



DRUG QUIZ SHOW

Eating Healthy and Exercising

Why is it important to eat healthy and exercise regularly? First, making healthy food choices and regular exercise contributes to overall good health and higher feelings of self-worth. Second, having a healthy diet coupled with regular physical activity prevents chronic conditions such as obesity, diabetes, and heart disease. Between 1980 and 2008 obesity rates in America have doubled in adults and tripled in children. Being overweight or obese can cause drastic health problems; the higher a person's BMI is the higher their risk of plaque buildup in their arteries. Plaque buildup narrows arteries and blocks blood flow causing high blood pressure, heart failure or a stroke. Body Mass Index (or, BMI) is a tool used to measure body fat based on height and weight. With rising obesity rates the number of people diagnosed with type two diabetes has also increased. 80-90% of people diagnosed with Type 2 diabetes are considered obese. Type 2 diabetes is when a person's body is making insulin, but their cells do not know how to process it properly. It is projected that 1 in 3 children born in or after 2000 will be diagnosed with Type 2 Diabetes.

Preventing chronic diseases is not the only reason we want to making healthy choices. It can also improve your performance in school and in some extracurricular activities. When making healthy choices with food and exercise, no one is expecting you to go to extremes; we all can indulge in some chocolate or pizza every now and then. Moderation and mindfulness are keys to making healthy lifestyle choices; the following information should give you the foundation necessary to making these informed decisions.

$$\text{BMI} = \frac{\text{Weight (lb)}}{\text{Height}^2 (\text{in}^2)} \times 703.0704$$

Sugar

The scientific community is not in complete consensus as to whether or not sugar is truly addictive; however, most agree that sugar has addictive properties. For instance, many people have intense cravings for sugar and they lose control once they start eating sugary foods. Additionally, certain sugary treats cause a rush, or a sugar high, when you indulge; these sugars (like the ones found in candy bars) are called simple carbohydrates, which are refined sugars that possess very little nutritional value to the body and are digested quickly. Simple carbohydrates are

quickly turned unto glucose in your blood stream, causing your blood sugar levels to spike. Simple carbohydrates are found in syrup, soda, candy, and table sugar. The added sugars (such as sucrose and high fructose corn syrup) in these products provide many calories but no essential nutrients, which is why they are often called empty calories. Contrarily the sugar found in fruits, vegetables, and dairy products are naturally occurring and are accompanied by fiber and protein, which slows down the process.

Of course, sugar highs must be followed by lows, or crashes. Your body needs to move glucose out of the bloodstream and into your cells for energy. To do this, your pancreas makes the hormone insulin. This often causes your blood sugar level to experience a sudden drop, which can leave you feeling wiped out, shaky, and searching for more sweets to regain that sugar "high." Are sugary-tasting foods the only ones that have sugar in them? Absolutely not; starchy foods such as bagels, chips, and French fries are complex carbohydrates that our bodies break down into simple sugars. There are two types of complex carbohydrates—oligosaccharides and polysaccharides—consisting of a chemical structure that is made up of three or more sugars. Most complex carbohydrates are rich in fiber, vitamins, and minerals, and they take a relatively longer time to digest, meaning that they don't raise blood sugar levels as quickly.

Now that we have some knowledge on sugar and its side effects, we can learn some of the common misconceptions about sugar and how much sugar Americans are eating and drinking. Sugar can go by many other names such as corn syrup, dextrose, isomaltotriose, agave nectar, sucrose, maltose, honey, maple syrup, and high fructose corn syrup. It is important to know these names for sugar so that we are not misled into thinking that we are not eating and drinking sugar when we actually are. Furthermore, many people believe the myth that sugars like brown sugar, honey, raw sugar, and agave nectar do not need to be limited because they're not as bad for our blood sugar levels. However, this is exactly that—a myth; all sugar s are sugar and they have the same effect on our bodies. Another widely held misconception is that most of our sugar intake comes from solid foods like donuts and candy bars. We actually *drink* a significant amount of our sugar intake; for instance, *one 12oz can* of regular Coca-Cola has 9 $\frac{3}{4}$ teaspoons (39 grams) of sugar. The American Heart Association recommends that the maximum amount of sugar per day that should not be exceeded is 37.5 grams (about **9 $\frac{1}{2}$ teaspoons**) for men and 25 grams (**6 $\frac{1}{4}$ teaspoons**) for women, both of which are less than one can of soda. As can be expected, the average American actually consumes about 194.4 grams (**48 $\frac{1}{2}$ teaspoons**) of sugar per day!

How to convert grams to teaspoons:

4 grams of sugar = 1 teaspoon

(i.e., divide the number of grams by 4)

Example: 25 grams of sugar = 6 $\frac{1}{4}$ teaspoons because $25 \div 4 = 6.25$

Exercise

Exercise is crucial to maintain overall good health and wellbeing; it reduces stress levels and provides numerous physical health benefits. There are four basic categories of exercise and physical activity—endurance, strength, balance, and flexibility. Endurance or aerobic activities increase your breathing and heart rate. By keeping your heart, lungs, and circulatory system healthy they can prevent many diseases from occurring in the long run. Strength activities improve the strength and power of your muscles. Balance exercises increase coordination and decrease your risk of falls. Flexibility exercises include stretches to increase the flexibility of your joints and muscles which reduces the risk of pains and injuries. To fully benefit from exercise, you should incorporate all of these types of exercises into your weekly physical fitness.

Federal guidelines recommend *at least* 150 minutes weekly of moderate-intensity aerobic activity for adults and 60 minutes *daily* for children and adolescents. Unfortunately, according to a 2013 survey conducted by the CDC, only 20.6% of American adults met the total recommended amount of weekly exercise; this means that about 80% of American adults were living more inactive lifestyles than they should have been. Some of the long-term side effects of physical inactivity are type 2 diabetes, heart disease, some cancers, and obesity. When it comes to losing weight, some people believe that they should drastically cut their caloric intake and significantly ramp up their physical in order to get to their goal weight. However, eating too few calories is incredibly dangerous on its own, and even more so when combined with strenuous physical activity. Consuming too few calories will lead to malnutrition, and with that comes weak and porous bones, decreased immunity, irregular heartbeat, increased risk of heart disease and cardiac arrest, hormonal changes, fatigue, slower metabolism, anemia, and cachexia which is characterized by wasting of muscle and fat tissue.

Healthy Eating

The USDA MyPlate is a model that illustrates how we should be eating at every meal. The plate shows all 5 major food groups, with half of your meal being fruits and vegetables. A balanced meal should consist of at least 3 of the 5 food groups. Each food group provides the body with essential nutrients. The USDA portion size recommendations are based off a 2,000 calorie diet. The number of calories a person should consume to maintain their weight varies from person to person based on age, weight, sex, and activity level. Fruits are low in fat sodium and calories. They do not have any cholesterol and are a great source of fiber, vitamin C and potassium. We should try to consume at least 2 cups of fruit a day. Fruit is also a natural source of sugar, and because of this it tends to be a little higher in calories than vegetables. Vegetables help reduce the chances of chronic diseases such as heart disease, cancer, stroke and diabetes. They are high in fiber Vitamin A, C and potassium and low in fat and calories. We should try to consume at least 2.5 cups of vegetables a day. Grains are any food made from wheat, rice, oats cornmeal or barley. They

are divided into two categories- whole grains and refined grains. A whole grain contains the entire grain kernel and should be at least half of your grain consumption in a day. Grains are a good source of fiber and help reduce heart disease. According to the USDA we should be limiting our grain consumption to 6 oz per day.

Protein can come from a variety of sources such as meat, poultry, seafood, beans, eggs, nuts and seeds. Selecting a variety of proteins will maximize their health benefits. Protein is a good source of vitamin B, E, iron, zinc and magnesium. It functions as the building blocks for enzymes and hormones that our bodies need to function. Iron is an essential component of hemoglobin. It binds to oxygen and delivers it throughout the body. Fatty sources of protein such as bacon and sausage should be limited because they are high in fat and cholesterol. Seafood is a good source of omega-3 fatty acids which help lower your risk of heart disease. Dairy is the last food group represented on the plate. It is any fluid milk products and any food made from milk such as cheese or yogurt. We should try to consume 3 cups of dairy a day. Low fat or fat free options are the healthiest choice. Dairy is a great source of calcium, which can lower blood pressure, risk of heart disease, reduces Body Mass Index (BMI) and strengthens bones and teeth. Aside from trying to get one item from each food group in every meal, it is important to remember to eat 3 meals a day. Skipping a meal to cut calories is not a healthy way to lose weight. Studies have shown that people who skip a meal are more likely to over-eat at their next meal and actually end up consuming more calories in a day than someone who ate 3 meals. Unhealthy eating can lead to a large variety of problems. It increases your risk of heart disease, high blood pressure, stroke, diabetes, and cancer.

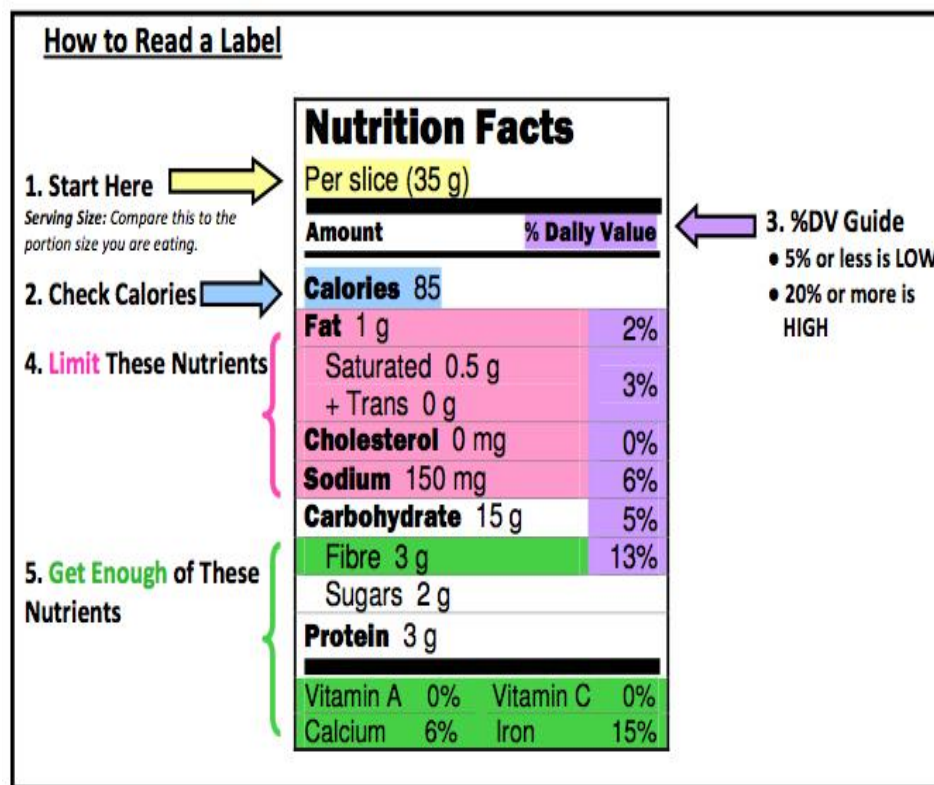
Go, Slow, Whoa is a simple way of classifying the foods we eat. **Go** foods are nutrient-dense; they're things we should be eating multiple times a day and have several health benefits because they are closest to their natural state, or whole foods. Some examples of go foods are fresh fruits and vegetables, fat free milk, and whole grains. **Slow** foods are often times a little harder to determine. These are foods that have health benefits, but may also be a little higher in fats or sugar like, peanut butter or vegetables and dip. We should be limiting slow foods to once or twice a day. **Whoa** foods are calorie-dense; they are high in fat, sugar, or sodium and have little to no nutritional value. Consuming whoa foods should be saved for special occasions.

Fat and Cholesterol

Fat is often thought of as a bad thing when talking about health and nutrition, but our body actually needs some fat to absorb certain vitamins and minerals. Our food contains 3 different types of fat, Trans fat, Saturated fat, and unsaturated fat. Trans fat is artificially created in a laboratory. These are the worst fats for us and often found in processed foods. Saturated fat is found in butter and whole fat dairy products. These two types of fat lead to high cholesterol and heart disease. Unsaturated fat is the best fat for us; it contains Omega 3 and 6 fatty acids. The primary source of unsaturated fat is seafood, nuts and vegetable oils. Unsaturated fat can help

reduce the body's bad cholesterol and raise good cholesterol. It can also help with inflammation, blood clotting and muscle contractions. Food is often times labeled "Fat Free", but this can be deceiving. Labels are allowed to put fat free on them if they contain .49 grams of fat or less. If you consume multiple servings of this you're actually consuming a couple of grams of fat without being aware of it. Cholesterol is a substance only found in animal products such as meat, milk and eggs. There are two types of cholesterol, High-density lipoprotein (HDL) and Low-density lipoprotein (LDL). HDL is considered "good" cholesterol because it helps remove LDL from the arteries. LDL is considered the "bad" cholesterol because hardens and block the arteries.

Nutrition Labels



The best way to make sure you are eating a healthy diet is by reading the nutrition labels. Every nutrition label tells you what a serving size of that food is. One of the problems is people think that a portion size and a serving size is the same thing. A portion size is the amount a person chooses to eat, while a serving size is the amount the nutritional label

is based off of. So if you were to eat a portion size of 8 thin mints and the box says a serving size is 4, you would have to double everything on the label to correctly understand the nutritional information of what you just ate. The next thing on a nutrition label is the amount of calories that food contains. A calorie is not good or bad it is just a unit of energy. Foods that are more calorie dense we should try to consume less of. To maintain a healthy weight we want the number of calories we consume to equal the number of calories we burn off in a day. Nutrition labels have a % daily value located on the right side. This number is based off a 2,000 calorie diet. The 5 and 20 rule is a good way to determine if something is high or low in certain nutrients. If something is 5% or below it is considered low. If something is 20% or above it is considered high. We want foods to be high in fiber, vitamins, calcium, and iron. We want foods to be low in fat, cholesterol and

sodium. All nutrition labels include an ingredients list. The list goes in order from largest quantity to smallest. Someone with food allergies should be extra mindful of this list because it is where all allergens are located. Companies try to trick people by listing ingredients multiple times, but with different names. Sugar is a great example of this; there are over 200 hundred different types of sugar listed on food labels. Some examples are corn syrup, honey, maple syrup, agave nectar and almost any word ending in *-ose*.

Screen time

A significant reason Americans are more overweight than ever before is because we are spending more and more time in front of a screen and less time doing physical activity. The average preschooler is spending over 32 hours in front of a screen every week. Screen time is anything that has you looking at a screen, so TV, movies, video games, computer time, even texting or playing on your phone. Everybody should be limiting screen time to no more than 2 hours a day. Too much screen time can lead to obesity, irregular sleep problems, impaired academic performance and violence. Aside from the lack of physical activity that comes from screen time it also exposes people to advertisements for unhealthy food. The average child is exposed to over 4000 ads for food every year. Of those ads 98% are for foods that are high in either fat, sugar or sodium. These ads are often misleading and boast that they are high in vitamins and minerals giving people a false sense of their nutritional quality.