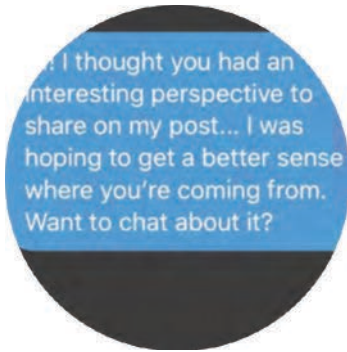
### **Take Control**

- *Check news sites whose perspectives you disagree with → [AllSides](#) gives readers a cross-partisan view of world events covered by the media, and sustains itself on a consciously created hybrid revenue model to avoid bias and clickbait incentives*



## **Eliminate Outrage from Your Diet**

We vote with our clicks. Don't support sites that pollute our cultural environment with vitriol via clickbait and outrage.



### **Be Compassionate**

Social media profits off hate and anger because it generates more engagement. Let's fight back with compassion.

#### **Take Control**

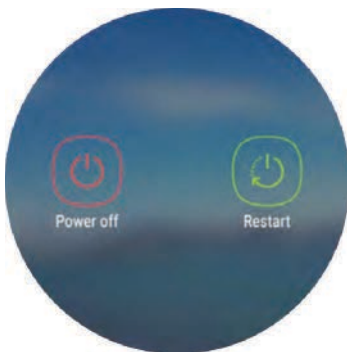
- *Pause* → Remember there's a real person behind the screen: Don't be so quick to unfollow or publicly argue with someone who posts something you disagree with
- *Be compassionate* → Try a private message to ask why they feel that way, with genuine curiosity and a desire to understand

## **Set Boundaries**

We use our phones and news feeds from the moment we wake up, to falling asleep, and even in the bathroom.

### **Take Control**

- *Clear your morning & evenings* → Set clear bounded blocks of time without technology
- *Device-free dinners* → Play a game where the first person to check their device does the dishes
- *Create a shared charging station at home* → Charge your family's phones away from bedrooms overnight
- *Buy a separate alarm clock* → Wake up without getting sucked into your phone first thing in the morning



## **Fully Disconnect 1 Day Per Week**

Disconnecting can be a powerful way to reconnect with yourself and your loved ones. It's not only good for you — collectively we can reduce time spent on social media platforms by 15%, impacting bottom lines.

### **Take Control**

- *Pick a date and let your friends and family know you'll be offline* → Or better yet, invite them to join you

## **Remember the Positive**

If you receive 99 positive comments on a post and 1 negative comment, which do you focus on? Our survival-biased brains tend to focus on the negative, even after we turn away from our tech.

### **Take Control**

- *Take screenshots of the positive messages you receive to store in a folder on your phone* → Let the rest go. Tech warps how our brains receive feedback, and we can fight back by remembering the positive
- Practice cultivating gratitude for others and using technology to share your love → Send a special video to a friend with [Tribute](#) or [Montage](#)



# Communicable and Non-communicable Diseases

**Disease** is defined as an incorrect functioning of an organ, part, structure, or system of the body.

**Communicable diseases:** also known as infectious diseases or transmissible diseases, are illnesses that result from the infection, presence and growth of pathogenic (capable of causing disease) biologic agents in an individual human or other animal host. Infections may range in severity from asymptomatic (without symptoms) to severe and fatal.

**Noncommunicable diseases:** also known as chronic diseases, are non-transmissible diseases of often long duration. Examples of NCDs include mental health conditions, stroke, heart disease, cancer, diabetes and chronic lung disease.

## Six areas from which disease results

1. **Infection**- caused by an agent capable of reproducing in the body  
ONLY AREA WHICH IS CONSIDERED COMMUNICABLE  
Examples: cold, influenza, STDs, AIDS, Lyme disease, etc.
2. **Heredity**- genetically passed  
Predisposition- more likely to get disease if it runs in your family than if you have no family history.  
Examples: cardiovascular disease, cancer, hemophilia, etc.
3. **Diet**- daily pattern of eating habits  
Examples: anemia, vitamin deficiency diseases, cardiovascular disease, etc.
4. **Stress**- physical and emotional complications  
Examples: headaches, ulcers, cardiovascular diseases, etc.
5. **Environment**- surroundings in which you live and work, including  
Pollution, accidents, smoking, work conditions, etc. can all cause these illnesses  
Examples: black lung disease, cancer, emphysema, mesothelioma, etc.
6. **Degenerative Process**- as the body ages, parts do wear out over time  
Examples: cardiovascular disease, osteoporosis, senility, vision/hearing loss, etc.

\*\*\*\*MOST DISEASES RESULT AS A COMBINATION OF AREAS\*\*\*\*

# Leading Causes of Death in the U.S. 2022

1. Diseases of the heart (Heart Disease) – 695,547
2. Malignant tumors (Cancers) – 605,213
3. COVID-19 – 416,893
4. Accidents (unintentional Injuries) – 224,935
5. Cerebrovascular diseases (Strokes) – 162,890
6. Chronic Lower Respiratory Diseases – 142,342
7. Alzheimer’s Disease – 142,342
8. Diabetes – 103,294
9. Chronic Liver Disease and Cirrhosis: 56,858
10. Nephritis, nephrotic syndrome, and nephrosis (kidney) – 54,358

The average life expectancy for American men was 76.1. The average life expectancy for American women was 81.1. Overall life expectancy at birth for the U.S. population was 78.6 years.

During the early 1900s, life expectancy was approximately 47 years of age at birth. In 1900, 30.4% of all deaths occurred among children aged less than 5 years; in 2017, that percentage was only 1.4%. In 1900, the three leading causes of death were pneumonia, tuberculosis (TB), and diarrhea and enteritis, which (together with diphtheria) caused one third of all deaths.

- How would you categorize the majority of the leading causes of death for 2022? Why? What is an example of an exception to the majority of the leading causes of death?
  
- Only since the 1900s have non-communicable diseases become the leading cause of death. Why?

Reasons for reduction of Communicable Diseases	Reasons for increase of Non Communicable Diseases

# Communicable Diseases

A. **Communicable Diseases** – diseases that can be transmitted from person to person, object to person, or animal/insect to person which are caused by pathogens (microorganisms that cause disease; aka germs)

## B. Types of Pathogens

1. **Bacteria** – most bacteria are harmless and help digestion; harmful bacteria may produce toxins; examples; food poisoning, Tuberculosis, Strep Throat
2. **Virus** – smallest pathogen; reproduces itself 1000's of times; examples: HIV, Influenza
3. **Protozoa** – found in tropical areas; usually live in the bloodstream; examples: Malaria, Dysentery (Montezuma's Revenge)
4. **Fungi** – usually attack the skin; examples: Ringworm, Athlete's foot
5. **Rickettsia** – live in animals (lice, fleas, ticks, and mites) and attack blood vessels; example: Rocky Mountain Spotted Fever
6. **Parasitic Worms** – usually infect intestines; examples: Tapeworm, Trichinosis
7. **Prions**: a protein particle that lacks nucleic acid and has been implicated as the cause of various neurodegenerative diseases (as scrapie, Creutzfeldt-Jakob disease, and bovine spongiform encephalopathy)

## C. Method of Transmission

1. → **Direct Contact** – pathogen is transmitted directly from its host to a new vector; example: kissing, sexual contact
2. → **Indirect Contact** – transmission of a pathogen occurs, but no contact will have been made between the host and the new vector; example: sharing a straw/glass which is carrying the pathogen. (contaminated objects)
3. → **Vector** – transmission from an animal / insect / parasite to a person.
4. → **Airborne Transmission** – transmission through small respiratory droplets.
5. → **Food / Water** – transmission of bacterial infections through water-borne sources

## D. Types of Infection

1. **Local** – an infection that is located in one area of the body
2. **Generalized** – an infection throughout the body

## E. Length of Infection

1. **Acute** – infection lasting a short period of time
2. **Chronic** – infection that stays in the host throughout a lifetime

## F. Body Defenses

1. **Skin**: this organ is the body's best outer defense; unbroken skin helps to keep fluids, blood borne pathogens, and chemicals from entering the body; very few pathogens can penetrate the many layers of dead or living skin cells; it also produces various oils and acids which help to keep the skin healthy and free from unwanted bacteria
2. **Coughing/Sneezing**: these defenses help the body to remove existing contaminants (examples: dust particles, pollen, etc.)
3. **Mucus**: a sticky substance which traps pathogens
4. **Cilia**: tiny, hair like structures found in the nasal cavity, pharynx (throat) and trachea (windpipe) which trap viruses and bacteria
5. **Stomach Acid**: while this aids in digestion, it also helps to destroy any pathogens that make it past the body's mucous membranes and/or cilia

6. **Eyelashes/Eyelids:** help to keep pathogens from entering the eyes
7. **Tears, Saliva, and Perspiration:** each of these body fluids contain enzymes which help dissolve bacteria; tears also wash pathogens from the eyes
8. **Lymphatic System:** lymph nodes in the body produce lymph which filters bacteria; lymph nodes are found in the neck, groin, and armpits
9. **Antibodies:** proteins that are developed by the immune system when the body encounters a pathogen; they help fight off infection and remain in the body after the body has recovered
10. **Immunity:** resistance to the development of particular diseases.

**Terms to know:**

- 1. Pandemic:** occurring over a wide geographic area and affecting an exceptionally high proportion of the population <pandemic influenza>
- 2. Epidemic:** affecting or tending to affect an atypically large number of individuals within a population, community, or region at the same time
- 3. Endemic:** restricted or peculiar to a locality or region

**G. Building Your Immune System/ Preventing Disease**

1. Wash your hands
2. Immunizations
3. Proper food storage and preparation
4. Avoid unnecessary contact with people who are sick
5. Avoid sharing personal objects
6. Eat a balanced diet
7. Sleep
8. Avoid tobacco, alcohol and other drugs
9. Manage stress
10. \_\_\_\_\_ (write in your own)

Communicable Disease Questions

**1. Are most communicable diseases acute or chronic? Why?**

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**2. How do we treat bacterial infections?**

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**3. Give 5 examples of indirect transmission:**

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**4. Give an example of a disease that caused a pandemic?**

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# The Immune Response

This is how the body fights infection. It is a bit complicated, but here is a simplified view of how it works.

1. Pathogens enter the body. They are immediately attacked by scavenger white blood cells—macrophages, monocytes or neutrophils.
2. The macrophage (WBC) engulfs the pathogen and grinds it up. It displays pieces of the pathogen called markers (or antigens) on the outside of itself. These help other white blood cells called lymphocytes to identify the pathogen.
  - a. T cells or T-lymphocytes are made in the thymus gland.
  - b. B cells or B-lymphocytes are made in the bone marrow.
3. Helper T cells bond with the antigen on the macrophage. These cells alert and activate B cells which change into Plasma cells. Plasma cells produce antibodies (proteins) to stop new pathogens of the same type or make them more vulnerable to scavenger white blood cells.
4. Killer T-lymphocytes attack virus infected cells and fire proteins, called interferon, that destroy the infected cell.
5. Suppressor T-lymphocytes circulate through the body after the infection has been eliminated, to slow and stop the process.
6. Memory cells (a type of plasma cell) circulate through the body after infection, ready for any new invasion by the same pathogen.



## Immunizations

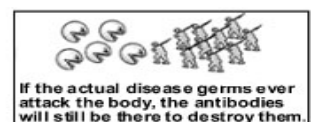
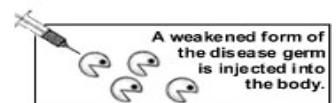
**Immunizations or vaccinations are preparations given to a person to trigger the immune response.**

They usually consist of dead or attenuated (weakened) pathogens which will not produce an episode of the disease, but prompt the body into making antibodies.

All children in the United States must be immunized in order to attend school. Immunizations are quite effective, as evidenced by the eradication of smallpox from the world.

## How Vaccines Prevent Disease

Parents are constantly concerned about the health and safety of their children and they take many steps to protect them. These preventive measures range from childproof door latches to child safety seats. In the same respect, vaccines work to safeguard children from illnesses and death caused by infectious diseases. Vaccines protect children by helping prepare their bodies to fight often serious, and potentially, deadly diseases.



## **What is COVID-19?**

Coronavirus Disease 2019 (COVID-19) is the name given by the World Health Organization for a new respiratory disease first identified in Wuhan, China, in December 2019. It is a pandemic impacting countries all over the world. Coronaviruses are a family of viruses found in people and animals causing a range of illnesses from the common cold to severe respiratory infection. Due to the increased availability of testing, more COVID 19 infections are being identified every day. As it is a newly-identified virus, this is an emerging and rapidly-evolving situation and new information becomes available daily. Stay updated.

### **How does the COVID-19 Virus Spread?**

The virus is thought to spread mainly by “person-to-person” contact. This means close contact within six feet and through respiratory droplets produced when an infected person coughs or sneezes. While humans are thought to be most contagious when symptomatic, the virus can spread even when an infected person is not showing symptoms. It may be possible that a person can get COVID-19 by touching a surface or object that has the virus on it and then touching his/her mouth, nose, or possibly eyes, but this is not thought to be the main way the virus spreads. The main way the virus spreads is through airborne droplets.

### **What are COVID-19 Symptoms?**

Symptoms of a COVID-19 infection may appear 2-14 days after being exposed to the virus. Symptoms range from mild to severe respiratory illness. The most common symptoms include:

- Fever
- Cough
- Shortness of breath or difficulty in breathing
- Tiredness/fatigue

While less common, individuals with COVID-19 may also experience:

- Aches and pains
- Sore throat
- Nasal congestion
- Runny nose
- Diarrhea


### **Vulnerable Populations**

Current COVID-19 cases and prior coronavirus infections suggest that the most vulnerable populations include:

- People 65 years and older
- People who live in a nursing home or long-term care facility
- Individuals who are immunocompromised or have pre-existing medical conditions, such as:
  - Heart disease
  - Lung disease
  - Diabetes
- Treatment and Recovery
- The overwhelming majority of people infected with COVID-19 experience mild symptoms and recover from the disease without needing special treatment.

## Common Symptoms of a Cold, the Flu, and COVID-19

Learn more at [www.nia.nih.gov/flu](http://www.nia.nih.gov/flu)



Common Symptoms	Cold	Flu	COVID-19
Fever and/or chills		✓	✓
Headache		✓	✓
Muscle pain or body aches		✓	✓
Feeling tired or weak		✓	✓
Sore throat	✓	✓	✓
Runny or stuffy nose	✓	✓	✓
Sneezing	✓		
Cough	✓	✓	✓
Shortness of breath or difficulty breathing		✓	✓
Vomiting and diarrhea		✓	✓
Change in or loss of taste or smell			✓

**1. What is the difference between the FLU and COVID-19 in relation to symptoms?**

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**2. The Flu, the Common Cold and COVID-19 are all what type of pathogen?**

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**3. What was the purpose of social distancing during the pandemic?**

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**4. Why might those who have pre-existing conditions be the most at risk for health issues when contracting COVID-19?**

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## New York State Immunization Requirements for School Entrance / Attendance

Vaccines	Prekindergarten (Day Care, Head Start, Nursery or Pre-k)	Kindergarten and Grades 1, 2, 3, 4 and 5	Grades 6, 7, 8, 9, 10 and 11	Grade 12
Diphtheria and Tetanus toxoid-containing vaccine and Pertussis vaccine (DTaP/DTP/Tdap/Td) <sup>2</sup>	4 doses	5 doses or 4 doses if the 4th dose was received at 4 years or older or 3 doses if 7 years or older and the series was started at 1 year or older	3 doses	
Tetanus and Diphtheria toxoid-containing vaccine and Pertussis vaccine adolescent booster (Tdap) <sup>2</sup>	Not applicable		1 dose	
Polio vaccine (IPV/OPV) <sup>4</sup>	3 doses	4 doses or 3 doses if the 3rd dose was received at 4 years or older		
Measles, Mumps and Rubella vaccine (MMR) <sup>5</sup>	1 dose	2 doses		
Hepatitis B vaccine <sup>6</sup>	3 doses	3 doses or 2 doses of adult hepatitis B vaccine (Recombivax) for children who received the doses at least 4 months apart between the ages of 11 through 15 years.		
Varicella (Chickenpox) vaccine <sup>7</sup>	1 dose	2 doses		
Meningococcal conjugate vaccine (MenACWY) <sup>8</sup>	Not applicable		Grades 7, 8, 9, 10 and 11: 1 dose	2 doses or 1 dose if the dose was received at 16 years or older
Haemophilus influenzae type b conjugate vaccine (Hib) <sup>9</sup>	1 to 4 doses	Not applicable		
Pneumococcal Conjugate vaccine (PCV) <sup>10</sup>	1 to 4 doses	Not applicable		

**1. Based on the chart and information above, explain why immunizations are so important to individuals and society.**

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**2. How do vaccines work? What are people getting injected into their body?**

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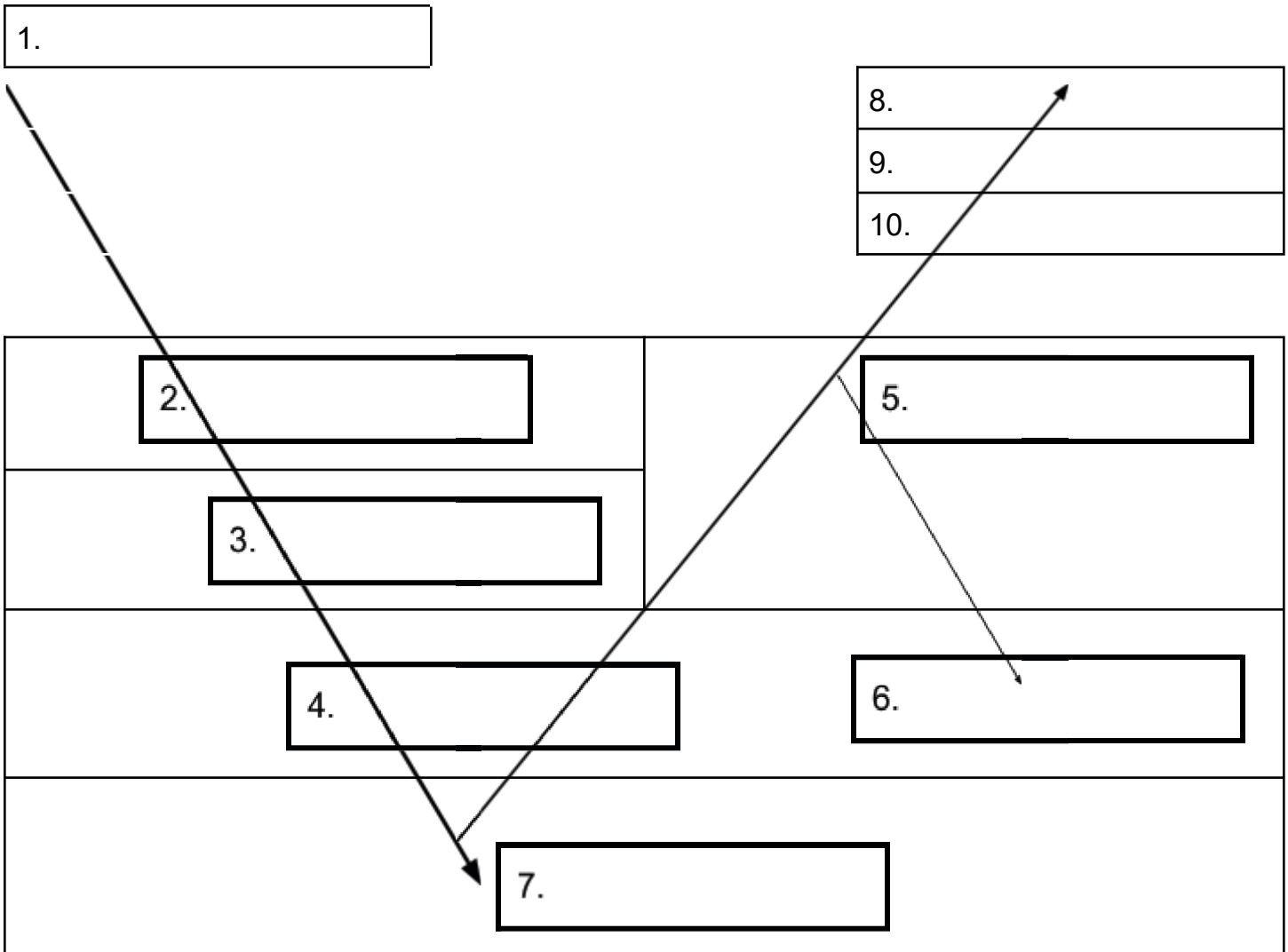


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## Communicable Disease Progression Diagram



Point of Infection -
Incubation -
Prodromal -
Typical Illness -
Recovery -
Relapse -
Death -
Carrier -
<b>You can recover as a Carrier, with or without immunity.</b>

# Lyme Disease

Lyme disease is caused by bacteria transmitted by the deer tick. Lyme disease may cause symptoms affecting the skin, nervous system, heart and/or joints of an individual. It is very commonly found on Long Island.

**Early symptoms:** in 60 to 80% of cases, a rash resembling a bull's eye or solid patch appears and expands around or near the site of the tick bite. Some may experience chills and fever, headache, fatigue, stiff neck, muscle and/or joint pain, swollen glands.

**Later symptoms:** As the disease progresses, severe fatigue, stiff aching neck and tingling or numbness in the arms and legs, facial paralysis may occur. The most severe symptoms can include severe headaches, painful arthritis, and swelling of the joints, heart and central nervous system problems.

**Treatment:** Early treatment of Lyme disease involves antibiotics and almost always results in a full cure. However, the chances of a complete cure decrease if treatment is delayed.

**Prevention:** Prevent tick bites by wearing light-colored clothing and tucking pants into socks and shirt into pants. Use a tick repellent containing DEET. Check for ticks after 2 or 3 hours of outdoor activity. Remove all ticks using tweezers.

## Answer the following questions:

1. Lyme Disease is caused by \_\_\_\_\_ transmitted by the \_\_\_\_\_ tick

2. List three early symptoms of Lyme Disease

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

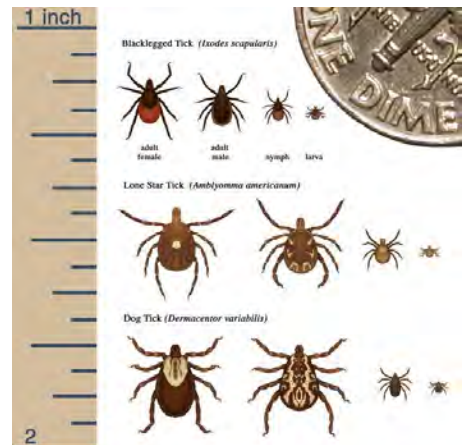
3. List three late symptoms of Lyme Disease

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

4. Early treatment of Lyme disease involves \_\_\_\_\_ and almost always results in a full \_\_\_\_\_.

5. There are several ways one can reduce their exposure to Lyme disease, List 3 preventive methods below

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_



# West Nile Virus

West Nile Virus is a mosquito-borne infection that can cause serious illness, and in some cases, death. It is quite common on Long Island at this time. Most people who are infected with the virus will not have any type of illness.

**Mild symptoms:** fever, headache, body aches, occasional skin rash and swollen lymph glands. About 20% of the people infected develop these symptoms.

**Severe symptoms:** headache, high fever, neck stiffness, muscle weakness, stupor, disorientation, tremors, convulsions, paralysis, and coma. One person out of 150 infected will develop these symptoms.

**Treatment:** There is no specific treatment for viral infections, other than to treat the symptoms and provide supportive care.

**Prevention:** Wear shoes, socks, long pants and long-sleeved shirts when outside for long periods of time or when mosquitoes are most active and use mosquito repellent according to directions. Prevent mosquitoes from breeding by eliminating any standing water in your yard, make sure gutters drain properly, and change water in birdbaths twice weekly.

## Answer the following questions:

1. What is West Nile Virus?

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2. List three mild symptoms of West Nile Virus

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

3. List three severe symptoms of West Nile Virus

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

4. There is \_\_\_\_\_ specific treatment for viral infections, other than to treat the \_\_\_\_\_ and provide \_\_\_\_\_.

5. Prevent mosquitoes from breeding by

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_



# What is Foodborne Disease?

Foodborne disease is caused by consuming contaminated foods or beverages. Many different disease-causing microbes, or pathogens, can contaminate foods, so there are many different foodborne infections. In addition, poisonous chemicals, or other harmful substances can cause foodborne diseases if they are present in food.

## **What are the most common foodborne diseases?**

The most commonly recognized foodborne infections are those caused by the bacteria *Campylobacter*, *Salmonella*, and *E. coli* O157:H7, and by a group of viruses called calicivirus, also known as the Norwalk and Norwalk-like viruses.

**Campylobacter** is a bacterial pathogen that causes fever, diarrhea, and abdominal cramps. It is the most commonly identified bacterial cause of diarrheal illness in the world. These bacteria live in the intestines of healthy birds, and most raw poultry meat has *Campylobacter* on it. Eating undercooked chicken or other food that has been contaminated with juices dripping from raw chicken is the most frequent source of this infection.

**Salmonella** is also a bacterium that is widespread in the intestines of birds, reptiles and mammals. It can spread to humans via a variety of different foods of animal origin. The illness it causes, salmonellosis, typically includes fever, diarrhea and abdominal cramps. In persons with poor underlying health or weakened immune systems, it can invade the bloodstream and cause life-threatening infections.

**E. coli** O157:H7 is a bacterial pathogen that has a reservoir in cattle and other similar animals. Human illness typically follows consumption of food or water that has been contaminated with microscopic amounts of cow feces. The illness it causes is often a severe and bloody diarrhea and painful abdominal cramps, without much fever.

**Calicivirus**, or Norwalk-like virus is an extremely common cause of foodborne illness. It causes an acute gastrointestinal illness, usually with more vomiting than diarrhea that resolves within two days. Norwalk-like viruses spread primarily from one infected person to another. Infected kitchen workers can contaminate a salad or sandwich as they prepare it if they have the virus on their hands.

Some common diseases are occasionally foodborne, even though they are usually transmitted by other routes. These include infections caused by *Shigella*, hepatitis A, and the parasites *Giardia lamblia* and *Cryptosporidia*. Even strep throats have been transmitted occasionally through food.

**1. Name the four most commonly recognized foodborne infections.**

**2. List some of the symptoms of food-borne illness:**

**3. How would you prevent the spreading illness through food?**

## Sexually Transmitted Infections

<u>Disease</u>	<u>Transmission</u>	<u>All these diseases can be transmitted through the exchange of bodily fluids</u>	<u>Common Symptoms</u>	<u>Possible Complications</u>	<u>Treatment</u>
<b>Chlamydia (Bacteria)</b>			Often no noticeable symptoms. Potential for itching, discharge or burning during urination or ejaculation, pain in the lower abdomen or back, pain during intercourse, discharge from the vagina, bleeding between menstrual periods, nausea, or fever.	If left untreated, may lead to infection of the testicles or pelvic inflammatory disease (PID) in women, a serious medical condition that can lead to infertility. May cause infertility even without symptoms. Can be transmitted from mother to newborn during childbirth.	Curable with antibiotics.
<b>Cytomegalovirus (Virus)</b>			No symptoms; or fever or severe illness   people with damaged immune systems	People with immune damage – severe mononucleosis, dangerous, blood disorders, blindness, lung damage	None
<b>Genital Herpes (Virus)</b>			Often no noticeable symptoms. May cause one or more sores, blisters, pimples, bumps, or a rash around mouth, genitals or anus, itching, burning, or tingling in either the genital area or the mouth, a fever, swollen glands or stiff neck and headache. May have repeated outbreaks that are generally less severe than the original.	May result in chronic painful condition particularly for people who have a weakened immune system. Can be transmitted from mother to newborn during childbirth.	No cure but medications can reduce the frequency and duration of outbreaks.
<b>Genital Warts (Virus)</b>			Often no noticeable symptoms but may cause raised or flat growths around genitals or anus that are usually flesh colored or whitish in appearance	Certain strains of HPV are considered risk factors for cervical cancer. In very rare cases, it can be transmitted from mother to newborn during childbirth.	No cure but warts can be removed using creams, surgery, cryosurgery (freezing), or laser treatment. There is now a vaccine to prevent certain types of HPV infection, including types that cause cervical cancer.
<b>Gonorrhea (Bacteria)</b>			May have discharge or burning during urination or ejaculation, pain in the lower abdomen or back, pain during intercourse, discharge from the vagina, bleeding between menstrual periods, nausea, or fever. For women, there are often no noticeable symptoms.	If left untreated, may lead to infection of the testicles or pelvic inflammatory disease (PID) in women, a serious medical condition that can lead to infertility. Can be transmitted from mother to newborn during childbirth.	Curable with antibiotics.

<b>Hepatitis A (Virus)</b>			Often no noticeable symptoms but may cause fever, tiredness, aches, loss of appetite, nausea, abdominal pain, dark urine, and jaundice (yellowing of the skin and eyeballs).	In rare cases, may lead to severe liver infection and death.	Nearly all infections resolve on their own. There are vaccines to prevent hepatitis A.
<b>Hepatitis B (Virus)</b>			Often no noticeable symptoms but may cause mild flu-like symptoms including fever, tiredness, aches, loss of appetite, nausea, abdominal pain, dark urine, and jaundice (yellowing of the skin and eyeballs).	Can lead to chronic infection, cirrhosis (scarring of liver tissue) and cancer of the liver. Can be transmitted from mother to newborn during childbirth.	Nearly all infections resolve on their own but medications may be used to treat chronic illness. Alcohol and certain medicines should be avoided to prevent further liver damage. There are vaccines to prevent hepatitis B.
<b>HIV / AIDS (Virus)</b>			Often no symptoms for years but may cause fever, chills and sweats, fatigue, appetite loss, weight loss, muscle and joint pain, long-lasting sore throat, swollen lymph nodes, diarrhea, yeast infections, and skin sores.	Over time, can lead to acquired immune deficiency syndrome (AIDS), which can leave a body vulnerable to other infections or cancers normally controlled by a healthy immune system. Can be transmitted from mother to newborn during childbirth.	No cure or vaccine for HIV or AIDS. There are medications that allow people to live with HIV or AIDS for longer periods of time.
<b>Scabies &amp; Pubic Lice (Crabs) (Parasite)</b>			Intense itching usually in genital area, visible crab eggs (small, oval-shaped, beads) attached to the base of hair, may have dark or bluish spots on skin in the infested area as a result of bites.	Scratching area may lead to secondary bacterial infections.	Medicated shampoos and creams will kill mites/lice on the body. In addition, need to thoroughly clean all clothing, towels and bedding to prevent reinfection.
<b>Syphilis (Bacteria)</b>			Painless sore on or around penis, vagina, mouth or anus; rash over the entire body or on the hands and soles of the feet, fever, swollen lymph glands, patchy hair loss, headaches, weight loss, muscle aches, and tiredness.	If left untreated, may damage heart, eyes, central nervous system and other organs. Can be transmitted from mother to fetus prior to birth.	Curable with antibiotics.
<b>Trichomoniasis (Protozoan Parasite)</b>			Women may experience frothy, yellow-green vaginal discharge, discomfort during intercourse and urination, irritation and itching in the genital area and in rare cases, lower abdominal pain. Most men do not experience symptoms but may have irritation inside the penis, mild discharge, or slight burning during urination or ejaculation.	If left untreated, on rare occasions, leads to pelvic inflammatory disease (PID) in women, a serious medical condition that can lead to infertility	Curable with antibiotics.

## STI Questions

Please use the chart from the previous page to answer the following questions.

1. List two bacterial STIs which have the similar symptoms

- \_\_\_\_\_
- \_\_\_\_\_

2. Which viral STI may lead to an increased risk of cervical cancer?

\_\_\_\_\_

3. Which STI manifests itself with a **painless sore**, called a *chancre*, during its first stage?

\_\_\_\_\_

4. Which STI is characterized by **painful** blister-like sores in the genital region?

\_\_\_\_\_

5. Which STIs are caused by parasites?

- \_\_\_\_\_
- \_\_\_\_\_

6. All bacterial diseases have one distinct advantage over viral STIs. Explain why it would be easier to deal with a bacterial STI.

\_\_\_\_\_  
\_\_\_\_\_

7. Which sexually transmitted infections often shows no symptoms in women but often causes pain during urination in men?

- \_\_\_\_\_
- \_\_\_\_\_

8. If 66% of patients who have contracted a bacterial STI have no symptoms, explain why this is a major issue. What should people always do before engaging in sexual behaviors with a new partner?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



# AIDS-Acquired Immune Deficiency Syndrome

## HIV-Human Immunodeficiency Virus

HIV+ means the person is infected with the virus; may be asymptomatic or do not yet meet the requirements for having AIDS.

AIDS means the person has had an opportunistic infection or has T-lymphocyte count under 200/cubic milliliter of blood and is HIV+.

### Signs and Symptoms:

HIV is a disease process. People move back and forth along the spectrum.

Early stage may exhibit flu-like symptoms.

Later, may experience night sweats, rapid weight loss, recurring viral infections, swollen glands.

Full-blown AIDS- T-cell count drops below 200 &/or **opportunistic infections** occur.

**Opportunistic infections:** infections that occur more often or are more severe in people with weakened immune systems. They can be caused by a wide variety of germs. Examples include:

- PCP (pneumocystis carinii pneumonia)
- Candida albicans (fungal infection)
- Toxoplasmosis (parasitic infection of brain)
- CMV (cytomegalovirus)
- **Kaposi's sarcoma** (rare skin cancer)
- Tuberculosis (infection of lungs)

### Transmission:

HIV is carried through body fluids, and may be transmitted during intercourse, sharing drug injection equipment, infected blood products, or maternal transmission (30 % risk, which can be reduced by antiviral drugs and c-section). The five body fluids, which **for the "average person" pose a risk** of contracting HIV:

- Blood
- Semen
- Vaginal secretions
- Breast milk
- Anal Secretions

\*\*There have been no reported cases of HIV infection through mosquito bites or human tears.

### Medications to Reduce Transmission:

Pre-Exposure Prophylaxis (PrEP) – this is medication that can reduce the risk of contracting HIV if someone may be at risk of contracting it (being in a sexually active relationship with someone who is HIV positive). With PrEP, if exposed to HIV the medicine can stop the person from becoming infected. This can either be a pill that someone takes every day or an injection that someone gets every two months.

Post-Exposure Prophylaxis (PEP) – this medication is for people who have possibly been exposed to HIV. This is only for emergency situations. This must be taken after 72 hours after a possible exposure to HIV to have a high percentage chance of preventing infection.

### Treatment:

- **HAART:** Highly Active Antiretroviral Therapy (AIDS cocktail)
- Disrupts the HIV at different stages of replication, can drop viral load to undetectable levels
- Drawbacks include: false sense of being well or cured, diabetes, huge expense, rigorous dosing schedule, resistant strains of HIV, weight redistribution, drug interaction
- Health foods, vitamins, alternative healing, support groups.
- People are living longer and staying healthier longer.

**No cure and no vaccine at this time, but has become for many people a chronic, manageable disease.**

# HIV and AIDS Questions

1. A person diagnosed with HIV is defined as \_\_\_\_\_  
\_\_\_\_\_

2. There are 2 reasons why someone would move from HIV+ to AIDS status. List both reasons. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

3. Define **opportunistic infections** & list four examples.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

4. HIV is transmitted through the exchange of body fluids. What 5 body fluids transmit the infection?  
1.  
2.  
3.  
4.  
5.

5. HAART stands for \_\_\_\_\_  
\_\_\_\_\_

6. Explain the difference between PrEP & PEP  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## True/False

- \_\_\_\_\_ 6. Human Immunodeficiency Virus is often spread by heterosexual intercourse.  
\_\_\_\_\_ 7. You can get AIDS from a mosquito bite.  
\_\_\_\_\_ 8. There is a cure for AIDS today.  
\_\_\_\_\_ 9. People do not die of AIDS, but rather, opportunistic infections.  
\_\_\_\_\_ 10. All pregnant mothers with HIV or AIDS will transmit the virus to their fetus.

# Family Health History

## **Medical history: How to compile your medical family tree**

Your family medical history — sometimes called a medical family tree or pedigree — is a record of illnesses and medical conditions affecting your family members. Similar to a family tree you might have drawn in school, a family medical history is a visual representation of the relationships among members of your family, but it also includes information for each person about diseases, age of disease onset, causes of death and other relevant health information.

## **How is a family medical history used?**

You inherit half of your genetic profile from each biological parent. Along with the genetic information that determined your appearance, you inherited genes that may cause or increase your risk of certain medical conditions. Except for a relatively small number of genes, the identities of most disease-associated genes remain unknown.

A family medical history can serve as a "substitute" genetic test to help your doctor interpret the history of disease in your family and identify patterns that may be relevant to your own health. Your doctor and other health care professionals may use your family medical history to:

- Assess your risk of certain diseases
- Recommend changes in diet or other lifestyle habits that can lower disease risk
- Recommend treatments that can modify disease risk
- Determine what diagnostic tests to order
- Determine the type and frequency of appropriate disease screening tests
- Determine whether you or family members should get a specific genetic test
- Identify a condition that might not otherwise be considered by your doctor
- Identify other family members who are at risk of developing a certain disease
- Assess your risk of passing conditions on to your children

A family medical history can't predict your future health. With few exceptions, it only provides information about risk. Other factors — such as your diet, weight, exercise routine, other lifestyle habits, and exposure to pollutants or environmental factors — will also raise or lower your risk of developing certain diseases.

## What information should you include in a family medical history?

If possible, your family medical history should include at least three generations. Compile information about your grandparents, parents, uncles and aunts, siblings, cousins, children, nieces and nephews, and grandchildren. For each person, gather the following information:

- Sex
- Date of birth
- For deceased relatives, age at the time of death and cause of death
- Diseases or other medical conditions
- Age of disease onset
- Diet, exercise habits, smoking habits or history of weight problems

Ask about the occurrence of the following diseases and medical conditions often associated with genetic risk:

- Cancer
- Heart disease
- Diabetes
- Asthma
- Arthritis
- Mental illness
- High blood pressure
- High cholesterol
- Stroke
- Kidney disease
- Alcoholism or other substance abuse
- Birth defects
- Vision loss
- Hearing loss
- Learning disabilities
- Mental retardation
- Miscarriages or stillbirths

### For help with your family health history tree:

#### The following websites provide additional information on family history:

- CDC's Family History Web site for the public — <http://www.cdc.gov/genomics/public/famhist.htm>
- U.S. Surgeon General's Family History Initiative — <http://www.hhs.gov/familyhistory/>
- National Society for Genetic Counselors — <http://www.nsgc.org/consumer/familytree/>

For more information on CDC's National Office of Public Health Genomics, visit the website at <http://www.cdc.gov/genomics>

1. Why is compiling your family health history important?
2. Name 5 diseases that might run in families.
3. Who should have access to your family health history information?

# Non-communicable Diseases

**Arthritis:** painful inflammation and swelling of joints – There are many different types and it may be caused by heredity, degeneration or injury to the joint(s). Arthritis can be treated with aspirin and other anti-inflammatory medications but there is no cure.

**Alzheimer's disease (AD)** is the most common form of [dementia](#) among older people. Dementia is a brain disorder that seriously affects a person's ability to carry out daily activities. AD begins slowly. It first involves the parts of the brain that control thought, memory and language. People with AD may have trouble remembering things that happened recently or names of people they know. Over time, symptoms get worse. People may not recognize family members or have trouble speaking, reading or writing. They may forget how to brush their teeth or comb their hair. Later on, they may become anxious or aggressive, or wander away from home. Eventually, they need total care. This can cause great stress for family members who must [care](#) for them. AD usually begins after age 60. The risk goes up as you get older. Your risk is also higher if a family member has had the disease. No treatment can stop the disease. However, some drugs may help keep symptoms from getting worse for a limited time.

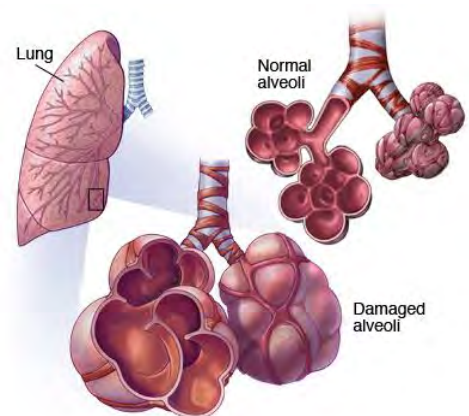
**Asthma:** periods of difficult breathing, or inability to breathe – Swelling of mucus membranes lining bronchial tubes, blocking airway. Asthma is often related to allergies, physical exertion, or anxiety. **It may develop or come to an end during one's lifetime.** Treatments include medications, inhalers, and avoiding allergy irritants.

## Chronic Obstructive Pulmonary Disease (COPD)

COPD makes it hard for you to breathe. Coughing up mucus is often the first sign of COPD. Chronic bronchitis and emphysema are common COPDs. Cigarette smoking is the most common cause of COPD. Breathing in other kinds of irritants, like pollution, dust or chemicals, may also cause or contribute to COPD. Quitting smoking is the best way to avoid developing COPD.

**Chronic Bronchitis:** recurring irritation of lungs – Bronchitis results from irritating mucus membranes, which then produce excess mucus or phlegm. This blocks the air passages, causing heavy coughing. Smoking is a major cause of chronic bronchitis. Other causes include a lack of treatment for influenza or a common cold.

**Emphysema:** gradual deterioration of the lungs caused by smoking; alveoli lose elasticity and may tear, resulting in a loss of lung capacity – Inhaled particles collect along walls of alveoli and harden over time. The main symptom is difficult breathing, especially while exhaling, even with no physical exertion. Treatments include mild exercise, medication, breathing exercises, and oxygen tanks. There is no cure.



# Cancer

- A. One of the leading causes of death in the U.S.
- B. More people could be saved through **early detection**.
- **Don't allow** fear to keep from medical help
  - Regular health exams, self-exams (breast, testicular, skin), mammography (x-ray to detect tumors in the breasts), prostate exam, colonoscopy, pap smears, etc.

\*Be aware of the **Seven Early Warning Signs:**

**C**hange in bowel or bladder habits

**A** sore that does not heal

**U**nusual bleeding or discharge

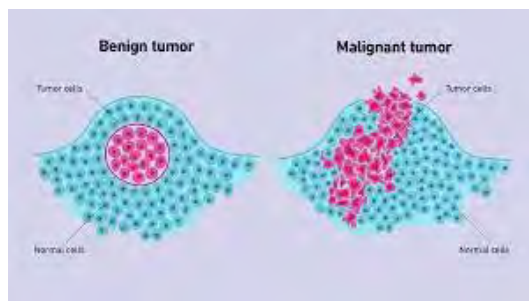
**T**hickening or lump in breast or elsewhere

**I**ndigestion or difficulty swallowing

**O**bvious change in wart or mole

**N**agging cough or hoarseness

- C. **Definition: Cancer** is the abnormal and uncontrolled growth and spread of your own body cells – cells no longer function properly.
- D. **Tumors** – swelling or mass formed when cells that normally cooperate in performing a useful function no longer cooperate; cells begin to multiply rapidly and independently, taking nourishment from normal and healthy cells.
- **Benign:** usually harmless, non-cancerous cells or tumors
  - **Malignant:** cancerous cells or tumors
  - **Metastasize:** when cells from a malignant tumor break off and spread to other areas of the body.
- E. **Cure for Cancer:** removal of every single malignant cell
- F. **Diagnosis:** how a person determines whether they have a specific condition or not
- Methods used for diagnosis include:
    - MRI:** a procedure in which magnetic resonance imaging is used; it produces shadowed images
    - Blood test:** sample of blood is taken and its characteristics and properties are analyzed
    - Pap smear:** extracting and analyzing cells from the cervix
    - Prostate/rectal exam:** examination of the prostate and rectum for malignant cells; an enlarged prostate is often a sign of cancer
    - CAT scan:** painless and noninvasive; a sectional view of the body constructed by computed tomography -- called also CT scan
    - Biopsy:** a sample of living tissue that is tested for malignant cells
    - PET scan:** an image obtained by positron emission tomography



## G. Treatment Options

- **Chemotherapy** – treatment with chemical agents; these chemicals impair the ability of cancer cells to replicate and are often used in conjunction with radiation treatment
- **Radiation** – treatment using x-rays or gamma rays to stop malignant cells from reproducing
- **Surgery** – treatment by operating and removing tissue from affected area
- **Interferon** – drugs that stimulate the immune system to fight cancer
- **Hormone therapy** – used in some cases to prevent the reoccurrence of cancer
- Other treatment options are also available and differ based on the type of cancer

## H. Causes – Usually involves a combination of many from these categories:

- **Environment** – chemicals/pollutants in water, air, etc.
- **Heredity/Genetics** – development of many conditions is linked to family history
- **Lifestyle behaviors** – diet, exercise, use of substances, stress, etc. may increase or decrease the chance of developing cancer or other conditions

\***Carcinogen** – cancer causing agent, found in the following:

asbestos, UV rays, radiation, toxic waste, tobacco, petroleum products, saccharine, chemical

## I. Types of cancer

- **Lymphoma** – cancer of the lymphatic system, including the lymph nodes
- **Melanoma** – deadly form of skin cancer, can spread to other areas of body
- **Sarcoma** – cancer in soft tissues, including cartilage, muscle, and fat, as well as in the bones
- **Carcinoma** – tumors that are firm and irregular, usually develop in the skin, large intestine, stomach, lungs, prostate, cervix, or breast
- **Leukemia** – cancer of blood forming tissues including bone marrow and the lymphatic system

**Fill in the blanks in the following paragraph.**

**Word bank: chemotherapy, radiation, mammogram, biopsy, tumor, cancer, metastasis.**

Mrs. Phillips felt an unusual lump in her breast. She called her radiologist and made an appointment for a \_\_\_\_\_. After her visit, Dr. Castro called and said it was a \_\_\_\_\_, a swelling or mass, and that she should have a \_\_\_\_\_ done to properly diagnosis a possible condition. Examination of the cells indicated that the lump was \_\_\_\_\_. The doctor was encouraged because there was no \_\_\_\_\_, meaning the cancer did not spread. Treatment included \_\_\_\_\_, which is the use of chemical agents, and \_\_\_\_\_ to stop malignant cells from reproducing. Today, Mrs. Phillips is feeling great.

# Skin Cancer

## I Skin cancer is the most common form of cancer in the United States.

The three major types of skin cancer are

- Basal cell and Squamous cell carcinomas ( highly curable)
- Malignant melanoma ( more serious)

## II Risk Factors for Skin Cancer

- Light skin color, hair color, or eye color.
- Family history of skin cancer.
- Personal history of skin cancer.
- Chronic exposure to the sun.
- History of sunburns early in life.
- Certain types of moles, or a large number of moles.
- Freckles, which indicate sun sensitivity and sun damage

## III What causes Skin Cancer?

- Exposure to the sun's ultraviolet (UV) rays appears to be the most important environmental factor involved in the development of skin cancer.
- UV rays from artificial sources of light, such as tanning beds and sunlamps, are as dangerous as those from the sun and should also be avoided.

## IV. The ABCDE's of Melanoma



**Asymmetry:** Most early melanomas are asymmetrical: a line through the middle would not create matching halves. Common moles are round and symmetrical.



**Border:** The borders of early melanomas are often uneven and may have scalloped or notched edges. Common moles have smoother, more even borders.



**Color:** Common moles usually are a single shade of brown. Varied shades of brown, tan, or black are often the first sign of melanoma. As melanomas progress, the colors red, white and blue may appear.



**Diameter:** Early melanomas tend to grow larger than common moles - generally to at least the size of a pencil eraser (about 6mm, or 1/4 inch, in diameter).



**Emerging / Evolving / Enlargement:** Melanoma has the opportunity to grow in size rapidly or become raised



# Explaining Sunscreen and the New Rules

New York Times/June 20, 2017/ By Jane E. Brody

**Attention, sun lovers (and yes, that includes all who think they are adequately protected against the sun's damaging rays):** Nearly four years after announcing its intention to improve the labeling of sunscreens, the Food and Drug Administration has finally issued new rules that should help reduce the confusion that currently prevails when consumers confront the aisle-long array of products in most pharmacies.

But these rules will not take effect for another year (and for small manufacturers, two years). Meanwhile, everyone needs to know what to do now about preventing painful sunburns, disfiguring and deadly skin cancers and premature skin aging.

**How high an SPF should one choose? Is SPF 60 really that much better than SPF 30? What does "broad spectrum" mean? Are all sunscreen ingredients equally effective? And equally safe?**

And perhaps the most frightening question: Why has the incidence of melanoma, the deadliest of skin cancers, doubled since sunscreens (as opposed to tanning lotions) became popular?

No better time to get the answers to these questions than now, the week of the summer solstice. Even if it is not sunny where you are, the ultraviolet rays hitting your skin will be their most intense.

## **Rating Sunscreens**

First, some facts about sun and current sunscreen labels. There are two kinds of solar rays: short ones called UVB that cause burning and skin cancer and long ones called UVA that cause skin cancer and wrinkling. SPF ratings — the letters stand for sun protection factor — reflect only the extent of protection against UVB. The higher the rating, the longer one can stay in the sun before burning.

But there are two important caveats. First, SPF ratings are based on a rather thick application of sunscreen, not the amount consumers normally use, which is most often a quarter to a half the amount applied in **manufacturers' tests. An adult in a bathing suit should apply** about three tablespoons of lotion every two hours, experts say.

Second, above an SPF of 30, which can block 97 percent of UVB (if used in testing amounts), effectiveness increases by only 1 or 2 percent. In the way that sunscreens are used in the real world, then, a product with an SPF of 30 actually provides the protection of SPF 2.3 to 5.5, and one rated SPF 50 provides the protection of SPF 2.7 to 7.1, according to a report published this month in Drug and Therapeutics Bulletin.

UVA, which represents more than 95 percent of solar radiation reaching the earth, does not figure in SPF **ratings. The phrase "broad spectrum" is meant to indicate protection against UVA, but there is no numerical rating for product effectiveness. Under the new rules, products labeled "broad spectrum" will have to provide equal protection against UVB and UVA, and only products with an SPF of 15 or higher will be allowed to claim protection against skin cancer and premature skin aging.**

Meanwhile, dermatologists suggest choosing **only products that are labeled "broad spectrum" and have an SPF rating of 30 to 50.** There is no evidence that anything higher than 50 is any better. Apply the sunscreen just before exposure, and reapply it two hours later — it loses effectiveness over time. And even if the label claims the sunscreen is water resistant, be sure to reapply it after swimming or sweating heavily.

The rise in melanoma has led to fears that sunscreens may actually cause this deadly cancer. But other explanations are more likely. By allowing people to stay in the sun longer, sunscreens have greatly increased exposure to UVA radiation. And many, if not most, victims of melanoma were damaged long before sunscreens became popular. A history of sunburn is a major risk factor for this cancer; five sunburns per decade raise the risk by about threefold.

Another reason for the increase in diagnoses: skin cancer screening and detection have improved greatly in recent decades.

With regard to ingredients, many dermatologists recommend products with micronized titanium or zinc oxide as the most effective sun blockers that leave no white residue on the skin. There is some concern, based on animal studies that the most popular ingredient in sunscreens, oxybenzone, may disrupt natural hormones, but the scientific evidence is scant.

Another chemical, retinyl palmitate, sometimes listed among the inactive ingredients, has been linked to skin cancers in animal studies. Because it is converted into a compound that can cause birth defects, it should be avoided by women who are pregnant or likely to become pregnant.

However, although more studies of these possible risks should be done, Consumer Reports concluded that **“the proven benefits of sunscreen outweigh any potential risks.”**

**Finally, don't be fooled by price. In tests of 22 sunscreens, Consumer Reports found nine to be effective against UVB and UVA and ranked three as “Best Buys”:** Up & Up Sport SPF spray (88 cents an ounce) at Target; No-Ad With Aloe and Vitamin E SPF 45 lotion (59 cents); and Equate Baby SPF 50 lotion (63 cents). The organization said La Roche-Posay Anthelios SPF 40 cream, at \$18.82 an ounce, scored well below these three in effectiveness.

Although it may be tempting to try to kill two birds at once with a combination sunscreen and insect repellent, the Centers for Disease Control and Prevention does not recommend this. Multiple applications could result in an overdose of the repellent.

### **Seek Other Protection**

The best advice to prevent UV damage is to stay out of the midday sun altogether and to cover up with clothing, a hat and umbrella during the rest of the day even if it is cloudy. Clouds do not block damaging rays. Keep in mind that ultraviolet radiation is reflected off sand and water, intensifying exposure even if you are protected by an umbrella from above.

Ordinary clothing provides a good sun shield when dry (the tighter the weave, the better) but little or no protection when wet. Special sun-protective clothing is costly but works well wet or dry; it is a wise investment for children who tend to stay in or around water for hours. Caps with a neck flap are especially helpful for **sports enthusiasts. And no matter how well covered up you are, don't forget to apply sunscreen to your face, ears, neck and hands.**

Also, keep in mind that some sun exposure is necessary to maintain a healthful level of vitamin D.

Dermatologists suggest, for light-skinned people, that **exposing one's hands, arms, face or back to non-burning doses of sunlight for 15 minutes two or three times a week from April to September** should result in adequate vitamin D synthesis. Dark-skinned people need longer exposure.

1. What are the differences between UVA and UVB solar rays?
2. What does SPF stand for and how should one use sunscreen?
3. What is meant by “broad spectrum” suntan lotion?
4. What may explain the recent rise in melanoma?
5. Is it always safe to use a combination sunscreen and insect repellent?
6. What other ways (not sunscreen) can one protect their skin from sunburn, aging and cancer?

# Breast and Testicular Cancer

## **Testicular Self-exam**

Testicular cancer is most common in men ages 15 – 34; men should perform monthly testicular self-exams by the age of 15. The best time to perform the self-exam is during or after a bath or shower, when the skin of the scrotum is relaxed. To perform a testicular self-exam:

- Hold the penis out of the way and examine each testicle separately.
- Hold the testicle between the thumbs and fingers with both hands and roll it gently between the fingers.
- Look and feel for any hard lumps or nodules (smooth rounded masses) or any change in the size, shape, or consistency of the testes.

You should be aware that each normal testis has an epididymis, which appears as a small "bump" on the upper or middle outer side of the testis. Normal testicles also contain blood vessels, supporting tissues, and tubes that conduct sperm. When you examine your testicles, you will become familiar with what is normal and what is different.

## **Breast Self-exam/Mammography**

Breast cancer rates on Long Island are higher than in other areas. Women should start practicing monthly breast self-exams by the age of 18 approximately one week into each menstrual cycle. Women should also have clinical breast exams beginning around the age of 18 - 20. Usually women get a baseline mammogram around the age of 35- 40. Mammograms are x-rays of the breast that are currently the most effective screening test for breast cancer.

## **The Five Steps of a Breast Self Exam**

**Step 1:** Begin by looking at your breasts in the mirror with your shoulders straight and your arms on your hips.

Here's what you should look for:

- Breasts that are their usual size, shape, and color.
- Breasts that are evenly shaped without visible distortion or swelling.

**Step 2:** Now, raise your arms and look for the same changes.

**Step 3:** While you're at the mirror, gently squeeze each nipple between your finger and thumb and check for nipple discharge (this could be a milky or yellow fluid or blood).

**Step 4:** Next, feel your breasts while lying down, using your right hand to feel your left breast and then your left hand to feel your right breast. Use a firm, smooth touch with the first few fingers. Follow a pattern to be sure that you cover the whole breast. You can begin at the nipple, moving in larger and larger circles until you reach the outer edge of the breast. You can also move your fingers up and down vertically, in rows, as if you were mowing a lawn. Be sure to feel all the breast tissue: just beneath your skin with a soft touch and down deeper with a firmer touch. Begin examining each area with a very soft touch, and then increase pressure so that you can feel the deeper tissue, down to your ribcage.

**Step 5:** Finally, feel your breasts while you are standing or sitting. Many women find that the easiest way to feel their breasts is when their skin is wet and slippery, so they like to do this step in the shower. Cover your entire breast, using the same hand movements described in Step 4.

# Cancer Review

1. What is the difference between a benign and malignant tumor?

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2. How are chemotherapy and radiation therapy different?

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3. List four tests that will help with the diagnosis of cancer.

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4. Define carcinogen and list six known carcinogens:

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**5. What are the "A, B, C, D, E's" of melanoma:**

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6. List three causes of cancer.

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7. List the seven warning signs of cancer.

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8. Why is it important to start either BSE or TSE during your teens?

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9. What are some ways to prevent or reduce your risk for cancer?

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# Cardiovascular Disease

## **What is cardiovascular disease?**

Cardiovascular disease is the name given to any disease that affects the heart or blood vessels by restricting the flow of blood. This occurs when plaque clogs the arteries, impeding the free flow of blood. Over time, the blood vessels become blocked and a heart attack or stroke can occur.

## **Important terms:**

1. **Angina Pectoris** – (Angina) pain that usually occurs in the chest, but may also occur in the arms, shoulders, or back; may be felt more when the heart beats fast, such as during exercise; may also be accompanied by weakness
2. **Coronary Artery Disease** (Atherosclerosis) – stage of arteriosclerosis when the deposits are made into the artery walls. **Plaque** – build-up of fat, cholesterol, and waste on the inner wall of a blood vessel
3. **Hypertension** – high blood pressure, which occurs when the pressure in the arteries is consistently higher than normal, indicating that the heart is working harder to pump blood through the circulatory system; symptoms may not appear until a major organ is damaged
4. **Congenital Heart Disease**- refers to a problem with the heart structure and function due to abnormal heart development before birth
5. **Heart Murmur** – a extra or unusual sound heard during a heartbeat. Most murmurs in children are caused by congenital heart defects. In adults, abnormal heart murmurs most often are caused by acquired heart valve disease.
6. **Myocardial Infarction** – (heart attack) when the blood flow to part of the heart is blocked, usually by a blood clot (thrombus) or a piece of dislodged plaque; this part of the heart muscle may die without sufficient oxygen
7. **Stroke** – occurs when part of the brain does not receive enough blood and stops working due to a lack of oxygen

**Electrocardiograph** (EKG or ECG) – an instrument that records the electrical currents of the heart

**Angiogram** – an X-ray representation of blood vessels that is taken after the person is injected with dye so that the area of constriction can be found more easily

**Balloon Angioplasty** – procedure used to widen narrowed arteries; a deflated balloon is inserted by a catheter into the narrowed part of the artery and is then inflated to push the walls outward and allow the blood to flow more freely

**Stent** – a narrow device placed into the blood vessel for support in keeping the walls opened for blood flow

**Cardiac Bypass** – a surgical procedure in which blood vessels from other parts of the body are used to bypass diseased or damaged coronary arteries.

**Myocardium** – the tough, muscular wall of the heart

**Coronary Arteries/Vessels** – the arteries that supply cardiac muscle with blood

# Risk Factors for Developing Cardiovascular Disease

## I. You can control:

- **Smoking** – decreases oxygen to the heart and changes blood flow
- **Dietary Habits** – consumption of nutrient-deficient foods and trans fats, among other things, increase risk
- **Excess Alcohol** – can raise the levels of some fats in the blood, lead to high blood pressure, heart failure, and increased caloric intake (which could lead to obesity); can also lead to stroke
- **Stress** – can make the heart work harder and lead to high blood pressure
- **Sedentary Lifestyle** – lack of exercise may lead to excess body fat or higher levels of cholesterol, both of which result in the heart having to work harder than normal

## II. You have some control:

- **High Cholesterol** – the build-up of cholesterol reduces the amount of blood that makes it to the heart, meaning less oxygen and nutrients are getting to the heart
- **High Blood Pressure/Hypertension** – causes the heart to have to work harder; puts excess pressure on blood vessels
- **Obesity** – for some, genetics plays a role; for many obesity is a result of lifestyle choices
- **Diabetes** – people with diabetes often have high levels of cholesterol; also, excess glucose is destructive to the blood vessels and cholesterol is more easily deposited

## III. You cannot control:

- **Family History/Predisposition** – those people whose family members have had any sort of heart disease have a higher risk of developing a heart disease
- **Race** – African Americans are at the highest risk for developing coronary artery disease
- **Age** – people over the age of 65 are the most at risk for developing cardiovascular disease, though it often occurs much earlier
- **Gender** – men are more likely to develop cardiovascular disease than women

## What are some common symptoms of a heart attack?

- Pain
- Pressure or squeezing sensation in the center of the chest which may last more than a few minutes
- Pain radiating out to the shoulders, jaw, neck, or arms
- Discomfort in the chest accompanied by nausea, heartburn, sweating, fainting, or a feeling of lightheadedness
- Shortness of breath

# Cholesterol and Fats

## **Types of Fat**

**Essential Fatty Acids:** Types of fat that cannot be made in the body. We must eat foods rich in these as they are the building block for other important fatty acids (e.g., DHA/EPA).

**Lipid:** Scientific term referring to fat, cholesterol and other fat-like substances. A common quality among lipids is that they do not dissolve in water.

**Lipoprotein:** A protein-coated transporter that carries fat and/or cholesterol in the bloodstream.

**LDL: Low Density Lipoprotein** unhealthy cholesterol that contributes to cardiovascular disease.

**HDL: High Density Lipoprotein** healthy cholesterol helps clear the blood of LDLs. HDLs can be increased by healthy diet, exercise and not smoking.

**Triglycerides:** Scientific name for the main form of fat found in the diet and in the body. Most of the fat in the body is stored as triglycerides.

**Saturated Fats:** Usually solid at room temperature, saturated fats have all of the hydrogen atoms they can hold (saturated with hydrogen). Saturated fats primarily come from animal products, but are also found in tropical plant oils, such as coconut and palm.

**Monounsaturated Fats:** Liquid at room temperature, monounsaturated fats are missing one pair of hydrogen atoms. Monounsaturated fats primarily come from plants and include olive oil, canola oil and peanut oil.

**Polyunsaturated Fats:** Liquid at room temperature, polyunsaturated fats are missing two or more pairs of hydrogen atoms. Many common vegetable oils, such as corn, soybean, safflower and sunflower oil, are high in polyunsaturated fats.

**Hydrogenated Fats:** Unsaturated fats are sometimes processed to make them solid at room temperature and to protect against rancidity. Hydrogen atoms are added through a process called hydrogenation or partial hydrogenation

**Trans Fatty Acids:** A type of fat formed during the process of hydrogenation. Trans fatty acids have been shown to increase LDL cholesterol and lower HDL cholesterol, which may increase the risk for heart disease.

**Omega-3 Fatty Acids:** A type of fatty acid that is highly polyunsaturated. Omega-3 fatty acids are mainly found in higher-fat, cold-water fish, such as salmon, mackerel and herring as well as omega-3 fortified eggs. Diets high in omega-3 fatty acids may help lower levels of LDL cholesterol and triglycerides.

## Cholesterol and Fats (continued)

- Approximately one in every six adults—16.3% of the U.S. adult population—has high cholesterol. The level defined as high total cholesterol is 240 mg/dL and above. People with high cholesterol have approximately twice the risk for heart disease as people with lower levels.
- If you have heart disease, lowering your cholesterol can reduce your risk for having a heart attack, needing heart bypass surgery or angioplasty, and dying from heart disease. Even if you do not have heart disease, you can reduce your risk of developing it by lowering your cholesterol. This is true even if you have normal cholesterol levels.
- There are steps you can take to prevent high cholesterol or to reduce your levels. These actions include exercising, eating a healthy diet, and not smoking.
- High cholesterol does not have symptoms. Doctors can do a simple blood test to check your levels. It is recommended that adults get their cholesterol checked every five years.

<b>Desirable Cholesterol Levels</b>	
Total cholesterol	Less than 200 mg/dL
LDL ("bad" cholesterol)	Less than 100 mg/dL*
HDL ("good" cholesterol)	60 mg/dL or higher
Triglycerides	Less than 150 mg/dL

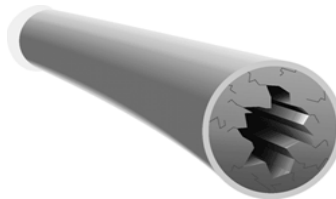
\*Optimal for people at risk for heart disease.

**What is cholesterol and where do we get cholesterol?** Cholesterol is a waxy, fat-like substance found in all animals including people. It is an essential part of cells in the body and is used to make certain hormones and digest fats. But, when you have too much in your blood, it can build up on the walls of your arteries. This can lead to heart disease and stroke. Our bodies can make all of our cholesterol, but most people also get it from foods. Different foods vary in the amount of cholesterol they contain. Only animal products have cholesterol; plants do not.

Healthy Blood Vessel



Narrowed Vessel/  
Atherosclerosis



**Is eating fat unhealthy?** Eating some fat is necessary. It is an important source of essential fatty acids and concentrated energy — it has more than twice as many calories per ounce as sugar, starch or protein. Fats help carry fat-soluble vitamins A, D,



E and K. Yet, eating too much fat may lead to obesity, which is unhealthy. It also may increase the risk of heart disease and some forms of cancer.

**What about fish and fish oil supplements?** Diets high in fish, especially cold-water fish like salmon, herring, mackerel, and whitefish, have been linked to reduced risk of heart disease. People who eat large amounts of fish tend to have lower blood cholesterol and triglyceride levels. The high amounts of omega-3 fatty acids found in fish are believed to be the reason. The current recommendation is to consume a variety of fish (preferably oily) at least two times per week. The use of fish oil supplements could be considered with consultation with your doctor, especially in individuals with cardiovascular disease and elevated triglycerides.

There are several things you can do to reduce the amount of fat and cholesterol you eat:

**Eat more:**

- Vegetables, fruits, lean meats, fish, poultry
- Vegetable protein -- peas, lentils, beans, grains, nuts, seeds, soy
- Whole grains in breads, cereals, pasta and white grains

**Eat less:**

- Fried foods
- Fatty and processed meats -- lunch meats, bacon, hot dogs, sausage
- Desserts high in fat -- ice cream, pastries, pies, cheesecake

1. What does LDL stand for and is it harmful?
2. What does HDL stand for?
3. List three ways you can increase your HDLs
4. List three foods that are low in cholesterol
5. What are considered desirable blood cholesterol levels?
  - Total Cholesterol
  - LDL
  - HDL
  - Triglycerides
6. What are Trans fatty acids and why are they harmful?
7. What are omega-3 fatty acids (include the food sources and benefits)?

## Hypertension/High Blood Pressure Facts

- Having high blood pressure puts you at risk for heart disease and stroke.
- High blood pressure usually has no warning signs or symptoms, so many people don't realize they have it.
- About one out of three U.S. adults has high blood pressure and about one in four American adults have prehypertension.

Blood pressure is written as two numbers. The first (systolic) number represents the pressure in your blood vessels when your heart beats. The second (diastolic) number represents the pressure in your vessels when your heart rests between beats.

### Blood Pressure Levels

Normal	systolic: less than 120 mmHg diastolic: less than 80mmHg
At risk (prehypertension)	systolic: 120–139 mmHg diastolic: 80–89 mmHg
High	systolic: 140 mmHg or higher diastolic: 90 mmHg or higher

## Stroke

Stroke is the fifth leading cause of death in the United States. A stroke occurs when a clot blocks the blood supply to the brain or when a blood vessel in the brain bursts. You can greatly reduce your risk for stroke through lifestyle changes and, in some cases, medication.

Stroke can cause death or significant disability, such as paralysis, speech difficulties, and emotional problems. Some new treatments can reduce stroke damage if patients get medical care soon after symptoms begin. When a stroke happens, it is important to recognize the symptoms, call 9-1-1 right away, and get to a hospital quickly.

### Symptoms of stroke are

- Sudden numbness or weakness of the face, arm or leg (especially on one side of the body)
- Sudden confusion, trouble speaking or understanding speech
- Sudden trouble seeing in one or both eyes
- Sudden trouble walking, dizziness, loss of balance or coordination
- Sudden severe headache with no known cause



**What should you do if someone experiences sudden numbness or weakness of the face arm or leg, especially if it is on one side of the body and /or has difficulty speaking?**

# HANDS-ONLY CPR

FOR WITNESSED SUDDEN COLLAPSE



1.

## CHECK and CALL

1. **CHECK** the scene, then **CHECK** the person.
2. Tap on the shoulder and shout, "Are you okay?" and quickly look for breathing.
3. **CALL** 9-1-1 if no response.
4. If unresponsive and not breathing, **BEGIN CHEST COMPRESSIONS**.

### TIPS:

- Whenever possible use disposable gloves when giving care.
- Occasional gasps are not breathing.



2.

## GIVE CHEST COMPRESSIONS

1. Place the heel of one hand on the center of the chest.
2. Place the heel of the other hand on top of the first hand, lacing your fingers together.
3. Keep your arms straight, position your shoulders directly over your hands.
4. Push hard, push fast.
  - Compress the chest at least 2 inches.
  - Compress at least 100 times per minute.
  - Let the chest rise completely before pushing down again.
5. Continue chest compressions.



3.

## DO NOT STOP

Except in one of these situations:

- You see an obvious sign of life (breathing).
- Another trained responder arrives and takes over.
- EMS personnel arrive and take over.
- You are too exhausted to continue.
- An AED is ready to use.
- The scene becomes unsafe.

AED

## AUTOMATED EXTERNAL DEFIBRILLATOR

If an AED is available:

1. Turn on AED.
2. Wipe chest dry.
3. Attach the pads.
4. Plug in connector, if necessary.
5. Make sure no one is touching the individual.
6. Push the "Analyze" button, if necessary.
7. If a shock is advised, push the "Shock" button.
8. Perform compressions and follow AED prompts.

Go to [redcross.org](http://redcross.org) or call your chapter to sign up for training in full CPR, First Aid, Babysitter's Training, Pet First Aid and much more.

# What is Diabetes?

Diabetes is a disease in which blood glucose levels are above normal. Most of the food we eat is turned into glucose, or sugar, for our bodies to use for energy. The pancreas, an organ that lies near the stomach, makes a hormone called insulin to help glucose get into the cells of our bodies. When you have diabetes, your body either doesn't make enough insulin or can't use its own insulin as well as it should. This causes sugar to build up in your blood.

Diabetes can cause serious health complications including heart disease, blindness, kidney failure, and lower-extremity amputations. Diabetes is in the top ten leading causes of death in the United States.

## What are the symptoms of diabetes?

People who think they might have diabetes must visit a physician for diagnosis. They might have SOME or NONE of the following symptoms:

- Frequent Urination
- Excessive thirst
- Unexplained weight loss
- Extreme hunger
- Sudden vision changes
- Tingling or numbness in hands or feet
- Very dry skin
- Sores that are slow to heal
- More infections than usual
- Feeling very tired much of the time

## What are the types of diabetes?

**Diabetes I:** which was previously called insulin-dependent diabetes mellitus (IDDM) or juvenile-onset diabetes, may account for 5% to 10% of all diagnosed cases of diabetes.

**Diabetes II:** which was previously called non-insulin-dependent diabetes mellitus (NIDDM) or adult-onset diabetes, may account for about 90% to 95% of all diagnosed cases of diabetes.

**Gestational Diabetes:** is a type of diabetes that only pregnant women get. If not treated, it can cause problems for mothers and babies. Gestational diabetes develops in 2% to 5% of all pregnancies but usually disappears when a pregnancy is over.

### What are the risk factors for diabetes?

Risk factors for type 2 diabetes include age, obesity, family history of diabetes, prior history of gestational diabetes, impaired glucose tolerance, physical inactivity and race/ethnicity.

Risk factors are less well defined for type 1 diabetes than for type 2 diabetes, but autoimmune, genetic, and environmental factors are involved in developing this type of diabetes.

Gestational diabetes occurs more frequently in African Americans, Hispanic/Latino Americans, American Indians, and people with a family history of diabetes than in other groups. Obesity is also associated with higher risk. Women who have had gestational diabetes are at increased risk for later developing type 2 diabetes. In some studies, nearly 40% of women with a history of gestational diabetes developed diabetes in the future.

### What is the treatment for diabetes?

Healthy eating, physical activity, and insulin injections are the basic therapies for type 1 diabetes. The amount of insulin taken must be balanced with food intake and daily activities. Blood glucose levels must be closely monitored through frequent blood glucose testing.

Healthy eating, physical activity, and blood glucose testing are the basic therapies for type 2 diabetes. In addition, many people with type 2 diabetes require oral medication, insulin, or both to control their blood glucose levels.

People with diabetes must take responsibility for their day-to-day care, and keep blood glucose levels from going too low or too high.

People with diabetes should see a health care provider who will monitor their diabetes control and help them learn to manage their diabetes. In addition, people with diabetes may see endocrinologists, who may specialize in diabetes care; ophthalmologists for eye examinations; podiatrists for routine foot care; and dietitians and diabetes educators who teach the skills needed for daily diabetes management.

### **Answer the following questions:**

1. What are the symptoms of diabetes? \_\_\_\_\_
2. List three long-term complications of diabetes. \_\_\_\_\_
3. What are three risk factors for Type 2 diabetes? \_\_\_\_\_
4. Name three types of diabetes \_\_\_\_\_

## Non-Communicable Disease Review

1. Dr. Smith was concerned when Marty came to the office complaining about not being able to sleep well and was up several times per night urinating. Marty has been excessively thirsty for the past few months and lost weight even though he was not dieting. The physician might order a fasting blood glucose test or an Oral Glucose Tolerance Test (OGTT). Diabetes is a possible diagnosis.

A. What are possible long-term complications for the above patient?

2. Bridget is a very fair-skinned female. She is very active outdoors and as an adult she puts on sunscreen whenever she is going to be outdoors for more than 2 hours. She remembers having several blistering sunburns as a child. She has a few rough, patchy areas of skin. Bridget is at risk for skin cancer.

A. What should she look for in the future in terms of early detection?

3. Henry is a sales representative who travels often and eats meals out on a regular basis. Henry feels that skipping dessert except on weekends is an adequate diet plan. His job is stressful and he does not have time to exercise.

A. Name two diseases for which Henry has increased risk.

B. How can Henry reduce his risk?

**4. Kendra's maternal grandmother died of stroke at the age of 40, her paternal grandfather died of "natural causes" at the age of 55. Kendra's mother and father both suffer from hypertension (high blood pressure).**

A. What are the symptoms of hypertension?

B. How can Kendra reduce her risk of developing hypertension?

**5. Brenda's mother and grandmother were both diagnosed with breast cancer in their early 40's. Brenda started menstruating early (by the age of 10) and is slightly overweight. She did not have her first child until after the age of 32. She is now 36 years old.**

A. What should Brenda do on a monthly basis one week after she starts menstruating?

B. If Brenda finds a lump during her BSE (Breast Self Exam); what is the only definitive test for cancer?

6. Tom just finished learning about non-communicable disease in his health class. While at the mall a sixty year old male had a medical emergency. Tom believed he may have had a stroke based on his symptoms.

A. His symptoms might have been (list 3):

B. What should Tom do?

7. Travis has a family history of heart disease and diabetes. Travis loves to eat and rarely has time for exercise. When Travis is outdoors coaching **his son's soccer team, he breaks out in a cold sweat, has difficulty breathing and feels nauseous.**

A. What might be the problem?

B. What should Travis do?

8. Timothy was a seventeen-year-old male. It is suggested that all males perform a \_\_\_\_\_ in the privacy of their own home once a month. The age group most often affected by testicular cancer is \_\_\_\_ - 35 years of age. If a male find a lump in his genitals that does not belong he should go see his doctor. The doctor will do an exam and take **a small sample of the "tumor"; this** is called a \_\_\_\_\_, which is the only definitive test for cancer. A doctor may order other tests such as a MRI, PET scan, CAT scan, blood work, etc. to determine if there is a growth and to look for certain characteristics.

9. List the seven warning signs for cancer... use "CAUTION".

**C** \_\_\_\_\_  
**A** \_\_\_\_\_  
**U** \_\_\_\_\_  
**T** \_\_\_\_\_  
**I** \_\_\_\_\_  
**O** \_\_\_\_\_  
**N** \_\_\_\_\_

10. For which diseases can a person reduce their risk by exercising, flossing and brushing teeth, maintaining a healthy weight and eating a well balance nutritious diet (that includes many fruits, vegetables and fiber, low fat and complex carbohydrates)? *List five minimum.*

11. List the symptoms for the following conditions:

**Heart attack:**

**Stroke:**

# Introduction to Drugs

What are drugs?

A medicine or other substance which has a physiological effect when ingested or otherwise introduced into the body.

## **Are medicines drugs?**

Medicines are legal drugs that help the body fight injury, illness or disease. There are two classifications:

- Over-the-counter drugs – a medicine that is sold legally in pharmacies and other stores without a doctor's permission. (aspirin, cold medicines etc.)
- Prescription drugs- a drug that can be obtained only with a written order from a doctor and can be purchased only at a pharmacy. (antibiotics, steroids, etc.)

Both can cause harm. However, prescription drugs can be worse because of their need to be controlled by a doctor. A doctor determines the correct amount of the medication that the individual patient needs at the time, therefore, if misused (or shared) the drug becomes more dangerous (if amount taken is incorrect)

## **Legal Drugs**

- Tobacco
- Alcohol
- Prescription Drugs (to be covered later in unit)
- Marijuana

While these drugs are legal, there are restrictions/criteria that can make them illegal. This can consist of Federal and State laws. These laws may include restrictions regarding age, quantity, dosage, etc.

**Illegal Drug** means a controlled substance, but does not include a controlled substance legally possessed or used under the supervision of a licensed health-care professional, or a substance that is otherwise legally possessed or used under the authority of the Controlled Substances Act or under any other provision of federal law.





# WHAT'S WORTH KNOWING ABOUT ALCOHOL AND DRUGS



alcohol | nicotine | marijuana | mdma | cocaine | meth | heroin | opioids | psilocybin

**WHICH DRUGS CAN CAUSE DEATH?**

**WHICH DRUGS ARE CONSIDERED "GATEWAY" DRUGS?**

**LEGAL DRUGS | ILLEGAL DRUGS**

**WHICH DRUGS CAN BE LEGALLY PRESCRIBED BY A DOCTOR? DOES THIS MEAN THESE ARE COMPLETELY SAFE TO USE?**

**WHICH DRUGS CAN CAUSE CANCER, HEART DISEASE, OR STROKE?**

**WHICH DRUGS CAN LEAD TO ADDICTION?**

**WHAT IS SUBSTANCE USE DISORDER? HOW CAN IT BE TREATED?**

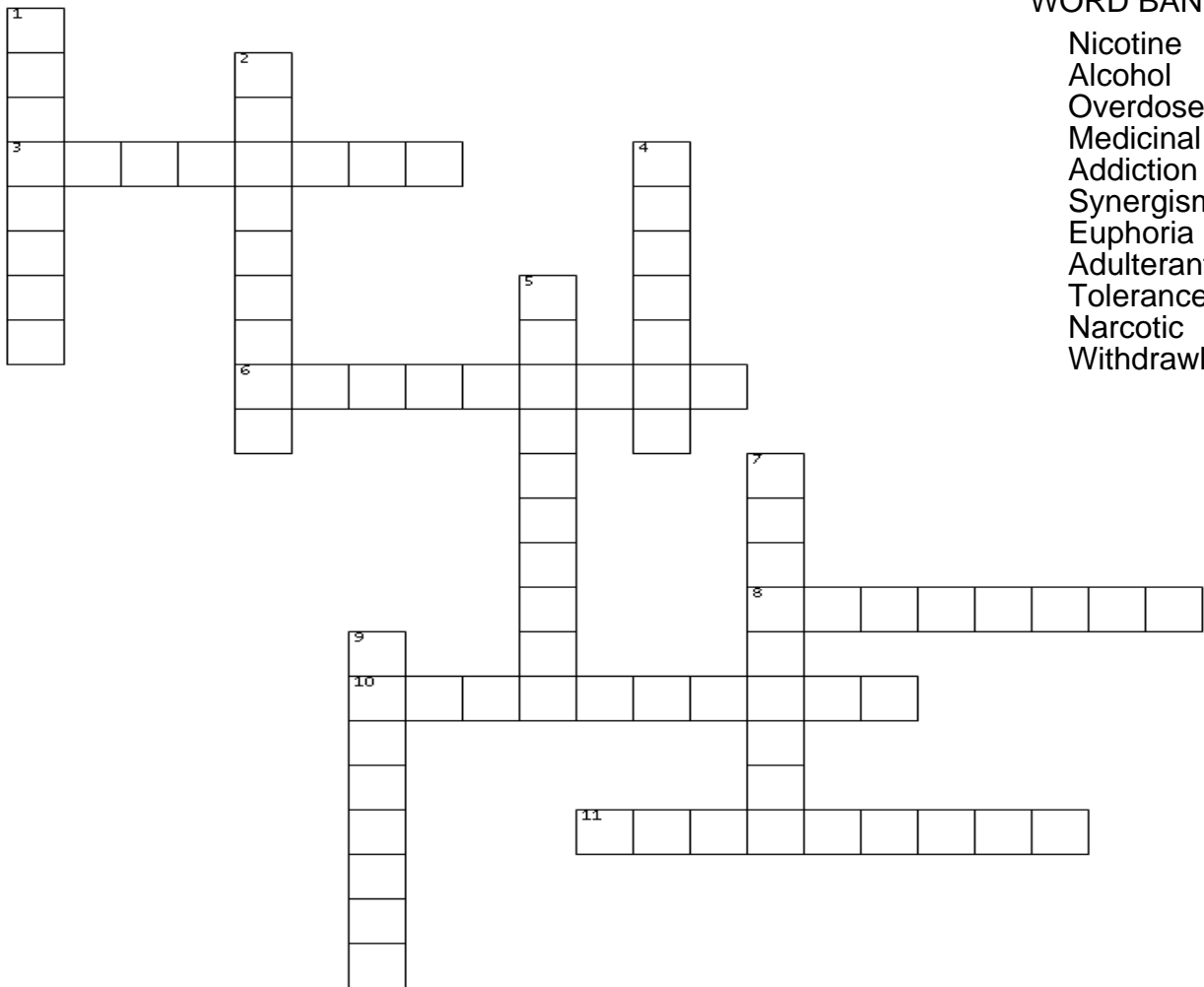
**WHAT SIGNS INDICATE THE NEED TO CALL 911?**

## **Substances Chart**

Substances	Short Term Effects	Long Term Effects	Category
Alcohol			
Benzodiazepines Xanax / Valium			
Cocaine			
Molly / Ecstasy			
GHB / Rohypnol			
Hallucinogens LSD / Mushrooms			
Inhalants			

Marijuana Hash Oil / THC			
Methamphetamines			
Opioids Heroin, Fentanyl, Morphine Prescription Drugs (Opioids) - Vicodin, Oxycontin, Oxycodone, Percocet			
K2 / Spice			
Steroids			
Tobacco / Nicotine / Vapes			

## DRUG VOCAB CROSSWORD PUZZLE



### WORD BANK

Nicotine  
Alcohol  
Overdose  
Medicinal  
Addiction  
Synergism  
Euphoria  
Adulterant  
Tolerance  
Narcotic  
Withdrawl

### ACROSS

3. An excessive and dangerous dose of a drug.
6. Physically and mentally dependent on a particular substance.
8. A feeling or state of intense excitement and happiness.
10. Something poorer in quality by adding another substance.
11. The interaction or cooperation of two or more substances.

### DOWN

1. A toxic colorless or yellowish oily liquid that is the chief active constituent of tobacco.
2. A drug that has healing properties.
4. Produced by the natural fermentation of sugars and is intoxicating.
5. Physical and mental symptoms that occur after stopping intake of a drug.
7. When the body gets used to a drug so that either more of the drug is needed.
9. A drug or other substance that affects mood or behavior.



# Tobacco

## What is Tobacco?

Tobacco is a plant grown for its leaves, which are dried and fermented before being put in tobacco products.

**Tobacco contains nicotine, an ingredient that can lead to addiction, which is why so many people who use tobacco find it difficult to quit.** There are also many other potentially harmful chemicals found in tobacco or created by burning it. Tar, a brown sticky substance, is the main carcinogen found in cigarettes / cigars.

## What Are Other Health Effects of Tobacco?

Although nicotine is addictive, most of the severe health effects of tobacco use comes from other chemicals.

Tobacco smoking can lead to lung cancer, chronic bronchitis, and emphysema. It increases the risk of heart disease, which can lead to stroke or heart attack. Smoking has also been linked to other cancers, leukemia, cataracts, Type 2 Diabetes, and pneumonia. All of these risks apply to use of any smoked product, including hookah tobacco. Smokeless tobacco increases the risk of cancer, especially mouth cancers.

Pregnant women who smoke cigarettes run an increased risk of miscarriage, stillborn or premature infants, or infants with low birth weight. Smoking while pregnant may also be associated with learning and behavioral problems in exposed children.

People who stand or sit near others who smoke are exposed to secondhand smoke, either coming from the burning end of the tobacco product or exhaled by the person who is smoking. Secondhand smoke exposure can also lead to lung cancer and heart disease. It can cause health problems in both adults and children, such as coughing, phlegm, reduced lung function, pneumonia, and bronchitis. Children exposed to secondhand smoke are at an increased risk of ear infections, severe asthma, lung infections, and death from sudden infant death syndrome.

- Smoking leads to disease and disability and harms nearly every organ of the body.
- Cigarette smoking remains the leading cause of preventable disease, disability, and death in the United States.
- The tobacco industry spends billions of dollars each year on marketing cigarettes.
- Smoking costs the United States hundreds of billions of dollars each year.
- States do not spend much of the money they get from tobacco taxes and lawsuits to prevent smoking and help smokers quit. CDC recommends that states spend 12% of those funds on tobacco control.
- Each day, about 1,600 youth try their first cigarette.
- Many adult cigarette smokers want to quit smoking.

## How Does Tobacco Affect the Brain?

The nicotine in any tobacco product readily absorbs into the blood when a person uses it. Upon entering the blood, nicotine immediately stimulates the adrenal glands to release the hormone epinephrine (adrenaline). Epinephrine stimulates the central nervous system and increases blood pressure, breathing, and heart rate. As with drugs such as cocaine and heroin, nicotine activates the brain's reward circuits and also increases levels of the chemical messenger dopamine, which reinforces rewarding behaviors. Studies suggest that other chemicals in tobacco smoke, such as acetaldehyde, may enhance nicotine's effects on the brain.

## How Does Tobacco Use Lead to Addiction?

Tobacco is well known as a gateway drug. This is a substance that people typically experiment with first. For many who use tobacco, brain changes brought on by continued nicotine exposure result in addiction. When a person tries to quit, he or she may have withdrawal symptoms, including:

- irritability
- problems paying attention
- trouble sleeping
- increased appetite
- powerful cravings for tobacco



# Vaping



## Vaping: The Facts

E-cigarettes are devices that heat a liquid into an aerosol that the user inhales. The liquid usually has nicotine and flavoring in it, and other additives. The nicotine in e-cigarettes and regular cigarettes is addictive. E-cigarettes are considered tobacco products because most of them contain nicotine, which comes from tobacco.

Besides nicotine, e-cigarettes can contain harmful and potentially harmful ingredients, including:

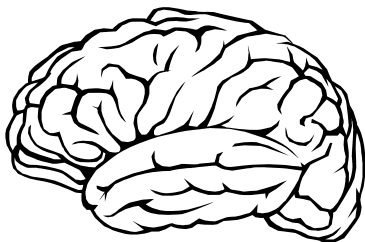
- ultrafine particles that can be inhaled deep into the lungs
- flavorants such as diacetyl, a chemical linked to serious lung disease
- volatile organic compounds
- heavy metals, such as nickel, tin, and lead

### E-cigarettes and Youth:

Adolescent years are times of important brain development. Brain development begins during the growth of the fetus in the womb and continues through childhood and to about age 25. Nicotine exposure during adolescence and young adulthood can cause addiction and harm the developing brain.

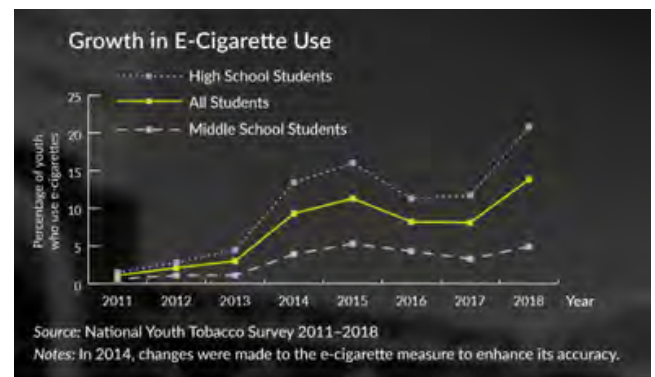
The part of the brain that's responsible for decision making and impulse control is not yet fully developed during adolescence. Young people are more likely to take risks with their health and safety, including use of nicotine and other drugs. Youth and young adults are also uniquely at risk for long-term, long-lasting effects of exposing their developing brains to nicotine. These risks include nicotine addiction, mood disorders, and permanent lowering of impulse control. Nicotine also changes the way synapses are formed, which can harm the parts of the brain that control attention and learning.

Until about age 25, the brain is still growing. Each time a new memory is created or a new skill is learned, stronger connections – or synapses – are built between brain cells. Young people's brains build synapses faster than adult brains. Because addiction is a form of learning, adolescents can get addicted more easily than adults. The nicotine in e-cigarettes and other tobacco products can also prime the adolescent brain for addiction to other drugs such as cocaine.



### How do we reverse the trend?

E-cigarettes are very popular with young people. Their use has grown dramatically in the last five years. Today, more high school students use e-cigarettes than regular cigarettes. The use of e-cigarettes is higher among high school students than adults.



### Other Risks:

The aerosol from e-cigarettes is not harmless. It can contain harmful and potentially harmful chemicals, including nicotine; ultrafine particles that can be inhaled deep into the lungs; flavoring such as diacetyl, a chemical linked to a serious lung disease; volatile organic compounds such as benzene, which is found in car exhaust; and heavy metals, such as nickel, tin, and lead. Scientists are still working to understand more fully the health effects and harmful doses of e-cigarette contents when they are heated and turned into an aerosol, both for active users who inhale from a device and for those who are exposed to the aerosol secondhand.

Another risk to consider involves defective e-cigarette batteries that have been known to cause fires and explosions, some of which have resulted in serious injuries. Most of the explosions happened when the e-cigarette batteries were being charged.

## Questions Related to Cigarettes and Vaping

1. What is the addictive substance in e-cigarettes / tobacco products?

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2. Why are the full risks regarding e-cigarettes currently unknown? \_\_\_\_\_

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3. What is a carcinogen? \_\_\_\_\_

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4. What are the steps we need to take in order to reduce the rising trend of vaping among young individuals?

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5. Are e-cigarettes a safe alternative to smoking? Explain. \_\_\_\_\_

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6. What advice would you give to a middle schooler in relation to Nicotine / Vaping?

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# Alcohol

**Ethyl Alcohol:**  $C_2H_5OH$  – colorless, odorless, depressant drug which slows CNS. It is toxic causing alcohol poisoning; can be lethal.

**Alcohol is the #1 drug problem in America.** Approximately 2.9 gals/person/yr are consumed. **Binge drinking** is defined as 5 or more drinks (males) or 4 or more drinks (female) on any one occasion and is a major problem for youth.

Proof is 2x the percent of alcohol in the beverage. Therefore, 100 proof = 50% alcohol and 80<sup>o</sup> = 40% alcohol.

**Hard liquor** is usually 40-50% alcohol, **wine** is usually 9-14%, and **beer/wine coolers** are about 4-7%

## Blood Alcohol Content (BAC)

.02% BAC = 4oz glass of wine = 12oz bottle of beer = 1oz shot of liquor

.02% BAC is reduced or oxidized per hour in the liver. 90% of ingested alcohol is burned for energy or stored, 10% expired with exhalation.  $\frac{1}{2000}$  BAC is exhaled in each breath – that is how

**Breathalyzer Test** works. .05% = DWAI .08% = DWI

**Physical Effects:** lower body temperature, dehydration, vasodilator - opens blood vessels, causing warm feeling, flush to skin, loss of heat; releases inhibitions – reduces anxiety, anemia, slows CNS – motor coordination, control, judgment, speech, digestion, reasoning, reactions, can interact with other medications or illicit drugs. (**Intoxication**)

**Long Range Effects:** cirrhosis of liver, nutritional deficiencies, degeneration of brain, ulcers, heart disease, death.

**Fetal Alcohol Syndrome:** One of the most severe effects of drinking during pregnancy is fetal alcohol syndrome (FAS). FAS is a group of problems that can include mental retardation, birth defects, abnormal facial features, behavior problems, etc.

**Zero Tolerance:** Under New York State's "Zero Tolerance Law," a driver under 21 will have his or her license suspended for a minimum of six months if found to have any measureable BAC (from .02 or higher).

**Help:** Alcoholics Anonymous – 12 Step Program, detoxification and rehabilitation, counseling; group and/or individual, Alanon and Alateen for family members.





## Alcohol's Effect on the Body/Mind

Average # of drinks	Blood Alcohol Content	Behavior
1 – 2	.05%	<ul style="list-style-type: none"> <li>• Feeling of well-being</li> <li>• Decrease in inhibitions</li> <li>• Increase in risk of collision while driving</li> <li>• Decreased coordination and alertness</li> <li>• Impaired judgment</li> </ul>
3 – 5	.10%	<ul style="list-style-type: none"> <li>• Reaction time is significantly slowed</li> <li>• Muscle control and speech are impaired</li> <li>• Limited night and side vision</li> <li>• Loss of self-control</li> <li>• Risk of accident while driving greatly increased</li> </ul>
6 – 7	.15%	<ul style="list-style-type: none"> <li>• Consistent and major decrease in reaction time</li> </ul>
8 – 10	.20%	<ul style="list-style-type: none"> <li>• Loss of equilibrium</li> <li>• Sensory and motor capabilities depressed</li> <li>• Double vision and legal blindness</li> </ul>
10 – 14	.20% - .25%	<ul style="list-style-type: none"> <li>• Severe motor disturbances</li> </ul>
10 – 14	.30%	<ul style="list-style-type: none"> <li>• Not aware of surroundings</li> </ul>
10 – 14	.35%	<ul style="list-style-type: none"> <li>• Surgical anesthesia</li> <li>• Lethal dosage for a small % of people</li> </ul>
14 – 20	.40%	<ul style="list-style-type: none"> <li>• Lethal dosage for about 50% of people</li> <li>• Severe circulatory/respiratory depression</li> <li>• Alcohol poisoning/overdose</li> </ul>

### Calculating Blood Alcohol Content

#### Weight in Pounds

-----	100	120	140	160	180	200	220	240
<b>1</b>	.04	.03	.03	.02	.02	.02	.02	.02
<b>2</b>	.08	.06	.05	.05	.04	.04	.03	.03
<b>3</b>	.11	.09	.08	.07	.06	.06	.05	.05
<b>4</b>	.15	.12	.11	.09	.08	.08	.07	.06
<b>5</b>	.19	.16	.13	.12	.11	.09	.09	.08
<b>6</b>	.23	.19	.16	.14	.13	.11	.10	.09
<b>7</b>	.26	.22	.19	.16	.15	.13	.12	.11
<b>8</b>	.30	.25	.21	.19	.17	.15	.14	.13
<b>9</b>	.34	.28	.24	.21	.19	.17	.15	.14
<b>10</b>	.38	.31	.27	.23	.21	.19	.17	.16

\* Reasons alcohol affects people differently could include: age, weight, gender, mood, speed of consumption, genetics, other drugs, food, other diseases, mixers, proof, liver function, etc.

# FAQs on Alcohol Abuse and Alcoholism

## **#1: What is alcoholism?**

Alcoholism, also known as alcohol dependence, is a disease that includes the following four symptoms:

- Craving--A strong need, or urge, to drink.
- Loss of control--Not being able to stop drinking once drinking has begun.
- Physical dependence--Withdrawal symptoms, such as nausea, sweating, shakiness, and anxiety after stopping drinking.
- Tolerance--**The need to drink greater amounts of alcohol to get "high."**

## **#2: Is alcoholism a disease?**

Yes, alcoholism is a disease. The craving that an alcoholic feels for alcohol can be as strong as the need for food or water. An alcoholic will continue to drink despite serious family, health, or legal problems.

Like many other diseases, alcoholism is chronic, meaning that it lasts a person's lifetime; it usually follows a predictable course; and it has symptoms. The risk for developing alcoholism is influenced both by a person's genes and by his or her lifestyle.

## **#3: Can alcoholism be treated?**

Yes, alcoholism can be treated. Alcoholism treatment programs use both counseling and medications to help a person stop drinking. Most alcoholics need help to recover from their disease. With support and treatment, many people are able to stop drinking and rebuild their lives.

## **#4: How can you tell if someone has a problem?**

Answering the following four questions can help you find out if you or a loved one has a drinking problem:

- Have you ever felt you should cut down on your drinking?
- Have people annoyed you by criticizing your drinking?
- Have you ever felt bad or guilty about your drinking?
- Have you ever had a drink first thing in the morning to steady your nerves or to get rid of a hangover?

One "yes" answer suggests a possible alcohol problem. More than one "yes" answer means it is highly likely that a problem exists. If you think that you or someone you know might have an alcohol problem, it is important to see a doctor or other health care provider right away. They can help you determine if a drinking problem exists and plan the best course of action.

# Tobacco / Alcohol Questions

**Directions:** Use workbook pages on tobacco and alcohol to answer the following questions.

1. What is nicotine and where is it found?
2. It has been said that there are between 400 – 4000 components in burning tobacco. List three other ingredients in tobacco smoke.
3. List 5 short term affects smoking cigarettes has on the body.
4. List 5 possible long term effects that smoking cigarettes has on the body.
5. If cigarettes cost \$10.00 per pack and a person smokes 1 pack per day. What is their total cost over a period of 6 months (average 30 days per month)? How much will they spend during the next 1 and 5 years if the price of cigarettes if the price does not increase?

6 months: \_\_\_\_\_ 1 year: \_\_\_\_\_ 5 years: \_\_\_\_\_

6. What is ethyl alcohol?

**7. What is "Binge Drinking"? Is it different for males and females?**

8. What is considered one drink?

\_\_\_\_\_ BAC = \_\_\_\_\_ ounces of wine = \_\_\_\_\_ ounces of beer = \_\_\_\_\_ ounces of 100 proof hard liquor

9. What BAC is considered DWI in NYS? \_\_\_\_\_ DWAI? \_\_\_\_\_

10. At a BAC of .05 what behaviors are occurring? \_\_\_\_\_

11. List 5 effects alcohol has on the body.

**12. What is "Fetal Alcohol Syndrome"?**

13. Define Alcoholism. What is Alcoholics Anonymous? Are there other programs for Alcoholics and their families?

**14. What is "zero tolerance"?**

# Understanding Binge Drinking

## What Is Binge Drinking?

The National Institute on Alcohol Abuse and Alcoholism (NIAAA) defines binge drinking as a pattern of drinking alcohol that brings blood alcohol concentration (BAC) to 0.08%—or 0.08 grams of alcohol per deciliter—or more. This typically happens if a woman has four or more drinks, or a man has five or more drinks, within about 2 hours. Research shows that fewer drinks in the same time frame result in the same BAC in youth: only three drinks for girls and three to five drinks for boys, depending on their age and size.

## How Common Is Binge Drinking?

According to the 2021 National Survey on Drug Use and Health (NSDUH), about 60 million, or 21.5%, of people in the United States ages 12 and older reported binge drinking during the past month. Although binge drinking is a concern among all age groups, there are important trends in the following groups.

- **Preteens and Teens:** Rates of binge drinking among young people have been steadily decreasing in the last decade. Still, according to 2022 data from the Monitoring the Future survey, 2.2% of 8th graders, 5.9% of 10th graders, and 12.6% of 12th graders reported binge drinking in the past 2 weeks.
- **Young Adults:** Rates of binge drinking among people ages 18 to 22 have been decreasing in the past decade, but remain high. According to the 2021 NSDUH, 49.3% of full-time college students ages 18 to 22 drank alcohol in the past month, and about 27.4% of students engaged in binge drinking during that same time frame.
- **Older Adults:** Binge drinking is on the rise among older adults—more than 11.4% of adults ages 65 and older reported binge drinking in the past month, and the prevalence is increasing. The increase in this group is of particular concern because many older adults use medications that can interact with alcohol, have health conditions that can be exacerbated by alcohol, and may be more susceptible to alcohol-related falls and other accidental injuries.
- **Women:** Studies show that among U.S. women who drink, approximately 1 in 4 have engaged in binge drinking in the last month, averaging about three binge episodes per month and five drinks per binge episode. These trends are concerning because women are at increased risk for health problems related to alcohol misuse.

## What Are the Consequences and Health Effects of Binge Drinking?

Although drinking any amount of alcohol can carry certain risks, crossing the binge threshold increases the risk of acute harm, such as blackouts and overdoses. Binge drinking

also increases the likelihood of unsafe sexual behavior and the risk of sexually transmitted infections and unintentional pregnancy. These risks are greater at higher peak levels of consumption. Because of the impairments it produces, binge drinking also increases the likelihood of a host of potentially deadly consequences, including falls, burns, drownings, and car crashes.

Alcohol affects virtually all tissues in the body. Data suggest that even one episode of binge drinking can compromise function of the immune system and lead to acute pancreatitis (inflammation of the pancreas) in individuals with underlying pancreatic damage. Over time, alcohol misuse, including repeated episodes of binge drinking, contributes to liver and other chronic diseases as well as increases the risk of several types of cancer, including head and neck, esophageal, liver, breast, and colorectal cancers.

Binge drinking can be deadly. Approximately 140,000 deaths resulted from alcohol misuse annually in the United States between 2015 and 2019, and almost half of those were associated with binge drinking. Binge drinking is also costly. Researchers estimated that binge drinking accounted for 77% of the \$249 billion (i.e., \$191.1 billion) economic cost of alcohol misuse in 2010.

## How Does Binge Drinking Affect Adolescents?

Brain development, once thought to taper off at the end of childhood, enters a unique phase during the adolescent years. Research indicates that repeated episodes of binge drinking during the teen years can alter the trajectory of adolescent brain development and cause lingering deficits in social, attention, memory, and other cognitive functions.

## What Is “High-Intensity” Drinking?

High-intensity drinking is defined as alcohol intake at levels twice or more the gender-specific threshold for binge drinking. This dangerous drinking pattern means 8 or more drinks for women and 10 or more drinks for men on one occasion. Research suggests that high-intensity drinking peaks around age 21 and is most common among young adults attending college.

This pattern of drinking is of particular concern because it is associated with an even greater risk of severe health and safety consequences. More research is needed to identify interventions that can be used to discourage this pattern of use.

Use the article to help you answer the following questions.

1. Define 'binge drinking'

2. Why is the increase of binge drinking in older adults such a concern?

3. What are three consequences and/or health effects of binge drinking?

4. Why is repeated binge drinking episodes such a concern in adolescents?

5. The article states that more research is needed in order to identify interventions that could discourage binge drinking, why do you think that is?

## Real Talk about: **MARIJUANA**



### What Do You Think?

Is marijuana a safe drug? Explain.

Do you believe marijuana should be legalized for both medicinal and recreational use on a FEDERAL LEVEL? Explain.

Is marijuana a healthy way to cope with stress? Explain.

Is it OK to drive under the influence of marijuana? Explain.

Did you know that the drugs that cause the most deaths every year are the ones that are legal? This is called a fact because it can be verified by many reliable sources. So when it comes to marijuana, the simple argument of it now being legal in NY is not enough to make and support the claim that it is safe.

Did you also know that even drugs that are legal have age restrictions based on scientific evidence and peer-reviewed studies? (If you are laughing and it's because you know people who use when under age we get that... we know it happens.) This means that at these ages these drugs are considered to be less harmful.

**The truth is** that the choice of whether or not to use drugs really is a personal one and one that only you can make.

It's complex for many people who go back and forth between thinking "I don't want to risk my health or future" and "but is it REALLY that bad to have a little?"

Having real, reliable information can help you navigate this territory. Here are the main points:

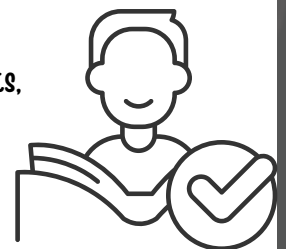
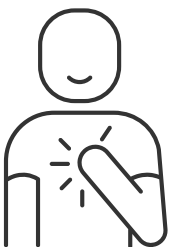
- Just because something is "legal" does not make it safe.
- Just because something has been considered safe to use in moderation at the age of 21 does not mean it impacts the teen brain the same way.
- Just because something can be used medically for people with certain conditions does not mean it should be used recreationally by people without those conditions.
- Just because something does not cause death from overdose doesn't mean it doesn't cause death.
- Just because something does not seem to cause a drastic change doesn't mean it doesn't change you.

BEFORE WE PROCEED, LET'S TALK ABOUT

## **CONFIRMATION BIAS**

Confirmation Bias is the tendency to look for information that supports, rather than rejects, one's preconceptions, typically by interpreting evidence to confirm existing beliefs while rejecting or ignoring any conflicting data (American Psychological Association).

We hope that you keep an open mind to learning about this topic so that you can make informed choices based on facts rather than ones based on perceptions and myths.

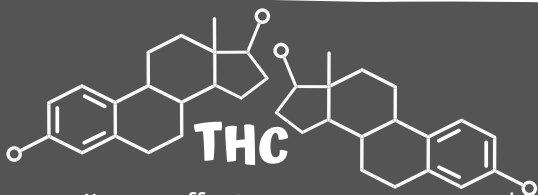


## Cannabis 101

Cannabis, also commonly known as marijuana or weed, comes from the Hemp (cannabis) plant and has been used throughout history recreationally, for wellness purposes, and to treat a variety of medical conditions. The cannabis plant has hundreds of chemical compounds, including cannabinoids.

Cannabinoids are natural compounds found in the cannabis plant; each of which can have different effects on the body. Tetrahydrocannabinol (THC) and cannabidiol (CBD) are the most common, but there are more than 100 cannabinoids. THC is known for its psychoactive effects (a feeling of being high). CBD does not directly produce a feeling of being high and may counteract some of the psychoactive effects of THC. CBD has always been and continues to be legal. THC, on the other hand, has not.

People think that because marijuana is a plant, it can't be bad for them. But many dangerous drugs like cocaine, heroin, and tobacco also come from plants and are natural like marijuana. In fact, marijuana has hundreds of chemicals in it, some of which can harm your brain and have an undesirable impact on your health and well-being.



How marijuana effects users can vary and depends on many factors. One of those being how much THC is actually present in the product they are using and the method they use to get THC into their system.

Prior to the 1990s standard weed contained 2% THC. Since then THC concentration has been steadily increasing and now ranges between 7-30%

There is now also concentrated THC products such as oil, shatter, dab, and edibles that have been able to get the THC concentration upwards of 95%.

In simple terms, the level of THC is what affects how much weed impacts the user.

On the following page you will learn more about more specific effects of marijuana.



## Is It Legal?

MARIJUANA IS STILL CONSIDERED ILLEGAL AT THE FEDERAL LEVEL.

However, individual states have passed legislation which makes marijuana legal to use within that state, some for medicinal use only, and some also for recreational use.

In NY, marijuana has been legalized for recreational use for people 21 and older and for medical use to treat conditions such as:

- *Alzheimer's disease*
- *(ALS)*
- *HIV/AIDS*
- *Crohn's disease*
- *Epilepsy and seizures*
- *Glaucoma*
- *Multiple sclerosis and muscle spasms*
- *Severe and chronic pain*
- *Severe nausea or vomiting caused by cancer treatment*

## Is Marijuana a "Gateway Drug"? Yes and No.

Animal studies have shown that early exposure to addictive substances, including THC, may change how the brain responds to other drugs. For example, when rodents are repeatedly exposed to THC when they're young, they later show an enhanced response to other addictive substances in the areas of the brain that control reward, and they're more likely to show addiction-like behaviors. Although these findings support the idea of marijuana as a "gateway drug," the majority of people who use marijuana don't go on to use other "harder" drugs. Marijuana use has been shown to be three times more likely to lead to dependence among adolescents than among adults. The earlier adolescents starts using marijuana, the more likely they are to become dependent on this or other illicit drugs later in life. Other factors seem to be more of an indicator than the substance itself. Age, for example, can be an indicator because the earlier an adolescent begins to use substances, the more likely they will move on to other drugs. Environment also plays a lead role by influencing availability of drugs and access to other drug users.



# CANNABIS and the BRAIN



The brain is made up of different regions that are connected and work together to control different functions like memory and motor skills. THC, a chemical found in cannabis, attaches to receptors in many parts of the brain. THC interferes with normal functioning within brain regions and communication between different areas. As a result, THC can impact a person's body and behavior in many different ways.

Scan the QR code for an Interactive Lesson/Activity on how THC affects each area of the brain. Fill in the notes below.

## CEREBRUM

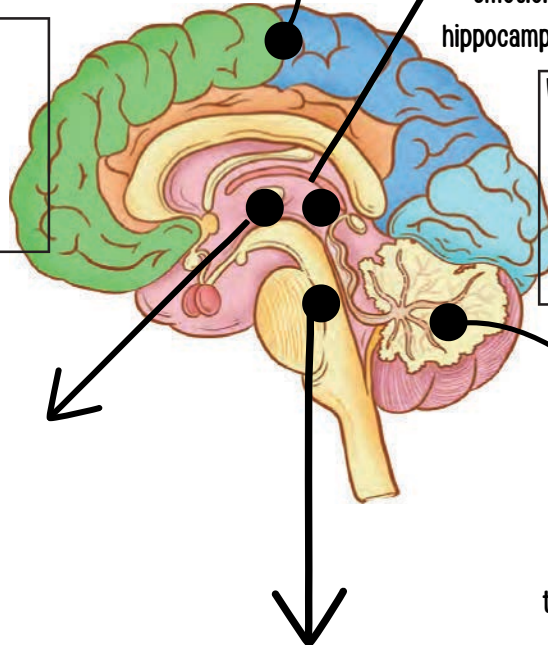
The cerebrum powers our ability to think, plan, solve problems, and make decisions. It also processes information from our senses, allowing us to see, feel, hear, and taste.

**Effects:**

## LIMBIC SYSTEM

The limbic system is a collection of brain structures deep within the brain that is involved in memory and emotion processing. The amygdala and hippocampus are two of the key structures.

**Effects:**



## BASAL GANGLIA

The basal ganglia are a group of structures deep within the brain that are strongly interconnected with other brain areas and involved in many processes, including motor function, cognition, and emotion. The basal ganglia also play an important role in regulating how the brain processes reward and reinforcement.

**Effects:**

## BRAIN STEM

The brain stem is in charge of the functions our body needs to stay alive—breathing, heart rate, and digesting food. It links the brain with the spinal cord, which runs down the back and moves muscles and limbs. It also lets the brain know what's happening to the body.

**Effects:**

## CEREBELLUM

Located at the back of the brain, the cerebellum is involved in the fine-tuning of motor skills, such as balance and coordination, and plays an important role in the perception of time.

**Effects:**

# MYTHS VS FACTS

## 1. MYTH: Marijuana is Harmless

TRUTH: Sure, it can't directly kill you – but that doesn't mean that pot is harm-free. Regular marijuana use has been shown to be associated with long-term problems, including poor academic performance, memory loss and lung cancer. To a developing brain, like those of teenagers, marijuana can be especially toxic -- using pot can lead to panic attacks, depression and other mental health problems, not to mention increased anxiety.

## 2. MYTH: Marijuana is Not Addictive

TRUTH: But what you didn't know is that more teens enter treatment each year with marijuana as the main substance that they abused. In 2004, 64% of teens were admitted for treatment for marijuana as their main drug of choice vs. 36% of all other substances including alcohol. Marijuana is addictive, as it meets the criteria for substance dependence established by the American Psychiatric Association including:

- *Tolerance (needing more of the substance to achieve the same effects)*
- *Withdrawal symptoms, using a drug even in the presence of adverse effects (you smoke even though bad things have happened when you do)*
- *Giving up social, occupational or recreational activities because of substance use (you quit your sports team or job because they get in the way of your drug use.)*

The desire for marijuana can have a powerful pull over a user – and can make it hard to quit.

## 3. MYTH: Marijuana Isn't As Bad As Cigarettes

TRUTH: Nope, sorry. Pot actually contains many of the same cancer-causing chemicals found in tobacco. Puff for puff, smoking marijuana may increase the risk of cancer more than smoking tobacco does.

Therefore, if you smoke pot regularly, you may experience the same breathing problems as those who smoke cigarettes. To put it plainly, walking up flights of stairs will seem difficult, and if you're an athlete -- that unattractive wheezing and coughing caused by excessive smoking won't look so hot (or feel so good) on the playing fields.

## 4. MYTH: Driving While High is Safer than Driving Drunk

TRUTH: Hardly. In a study reported by the National Highway Traffic Safety Administration, even a moderate dose of marijuana was shown to impair driving performance, since it affects alertness, concentration, perception coordination and reaction time – essential skills required for safe driving. Researchers also found that 17% (1 in 5) of crash victims under the age of 18 tested positive for marijuana.

## 5. MYTH: I Can Smoke Pot and Still Get Straight A's

TRUTH: Hey, anything is possible – but there has been a lot of research done that states the opposite. Researchers have found that heavy marijuana use may be especially problematic during teens' peak learning years, when the brain is still developing, since smoking pot can impair your ability to concentrate and retain information. This can cause poor academic performance. You might think you're doing well in school – but you'll never know if smoking pot is inhibiting your true academic potential.

## Over-the-counter Pain Reliever Guide: Compare Before Choosing



The nonprescription oral pain relievers that line the aisles in your local drugstore aren't all the same. But they fall into two main categories:

- **Pain relievers that decrease inflammation.** Often called non-steroidal anti-inflammatory drugs (NSAIDs), this group includes medications with aspirin, ibuprofen, naproxen sodium or ketoprofen.
- **Pain relievers that don't decrease inflammation.** The active ingredient in these medications is acetaminophen.

In general, all regular-strength doses of over-the-counter (OTC) pain medications provide comparable relief for everyday pains. But the effectiveness of a particular NSAID varies from person to person. You may want to try different pain relievers to find out which one works best for you.

Just remember that individual factors, such as your medical history and other medications you're taking, may limit your OTC pain reliever options. So, read the labels carefully. If you're not sure whether a particular OTC pain reliever is right for you, ask your pharmacist or doctor. Over-the-counter medications are safe when taken as directed, but they're not without risk. The fact that you don't need a prescription doesn't mean that you can't ask for some advice.

Active ingredient	Acetaminophen	Aspirin	Ibuprofen	Naproxen sodium	Ketoprofen
<b>Brand-name examples</b>	Tylenol	Ascriptin, Bayer, Bufferin, Ecotrin	Advil, Motrin IB	Aleve	Orudis KT
<b>Uses</b>	Treats pain and fever	Treats pain, fever and inflammation	Treats pain, fever and inflammation	Treats pain, fever and inflammation	Treats pain, fever and inflammation
<b>Length of pain relief (1)</b>	4 to 6 hours	4 to 6 hours	4 to 6 hours	8 to 12 hours	6 to 8 hours
<b>Common side effects</b>	Rare when taken as directed for short periods (days to weeks)	Stomach pain, heartburn, constipation, or dizziness	Stomach pain, heartburn, constipation or dizziness	Stomach pain, heartburn, constipation or dizziness	Stomach pain, heartburn, constipation or dizziness
<b>Possible serious complications</b>	Liver damage when used long term at high doses	Stomach bleeding, impairment of kidney function, liver dysfunction or allergic reaction	Stomach bleeding, impairment of kidney function, liver dysfunction or allergic reaction. Prolonged use above the	Stomach bleeding, impairment of kidney function, liver dysfunction or allergic reaction. Prolonged use	Stomach bleeding, impairment of kidney function, liver dysfunction or allergic reaction. Prolonged use

Active Ingredient	Acetaminophen	Aspirin	Ibuprofen	Naproxen Sodium	Ketoprofen
			recommended dosage may increase risk of cardiovascular events and serious skin reactions.	above the recommended dosage may increase risk of cardiovascular events and serious skin reactions.	above the recommended dosage may increase risk of cardiovascular events and serious skin reactions.
<b>Conditions it may worsen (2)</b>	Severe kidney disease or liver disease	Asthma, diabetes, bleeding disorder, gout, kidney disease, liver disease or stomach ulcers	Liver, heart or kidney disease; high blood pressure; bleeding disorder; or stomach problems	Liver, heart or kidney disease; high blood pressure; bleeding disorder; or stomach problems	Liver, heart or kidney disease; high blood pressure; bleeding disorder; or stomach problems
<b>Drugs you should <i>not</i> take it with (3)</b>	Alcohol or other medicines that contain acetaminophen	Alcohol, blood thinners, corticosteroids, medications for high blood pressure or diabetes, methotrexate, or probenecid	Alcohol, blood thinners, diuretics, medications for arthritis or diabetes, aspirin, or other over-the-counter pain relievers	Alcohol, blood thinners, diuretics, medications for arthritis or diabetes, aspirin, or other over-the-counter pain relievers	Alcohol, blood thinners, diuretics, medications for arthritis or diabetes, aspirin, or other over-the-counter pain relievers
<b>Safe for children?</b>	Yes (4)	No (5)	Yes (4)	No, except for age 12 and over	Unknown; not recommended for children
<b>Safe in pregnancy?</b>	Yes, for short-term pain relief	No	No	No	No
<b>Safe in breast-feeding women?</b>	Yes, for short-term pain relief	No	Yes, for short-term pain relief	No	No

(1) Length of pain relief can vary by dosage and the condition being treated.

(2) If you have a chronic illness, check with your doctor before using any over-the-counter medication. This precaution is particularly important for the specific medications and conditions listed here.

(3) Other drug interactions are possible, but over-the-counter pain medications are particularly risky if you take the medications listed here.

(4) Children's formula available. Dosages are based on age and weight. Consult your doctor.

(5) Can cause Reye's syndrome — a life-threatening condition — in children with chickenpox, the flu or other viral illnesses.

**Directions: Use the previous pages answer the following questions.**

1. Which pain reliever is "safe" for children to use?
  
2. Are all Pain relievers safe for pregnant women to use?
  
3. Do all pain relievers work for more than 8 hours? Which one(s) do?
  
4. Are there diseases that make using OTC pain relievers dangerous? Which conditions might they worsen?
  
5. What drug(s) should you not mix with pain relievers?
  
6. Use of which medication caused an increased risk of what life-threatening condition in children with the chicken pox, flu or other viral illness? (see footnotes)
  
7. What are some common side effects of using aspirin, acetaminophen or ibuprofen?
  
8. What are possible complications when using  
Acetaminophen:  
  
Aspirin, Ibuprofen, Naproxen sodium:
  
9. All of the pain relievers reduce pain and fever, which pain reliever does not reduce inflammation?
  
10. Which pain relievers are safe to use?  
  
During pregnancy:  
  
While breast feeding:

# What Is the Difference Between Misuse and Abuse?

Read the article below from, [DrugFreeClermont.org](http://DrugFreeClermont.org). Then answer the questions on the following page.

What is the difference between misuse and abuse?

The number of emergency department visits due to misuse or abuse of prescription drugs has risen 98.4% since 2004. The terms misuse and abuse are often used interchangeably, but there is a distinct difference. The Food and Drug Administration (FDA) explains that the difference between abuse and misuse has to do with the individual's intentions or motivations.

Prescription drug ABUSE is the use of a medication without a prescription, in a way other than as prescribed, or for the experience or feelings elicited, as defined by the National Institute on Drug Abuse. For example, when a person takes a prescription drug to get a pleasant or euphoric feeling (i.e. to "get high"), especially at higher doses than prescribed, that is an example of drug abuse. The abuse of certain prescription drugs – opioids, central nervous system depressants, and stimulants – can lead to a variety of adverse health effects, including addiction.

According to the FDA, prescription drug MISUSE may involve not following medical instructions, but the person taking the drug is not looking to "get high." For example, if a person isn't able to fall asleep after taking a single sleeping pill, they may take another pill an hour later, thinking, "That will do the job." Or a person may offer his headache medication to a friend who is in pain. Those are examples of drug misuse because, according to the FDA, the person is treating themselves, but not according to the directions of their health care providers. According to the Institute for Safe Medication Practices, prescription drug misuse can include: taking the incorrect dose; taking a dose at the wrong time; forgetting to take a dose; stopping medicine too soon.

The FDA stresses that both misuse and abuse of prescription drugs can be harmful and even life-threatening. This is because taking a drug other than the way it is prescribed can lead to dangerous outcomes the person may not anticipate.

Prescription medications have many beneficial effects. When used under proper medical supervision, they can help us live longer, healthier lives. But these same medications have the potential to produce dangerous side effects and deadly outcomes, especially when misused or abused. Because of this potential for harm, prescription medications should be used precisely as prescribed, and only by the person for whom they are intended.

Read the following scenarios and circle either, drug use, drug misuse or drug abuse as described in the prior article.

1. Julie attends a party and one of her friends offers her a prescription painkiller that she found in the medicine cabinet of the person throwing the party. Julie has had a rough week and decides to just take 1 pill to take the edge off and washes it down with a sip of beer.

Drug Use

Drug Misuse

Drug Abuse

2. Carter falls off his skateboard during a railslide. As he falls he hits his tailbone on the rail and it sends a sharp pain up his back. As the day goes on Carter starts to get more and more sore. He goes home and gets a bottle of Advil©. When he reads the bottle it says take 2 every 4-6 hours. Carter decides that this is different from a regular bump or bruise and decides to take 4 pills. Hopefully the pain will go away quicker, he thinks.

Drug Use

Drug Misuse

Drug Abuse

3. Vincent goes to the dentist to get his wisdom teeth out. After the extraction, the dentist gives him a prescription for 10 Vicodin (painkillers). On the way home he fills the prescription. When he gets home the novocaine is starting to wear off. He reads the bottle and it says to take 1 pill every 6-8 hours. He takes 1 pill and heads to bed.

Drug Use

Drug Misuse

Drug Abuse

4. Johnny sees that his brother Vincent did not use all of the Vicodin from when he got his wisdom teeth out. Johnny has had a toothache for weeks and his dentist appointment is not for another two days. The pain is getting unbearable so he reads the directions and takes 1 pill then goes and lies down.

Drug Use

Drug Misuse

Drug Abuse

What can you do to prevent prescription drug misuse and abuse?

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# What is prescription drug abuse?

Although most people take prescription medications responsibly, there has been an increase in the nonmedical use of or abuse of prescription drugs in the United States.

The three classes of prescription drugs that are most commonly abused are:

- Opioids, which are most often prescribed to treat pain;
- Central nervous system (CNS) depressants, which are used to treat anxiety and sleep disorders; and
- Stimulants, which are prescribed to treat the sleep disorder narcolepsy and attention-deficit hyperactivity disorder (ADHD).

Opioids are commonly prescribed because of their effective analgesic, or pain-relieving, properties. Medications that fall within this class-referred to as prescription narcotics-include morphine (e.g., Kadian, Avinza), codeine, oxycodone (e.g., OxyContin, Percodan, Percocet), and related drugs. Morphine, for example, is often used before and after surgical procedures to alleviate severe pain. Codeine, on the other hand, is often prescribed for mild pain. In addition to their pain-relieving properties, some of these drugs-codeine and diphenoxyllate (Lomotil) for example-can be used to relieve coughs and diarrhea.

Taken as directed, opioids can be used to manage pain effectively. Many studies have shown that the properly managed, short-term medical use of opioid analgesic drugs is safe and rarely causes addiction-defined as the compulsive and uncontrollable use of drugs despite adverse consequences-or dependence, which occurs when the body adapts to the presence of a drug, and often results in withdrawal symptoms when that drug is reduced or stopped. Withdrawal symptoms include restlessness, muscle and bone pain, insomnia, diarrhea, vomiting, cold flashes with goose bumps ("cold turkey"), and involuntary leg movements. Long-term use of opioids can lead to physical dependence and addiction. Taking a large single dose of an opioid could cause severe respiratory depression that can lead to death.

Only under a physician's supervision can opioids be used safely with other drugs. Typically, they should not be used with other substances that depress the CNS, such as alcohol, antihistamines, barbiturates, benzodiazepines, or general anesthetics, because these combinations increase the risk of life-threatening respiratory depression.

1. Which three groups of drugs are most commonly abused?
  
  
  
  
  
  
  
  
  
  
2. If a person combines opioids with other drugs what risks do they face?



# Heroin and Prescription Opioids

Prescription drug misuse occurs when a person takes a prescription medication that is not prescribed for him/her, or takes it for reasons or in dosages other than as prescribed. The nonmedical use of prescription medications has increased in the past decade and has surpassed all illicit drug usage except marijuana in the United States. Misuse of prescription drugs can produce serious health effects, including addiction. One of the most striking aspects of the misuse of prescription medications has been the increase in painkiller abuse, which can lead to heroin use.

- Prescription analgesic overdoses killed nearly 15,000 people in the US in 2008, more than three times the 4,000 killed by these medications in 1999. *(CDC Vital Signs 11/2011)*
- Young adults ages 18 - 24 are particularly at risk, with increases in heroin/opioid admissions for treatment throughout the state. In particular, upstate New York (222% increase in admissions) and Long Island (242% increase) have been hard hit by this problem. *(NYS Client Data System)*
- In 2011, nonmedical use of prescription drugs among youth ages 12 - 17 and young adults ages 18 - 24 was the second most prevalent illicit drug use category, with marijuana being first. *(NSDUH 2011)*
- Between 2007 and 2012, the number of individuals using heroin during the past 30 days more than doubled nationwide (161,000 to 335,000). *(NSDUH 2012)*
- The percentage of New York State high school students who reported using heroin more than doubled between 2005 and 2011 (1.8 % to 4%). *(Youth Risk Behavior Survey (YRBS))*

## Heroin and Prescription Drug Abuse Can Be Addictive and Deadly

### Loss of tolerance

Regular use of opioids leads to greater tolerance. For example, more is needed to achieve the same effect (high). Overdoses occur when people begin to use again. This is usually following a period of not using (abstinence) such as after coming out of treatment.

### Mixing drugs

Mixing heroin or prescription opioids with other drugs, especially depressants such as benzodiazepines (Xanax, Klonopin, etc.) or alcohol, can lead to an accidental overdose, respiratory problems and death. The effect of mixing drugs is greater than the effect one would expect if taking the drugs separately.

### Variation in strength of heroin

Heroin may vary in strength and effect based on the purity.

### Serious illness

Users with serious illness such as HIV/AIDS, hepatitis B and C, heart disease, and endocarditis are at greater risk for overdose.

## Prevent Prescription Drug Misuse

**Despite what some people may assume, abusing prescription drugs is not safe.**

**Safeguard Your Meds** by placing your prescribed medication in a secure location and tracking the number of pills at all times

- Routine tracking of your prescribed medication is smart, especially when others live with you or visit your dorm room/apartment.
- Never share medication that is prescribed for you.
- Never take medication that was prescribed for someone else.
- Don't mix medications. Speak to your health care provider about all medications you are taking, including over-the-counter medications.

### Pass It On

Share your knowledge, experience and support with your friends and family.



1072

Produced by the New York State Department of Health  
and the New York State Office of Alcoholism and Substance Abuse Services

8/14

[www.combatheroin.ny.gov](http://www.combatheroin.ny.gov)

## Ask for Help

There are many confidential resources available for students – if you ask! Ask your health care professional or seek assistance from a mental health or substance abuse counselor.

## Signs and Symptoms

Change in behavior is key when one suspects there is substance abuse. The key is to get the person assistance as soon as possible.

### Physical Signs

- Loss or increase in appetite; unexplained weight loss or gain
- Small pupils, decreased respiratory rate and a non-responsive state are all signs of opioid intoxication.
- Nausea, vomiting, sweating, shaky hands, feet or head, and large pupils are all signs of opioid withdrawal.

### Behavioral Signs

- Change in attitude/personality
- Change in friends; new hangouts
- Avoiding contact with family
- Change in activities, hobbies or sports
- Drop in grades or work performance
- Isolation and secretive behavior
- Moodiness, irritability, nervousness, giddiness, nodding off
- Wearing long-sleeved shirts or layers of clothing out of season
- Stealing

### Advanced Warning Signs

- Missing medications
- Burnt or missing spoons/ bottle caps
- Missing shoelaces/belts
- Small bags with powder residue
- Syringes

## Good Samaritan Law

Some individuals may fear that police will respond to a 911 call and there will be criminal charges for themselves or for the person who overdosed. Those fears should NEVER keep anyone from calling 911 immediately. It may be a matter of life or death.

In September 2011, the 911 Good Samaritan Law went into effect to address fears about a police response to an overdose. This law provides significant legal protection against criminal charges and prosecution for possession of controlled substances, as well as possession of marijuana and drug paraphernalia. This protection applies to both the person seeking assistance in good faith, as well as to the person who has overdosed. Class A-1 drug felonies, as well as sale or intent to sell controlled substances, are not covered by the law.

The following organizations offer information and resources that can help you and your family.



**1-877-8-HOPENY**

Find Help for **1-877-846-7369**  
Alcoholism, Drug Abuse, Problem Gambling



New York State Office of Alcoholism and Substance Abuse Services  
[www.oasas.ny.gov](http://www.oasas.ny.gov)



New York State Department of Health  
[www.health.ny.gov](http://www.health.ny.gov)

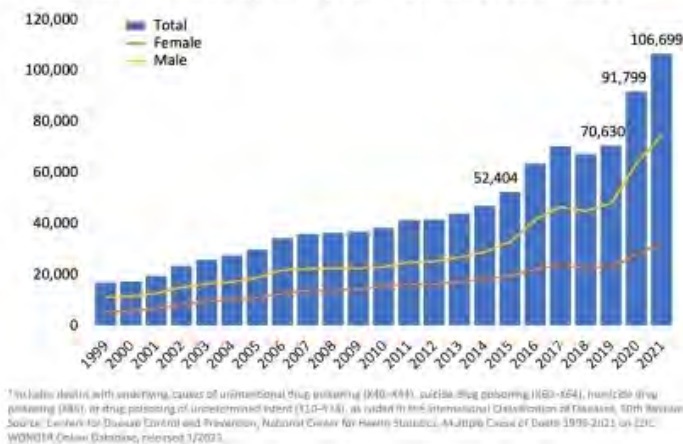


[www.combatheroin.ny.gov](http://www.combatheroin.ny.gov)

After reading the New York Times article, *Fentanyl Outpaces Heroin as the Deadliest Drug on Long Island*, answer the questions Q1-6. Then use the graph for Q7-8 and free response to the reading above Q9.

1. What was the deadliest drug on Long Island prior to December 2016? \_\_\_\_\_
2. What type of drug is fentanyl? \_\_\_\_\_
3. According to the article, why has fentanyl use increased? \_\_\_\_\_  
\_\_\_\_\_
4. According to the Department of Health and Mental Hygiene, how many deaths due to overdose are expected to happen in the year this article was written? \_\_\_\_\_
5. What did the health department say about unintended drug overdoses? \_\_\_\_\_  
\_\_\_\_\_
6. Nationwide, recorded deaths from opioids surpassed 30,000 in 2015, according to the article. Use the internet and search how many deaths from opioids there were in the US this past year?  
\_\_\_\_\_

Figure 1. National Drug-Involved Overdose Deaths\*, Number Among All Ages, by Gender, 1999-2021



7. Using the graph on the left, by approximately how many death have increased from 2016-2021?  
\_\_\_\_\_
8. Looking at the graph you will a fairly large spike in two of the years. Why do you think these spikes may have occurred?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

According to the CDC, 107,375 people in the United States died of drug overdoses and drug poisonings in the 12- month period ending in January 2022. A staggering 67 percent of those deaths involved synthetic opioids like fentanyl. Some of these deaths were attributed to fentanyl mixed with other illicit drugs like cocaine, methamphetamine, and heroin, with many users unaware they were actually taking fentanyl. Only two milligrams of fentanyl is considered a potentially lethal dose; it's particularly dangerous for someone who does not have a tolerance to opioids.

9. Read the statement above. Are your thoughts? 3-5 sentences.

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## Fentanyl Outpaces Heroin as the Deadliest Drug on Long Island

By Kevin Deutsch

Dec. 28, 2016

An anesthetic commonly used for surgery has surpassed heroin to become the deadliest drug on Long Island, killing at least 220 people there in 2016, according to medical examiners' records.

The drug, fentanyl, is a synthetic opioid, which can be 100 times more potent than morphine.

The numbers from Long Island are part of a national pattern, as fentanyl fatalities have already surpassed those from heroin in other parts of the country, including New England, as its use has skyrocketed. Part of the reason for the increase is economic — because fentanyl can be manufactured in the lab, it is much cheaper and easier than cultivating heroin.

In New York City, more than 1,000 people are expected to die from drug overdoses this year — the first recorded four-digit death total in city history, according to statistics compiled by the Department of Health and Mental Hygiene. Nearly half of all unintentional drug overdose deaths in the city since July have involved fentanyl, the health department said.

The medical examiners of Long Island's two counties, Nassau and Suffolk, compiled the new numbers. "Fentanyl has surpassed heroin as the most commonly detected drug in fatal opioid overdoses," Dr. Michael J. Caplan, the Suffolk County medical examiner, said in a written statement about the statistics, which were obtained by The New York Times ahead of their release. "The influx of illicitly manufactured fentanyl from overseas is a nationwide issue that requires a multidisciplinary intervention from all levels of government."

Nationwide, recorded deaths from opioids surpassed 30,000 in 2015, according to data compiled by the Centers for Disease Control and Prevention. And overdoses caused by synthetic opioids like fentanyl increased by 72.2 percent in 2015 over 2014 — one of the deadliest year-over-year surges for any drug in United States history, the same data shows.

As recently as three years ago, few people outside the medical profession or law enforcement had even heard of fentanyl, which is legally prescribed in the form of transdermal patches or lozenges. But drug dealers have been lacing heroin with fentanyl for years, just to fill out the packets and save on the heroin — with or without the user's knowledge.

At the same time, many drug users seek out fentanyl because it gives them a higher high and the thrill of using something so risky, although often they do not know exactly what they are shooting up.

In a statement responding to the overdose data, James J. Hunt, special agent in charge of the Drug Enforcement Administration's New York Division, said that seizures of fentanyl had increased drastically in the last five years. "Not only are drug traffickers mixing it with heroin for street distribution," he said, "but drug suppliers are sending it in bulk form for resellers to sell in pill form or in bulk powder."

Prescription fentanyl is used to treat cancer pain and as an anesthetic for surgery. Even small amounts of it can be deadly. The drug is so powerful that law enforcement officers have to wear gloves when searching for it, as just a tiny bit can get into the skin and, depending on the amount, can be fatal.

On Long Island, America's most densely populated suburban region, opioids of all kinds killed at least 464 people in 2016, the medical examiners' records show. Hundreds of additional drug overdose analyses are pending.

"Too many young people have fallen victim," the Nassau County executive, Edward Mangano, said of the new data in a written statement. The Nassau County medical examiner, Dr. Tamara Bloom, did not comment on the new numbers.

In New York City, as of June, there were 184 fentanyl-related overdose deaths recorded — more than in all of 2015, health department records show. Since then, the number of fatal 2016 overdoses involving fentanyl has surged to about 500, according to the department data.

Fentanyl is increasingly being manufactured by Mexican drug cartels, according to the D.E.A., or is cooked up in labs in the United States. It is being sold by dealers in New York City and on Long Island, according to Mr. Hunt, the D.E.A. special agent.

Some users who purchase it believe they are actually buying prescription pain pills like oxycodone or hydrocodone, or heroin alone — drugs far less potent than fentanyl.

A user can fatally overdose within moments of snorting, injecting or swallowing the drug, authorities said.

**A correction was made on Dec. 28, 2016:** An earlier version of this article referred incorrectly to the proportion of drug overdose deaths in New York City that could be attributed to fentanyl. It is nearly half since July, not over half the number this year.

**Editors' Note: Feb. 24, 2017**

# 9 things everyone should know about the drug Molly

The drug called Molly isn't what most of its users think it is. If you Google "Molly," many articles say the drug is "pure" MDMA, the active ingredient in Ecstasy.

Users often talk about the "purity" of taking Molly, as if it's somehow better; after all, MDMA was originally developed as a medication to treat depression. But today's Molly is most often not MDMA -- in the last few years, the drug has become a toxic mixture of lab-created chemicals, according to the U.S. Drug Enforcement Administration.

## **Here are nine things everyone should know about this rapidly changing party drug:**

### **1. What is Molly?**

Someone who buys or takes Molly now is probably ingesting dangerous synthetic drugs that have not been tested and are produced in widely varying strengths. The DEA says only 13% of the Molly seized in New York state the last four years actually contained any MDMA, and even then it often was mixed with other drugs. The drugs frequently found in Molly are Methylone, MDPV, 4-MEC, 4-MMC, Pentedrone and MePP.

### **2. What does Molly do?**

The lab-created chemicals mimic the effects of MDMA; most of them are central nervous system stimulants that cause euphoric highs. They can also cause a rapid heartbeat; high blood pressure, blood vessel constriction and sweating, and can prevent the body from regulating temperature. Some of the chemicals have been reported to cause intense, prolonged panic attacks, psychosis and seizures.

After they wear off, the chemicals can cause devastating depression. Several of these compounds have caused deaths.

### **3. Who is using Molly?**

Molly is being marketed to young first-time drug abusers between the ages of 12 and 17, as well as traditional rave, electronic dance music fans who may think they're getting MDMA. "Our kids are being used as guinea pigs by drug traffickers," says Al Santos, associate deputy administrator for the DEA.

### **4. What does Molly look like?**

Molly can take many different forms, although it's most often found in a capsule or powder. The DEA has also seen Molly applied to blotting paper, like LSD, and in injectable form.

### **5. What makes Molly so dangerous?**

Molly is dangerous because of the toxic mix of unknown chemicals; users have no idea what they're taking or at what dose. Unlike MDMA and other illegal drugs that have known effects on the body, the formulas for these synthetic drugs keep changing, and they're manufactured with no regard to how they affect the user.

"You're playing Russian roulette if you take these compounds because we're seeing significant batch-to-batch variances," Santos says.

For example, officials have found completely different ingredients in drugs sold in the same packaging. Santos also says the amount of active ingredients can be dangerously different, because "the dosing for these sorts of drugs are in the micrograms. The room for error is tremendous, and we've seen a lot of deaths with some of these compounds."

The DEA has developed its own reference materials for state and local law enforcement because they were encountering so many different drug compounds they'd never seen before. At the DEA testing lab, technicians are constantly trying to unravel the chemical makeup of newly discovered drug compounds that have been seized.

## **6. Where do the chemicals come from?**

Almost all the chemicals in Molly and other synthetic drugs come from laboratories in China. Chinese chemists sell the drugs online, and middlemen in the United States and around the world cut it with other substances, and either place it in capsules or sell it as powder. Other kinds of synthetic drugs can be sprayed onto plant material and smoked, such as synthetic marijuana.

But it's difficult for law enforcement to keep track of all the chemicals. The DEA says it's seen about 200 individual chemical compounds since 2009 and 80 new compounds since 2012. As soon as a compound is discovered and banned, another one is created to take its place.

Interestingly enough, the formulas for these drugs were discovered by legitimate scientists working on new medications. The formulas couldn't be used as medicine because of the stimulant or hallucinogenic effects they had users, but the "recipes" for the drugs still remain.

Clandestine chemists have used the scientific literature to create hundreds of new chemical compounds for the sole purpose of getting people high. There is no known legitimate purpose for any of these chemicals.

## **7. How widespread is the problem?**

Huge. The fastest-emerging drug problem in the United States is the synthetic drug market, which now includes Molly. The chemicals in Molly have been found in nearly every state in the U.S.

And it's a multibillion-dollar business. In two days, the DEA seized \$95 million off drug traffickers during a crackdown. It is a growing problem in Australia, New Zealand and Europe as well.

## **8. What's being done about it? Why can't the government just make it illegal?**

Congress passed the Synthetic Drug Abuse Prevention Act in July 2012, which controlled 26 compounds by name. But there are hundreds of compounds, and every time the government makes one illegal, chemists alter the formula slightly to make it a substance that is no longer controlled.

U.S. officials say they are discussing the issue with the Chinese government, but most of these chemicals are legal in China.

## **9. How can I tell if someone is using or has used Molly?**

The effects can vary widely, depending on the chemical, but while users are under the influence, they may exhibit the following symptoms: sweating, jaw clenching, violent or bizarre behavior and psychosis.

After the drug has worn off, a user may show signs of depression or may not be able to get out of bed for an extended period of time.

### **ANSWER THE FOLLOWING QUESTIONS:**

- 1. What do most users think "Molly" is?**
- 2. According to the DEA, what percent of Molly seized in NY actually contains MDMA?**
- 3. What do you think is meant by the following quote from the article?  
"Our kids are being used as guinea pigs by drug traffickers."**
- 4. What makes Molly so dangerous?**

# DRUG REVIEW

1. Alcohol is a \_\_\_\_\_ drug, which slows down the central nervous system. One drink is equal to:  
\_\_\_\_ oz. of beer \_\_\_\_ oz. of wine \_\_\_\_ oz. of 100 proof liquor.
2. Alcohol is broken down (oxidized) at the rate of \_\_\_\_ drink per hour for a 160 pound male.
3. BAC stands for \_\_\_\_\_. DWI in NYS is \_\_\_\_\_ or higher.
4. Zero Tolerance means that a person under the age of 21 can have no measurable \_\_\_\_\_. In NYS this is a BAC of .02% or below.
5. Binge Drinking is defined as having \_\_\_\_\_ or more drinks for females in about 2 hours and \_\_\_\_\_ or more drinks for males in about 2 hours. Binge drinking may lead to poor decision making and unintentional injuries.
6. Long term effects of alcohol abuse are: (list 4)
7. Alcoholism is a \_\_\_\_\_ that causes people to lose control of drinking behavior.
8. The addictive substance in tobacco smoke is \_\_\_\_\_. The addictive substance in Vapes is also \_\_\_\_\_.
9. Long term effects of smoking any products include: (name diseases)  
\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.
10. Define:
  - A. Tolerance: \_\_\_\_\_
  - B. Adulterant: \_\_\_\_\_
  - C. Synergism: \_\_\_\_\_
  - D. Withdrawal: \_\_\_\_\_
  - E. Euphoria: \_\_\_\_\_
  - F. Hallucinogen: \_\_\_\_\_
  - G. Stimulant: \_\_\_\_\_
11. What substances that are prescribed by a doctor can lead to heroin usage?  
\_\_\_\_\_ and \_\_\_\_\_.
12. Are all pain relievers safe and effective? What do you think people should be told about "pain relievers?"
13. Describe the relationship between prescription opioids and heroin:
14. What type of drug is fentanyl and why is it so dangerous? \_\_\_\_\_

# Nutrition

## The Dietary Guidelines:

1. Enjoy your food, but eat less.
2. Avoid oversized portions.
3. Make half your plate fruits and vegetables.
4. Switch to fat-free or low-fat (1%) milk.
5. Make at least half your grains whole grains.
6. Compare sodium in foods like soup, bread, and frozen meals—and choose foods with lower numbers.
7. Drink water instead of sugary drinks.



## Find your balance between food and physical activity

- Be sure to stay within your daily calorie needs.
- Be physically active for at least 30 minutes most days of the week.
- About 60 minutes a day of physical activity may be needed to prevent weight gain.
- For sustaining weight loss, at least 60 to 90 minutes a day of physical activity may be required.
- Children and teenagers should be physically active for 60 minutes every day, or most days

## How Much Do I Need to Eat?

A balanced diet is one that includes all of the food groups. Everyone wants to know how much they should eat to stay healthy. It's a tricky question, though. It depends on your age, whether you're a girl or a boy, and how active you are. Kids who are more active burn more calories, so they need more calories. Visit the website to find out how much of each food group and how many calories YOU need.

### MY DIETARY GUIDELINES

Sex: \_\_\_\_\_ Age: \_\_\_\_\_ Activity Level: \_\_\_\_\_

#### Total Calories: \_\_\_\_\_

Grains	Vegetables	Fruits	Protein	Dairy
Oz.	cups	cups	Oz.	cups

[Make half whole!]

[Eat a wide variety of colors each day!]

[Go lean with protein! (lower in fat)]

**\*Any food made from wheat, rice, oats, cornmeal, barley, or another cereal grain is a grain product.** Bread, pasta, oatmeal, breakfast cereals, tortillas, and grits are examples. Grains are divided into two subgroups, **whole grains** and **refined grains**. Whole grains contain the entire grain kernel—the bran, germ, and endosperm. People who eat whole grains as part of a healthy diet have a reduced risk of some chronic diseases.



# BUILD A BETTER GREEN SMOOTHIE

piecesinprogress.tumblr.com

## THE ESSENTIAL RECIPE

1 & 1/2 CUPS LIQUID + 2 CUPS GREENS + 2-3 SERVINGS FRUIT  
EXTRAS + 1 CUP ICE (*less if frozen fruit*) + SWEETENER TO TASTE

### LIQUID

WATER  
COCONUT WATER  
SOYMILK  
ALMOND MILK  
REGULAR MILK  
FRESH ICED TEA  
FRESH JUICE

### GREENS

BABY SPINACH  
*Honestly, I always use spinach*  
KALE  
SWISS CHARD  
COLLARD GREENS  
DANDELION GREENS  
BROCCOLI

### FRUIT

*\*my favorites in orange*  
APPLE  
BANANA  
BLACKBERRIES  
CANTALOUPE  
FIGS  
HONEYDEW  
KIWI  
MANGO  
NECTARINES  
ORANGE  
PEACHES  
PEAR  
PINEAPPLE  
PLUMS  
RASPBERRIES  
STRAWBERRIES  
TANGERINES  
WATERMELON

### EXTRAS

ALMONDS  
CHIA SEEDS  
COCOA POWDER  
CINNAMON  
MACHA POWDER  
NUT BUTTER  
PECANS  
PROTEIN POWDER

### SWEET

AGAVE  
COCONUT  
DATES  
DATE PASTE  
HONEY  
STEVIA  
SUGAR  
VANILLA EXTRACT

## Smoothie Recipes

### Easy Green Smoothie

½ c green grapes, 1 orange, ½ banana,  
½ c carrots and/or ½ c broccoli,  
2 c leafy greens (spinach/ kale),  
½ c pineapple, 1 ½ c ice

### Going Green Smoothie

½ c water, 1 c grapes,  
½ c pineapple,  
½ banana, 2 c spinach, ½ c ice

### Island Green (Knock-Off)

2 c greens (kale and/or spinach),  
½ c mango, ½ c pineapple, 1 orange,  
½ banana, ½ c ice

### Blueberry Pomegranate

1 c blueberries, ½ c uncooked oats,  
½ c pomegranate, 1 c spinach  
(Ice if blueberries aren't frozen)

### Strawberry, Banana, Carrot

1 orange, ½ banana, ¼ c pineapple,  
½ c frozen strawberries, ½ c carrots,  
add ice/water as needed

### Pear and Greens

½ c water, 1 c grapes, 1 orange,  
½ c pear, 1 c greens, ½ c broccoli,  
½ c ice

## Smoothie Tips

- Don't be afraid to try recipes even if they seem strange!
- Don't let one bad smoothie experience keep you from trying others!
- The colors in fruits and vegetables come from minerals and phytonutrients which are important compounds that help the body fight illnesses.
- Try to "eat a rainbow" of fruits and veggies each week.



# Build a Healthy Meal



## 10 tips for healthy meals

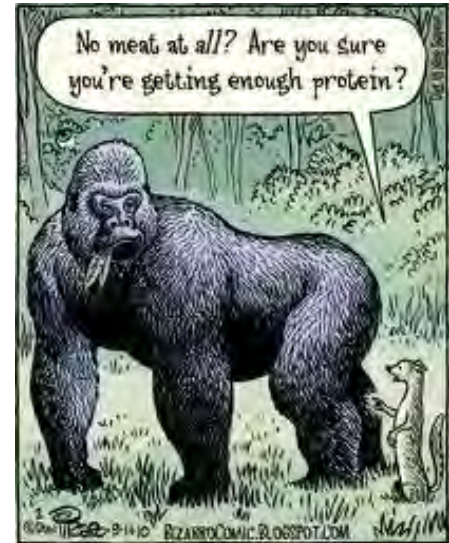
**A healthy meal starts with more vegetables and fruits and smaller portions of protein and grains.** Think about how you can adjust the portions on your plate to get more of what you need without too many calories. And don't forget dairy—make it the beverage with your meal or add fat-free or low-fat dairy products to your plate.

- 1. Make half your plate veggies and fruits** Vegetables and fruits are full of nutrients and may help to promote good health. Choose red, orange, and dark-green vegetables such as tomatoes, sweet potatoes, and broccoli.
- 2. Add lean protein** Choose protein foods, such as lean beef and pork, or chicken, turkey, beans, or tofu. Twice a week, make seafood the protein on your plate.
- 3. Include whole grains**  
Aim to make at least half your grains whole grains. Look for the words "100% whole grain" or "100% whole wheat" on the food label. Whole grains provide more nutrients, like fiber, than refined grains.
- 4. Don't forget the dairy** Pair your meal with a cup of fat-free or low-fat milk. They provide the same amount of calcium and other essential nutrients as whole milk, but less fat and calories. Don't drink milk? Try soymilk (soy beverage) as your beverage or include fat-free or low-fat yogurt in your meal.
- 5 Avoid extra fat** Using heavy gravies or sauces will add fat and calories to otherwise healthy choices.  
For example, steamed broccoli is great, but avoid topping it with cheese sauce. Try other options, like a sprinkling of low-fat parmesan cheese or a squeeze of lemon.
- 6. Take your time** Savor your food. Eat slowly; enjoy the taste and textures, and pay attention to how you feel. Be mindful. Eating very quickly may cause you to eat too much.
- 7. Use a smaller plate**  
Use a smaller plate at meals to help with portion control. That way you can finish your entire plate and feel satisfied without overeating.
- 8. Take control of your food**  
Eat at home more often so you know exactly what you are eating. If you eat out, check and compare the nutrition information. Choose healthier options such as baked instead of fried.
- 9. Try new foods**  
Keep it interesting by picking out new foods you've never tried before, like mango, lentils, or kale. You may find a new favorite! Trade fun and tasty recipes with friends or find them online.
- 10. Satisfy your sweet tooth in a healthy way**  
Indulge in a naturally sweet dessert dish—fruit! Serve a fresh fruit cocktail or a fruit parfait made with yogurt. For a hot dessert, bake apples and top with cinnamon.

Center for Nutrition *USDA 6/2011*

# Nutrition Tips for Vegetarians

A vegetarian is a person who does not eat meat, and sometimes other animal products. Vegetarian diets can meet all the recommendations for nutrients. The key is to consume a variety of foods and the right amount of foods to meet your calorie needs. Follow the food group recommendations for your age, sex, and activity level to get the right amount of food and the variety of foods needed for nutrient adequacy. Nutrients that vegetarians may need to focus on include protein, iron, calcium, zinc, and vitamin B<sub>12</sub>.



## Nutrients to focus on for vegetarians

- Protein has many important functions in the body and is essential for growth and maintenance. Protein needs can easily be met by eating a variety of plant-based foods. Combining different protein sources in the same meal is not necessary. Sources of protein for vegetarians and vegans include beans, nuts, nut butters, peas, and soy products (tofu, tempeh, veggie burgers). Milk products and eggs are also good protein sources for lacto-ovo vegetarians.
- Iron functions primarily as a carrier of oxygen in the blood. Iron sources for vegetarians and vegans include iron-fortified breakfast cereals, spinach, kidney beans, black-eyed peas, lentils, turnip greens, molasses, whole wheat breads, peas, and some dried fruits (dried apricots, prunes, raisins).
- Calcium is used for building bones and teeth and in maintaining bone strength. Sources of calcium for vegetarians and vegans include calcium-fortified soymilk, calcium-fortified breakfast cereals and orange juice, tofu made with calcium sulfate, and some dark-green leafy vegetables (collard greens, turnip greens, bok choy, mustard greens). The amount of calcium that can be absorbed from these foods varies. Consuming enough plant foods to meet calcium needs may be unrealistic for many. Milk products are excellent calcium sources for lacto vegetarians. Calcium supplements are another potential source.
- Zinc is necessary for many biochemical reactions and also helps the immune system function properly. Sources of zinc for vegetarians and vegans include many types of beans (white beans, kidney beans, and chickpeas), zinc-fortified breakfast cereals, wheat germ, and pumpkin seeds. Milk products are a zinc source for lacto vegetarians.
- Vitamin B<sub>12</sub> is found in animal products and some fortified foods. Sources of vitamin B<sub>12</sub> for vegetarians include milk products, eggs, and foods that have been fortified with vitamin B<sub>12</sub>. These include breakfast cereals, soymilk, veggie burgers, and nutritional yeast.

## Tips for Vegetarians:

- Build meals around protein sources that are naturally low in fat, such as beans, lentils, and rice. Don't overload meals with high-fat cheeses to replace the meat.
- Calcium-fortified soymilk provides calcium in amounts similar to milk. It is usually low in fat and does not contain cholesterol.
- Many foods that typically contain meat or poultry can be made vegetarian. This can increase vegetable intake and cut saturated fat and cholesterol intake.
- Most restaurants can accommodate vegetarian modifications to menu items by substituting meatless sauces, omitting meat from stir-fries, and adding vegetables or pasta in place of meat. These substitutions are more likely to be available at restaurants that make food to order.
- Many Asian and Indian restaurants offer a varied selection of vegetarian dishes.

# Benefits of a Plant-Based Diet

Cancer experts agree that eating a variety of colorful fruit and vegetables, grains, and legumes (dried peas and beans) aids in the fight against cancer. By making simple diet and lifestyle changes, you may reduce your risk for cancer as well as your risk for other chronic diseases like heart disease and diabetes mellitus.

A plant-based diet emphasizes vegetables, fruits, legumes, and whole grains. These foods are good sources of protein, carbohydrates, fat, vitamins, and minerals. They are also naturally lower in calories than foods made from animals. Colorful plant foods are also good sources of *phytochemicals*. Phytochemicals are naturally present in plant foods, and they can help to protect our body's cells from damage by cancer-causing agents. They also help support overall health. Eating a plant-based diet does not mean that you have to become a vegetarian; it just means that you should try to select most of your foods from plant sources.

The American Institute for Cancer Research (AICR) recommends these guidelines for adopting a plant-based diet using their New American Plate\*:

- ✓ Plant-based foods like vegetables, fruits, whole grains, and beans should cover two thirds or more of the plate. Fish, poultry, meat, or low-fat dairy foods should cover no more than one third of the plate.
- ✓ Include substantial portions of one or more vegetables or fruits on your plate—not just grain products like pasta or whole-grain bread.
- ✓ Eat five or more servings every day of a variety of colorful vegetables and fruits.
- ✓ Eat more than seven servings a day of a variety of grains (breads, cereals, pasta, and rice), legumes, and tubers (potatoes and sweet potatoes).
- ✓ Choose minimally processed foods and limit consumption of refined sugar.

**Answer the following questions based on the information on vegetarian and plant-based diets.**

**1. Explain why plant-based diets are considered to be extremely beneficial to our health.**

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**2. How can a vegetarian be sure to meet all nutritional needs?**

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**3. What nutrients do vegetarians need to be careful about getting enough of?**

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**4. What are phytochemicals and where are they found?**

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**5. Could you ever see yourself following a more “plant-based” approach to eating? Why/why not?**

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**Amino Acids** – the building blocks of proteins. There are 20 different amino acids, 9 of which are essential in our diet.

**Antioxidants** – a substance that removes potentially damaging oxidizing agents in a living organism. (to put it more simply... it is a substance that protects cells from damaging free radicals.)

**Calorie** – a unit of energy used to express the nutritional value of foods, equivalent to the heat energy needed to raise the temperature of 1 kilogram of water by 1 degree Celsius

**Carbohydrates** – nutrients that provide energy to the body

**Cholesterol** – a fat-like substance made by the body and found in many foods

**Complementary Proteins** – 2 or more sources of protein which provide all of the essential amino acids when consumed together

**Complete Proteins** – proteins from animal sources that contain all the essential amino acids

**Complex Carbohydrates** – starches and fiber

**Desired Weight** – the weight that is recommended for a person's age, height, sex and body frame

**Empty Calories** – little or no nutritional value in a food

**Essential Amino Acids** – nine amino acids the body cannot produce. They must be ingested in the diet in the proper amounts

**Fat** – nutrient that is a source of energy and makes certain vitamins available to the body

**Fat-Soluble Vitamins** – vitamins that dissolve in fat and get stored in the body (A,D,E,K)

**Fiber** – the part of grains and plant food that cannot be digested but are extremely important for a healthy digestive tract

**High Density Lipoprotein (HDL)** – substances that carry cholesterol to the liver for breakdown and excretion

**Hypoglycemia** – a condition in which the pancreas produces too much insulin and blood sugar levels become low

**Incomplete Proteins** – proteins from plant sources that do not have all of the essential amino acids

**Insulin** – a hormone that regulates the blood sugar level

**Lipoproteins** – substance that transports cholesterol in the bloodstream

**Low Density Lipoprotein (LDL)** – substances that carry cholesterol to the body cells

**Minerals** – nutrients that regulate many chemical reactions in the body

**Nutrient** – a chemical substance in foods that builds, repairs, maintains body tissues, regulates body processes, and provides energy

**Organic Foods** – foods produced without the use of pesticides, additives, or other chemicals; also does not use genetic engineering or radiation for food production

**Protein** – a nutrient needed to build, repair and maintain body tissues

**Simple Carbohydrates** – sugars that enter the bloodstream quickly and provide temporary energy

**Saturated Fats** – fats from dairy products, solid vegetable fats, and animal red meats

**Trans Fats** – type of processed fat that does not occur in nature; also called hydrogenated or partially hydrogenated oil; increase the likelihood of cardiovascular diseases

**Unsaturated Fats** – fats from fish and plant products

**Vitamins** – nutrients that help chemical reactions take place in the body

**Water** – the primary nutrient that makes up a part of blood. Helps processes in digestion, helps remove body wastes, regulates body temperature, and cushions the spinal cord and joints

**Water-Soluble Vitamins** – cannot be stored in the body in significant amounts



quick

# Nutrition Vocabulary Quiz

Match each definition with the correct vocabulary word.

- \_\_\_\_\_ 1. Type of processed fat that does not occur in nature; also called hydrogenated or partially hydrogenated oil; increase the likelihood of cardiovascular diseases.
- \_\_\_\_\_ 2. Nutrients that help chemical reactions take place in the body.
- \_\_\_\_\_ 3. Building blocks that make up proteins.
- \_\_\_\_\_ 4. Nutrients that are a source of energy and make certain vitamins available for use in the body.
- \_\_\_\_\_ 5. Part of grains and plants that cannot be digested but are important for a healthy digestive tract.
- \_\_\_\_\_ 6. Unit of measure for both the energy supplied by food and the energy used by the body for physical activity and normal body functions.
- \_\_\_\_\_ 7. Vitamins that cannot be stored by the body in significant amounts.
- \_\_\_\_\_ 8. Nutrients that provide energy to the body.
- \_\_\_\_\_ 9. Substances that protect cells from being damaged by oxygen.
- \_\_\_\_\_ 10. Foods produced without the use of pesticides, additives, or other chemicals

- A. Calorie
- B. Amino Acids
- C. Carbohydrates
- D. Fiber
- E. Fats
- F. Antioxidants
- G. Vitamins
- H. Water-Soluble Vitamins
- I. Trans-fats
- J. Organic



## Six Basic Nutrients

NUTRIENT	CALORIES	FACTS	SOURCES	NOTES
P R O T E I N S	1 gram = 4 calories	<ul style="list-style-type: none"> <li>• Essential for growth, development, and repair of body tissues</li> <li>• Form parts of muscle, bone, blood, and cell membranes</li> <li>• Form hormones and enzymes</li> <li>• Made of amino acids (9 are essential)</li> <li>• Complementary proteins</li> </ul>		
C A R B O H Y D R A T E S	1 gram = 4 calories	<ul style="list-style-type: none"> <li>• Provide energy</li> <li>• Simple carbs, such as fruit, enter bloodstream quickly</li> <li>• Complex carbs, such as rice, provide long-lasting energy</li> <li>• Carries other nutrients</li> <li>• Monosaccharides, disaccharides, polysaccharides</li> <li>• Fiber</li> <li>• Empty calories</li> </ul>		
F A T S	1 gram = 9 calories	<ul style="list-style-type: none"> <li>• Energy reserve</li> <li>• Essential for making fat-soluble vitamins available (ADEK)</li> <li>• Stored in adipocytes, surround/protect organs</li> <li>• Increase palatability of food</li> <li>• Increase satiety factor</li> <li>• Saturated fats, monounsaturated, polyunsaturated</li> <li>• Hydrogenation and trans fats</li> <li>• Cholesterol</li> </ul>		



<b>NUTRIENT</b>	<b>CALORIES</b>	<b>FACTS</b>	<b>SOURCES</b>	<b>NOTES</b>
V I T A M I N S	0 calories	<ul style="list-style-type: none"> <li>• Potent, non-caloric, organic compounds</li> <li>• Facilitate chemical reactions</li> <li>• Deficiency diseases result if not enough in system</li> <li>• Vitamin A</li> <li>• Thiamine</li> <li>• Riboflavin</li> <li>• Niacin</li> <li>• Folic Acid</li> <li>• Ascorbic Acid</li> </ul>		
M I N E R A L S	0 calories	<ul style="list-style-type: none"> <li>• Inorganic</li> <li>• Assist in the regulation of chemical reactions</li> <li>• Calcium</li> <li>• Iodine</li> <li>• Iron</li> <li>• Phosphorus</li> <li>• Sodium</li> </ul>		
W A T E R	Water does not contain calories, but the food or drink it is in will contain varying amounts of calories	<ul style="list-style-type: none"> <li>• Makes up blood</li> <li>• Aids in the process of digestion</li> <li>• Helps remove wastes from the body</li> <li>• Helps regulate body temperature</li> </ul>	<ul style="list-style-type: none"> <li>• Drinking water</li> <li>• Juices</li> <li>• Soups</li> <li>• Vegetables, such as celery</li> <li>• Herbal teas</li> </ul>	

**::Color Me Healthy::**

**By eating fruits and vegetables of different colors you will get a wide range of phytochemicals!**

<b>Red: lycopene</b>	<b>Red/Purple: anthocyanins</b>	<b>Orange: carotenoids</b>	<b>Orange/Yellow: beta cryptothanxin</b>
<b>Yellow/Green: lutein &amp; zeaxanthin</b>		<b>Green: indoles &amp; suloraphanes</b>	<b>Green/White: allicin, quercetin, &amp; flavinoids</b>

# HOW TO UNDERSTAND AND USE THE NUTRITION FACTS LABEL

## New Label / What's Different?

Nutrition Facts	
8 servings per container	
<b>Serving size</b>	<b>2/3 cup (55g)</b>
<b>Amount per serving</b>	
<b>Calories</b>	<b>230</b>
% Daily Value*	
<b>Total Fat</b> 8g	<b>10%</b>
Saturated Fat 1g	<b>5%</b>
Trans Fat 0g	
<b>Cholesterol</b> 0mg	<b>0%</b>
<b>Sodium</b> 160mg	<b>7%</b>
<b>Total Carbohydrate</b> 37g	<b>13%</b>
Dietary Fiber 4g	<b>14%</b>
Total Sugars 12g	
Includes 10g Added Sugars	<b>20%</b>
<b>Protein</b> 3g	
Vitamin D 2mcg	10%
Calcium 260mg	20%
Iron 8mg	45%
Potassium 240mg	6%
* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.	

Servings:  
larger,  
bolder type

Serving sizes  
updated

Calories:  
larger type

Daily Values  
Updated

New:  
added sugars

Change  
in some  
nutrients  
required

Actual  
amounts  
declared

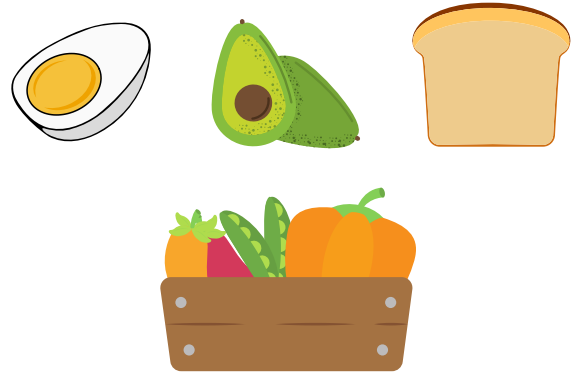
New  
footnote

## IMPORTANT!

### Important things to look at:

- 1) Serving size and servings per container
- 2) Check the calories
- 3) Limit fat intake (saturated fat)
- 4) Check total sugar/ADDED sugar
- 5) Get enough vitamins and minerals

Other names for sugar: corn syrup, high fructose corn syrup, fruit juice concentrate, maltose, dextrose, honey, maple syrup, etc.



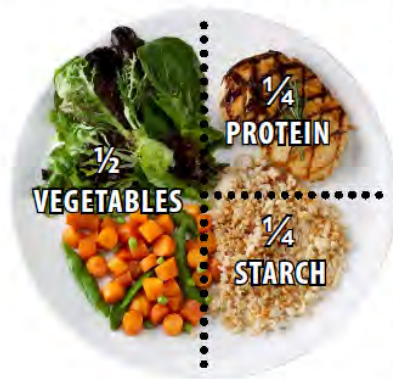
## Directions: Use your own nutrition label to answer the questions below:

1. Name of the product. \_\_\_\_\_
2. How many calories per serving? \_\_\_\_\_
3. How many Servings per package? \_\_\_\_\_
4. How many grams of (a) Carbohydrates (b) Protein (c) Fat in each product?  
(a) \_\_\_\_\_ (b) \_\_\_\_\_ (c) \_\_\_\_\_
5. How much cholesterol is in this product? \_\_\_\_\_
6. How many grams of dietary fiber is in this product? \_\_\_\_\_
7. Is there a good amount of vitamins and minerals? Why or why not?  
\_\_\_\_\_
8. How much ADDED sugar is in the product? \_\_\_\_\_
9. What is the ingredient that is present in the largest amount? \_\_\_\_\_
10. List the ingredients that indicate sugar in the product.  
\_\_\_\_\_
11. Do you think your product is healthy? Why or why not?  
\_\_\_\_\_



# WebMD Portion Size Guide

When you're trying to eat healthfully, it's essential to keep track of just how much you're eating. It's all too easy to misjudge correct portion sizes. Here are some easy comparisons to help you figure out how many servings are on your plate.



## PORTION SIZE YOUR PLATE

### 1/2 PLATE VEGETABLES:

Fill half your plate with a colorful assortment of different vegetables for good nutrition and tastes to please your palate.

### 1/4 PLATE PROTEINS:

Low-fat proteins are good for your heart and better for your waistline. Bake, broil, or grill your way to a delicious and healthy meal.

### 1/4 PLATE STARCHES:

Whole-grain starches are good for your heart and keep you feeling fuller longer. While foods like yams, potatoes and corn are considered vegetables, they are high in starch and should be placed on this part of your plate.

## BASIC GUIDELINES



1 cup = baseball



1/2 cup = lightbulb



1 oz or 2 tbsp = golf ball



1 tbsp = poker chip



1 slice of bread = cassette tape



3 oz chicken or meat = deck of cards



3 oz fish = checkbook



1 oz lunch meat = compact disc



3 oz muffin or biscuit = hockey puck



1 1/2 oz cheese = 3 dice



### GRAINS

- 1 cup of cereal flakes = baseball
- 1 pancake = compact disc
- 1/2 cup of cooked rice = lightbulb
- 1/2 cup cooked pasta = lightbulb
- 1 slice of bread = cassette tape
- 1 bagel = 6 oz can of tuna
- 3 cups popcorn = 3 baseballs



### DAIRY & CHEESE

- 1 1/2 oz cheese = 3 stacked dice
- 1 cup yogurt = baseball
- 1/2 cup frozen yogurt = lightbulb
- 1/2 cup ice cream = lightbulb



### FRUITS & VEGETABLES

- 1 medium fruit = baseball
- 1/2 cup grapes = about 16 grapes
- 1 cup strawberries = about 12 berries
- 1 cup of salad greens = baseball
- 1 cup carrots = about 12 baby carrots
- 1 cup cooked vegetables = baseball
- 1 baked potato = computer mouse



### FATS & OILS

- 1 tbsp butter or spread = poker chip
- 1 tbsp salad dressing = poker chip
- 1 tbsp mayonnaise = poker chip
- 1 tbsp oil = poker chip



### MEATS, FISH & NUTS

- 3 oz lean meat & poultry = deck of cards
- 3 oz grilled/baked fish = checkbook
- 3 oz tofu = deck of cards
- 2 tbsp peanut butter = golf ball
- 2 tbsp hummus = golf ball
- 1/4 cup almonds = 23 almonds
- 1/4 cup pistachios = 24 pistachios



### SWEETS & TREATS

- 1 piece chocolate = dental floss package
- 1 brownie = dental floss package
- 1 slice of cake = deck of cards
- 1 cookie = about 2 poker chips



## Why Is Physical Activity Important?

Regular physical activity can produce long-term health benefits. People of all ages, shapes, sizes, and abilities can benefit from being physically active. The more physical activity you do, the greater the health benefits.

### **Being physically active can help you:**

- Increase your chances of living longer
- Feel better about yourself
- Decrease your chances of becoming depressed
- Sleep well at night
- Move around more easily
- Have stronger muscles and bones
- Stay at or get to a healthy weight
- Be with friends or meet new people
- Enjoy yourself and have fun

### **When you are *not* physically active, you are more likely to:**

- Get heart disease
- Get type 2 diabetes
- Have high blood pressure
- Have high blood cholesterol
- Have a stroke

## Physical Fitness

**Physical activity** is any form of movement that causes your body to use energy.

**Physical fitness** is the ability to carry out daily tasks easily and have enough reserve energy to respond to unexpected demands.

### **Elements of Fitness**

**Cardio respiratory endurance** – the ability of the heart, lungs, and blood vessels to utilize and send fuel and oxygen to the body's tissues during long periods of moderate to vigorous activity

**Muscular strength** – the amount of force a muscle can exert

**Muscular endurance** – the ability of the muscles to perform physical tasks over a period of time without becoming fatigued

**Flexibility** – the ability to move a body part through a full range of motion

**Body composition** – the ratio of body fat to lean body tissue, including muscle, bone, water, and connective tissue such as ligaments, cartilage, and tendons

### **Skill Related Fitness Terms**

**Agility** – the ability to rapidly and accurately change the direction of the movement of the entire body in space

**Balance** – the maintenance of equilibrium while stationary or while moving

**Coordination** – the ability to use the senses with the body parts to perform motor tasks smoothly and accurately

**Power** – the ability to transfer energy into force at a fast rate

**Reaction Time** – the time elapses between stimulation and the beginning of reaction to that stimulation

# Improving Fitness

**\*Aerobic exercise** is all rhythmic activities that use large muscle groups for an extended period of time.

**\*Anaerobic exercise** is intense short burst activity in which the muscles work so hard that they produce energy without using oxygen.

## **\*The FITT Formula**

- **F**requency - how often you do the activity each week (3-4 times a week)
- **I**ntensity - how hard you work at the activity (target zone)
- **T**ime/Duration – how much time you devote to a session (aerobic goal is 20-30 minutes within your target zone) A zone is 2 numbers.
- **T**ype – which activities you select (For maximum health benefits from your workout routine, devote 75-80% of your workout time to aerobic activity and 20-25 % to anaerobic activity.)

**\*Resting Heart Rate** is the number of times your heart beats in one minute when you are not active. **Let's sit quietly for a few minutes, and then take our resting heart rate. (Carotid and Radial)**

Carotid Pulse \_\_\_\_\_

Radial Pulse \_\_\_\_\_

## **Questions for Physical Activity and Fitness:**

### **1. What are the benefits of being physically active?**

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### **2. List at least two activities you do for the following components of fitness:**

- Cardiorespiratory Endurance \_\_\_\_\_
- Muscular Strength \_\_\_\_\_
- Muscular Endurance \_\_\_\_\_
- Flexibility \_\_\_\_\_

### **3. Why is lean mass a more important concept than the weight on a scale?**

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### **4. What is the difference between aerobic and anaerobic exercise?**

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### **5. What component of exercise would like to improve? How could you do this?**

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# Fitness and Health Calculations

## Finding Your Target Heart Range

1. Write your resting heart rate here (see pg. 100) \_\_\_\_\_
2. Subtract your age from 220 to find your maximum heart rate. (Example: If you are 16, your maximum heart rate will be  $220-16=204$ )
3. Subtract your resting heart rate from your maximum heart rate. (Example: Suppose that your resting heart rate is 66.  $204-66=138$ )
4. Multiply the number you arrived at in step 3 by 60% and again by 85%. Round to the nearest whole numbers. (Example:  $138 \times .60 = 83$ ;  $138 \times .85 = 117$ )
5. Add your resting heart rate to the numbers you arrived at in Step 4. (Example:  $83 + 66 = 149$ ;  $117 + 66 = 183$ ) The resting totals represent your target heart range (between 149 and 183)
  - **Maximum target heart rate** - Exercising above this rate can result in injury.
  - **Target heart range** - to safely build cardio endurance, keep your heart rate within this range.
  - **Minimum target heart rate**- Exercising below this rate will not build cardiorespiratory endurance.

## Basal Energy Expenditure: How many calories should you be consuming daily?

### Step 1- Change your height to centimeters (cm):

- a. Convert your height to inches (ex. 5ft. 5 inches =65 inches, 6ft. = 72 inches)
- b. Multiply number of inches by 2.54

\_\_\_\_\_ Inches x 2.54 = \_\_\_\_\_ cm

### Step 2 - Change your weight to kilograms (kg): You divide # of pounds you weigh by 2.2

$\frac{\# \text{pounds}}{2.2} = \text{_____ kg}$

### Step 3 - Female Formula

$655 + (9.6 \times \text{weight in kg}) + (1.8 \times \text{height in cm}) - (4.7 \times \text{age}) = \# \text{ of calories needed daily}$

### Step 4 - Male Formula

$66 + (13.8 \times \text{weight in kg}) + (5 \times \text{height in cm}) - (6.8 \times \text{age}) = \# \text{ of calories needed daily}$

### Take the answer from step 3 and multiply it by the % indicated in Step 4

(ex. If the # of calories needed in step 3 is 2000 calories, you would multiple it by 20% if you are sedentary.)  $2000 \times .20 = 400$  calories (Calculate sedentary, moderately active, and very active to see the difference in calories) Then choose your activity level answer to complete Step 5.

- +20% of your total if you are sedentary
- +35% of your total if you are moderately active
- +50% of your daily total if you are very active

### Step 5

Add the answer from steps 3 and 4. \_\_\_\_\_ (Daily Caloric Intake)

(ex. Answer from step 3 (2000) plus the answer from step 4 (400) = 2,400 calories)

## Balance Your Calories In and Out

Physical activity and nutrition work together for better health. Being active increases the amount of calories burned. As people age their metabolism slows, so maintaining energy balance requires moving more and eating less.

<b>Moderate physical activities</b>	<b>1 hour calories burned</b>	<b>30 minutes calories burned</b>
Hiking	370	185
Yard work	330	165
Dancing	330	165
Golf (walking carrying clubs)	330	165
Walking (3.5 mph)	280	140
Weight training(light workout)	220	110
Bicycling(less than 10 mph)	290	145
<b>Vigorous physical activities</b>	<b>1 hour calories burned</b>	<b>30 minutes calories burned</b>
Jogging (5 mph)	590	295
Bicycling (more than 10 mph)	590	295
Swimming (slow free style laps)	510	255
Aerobics	480	240
Walking (4.5 mph)	460	230
Heavy yard work	440	220
Weight lifting(vigorous effort)	440	220
Basketball (vigorous)	440	220

**Note:** These calories burned are based on a 154 lb. male

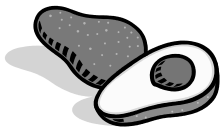
<b>Food</b>	<b>Amount</b>	<b>Calories</b>	<b>Activity needed to burn calories</b>
2' Chocolate Chip cookies	6	441	1 hour vigorous basketball
Sandwich cookies	6	286	
2 scoop ice cream cone	1	386	
Soft pretzel	1	389	
Bagel (5 ounces)	1	337	
Cream cheese	1 ounce	97	
Potato chips	1 ounce	152	
Hot dog with roll	1	314	
Cola (can)	12 ounces	136	



**What is meant by the phrase "balance your calories"?**



**Why is balancing calories important?**



## Nutrition/Fitness Review



1. Carbohydrates are nutrients that \_\_\_\_\_ for the body. \_\_\_\_\_ is the part of grains and plant food that cannot be digested and are important for a healthy digestive tract. \_\_\_\_\_ Carbohydrates are sugars that enter the blood stream quickly and should be limited in your diet.
2. \_\_\_\_\_ is a nutrient needed to build, repair and maintain body tissues. \_\_\_\_\_ are the building blocks that make up proteins. Vegetarians/Vegans can certainly get enough protein by eating a \_\_\_\_\_ of plant foods.
3. Saturated fats are found in \_\_\_\_\_. Trans fats are also called \_\_\_\_\_ or \_\_\_\_\_. Both types of these fats should be limited in your diet as they both contribute to heart disease.
4. \_\_\_\_\_ are nutrients that help chemical reactions take place in the body. Minerals are nutrients that \_\_\_\_\_. You need both of these in small quantities.
5. Physical fitness is \_\_\_\_\_. The elements of fitness include \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_. F.I.T.T. stands for \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.
6. Being able to read a nutrition label is important.
  - a. List 5 other names for sugar: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.
  - b. % Daily Values are based on a \_\_\_\_\_ calorie diet
  - c. How can you tell which ingredient is present in the largest amount?  
\_\_\_\_\_
7. **Why do "fad diets" often fail? List 5 ways you can recognize a "fad diet"?**
8. **Why are the "DASH" Diet, "Mediterranean Diet" and "Weight Watchers Diet" considered to be among the best diets for life-long well-being?**
9. **What changes can you make in your diet and life to help you move more towards "optimal health" on the health continuum?**



## Sexual Harassment

### **How Can I Tell If I'm Saying and Doing the Right Thing or the Wrong Thing?**

Sexual harassment is defined as behavior or comments of a sexual nature which are unwelcome and make the person feel uncomfortable.

It is important to remember that sexual harassment can be ambiguous—you may think you are giving a compliment and the receiver may think it is harassment. The law says that it is not the intent; **it's the impact of the comment or behavior.** Whether harassment had occurred is truly in the eye of the beholder. So when you are not sure about your behavior, ask yourself these questions:

1. Would I want my comments/behaviors to appear in the newspaper or on TV so my family and friends would know about them?
2. Is this something I would say or do if my mother/father, girlfriend/boyfriend, sister/brother, wife/husband/partner were present?
3. Is this something I would want someone else to say or do to my mother/father, girlfriend/boyfriend, sister/brother, wife/husband/partner?
4. **Is this something I would say or do if the other person's significant other (wife, husband, partner, boyfriend, girlfriend) were present?**
5. Is there a difference in power between me and the other person? (Power can be based **on one's position, social status, size, etc.**)

## Love Shouldn't Hurt

### **33% of Teenagers Experience Physical Abuse in a Relationship**

Violence in relationships is not just an adult problem. Abuse occurs in many teen relationships. Dating violence is when physical, emotional, and/or sexual force is used by one person to control or dominate the other.

- Do you feel confused about your relationship?
- Does your partner lose his/her temper suddenly over small things?
- Is your partner jealous or possessive towards you?
- Does your partner yell or swear at you when you are alone or with friends?
- **Does your partner pressure you to do things that don't feel comfortable to you?**
- Does your partner blame you for his/her problems?
- Does your partner abuse alcohol or illegal drugs?
- Have you been slapped, kicked, shoved, or punched by your partner?
- Have your family or friends warned you about your partner or told you that they are worried about your safety?
- Does your partner check up on you, call you constantly, want to know where you have been or whom you have been with and why, whenever you have gone out?

# Values & Relationships

What are the main values that you are looking for in a partner? Why? Can you give me any examples? Please write your answer in the text box below.

What are the main values that you would bring into a relationship? Why do you think these are important? Please write your answer in the text box below.

Does someone need to have a good self-image / self-esteem before entering a romantic relationship?

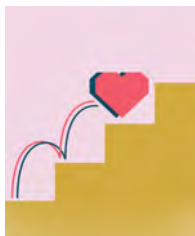
What are some “warning signs” to look out for in a relationship? For example... what would make you think twice about being with someone?



## 10 Signs of Healthy Relationship

Healthy relationships bring out the best in you and make you feel good about yourself. A healthy relationship does not mean a “perfect” relationship, and no one is healthy 100% of the time, but the signs below are behaviors you should strive for in all of your relationships.

Healthy relationships manifest themselves as healthy communication, but in order to have a healthy relationship, you need to love yourself first. Here are some characteristics and behaviors of a healthy relationship.



**Comfortable Pace**  
The relationship moves at a speed that feels enjoyable for each person.



**Trust**  
Confidence that your partner won't do anything to hurt you or ruin the relationship.



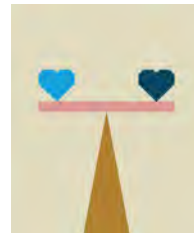
**Honesty**  
You can be truthful and candid without fearing how the other person will respond.



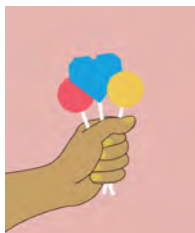
**Independence**  
You have space to be yourself outside of the relationship.



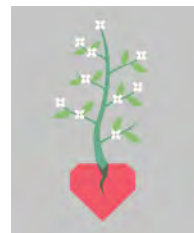
**Respect**  
You value one another's beliefs and opinions, and love one another for who you are as a person.



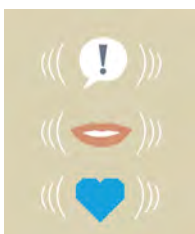
**Equality**  
The relationship feels balanced and everyone puts the same effort into the success of the relationship.



**Kindness**  
You are caring and empathetic to one another, and provide comfort and support.



**Taking Responsibility**  
Owning your own actions and words.



**Healthy Conflict**  
Openly and respectfully discussing issues and confronting disagreements non-judgmentally.



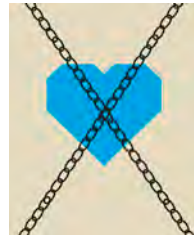
**Fun**  
You enjoy spending time together and bring out the best in each other.

## 10 Signs of Unhealthy Relationship

While everyone does unhealthy things sometimes, we can all learn to love better by recognizing unhealthy signs and shifting to healthy behaviors. If you are seeing unhealthy signs in your relationship, it's important to not ignore them and understand they can escalate to abuse. If you think you are in a dangerous situation, trust your gut and get help.



**Intensity**  
When someone expresses very extreme feelings and over-the-top behavior that feels overwhelming.



**Possessiveness**  
When someone is jealous to a point where they try to control who you spend time with and what you do.



**Manipulation**  
When someone tries to control your decisions, actions or emotions.



**Isolation**  
When someone keeps you away from friends, family, or other people.



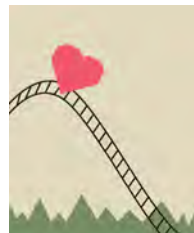
**Sabotage**  
When someone purposely ruins your reputation, achievements, or success.



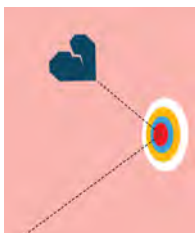
**Belittling**  
When someone does and says things to make you feel bad about yourself.



**Guilt**  
When someone makes you feel responsible for their actions or makes you feel like it's your job to keep them happy.



**Volatility**  
When someone has a really strong, unpredictable reaction that makes you feel scared, confused or intimidated.



**Deflecting Responsibility**  
When someone repeatedly makes excuses for their unhealthy behavior.



**Betrayal**  
When someone is disloyal or acts in an intentionally dishonest way.

## RELATIONSHIP HEALTH

1. Where do people learn “how to love”?
  
2. What can help people to learn how to love better/be in healthier relationships?
  
3. Do you think maintaining healthy relationships is easy? Explain your thoughts *with specific responses such as “Yes I think it is easy because” or “No I think it’s hard to because”...*

<i>10 Attributes of a Healthy Relationship</i>	<i>10 Attributes of an Unhealthy Relationship</i>

4. **Abuse is not typically obvious** and does not always seem like abuse, even when you “know the signs”. It’s never a victim’s fault. Victims are not lacking intelligence. Abusers are good at their craft, **masking the abuse as love**, making it incredibly difficult to notice or end the relationship once victims do notice. However, knowing the signs is how we might be better able to end unhealthy relationships before they become abusive.

**\*What are some things that you would consider RED FLAGS within a relationship?**

## Evaluating a Relationship

- |  |          |
|--|----------|
| 1. Do you feel that the other person in this relationship does not understand you? | YES / NO |
| 2. Are you able to speak freely to him or her about things that bother you?        | YES / NO |
| 3. Do you take a genuine interest in each other's lives?                           | YES / NO |
| 4. Do both of you pursue individual interests?                                     | YES / NO |
| 5. Is this relationship the only important relationship in your life?              | YES / NO |
| 6. Do you believe that you are a worthwhile person outside of this relationship?   | YES / NO |
| 7. Do you expect this person to meet all of your emotional or physical needs?      | YES / NO |
| 8. Is your relationship often threatened by others?                                | YES / NO |
| 9. Can you be yourself in this relationship?                                       | YES / NO |
| 10. Are you uncomfortable sharing your feelings with this person?                  | YES / NO |
| 11. Do you both work to improve the relationship?                                  | YES / NO |
| 12. Do you feel good about yourself?   | YES / NO |
| 13. Do you feel you have become a better person because of this relationship?      | YES / NO |
| 14. Can you both accept changes in roles and feelings within the relationship?     | YES / NO |

### **ANSWER: Is it possible for a bad relationship to improve? What does it take to make a relationship better?**

#### SCORING:

1 point if you answered 'YES' to questions: 2, 3, 4, 6, 9, 11, 12, 13 and 14

1 point if you answered 'NO' to questions: 1, 5, 7, 8 and 10

1-3: There are few constructive elements in this relationship. You may want to think about your reasons for continuing the relationship, or work toward improving it.

4-6: This relationship has problems that might be resolved by working on honesty and communication

7-10: There is the basis for a good relationship. Focus on the positive elements and work on improving the destructive ones.

10-14: You're doing well and have what it takes to build a successful and satisfying relationship.

# Relationship Circle



**I have a relationship  
but am not close with...**

**My closest relationships  
are with...**

**My Name is...**

## Section 1: Defining Healthy Relationships



# Relationship Bingo

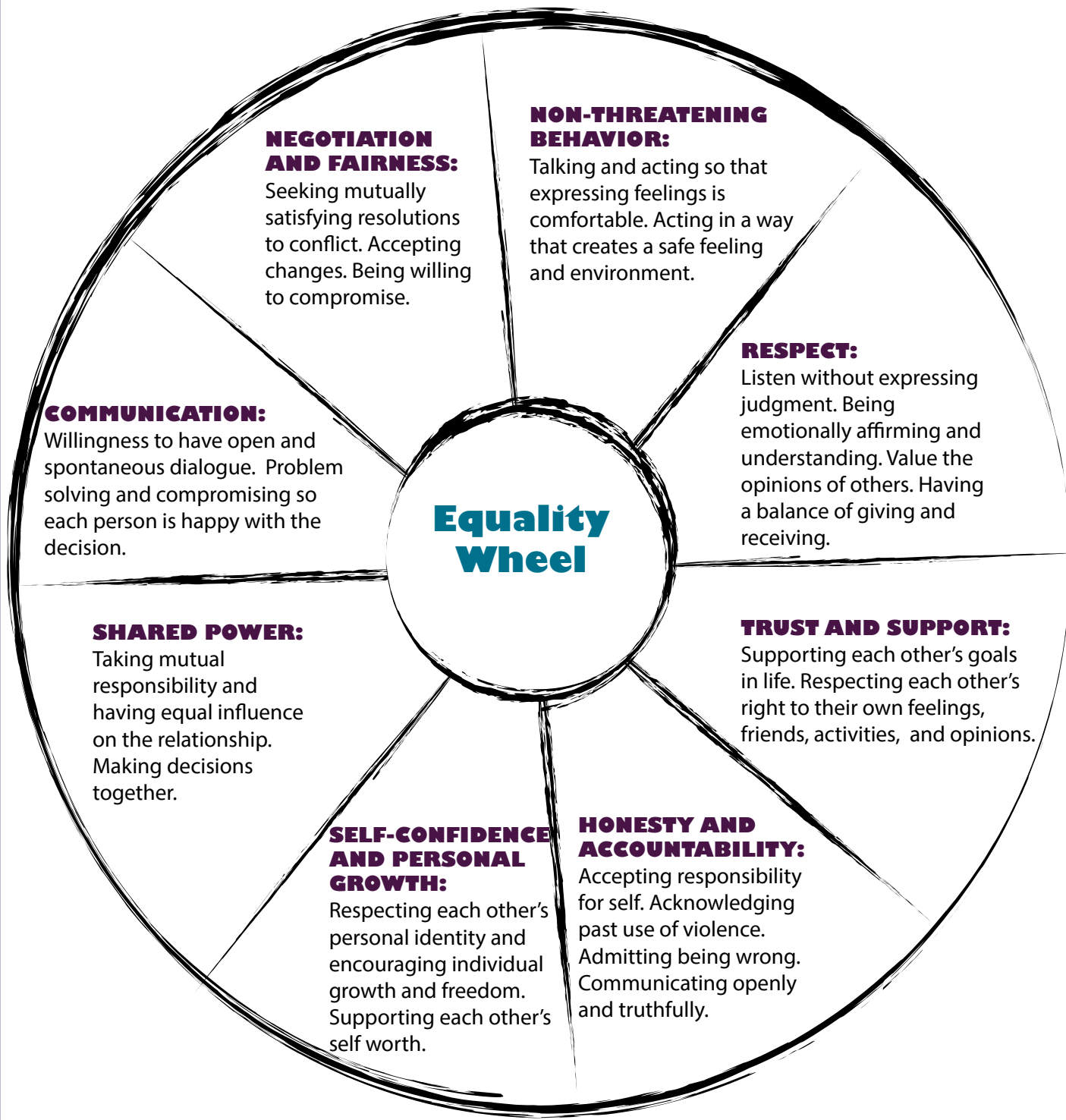
## DIRECTIONS

1. Think of someone you have a relationship with as you read each box below.
2. Circle the five traits you think are important for that person to have.
3. Find five different people in the room who have circled one of the same traits.
4. Have them sign in that box.
5. The first person to get all five boxes signed by a different person shouts "Bingo."

<b>funny</b>	<b>unique</b>	<b>older than me</b>	<b>popular</b>	<b>weird and wacky</b>
<b>independent</b>	<b>honest</b>	<b>confident</b>	<b>nice to other people</b>	<b>adventurous</b>
<b>romantic</b>	<b>smart</b>	<b>rich</b>	<b>a movie fanatic</b>	<b>outgoing</b>
<b>athletic</b>	<b>a good listener</b>	<b>supportive</b>	<b>artsy</b>	<b>passionate</b>



# Equality Wheel



## Section 1: Defining Healthy Relationships

# Power & Control Wheel

## Power & Control Wheel

### PEER PRESSURE:

Threatening to expose someone's weakness or spread rumors. Telling malicious lies about an individual to peers.

### ANGER/EMOTIONAL ABUSE:

Putting someone down. Making someone feel bad about himself/herself. Name calling. Making someone think they are crazy. Playing mind games. Humiliating one another. Making someone feel guilty.

### USING SOCIAL STATUS:

Treating someone like a servant. Making all the decisions. Acting like the "master of the castle."

### INTIMIDATION:

Making someone afraid by using looks, actions, gestures. Smashing things. Destroying property. Abusing pets. Displaying weapons.

### MINIMIZE/DENY/ AND BLAME:

Making light of and not taking someone's concerns seriously. Saying bad behavior didn't happen. Shifting responsibility for one's bad behavior.

### THREATS:

Making and/or carrying out threats to hurt someone. Threatening to end a relationship or to commit suicide. Making someone do something illegal.

### ISOLATION/EXCLUSION:

Controlling what someone does, who that person sees and talks to, what they read, where they go. Limiting outside involvement. Using jealousy to justify actions.

### SEXUAL COERCION:

Manipulating or making threats to get sex. Getting someone drunk or drugged to get sex. Pressuring someone to have sex when they don't want to.

# Relationship Continuum

## Directions

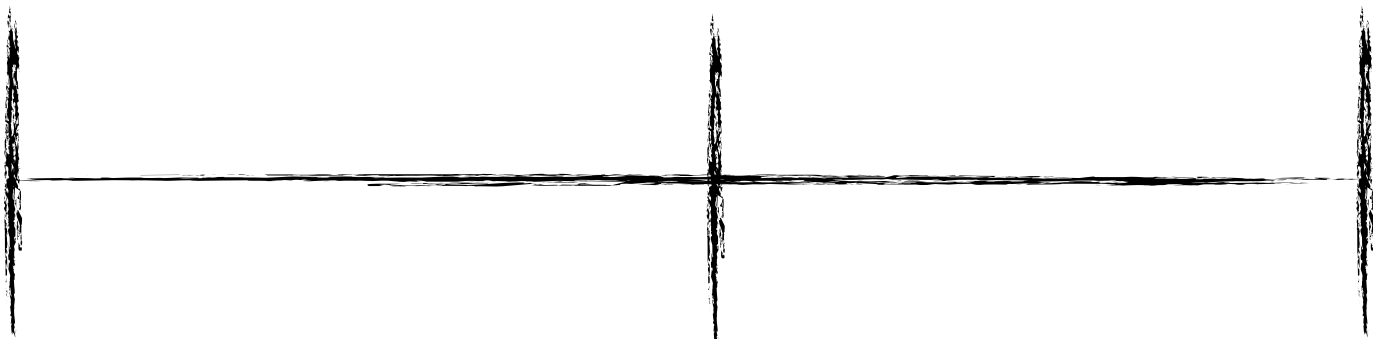
Take each item (1-10) and list it on the continuum where you believe it falls (healthy, unhealthy, abusive).

1. Checking your partner's phone.
2. Constantly checking up on where your partner is.
3. Encouraging your partner to run for student government.
4. Calling your partner names in front of his/her friends.
5. Telling your partner when you are upset with them and why.
6. Pressuring your partner to text you inappropriate photos.
7. Making decisions together.
8. Making you feel guilty when you spend time with your friend.
9. Pressuring your partner to do something he or she does not want to do.
10. Getting jealous when you do better on a test or assignment.

**healthy**

**unhealthy**

**abusive**



## Section 2: Defining Unhealthy Relationships

# Music's Impact

Artist

Song title:

Serving Size: Min:

Sec:

Amount per serving:	Present (X)	Intensity level (1-10)
<b>Unhealthy Relationship Ingredients</b>		
Drama		
Possession/obsession		
Disrespect		
Relationship = sex		
Manipulation		
<b>Total Unhealthy</b>		
<b>Healthy Relationship Ingredients</b>		
Fun/Enjoyable		
Support		
Respect		
Equality		
Trust		
<b>Total Healthy</b>		

**The song may portray:** Drama: a belief that making up/breaking up, yelling, bitter arguing, destroying property or a general sense that unhealthy conflict in the relationship is part of a normal relationship. Possession/Obsession: a belief that another person is an object to use for one's personal benefit. This could also include stalking, objectification, and controlling behavior. Disrespect: a belief that it is acceptable to disregard another person's feelings, ideas, opinions and wishes. This could include name calling, put downs, minimizing language, and cheating. Relationship=sex: a belief that the main component or focus of the relationship is sex. Manipulation: a belief that it is acceptable to lie or use another person's emotions or vulnerabilities to get what is desired. This could include guilt trips, lying, and using alcohol to get sex. Fun/Enjoyable: a belief that relationships are enjoyable and fun. Support: a belief that a relationship includes building up the other person's confidence and strengths. This could include encouraging another person to make healthy decisions to better themselves, even when the other person may not totally agree. Respect: a belief that another person has value and is appreciated and recognized for their ideas, thoughts, and decisions. This could include the use of positive or supportive words to describe the other person. Equality: a belief that both parties share in decision making and are free to choose what is right for them. One person does not have power over the other either in decision making or sex. Trust: a belief that the other person in the relationship has your best interest at heart. This could include being faithful and honest.

## STEP ONE: Find a song

Select a song. Find the lyrics of the song either from the CD insert, or search for them online. Print out the lyrics, and read them to get a feel for the main themes in the song.

## STEP TWO: Determine if the song has a relationship theme

Songs with a relationship theme describe an emotional or physical connection between two or more people and should support, celebrate or glorify the unhealthy or healthy characteristics of the relationship.

## STEP THREE: Score the song lyrics

Carefully examine the song's title and all lyrics in the chorus and verses of the song. Now look at the Song Lyric Scoring Label to the left. Check the "PRESENT" box for each relationship ingredient that you find in the song. The definitions for each relationship ingredient are at the bottom of the label. Finally, for each ingredient that is present in the song, assign it a score from 1-10 in the "INTENSITY LEVEL" box based on how much of that relationship ingredient you feel is in the song. A score of 1 would indicate that there is a very low level of that relationship ingredient in the song while a score of 10 would indicate a very high level of that relationship ingredient. When assigning an intensity score, consider how those particular lyrics impact the overall message of the song.

## STEP FOUR: Total your numbers

Add up the scores from the intensity column in both the unhealthy and healthy sections. These totals indicate the unhealthy and healthy relationship "nutritional" value of the song's lyrics.

## STEP FIVE: Balance your "lyrical" diet

Use this tool whenever you want to find out the relationship ingredients of a song. Just like with the food we eat, it is important to have a balanced "song" diet that includes lots of healthy relationship ingredients. Knowing the ingredients will help you make an informed decision about which songs will promote good relationship health.

## SOUND RELATIONSHIPS

Music, like food, can feed our brains and give us energy. But, it also can be filled with ingredients that can affect us negatively. Some music may even have an influence on our health and the health of our relationships. This instrument will help you evaluate the "nutritional" value of the music you might listen to. We want you to put on your headphones, turn up the volume and become a song lyrics nutritionist. Just follow these easy steps.

# Sexting

"sending, receiving, or forwarding sexually explicit messages, photographs, or videos, primarily between mobile phones. It may also include the use of a computer or any digital device"



## Know the Consequences

A teen sexting conviction results in a permanent felony criminal record and requires registration as a Sex Offender

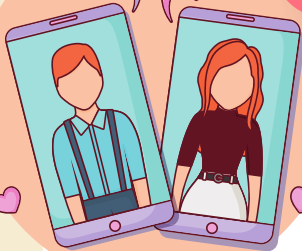
## How can it impact you or your friends?

In the wrong hands, these images can end up hurting you or other people in different ways:

- It can make you a target of people who want to control or harm you
- It can be very upsetting when they are shared with other people
- It can affect the way people see you or act around you
- It can make it harder for you at school, activities and jobs
- In many cases, creating and sharing sexualized images of someone under the age of 18 years is illegal



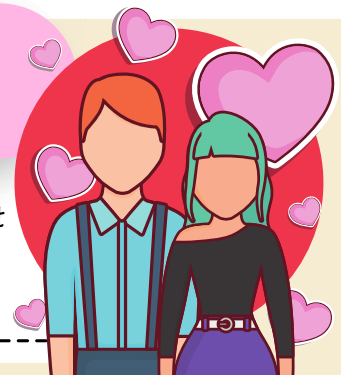
## What can you do?



- Immediately block and stop all communication
- Refuse to give in to threats – do not send more nudes or pay them money
- Keep the correspondence to show those who will help you
- If you get sent sexual materials, don't forward them to others – you may hurt someone else
- Ask for help from parents, teachers, or another safe adult

## We know you are curious...

You're probably curious about sex. That's natural. It's a healthy part of growing up, but it can have unexpected consequences if you are not careful, or make yourself vulnerable to people who want to take advantage of you



If someone send you unwanted sexually explicit content,  
who are 3 people you can tell:

- 1.
- 2.
- 3.

On what platforms can sexting occur? Is any  
one platform safer than the other?

### True or False

You have to be careful about what you post online, because it could be against the law.

If a child under the age of 18 sends a naked picture of themselves to someone else, it is  
against the law.

If a child forwards on a naked picture of someone else to embarrass or upset them, there could  
be serious legal consequences.

- 20% of teens have posted or sent nude or semi nude photos or videos of themselves
- 40% of teens have posted or sent sexually suggestive messages
- 53% of teens who sext are females, while 47% are males
- 17% of sexters share their messages with others

# Puberty

## What is puberty?

Puberty is period of sexual development during which time a young person begins to sexually mature and become able to produce offspring.

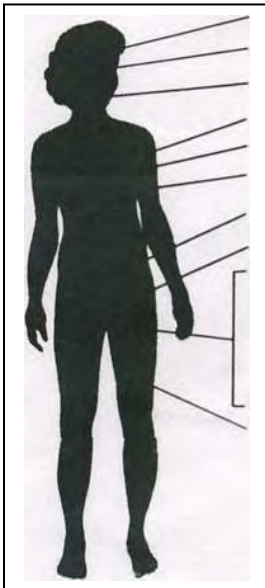
In girls, puberty may start as early as 6 or 7 years of age, but it usually starts around 11 years of age. This represents a change in how doctors think about normal puberty. Until recently, puberty that started at 8 years of age or later in girls was considered normal. In boys, though, the age considered normal for the beginning of puberty has not changed. In boys, puberty begins around 12 years as age, but may start as early as 9 years of age. This is a process that goes on for several years. Most girls are physically mature by about 14 years of age. Boys mature at about 15 or 16.

## Emotional Changes during puberty include:

- Mood swings
- Focus changes from family outward
- Sudden attraction to others
- Confusion- feelings of being lost, not fitting in, insecurity
- Behavior to prove yourself, etc.
- More concern about body image, looks and clothes

## Mental/Cognitive Changes during puberty include:

- More ability for complex thought
- A stronger sense of right and wrong
- Better able to express feeling through talking



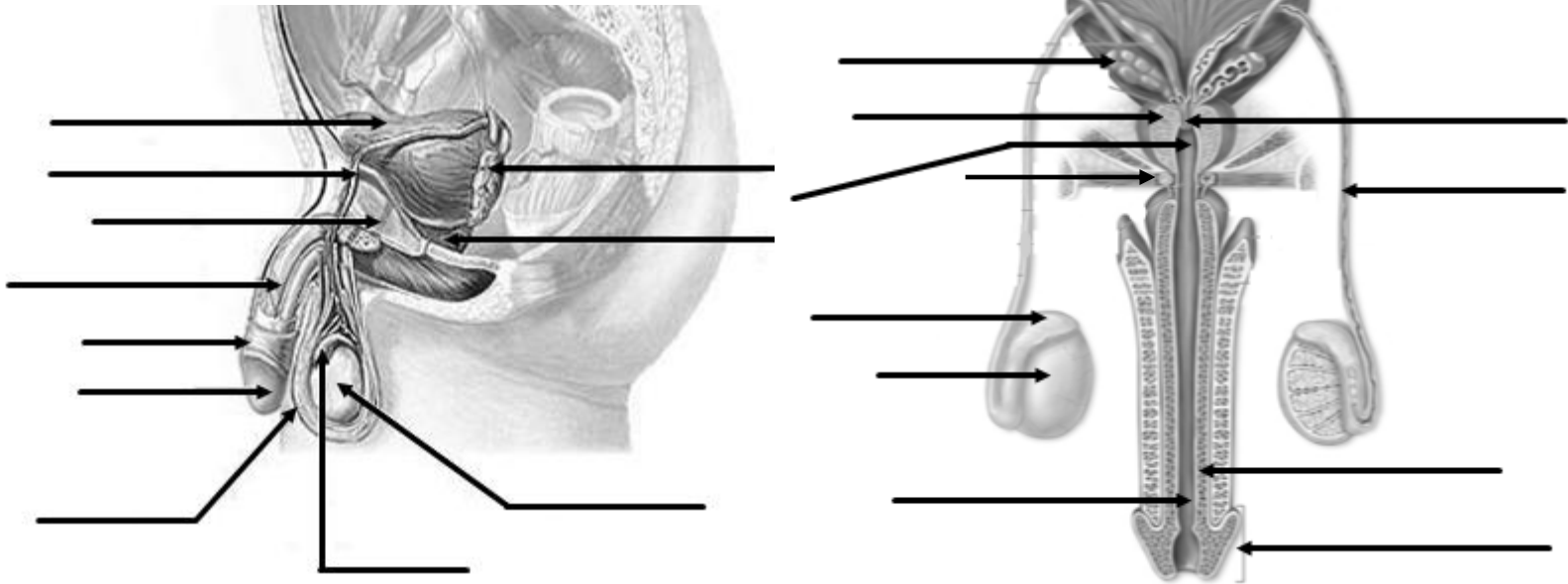
**Growth spurt occurs**  
**No change in hairline**  
**Acne appears**  
**Permanent teeth all in**  
**Underarm hair appears**  
**Perspiration increases**  
**Breasts develop**  
**Waistline narrows**  
**Hips widen**  
**Uterus and ovaries enlarge**  
**Ovulation occurs**  
**Menstruation begins**  
**Pubic hair appears**  
**External genitals enlarge**

**Growth spurt occurs**  
**Hairline recession begins**  
**Acne appears**  
**Facial hair appears**  
**Permanent teeth all in**  
**Larynx enlarges, voice deepens**  
**Shoulders broaden**  
**Axillary hair appears**  
**Perspiration increases.**  
**Muscles develop**  
**Some breast enlargement may occur**  
**Pubic hair appears**  
**External genitals enlarge**  
**First ejaculation occurs**  
**Sperm production begins**  
**Long bone growth**



# The Male Reproductive System

The internal structures of the male reproductive system play a role in the delivery of sperm.




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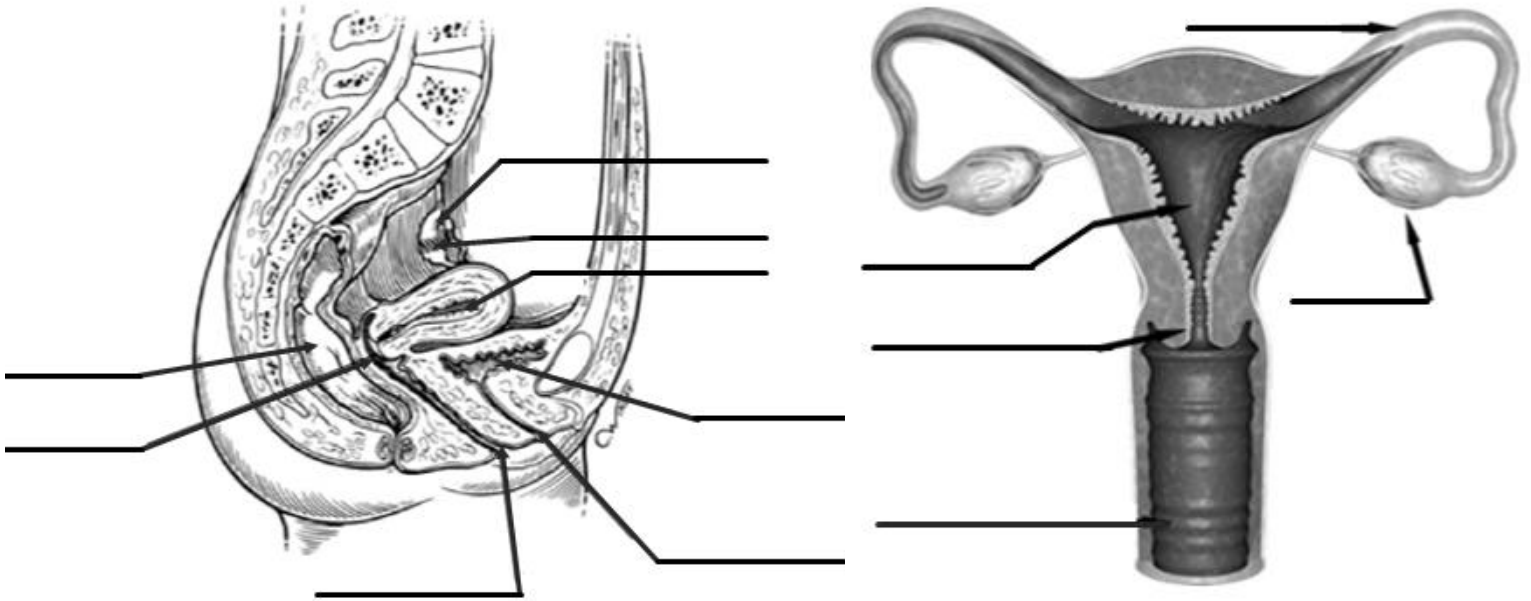
## Fill in the correct term.

- \_\_\_\_\_ : tubes that transport sperm from testes toward urethra
- \_\_\_\_\_ : area behind testes where sperm mature
- \_\_\_\_\_ : gland that produces 30% of the seminal fluid (semen)
- \_\_\_\_\_ : (2) small structures at the base of the bladder that produce 70% of the seminal fluid
- \_\_\_\_\_ : connection between vas deferens and urethra
- \_\_\_\_\_ : (2) pea size organs that secrete a clear alkaline fluid during sexual excitement
- \_\_\_\_\_ : passage for urine and semen to the external environment
- \_\_\_\_\_ : skin fold covering the end of the penis
- \_\_\_\_\_ : loose pouch of skin containing sperm producing organs (testes)
- \_\_\_\_\_ : external male sex organ
- \_\_\_\_\_ : (2 testicles) ovoid glands which create sperm and secrete male hormone, testosterone



## The Female Reproductive System

The female reproductive system produces sex cells called ova and provides a place for a fertilized ovum to grow.



---

### Fill in the correct term.

\_\_\_\_\_ : both the Birth Canal and the structure that receives the penis during intercourse

\_\_\_\_\_ : connects the urinary bladder to the outside

\_\_\_\_\_ : the entrance to the uterus at the internal end of the vagina

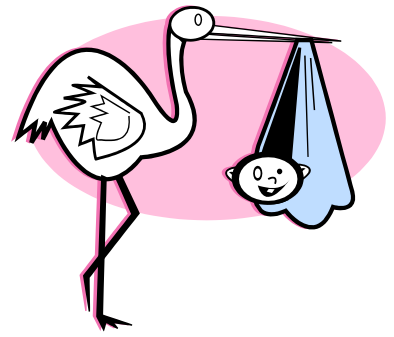
\_\_\_\_\_ : inside layer of the uterus, rich in blood supply, that nourishes a fertilized egg

\_\_\_\_\_ : (Womb) hollow muscular structure that holds the fetus during pregnancy

\_\_\_\_\_ : (2) produce ova (egg cells) and female hormones, estrogen and progesterone

\_\_\_\_\_ : (2) muscular tunnel that transports ova to the uterus; where fertilization of an egg occurs

# Conception and Childbirth



## I Conception or Fertilization:

- The union of the sperm and the egg.
- Heredity is determined ( passing of traits)
- 23 pairs of chromosomes are developing
- Every ovum (egg) has the X chromosome
- Sperm can be either X or Y (Y containing the male characteristics)  
i.e.: XX = female child    XY = male child

## II How Pregnancy is determined?

- First sign may be the absence of the menstrual period
- Confirmed by a pregnancy test conducted by a medical professional.
- Breasts are tender, fatigue, change in appetite and morning sickness

## III Prenatal Care:

- Routine medical examination
- Proper nutrition and exercise
- Rest and relaxation
- Avoidance of drugs and other risk behaviors \*(FAS)
- Proper education
- Folic acid is a B vitamin that can help prevent birth defects of the brain and spinal cord called neural tubal defects. Folic acid works best if taken before conception and during early pregnancy.



## IV What to know about child birth:

**Labor:** muscular contractions of the uterus

\*The amniotic sac may rupture (water breaking)

### There are three stages of childbirth:

Stage 1: Dilation of the cervix

This is the longest stage of childbirth

The cervix opens 8-10 centimeters

(Wide enough for the baby to fit through)

Stage 2: Delivery of the baby

Crowning is the **appearance of the baby's head in the birth canal**

The mother can begin to push

Once the baby is out, the umbilical cord is cut.

Stage 3: Delivery of the Placenta

The afterbirth is the placenta that is expelled after delivery



# Parenting

- Parenthood is 24 hours a day, 7 days a week for at least 18 years.
- Needs of the child must come first.
- 10% of women aged 15-19 get pregnant each year.
- More than 750,000 teenagers become pregnant each year, and about 445,000 give birth.
- The teenage birth rate increased in 2006 and 2007. Between 2005 and 2007, the rate rose 5 percent (from 41 to 42.5 per 1,000 women). This increase follows a 14-year decline between 1991 and 2005, when the rate fell by one-third (from 62 to 41 per 1,000 women). In 2007, about 4 in 100 teenage girls had a baby.
- Teen mothers are more likely than mothers over age 20 to give birth prematurely (before 37 completed weeks of pregnancy). Between 2003 and 2005, preterm birth rates averaged 14.5 percent for women under age 20 compared to 11.9 percent for women ages 20 to 29. Babies born prematurely face an increased risk of newborn health problems, long-term disabilities and even death.
- 1.5% of teen moms get a college degree by age 30.
- 25% of teen moms have a second child within 2 years of the first.
- Health risks posed to teen mother and child as well as social issues.
- Drugs, alcohol and tobacco all affect the fetus and may cause birth defects, addiction, brain damage, miscarriage, etc.
- No license required to have a child. No formal training required. Most important job in the world, least preparation given.
- Parenting styles may differ and can strain a marriage/relationship.
- Cost of raising a child is tremendous. (From \$241,080- \$301,970 from birth to age 18.)
- Social life is drastically reduced for years.
- Many items are necessary to care for a baby.

## **Nine Steps to More Effective Parenting**

### **1. Boosting Your Child's Self-Esteem**

Kids start developing their sense of self as babies when they see themselves through their parents' eyes. Your tone of voice, your body language, and your every expression are absorbed by your kids. Your words and actions as a parent affect their developing self-esteem more than anything else. Choose your words carefully and be compassionate. Let your kids know that everyone makes mistakes and that you still love them, even when you don't love their behavior.

### **2. Catch Kids Being Good**

Make a point of finding something to praise every day. Be generous with rewards — your love, hugs, and compliments can work wonders and are often reward enough. Soon you will find you are "growing" more of the behavior you would like to see.

### **3. Set Limits and Be Consistent With Your Discipline**

Discipline is necessary in every household. The goal of discipline is to help kids choose acceptable behaviors and learn self-control. They may test the limits you establish for them, but they need those limits to grow into responsible adults. Establishing house rules helps kids understand your expectations and develop self-control. Being consistent teaches what you expect.

### **4. Make Time for Your Kids**

Kids who aren't getting the attention they want from their parents often act out or misbehave because they're sure to be noticed that way. Many parents find it rewarding to schedule together time with their kids. Adolescents seem to need less undivided attention from their parents than younger kids. Because there are fewer windows of opportunity for parents and teens to get together, parents should do their best to be available when their teen does express a desire to talk or participate in family activities

### **5. Be a Good Role Model**

Young kids learn a lot about how to act by watching their parents. The younger they are, the more cues they take from you. Studies have shown that children who hit usually have a role model for aggression at home. Model the traits you wish to see in your kids. Above all, treat your kids the way you expect other people to treat you.

### **6. Make Communication a Priority**

Parents who reason with their kids allow them to understand and learn in a nonjudgmental way. Make your expectations clear. If there is a problem, describe it, express your feelings, and invite your child to work on a solution with you. Be sure to include consequences. Make suggestions and offer choices. Be open to your child's suggestions as well. Negotiate. Kids who participate in decisions are more motivated to carry them out.

### **7. Be Flexible and Willing to Adjust Your Parenting Style**

As your child changes, you'll gradually have to change your parenting style. Chances are, what works with your child now won't work as well in a year or two. Teens tend to look less to their parents and more to their peers for role models. But continue to provide guidance, encouragement, and appropriate discipline while allowing your teen to earn more independence. And seize every available moment to make a connection!

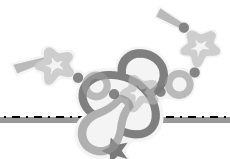
### **8. Show That Your Love Is Unconditional**

As a parent, you're responsible for correcting and guiding your kids. But how you express your corrective guidance makes all the difference in how a child receives it. When you have to confront your child, avoid blaming, criticizing, or fault-finding, which undermine self-esteem and can lead to resentment. Instead, strive to nurture and encourage, even when disciplining your kids. Make sure they know that although you want and expect better next time, your love is there no matter what.

### **9. Know Your Own Needs and Limitations as a Parent**

Face it — you are an imperfect parent. You have strengths and weaknesses as a family leader. Recognize your abilities — "I am loving and dedicated." Vow to work on your weaknesses — "I need to be more consistent with discipline"

*Reviewed by: Steven Dowshen, MD  
Date reviewed: January 2015*



## Parent for a Day

Now that you have had a chance to think about some of the situations and pressures that parents have to face, you may be better able to understand their reactions. Try putting yourself in the place of a parent of a teenage son or daughter. Choose a partner and decide who will be the parent and who will be the teenager. Then pick one of the following situations to role play for the class.

1. Your 13-year-old daughter informs you that she wants to dye her hair pink to be like her friends.
2. Your 17-year-old son went to a party. He was supposed to be home no later than 1:00am. He comes home drunk at 4:00am.
3. Your 14-year-old daughter wants to spend a weekend at a cabin with her girlfriends but no parents or other adults will be chaperoning. **She tells you that all her friends' parents said they could go.**
4. Your 18-year-old son informs you that he wants to buy a motorcycle.
5. Your 17-year-old son wants to try out for the football team, but his grades are lower than you think they should be.
6. Your 18-year-old daughter wants to take a part-time job after school. Taking it will mean that she will not get home until about 11:00pm every weeknight.
7. Your 16-year-old daughter has a boyfriend you do not like. She wants to invite him on a family outing for the weekend.
8. Your 13-year-old son and some of his friends have formed a rock band. They want to practice at your home twice a week.
9. Your 17-year-old daughter has informed you that she and her boyfriend are engaged. You were not aware that her relationship was that serious and are concerned about the year of school she needs to complete.
10. You smell marijuana smoke coming from your 14-year-old son's room, where he and two friends are listening to music.

# Parent Interview

Please interview any parent to get their answers to the following questions.

## **Questions**

1. What advice would you give to someone considering whether or not to become a parent?
2. When you first became a parent, what kinds of changes were required in your life?
3. What was the most difficult adjustment you had to make as a result of becoming a parent?
4. What was the least difficult adjustment you had to make as a result of becoming a parent?
5. What do you think is the most rewarding part of being a parent?
6. What do you think is the most difficult part of being a parent?
7. Were you surprised by any responsibilities of the parent role? If so, which ones?
8. What do you think are the most important personality traits a parent should display?
9. What do you think is the most important thing a parent can do when raising children?
10. What helped you the most in preparing to be a parent?

## Family Living Review

1. Sexual responsibility includes (list three):
2. What are four characteristics of a successful relationship?
3. Sexual harassment is defined as:
4. **Do you agree or disagree with the "Dating Bill of Rights"? Why or why not?**
5. What is puberty?
6. The part of the male reproductive system that produces sperm or testosterone is the \_\_\_\_\_. The \_\_\_\_\_ regulates the temperature of the testes. The three glands that make up a majority of the semen are: \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.
7. The part of the female reproductive system that produces eggs(ova) and estrogen/progesterone are the \_\_\_\_\_. The \_\_\_\_\_ is where the fetus grows and develops. The \_\_\_\_\_ is the lining of the uterus that is shed during menstruation and is where the egg implants during pregnancy.
8. What is conception and what happens at conception?
9. Why is folic acid important for a pregnant female?
10. What are the three stages of childbirth?

## Stats on sex

As you consider whether abstinence is right for you, consider some research on what teens think about sex.

### Sex by the numbers

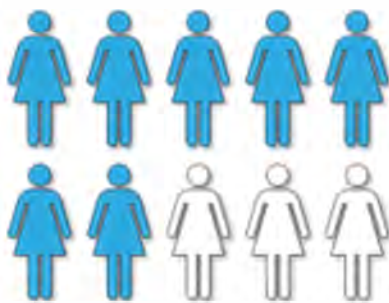
Check out some fast facts about sex.

1. Do lots of teens wish they could slow down their sex lives?  
Yes.



One out of 3 teens age 15 to 17 felt things were moving too fast sexually.

2. Do many girls wish they had waited to have sex?  
Yes.



In one study, almost 7 out of 10 girls 15 to 19 who had sex wish they had waited.

3. Do teens think boys get the message that abstinence is okay?  
No.



Nearly 2 out of 3 teens think boys often get the message that they're expected to have sex.

Sources: Kaiser Family Foundation and the National Campaign to Prevent Teen and Unplanned Pregnancy

## Ways to stick to abstinence

It's not always easy to abstain from sex. It can help to make a plan ahead of time and get support from people you trust. You might try [talking with your parents/guardians about sex](#) to see if they have advice. You also might keep in mind the reasons you made the choice to be abstinent.

**Don't be afraid to take a stand with your partner.** If you are close enough with someone to consider having sex, you should be close enough to talk about the decision. If you and your partner can't agree, then you might think about whether you'd be better off with someone whose beliefs are closer to your own.

**Your own body may tell you to give up on abstinence.** Remember that your body is not in charge! Remind yourself of the possible physical, emotional, and financial costs of having sex before you're really ready.

### Consider these tips for staying abstinent:

- **Get involved.** Some people find it helps to get involved in activities that let them focus on something other than sex, like volunteering or joining a sports team.
- **Get together.** When you hang out with your date, it can help to hang out in a group. Also, try not to spend a lot of time in secluded places with no one else around or at someone's house when no adults are home.
- **Get out.** Always take a cell phone and cab or bus money in case you want to get out of an uncomfortable situation.
- **Practice.** Think about how to say "no" ahead of time, so you don't have to come up with replies on the spot.
- **Stay sober.** Drugs and alcohol can make you more likely to do something you otherwise never would.

#### Sex talk



Maybe your partner says, "If you love me, you'll have sex with me." It's just not true. You don't have to have sex with someone to prove you care. Sharing time, thoughts, feelings, and mutual respect are what make a relationship strong. And don't ever feel like you owe your date anything sexually because that person spent money on you. You don't owe that person anything — except "thank you"!



Think about the components of the health triangle and the information you just read. List the pros and cons of practicing abstinence.

	PROS	CONS
Physical		
Mental		
Social		

## Health Education and the World Wide Web

There are many websites that give "health" information. You have to be able to judge the quality of that information to determine if it reliable, up to date and valuable. Websites that have .gov or .edu extensions are usually considered to be reliable. In addition you need to answer the following questions to determine if the website will be beneficial.

- Who authored the web site? Are they an expert in that field?
- What is the purpose of the web site? (Do they sell nutritional products, etc.?)
- When was the site written or last updated? (Is it current?)
- Does the web site have .edu, .gov or .org? (these are educational, government web sites or organization web sites; remember .com is a commercial web site) (.int is an international website e.g. [www.who.int](http://www.who.int); World Health Organization)
- Is the information useful for my purpose?

After you have answered the above questions; you want to double check the information you obtain by comparing it to other reliable and current web sites. If you are reading about cancer treatment; information about treatment that is published has **already been through the "clinical trial" period. For current government sponsored "clinical trials" you can go to Medlineplus.gov.**

If you are looking for an organization that can provide onsite information and assistance please use <https://211longisland.communityos.org/cms/>. This is a compilation of "health related" and other agencies in Nassau and Suffolk counties.

***Question: When researching a health topic which website extensions are considered to be the most reliable?***

The following list of web sites will help you start your "health" research. This is not a complete list; however, it will link you to many reliable sites.

[www.medlineplus.gov](http://www.medlineplus.gov)

[www.healthfinder.gov](http://www.healthfinder.gov)

[www.who.int](http://www.who.int) or [www.who.org](http://www.who.org)

[www.cdc.gov](http://www.cdc.gov)

[www.health.state.ny.us](http://www.health.state.ny.us)

[www.kidshealth.org](http://www.kidshealth.org)

[www.discovery.com](http://www.discovery.com)

[www.nih.gov](http://www.nih.gov)

[www.health.org](http://www.health.org)

[www.wedmd.com](http://www.wedmd.com)

[www.heart.org](http://www.heart.org)

[www.cancer.org](http://www.cancer.org)

[www.diabetes.org](http://www.diabetes.org)

[www.fda.gov](http://www.fda.gov)

[www.lungusa.org](http://www.lungusa.org)

[www.4women.gov](http://www.4women.gov)

[www.girlshealth.gov](http://www.girlshealth.gov)

[www.hhs.gov](http://www.hhs.gov)

[www.noah-health.org](http://www.noah-health.org)

[www.choosemyplate.gov](http://www.choosemyplate.gov)

<http://themint.org>

<https://211longisland.communityos.org/cms/>

# Medical Professionals

Generalists include both [medical doctors \(MDs\)](#) and [doctors of osteopathic medicine \(DOs\)](#). These professionals usually specialize in family practice or internal medicine.

- Specialists who are frequently sought directly by women for general primary care needs include the following:
  - OB/GYNs are physicians who specialize in obstetrics and gynecology, including well women's health care and prenatal care.
  - [Nurse practitioners \(NPs\)](#) may be prepared in programs specific to women's health care including common gynecological concerns, routine health maintenance and screenings (such as a [Pap smear](#)), and family planning
- Registered nurses (RNs) have graduated from a nursing program, have passed state board examinations, and are licensed by the state.
- Licensed practical nurses (LPNs) are state-licensed caregivers who have been trained to care for the sick.
- Advanced practice nurses have education and clinical experience beyond the basic training and licensing required of all RNs:
  - [Nurse practitioners \(NPs\)](#) are RNs with graduate training in primary care. The profession includes family (FNP), pediatric (PNP), adult (ANP), and geriatric (GNP) specialties. In some states NPs can prescribe medications.
  - Clinical nurse specialists (CNSs) are RNs who have graduate training in a specialized clinical field such as cardiac, psychiatric, or community health.
  - [Certified nurse midwives \(CNMs\)](#) are RNs with graduate training in women's health care needs, including prenatal, labor and delivery, and postpartum care.
  - Certified registered nurse anesthetists (CRNAs) are RNs with graduate training in the field of anesthesia.
- A [physician assistant \(PA\)](#) is trained in the family practice model for a primary care role.

## SPECIALTY CARE

Common specialty areas to which the patient is typically referred by the primary care provider:

- Anesthesiology -- anesthesia, either general or spinal block for surgeries and some forms of pain control
- Cardiology -- heart disorders
- Dermatology -- skin disorders
- Endocrinology -- hormonal and metabolic disorders, including [diabetes](#)

- Gastroenterology -- digestive system disorders
  - General surgery -- common surgeries involving any part of the body
  - Gynecology/obstetrics -- pregnancy (normal or problematic) and women's reproductive tract disorders
  - Immunology -- disorders of the immune system and [allergies](#)
  - Infectious disease -- infections affecting the tissues of any body system
  - Nephrology -- [kidney disorders](#)
  - Neurology -- nervous system disorders
  - Oncology -- [cancer](#) and some other diseases that resist treatment
  - Ophthalmology -- eye disorders and surgery
  - Orthopedics -- bone and connective tissue disorders
  - Otorhinolaryngology -- ear, nose, and throat (ENT) disorders
  - Physical and rehabilitative medicine -- coordinate return to optimal functioning in individuals with musculoskeletal and neurological disorders (such as low back injury, spinal cord injuries, and [stroke](#))
  - Psychiatry -- emotional or mental disorders
  - Pulmonary (lung) -- respiratory tract disorders
  - Radiology -- [X-rays](#) and related procedures (such as [ultrasound](#), [CT](#), and [MRI](#))
  - Urology -- disorders of the male reproductive and urinary tracts and the female urinary tract
1. A person has a mole that has changed shape and color. They go to their primary medical doctor. Their medical doctor recommends a specialist. To which specialist will the primary doctor likely refer his patient?  

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2. **A female thinks she is expecting her first child... which kind of doctor should she see?**  

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3. A person thinks they may be suffering from depression. Which health care profession should they make an appointment to see?  

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Describe the role of each specialty.

Anesthesiology:

Cardiology:

Dermatology:

Endocrinology:

Gastroenterology:

Gynecology/obstetrics:

Nephrology:

Neurology:

Oncology:

Ophthalmology:

Orthopedics:

Psychiatry:

Radiology:

Urology:

Nurse practitioner:

Certified nurse midwives:

Physician assistant:

Registered Nurse:

Licensed practical nurses:

NAME: \_\_\_\_\_

WHAT DOES PHYSICAL WELLNESS MEAN TO YOU?

PHYSICAL WELLNESS SELF-ASSESSMENT

- I almost always do this =2
- Sometimes/occasionally =1
- Hardly ever/never =0

SCORE

- \_\_\_ I exercise aerobically (vigorous and continuous) for 20-30 minutes at least 3X per week
- \_\_\_ I eat fresh fruits, vegetables, and whole grains every day
- \_\_\_ I avoid tobacco/nicotine products
- \_\_\_ I wear a seatbelt riding in a car
- \_\_\_ I avoid drinking caffeinated and sugary beverages
- \_\_\_ I get an adequate amount of sleep (7-9 hours)
- \_\_\_ I keep up with my check-ups at all necessary medical offices (doctor, dentist, vision, immunizations, self-exams, specialists)
- \_\_\_ I brush and floss my teeth daily
- \_\_\_ I avoid alcohol
- \_\_\_ I use stress management techniques that help me stay calm and relaxed

PHYSICAL WELLNESS STRENGTHS

These are the things I do well that I will continue with:

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

THINGS I WOULD LIKE TO DO TO FURTHER ENHANCE MY PHYSICAL WELLNESS

WHAT DOES INTELLECTUAL WELLNESS MEAN TO YOU?

INTELLECTUAL WELLNESS SELF-ASSESSMENT

SCORE

- I almost always do this =2
- Sometimes/occasionally =1
- Hardly ever/never =0

- \_\_\_ I make an effort to learn new things
- \_\_\_ I try to keep up with current affairs of significance (locally, nationally, globally)
- \_\_\_ I listen to lectures, podcasts, plays, musical performances
- \_\_\_ I do creative and stimulating mental activities/games
- \_\_\_ I read daily (articles, books)
- \_\_\_ I practice something every week to improve my skills (crafts, cooking, music, sports, art, etc.)
- \_\_\_ I try to see more than one side of an issue even if I do not agree with other viewpoints
- \_\_\_ I engage in intellectual discussions
- \_\_\_ I look up things I don't know using reliable sources/fact check claims made on TikTok/social media/friends
- \_\_\_ I ask questions and enjoy learning

INTELLECTUAL WELLNESS STRENGTHS

These are the things I do well that I will continue with:

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

THINGS I WOULD LIKE TO DO TO FURTHER ENHANCE MY INTELLECTUAL WELLNESS

WHAT DOES ENVIRONMENTAL WELLNESS MEAN TO YOU?

ENVIRONMENTAL WELLNESS SELF-ASSESSMENT

- I almost always do this =2
- Sometimes/occasionally =1
- Hardly ever/never =0

SCORE

- \_\_\_ I regularly clean my living and/or work environment
- \_\_\_ I make maximal use of natural light, fresh air, and live plants
- \_\_\_ I discard garbage regularly, clean spoiled foods out of the refrigerator, and stay on top of any pet odors
- \_\_\_ I tidy my home and workspaces in order to prevent clutter and stay organized
- \_\_\_ I conserve energy (fuel, electricity, water, etc.) in my home, car, elsewhere
- \_\_\_ I recycle
- \_\_\_ I do not litter
- \_\_\_ I purchase recycled items when possible or find ways to repurpose/reuse things rather than just throwing them away
- \_\_\_ I make time to enjoy nature
- \_\_\_ I set aside time to reflect and/or practice mindfulness

ENVIRONMENTAL WELLNESS STRENGTHS

These are the things I do well that I will continue with:

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

THINGS I WOULD LIKE TO DO TO FURTHER ENHANCE MY ENVIRONMENTAL WELLNESS



WHAT DOES SPIRITUAL WELLNESS MEAN TO YOU?

SPIRITUAL WELLNESS SELF-ASSESSMENT

- I almost always do this =2
- Sometimes/occasionally =1
- Hardly ever/never =0

SCORE

- \_\_\_ I can name my own values and describe my beliefs about life
- \_\_\_ I make conscious choices about my daily actions based on my personal values
- \_\_\_ When I get depressed or frustrated, I draw on my beliefs and values to give me direction
- \_\_\_ I use prayer, meditation, and/or quiet personal reflection time regularly in my life
- \_\_\_ Life is meaningful for me, and I feel a purpose in life
- \_\_\_ I try to learn about others' beliefs and values, especially those that are different from my own
- \_\_\_ I have a strong sense of optimism and faith in the future
- \_\_\_ I use my thoughts and attitudes in life-affirming ways
- \_\_\_ I appreciate the natural forces that exist in the universe
- \_\_\_ I feel gratitude for the things in my life

SPIRITUAL WELLNESS STRENGTHS

These are the things I do well that I will continue with:

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

THINGS I WOULD LIKE TO DO TO FURTHER ENHANCE MY SPIRITUAL WELLNESS

WHAT DOES SOCIAL WELLNESS MEAN TO YOU?

SOCIAL WELLNESS SELF-ASSESSMENT

- I almost always do this =2
- Sometimes/occasionally =1
- Hardly ever/never =0

SCORE

- \_\_\_ I have a network of family/friends who I feel supported by
- \_\_\_ I contribute time/money to social and community projects/causes
- \_\_\_ I regularly spend time with people I genuinely like
- \_\_\_ I balance my own needs with the needs of others
- \_\_\_ I am a compassionate person and try to help others when I can
- \_\_\_ I have a sense of belonging within my school/community
- \_\_\_ I feel comfortable meeting and interacting with new people
- \_\_\_ I can give and receive compliments graciously
- \_\_\_ I communicate with and get along with a wide variety of people
- \_\_\_ I am interested in others, including those with backgrounds that are different from my own

SOCIAL WELLNESS STRENGTHS

These are the things I do well that I will continue with:

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

THINGS I WOULD LIKE TO DO TO FURTHER ENHANCE MY SOCIAL WELLNESS

WHAT DOES EMOTIONAL WELLNESS MEAN TO YOU?

EMOTIONAL WELLNESS SELF-ASSESSMENT

- I almost always do this =2
- Sometimes/occasionally =1
- Hardly ever/never =0

SCORE

- \_\_\_ I accept responsibility for my actions
- \_\_\_ I see challenges and changes as opportunities for growth
- \_\_\_ I believe that I have considerable control over my life
- \_\_\_ I am able to laugh at life and at myself
- \_\_\_ I feel good about myself
- \_\_\_ I am able to appropriately cope with stress and tension
- \_\_\_ I make time for leisure and fun
- \_\_\_ I am able to recognize my personal shortcomings and learn from my mistakes
- \_\_\_ I am able to recognize and express my feelings
- \_\_\_ I enjoy each day

EMOTIONAL WELLNESS STRENGTHS

These are the things I do well that I will continue with:

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

THINGS I WOULD LIKE TO DO TO FURTHER ENHANCE MY EMOTIONAL WELLNESS

## Final Exam Review

### Intro to Health

Define:

- Values: \_\_\_\_\_
- "Seek first to understand, then be understood" \_\_\_\_\_  
\_\_\_\_\_
- Health Continuum: \_\_\_\_\_  
\_\_\_\_\_
- Tips for assessing risk: \_\_\_\_\_  
\_\_\_\_\_
- Why is the Health Triangle represented as equilateral: \_\_\_\_\_  
\_\_\_\_\_

*True or False:* If a person has Positive Self-Image, they would feel worthwhile no matter the opinions of others. \_\_\_\_\_

*Passive, Aggressive or Assertive:* When a person is able to express their thoughts and feelings in a firm but positive manner. \_\_\_\_\_

### Mental Illness

A health professional to consult with mental health problems \_\_\_\_\_

Mental illness that moves between mania, depression and normal moods \_\_\_\_\_

Define Mental Illness: \_\_\_\_\_

Factors that can lead to eating disorders: \_\_\_\_\_

A person who is mentally healthy is able to: \_\_\_\_\_

*True or False:* A person with a mental illness is not able to be mentally healthy

Healthy ways to reduce stress: \_\_\_\_\_

## Reproduction and Family Living

Prostate Gland      Stress      Fallopian Tube      Diet      Sexual Harassment  
illness      Endometrium      Seminal Vesicles

1. Fertilization occurs in the \_\_\_\_\_
2. Behaviors or comments of a sexual nature which are unwelcomed are called \_\_\_\_\_
3. The 3 factors that influence a females menstrual cycle \_\_\_\_\_
4. The 2 glands were seminal fluid is released from \_\_\_\_\_
5. The lining of the uterus \_\_\_\_\_

### List:

- Characteristics of a successful long term relationship:  
\_\_\_\_\_  
\_\_\_\_\_
- Puberty is defined as: \_\_\_\_\_  
\_\_\_\_\_
- Sexual responsibility includes: \_\_\_\_\_  
\_\_\_\_\_
- Attributes of a successful Parent: \_\_\_\_\_  
\_\_\_\_\_

## Drugs and Alcohol

- |                        |   |
|------------------------|---|
| 1. THC _____           | <b>A.</b> Bone pain, nausea and hallucinations caused when the effects of a certain drug wear off |
| 2. Hallucinogens _____ | <b>B.</b> Mixing two depressants to get an intensified effect                                     |
| 3. Alcoholism _____    | <b>C.</b> Loss of control of drinking behavior  |
| 4. Synergism _____     | <b>D.</b> Active ingredient in marijuana  |
| 5. Withdrawal _____    | <b>E.</b> Drug that caused distortions of reality   |

Fill in:

- A BAC of \_\_\_\_\_ is considered a DWI in New York State
- The most common pain medications a person will become addicted to before becoming addicted to heroin are \_\_\_\_\_ and \_\_\_\_\_.
- An \_\_\_\_\_ is a material that lessens the purity of a drug. A common hallucinogen to contain this is \_\_\_\_\_.
- An exaggerated sense of well-being is known as \_\_\_\_\_.

**Communicable and Non-Communicable Disease**

- List Bacterial STI's and their treatment: \_\_\_\_\_  
\_\_\_\_\_
- True or False: A person can go years without symptoms while being infected with HIV
- List Symptoms of a
  - a) Stroke: \_\_\_\_\_
  - b) Heart Attack: \_\_\_\_\_
  - c) Genital Herpes: \_\_\_\_\_
- If you suspect that a person suffered a heart attack. The first step is to \_\_\_\_\_ and then get the \_\_\_\_\_.
- When there is a buildup of plaque in the walls of a person's arteries, they are at an increased risk of \_\_\_\_\_
- List 3 things that put a person at an increased risk of type 2 diabetes
  - a) \_\_\_\_\_
  - b) \_\_\_\_\_
  - c) \_\_\_\_\_
- Cancer:
  - a) Most important factor to beating it: \_\_\_\_\_
  - b) Taking of tissue to determine cancer: \_\_\_\_\_
  - c) Definition of metastasize: \_\_\_\_\_
  - d) A cancer causing agent: \_\_\_\_\_
  - e) Common Signs of Melanoma: \_\_\_\_\_

- The reason non-communicable diseases replaced communicable diseases as the leading cause of death in the US is due to longer lifespan and poor lifestyle choices.
- Prevention and Treatment:
  - a) Treatment for type 1 diabetes: \_\_\_\_\_
  - b) Prevention of heart disease, diabetes and cancer: \_\_\_\_\_  
\_\_\_\_\_
  - c) 100% reduction risk of STI's and pregnancy: \_\_\_\_\_
  - d) Prevention of Lyme Disease: \_\_\_\_\_
  - e) The purpose of vaccines is to: \_\_\_\_\_

**Nutrition**

<i>Calorie</i>	<i>Trans Fat</i>	<i>Fructose</i>	<i>Organic</i>	<i>Corn syrup</i>
<i>Fiber</i>	<i>Vegetables</i>	<i>Protein</i>	<i>First</i>	<i>Fruits</i>

- Other names for sugar: \_\_\_\_\_
- Processed fat that doesn't occur in nature, also known as hydrogenated oil \_\_\_\_\_
- Lower in pesticides and chemicals \_\_\_\_\_
- The energy food provides your body \_\_\_\_\_
- Not digested, cleans intestines, adds bulk to diet \_\_\_\_\_
- Poultry, fish and eggs are a great source of this \_\_\_\_\_
- Ingredients present in the largest amount are listed where on the label \_\_\_\_\_
- Largest area on your plate should include these 2 \_\_\_\_\_

To increase fiber in your daily diet, you can eat more \_\_\_\_\_ instead of processed, packaged foods.

Vegetarians tend to need more protein in their diet due to plant based foods being incomplete. In order to get more protein, a person can \_\_\_\_\_

Extra sodium in our diet comes from \_\_\_\_\_ and can lead to an increased risk in developing \_\_\_\_\_

### **Additional Review Questions**

Anything, such as an event, a person, a situation, etc., that causes us stress in our lives is called a \_\_\_\_\_

Also known as manic depression; it is an illness in which periods of mania, depression, and normal moods alternate. \_\_\_\_\_

The principle characteristics are inattention, hyperactivity, and impulsivity \_\_\_\_\_

Which of the following health professionals would one consult/contact when experiencing problems with their mental health (i.e. depression)? \_\_\_\_\_

What type of communicator should we strive to be? Aggressive, passive or assertive?

The mental illness which mostly affects young people aged 16-25, in which they may experience paranoia, delusions and hallucinations is called \_\_\_\_\_

The disease characterized by an irrational fear of body fat and weight gain, distorted body image and severe restriction of food intake is called \_\_\_\_\_

A disease carried by mosquitoes that can cause a bulls eye rash \_\_\_\_\_

A disease that can be spread through sexual contact and contaminated needles. Magic Johnson, the professional basketball player, is living with it. \_\_\_\_\_

What is one thing you can do to help prevent the risk of cancer, illness and disease?  
\_\_\_\_\_

Portion control and exercise are a great way to do what? \_\_\_\_\_

The only way to 100% prevent pregnancy and STI's is what? \_\_\_\_\_

Gonorrhea, chlamydia and syphilis are all bacterial infections, which means they can be cured with what? \_\_\_\_\_



When companies take the fat out of our foods it does not taste as good anymore. What do they add in to make it taste better? \_\_\_\_\_

The recommended amount of physical activity for children and teens each day:\_\_\_\_\_

Nutrient that is our main source of energy \_\_\_\_\_

What nutrients' main responsibility is growth and maintenance of body tissue?\_\_\_\_\_

True or False: When a person loses control of their drinking behavior this could be a sign of a drinking problem. \_\_\_\_\_

Alcohol slows down the functions of the body which makes it what type of drug\_\_\_\_\_

The mind altering ingredient in marijuana is:\_\_\_\_\_

The tube that carries urine and semen for men and urine for women. \_\_\_\_\_

The sac of skin that holds the testes and controls the temperature. \_\_\_\_\_

Is a female born with all the eggs they will ever have or do they make them all the time?

\_\_\_\_\_



