A Su Salud To your health

What Do You Know About the Carbo? A Nutrition Quiz

With final exams just around the corner, here's a little exercise to help you to get into test-taking shape! $\frac{1}{1000 \text{ tot}}$



1. A carbohydrate (sometimes referred to as a carbo) is an essential nutrient in our diet. What is *not* considered a carbohydrate?

- a. sugars
- b. starches
- c. dietary fiber
- d. cholesterol

2. Besides carbohydrates, the other essential nutrients are all *except* which?

- a. proteins
- b. fats
- c. calories
- d. vitamins
- e. minerals
- f. water
- 3. Carbohydrates supply energy.
 - a. True
 - b. False

4. The two categories of carbohydrates are:

- a. simple and complex
- b. plain and simple
- c. dumb and dumber

5. Foods made with processed white flour (cookies, cakes, doughnuts, bread) are considered to be:

- a. simple carbohydrates
- b. complex carbohydrates

6. The following are foods high in carbohydrates except which?

- a. low carbohydrate cookies
- b. apple
- c. oatmeal
- d. pretzels
- e. all of the above



FLOUR.

7. If you were to follow the Atkins (low carbohydrate) diet, which food would not be allowed?

- a. low carbohydrate cookies
- b. low carbohydrate ice cream
- c. low carbohydrate beer
- d. all of the above
- e. none of the above

8. The magic behind a low carbohydrate diet:

- a. is it restricts your total caloric intake, so you are eating fewer calories than you burn
- b. is that carbohydrates leads to weight gain, so eating fewer carbos means weight loss.
- c. is that proteins have fewer calories than carbos, so it's better to eat more protein.
- 9. Low carbohydrate foods are low in calories.
 - a. True
 - b. False
- 10. Which has more calories?
 - a. proteins
 - b. fats
 - c. carbohydrates

Answers:

1. (d) Cholesterol is a waxy substance that is found in the blood and cells of our body. Our bodies produce more cholesterol than it needs when we eat foods that are high in saturated fats (butter, cheese, fatty meats). Too much cholesterol can lead to heart disease.

2. (c) Calories are basically the body's energy source. If the body were a car, calories would be the gas. Proteins, fats and carbohydrates all have calories and provide energy for the body. All food is a combination of proteins, fats and carbohy-



drates, and are categorized as one or the other based on where they majority of their calories come from. Vitamins, minerals and water do not provide energy (they don't have calories), but they are needed for every cell in the body to function properly. Different types and amounts

of vitamins, minerals and water are in all food, so it is important to eat a variety of foods.

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3. True. In fact carbohydrates are the body's main source of energy. The other two sources of energy are protein and fat. Proteins are necessary for the maintenance and repair of the body's muscles, ligaments, organs and all the other tissues. Fat is needed for various reasons including long-term energy storage, to protects vital organs, to transport certain vitamins and to help make food taste good. Both fat and protein provide energy (calories), but carbohydrates are the main source.

4. (a) The terms *simple* and *complex* refer to the molecular make up of the carbohydrate. Simple carbohydrates contain only one or two sugar molecules while complex are long chains of sugar molecules. Simple carbos are digested very quickly and give instant energy. Examples of simple carbos are sucrose (table sugar), fructose (sugar in fruits) and lactose (sugar in milk). Fruits are good sources of simple carbohydrates because they are loaded with vitamins, minerals and dietary fiber. Cookies are also simple carbos, but they aren't very nutritious (don't have much in the way of vitamins, minerals or fiber). Complex carbohydrates take more time to digest so they provide energy over a longer period of time. Vegetables and whole grains like wheat and oats are examples of complex carbos and have lots of vitamins, minerals and dietary fiber. But when whole grain wheat gets processed into white flour, most of the vitamins, minerals and fiber get processed out.

5. (a) Cookies, cakes and doughnuts are usually made from processed white flour, sugar and fat. They taste good but these types of foods are high in calories but low in nutrients (vitamins, minerals, etc.). Bread, unless it is made from a whole grain, also packs less of a nutritious punch.

6. (e) Even low-carbohydrate cookies gets most of its calories from carbohydrates. The least nutritious of these high carbohydrate foods are the low carb cookies and the pretzels.

7. (e) If you were truly following the Atkins diet, you would get your carbohydrates from fruits, vegetables and whole grains. Don't be fooled by thinking low-carb junk food is any "healthier" than regular junk food! Not only do the low carb cookies and ice creams cost more than regular cookies and ice creams, but some of them actually have more total calories than the regular kind!

8. (a) Any diet that restricts the total number of calories you eat will result in weight loss. Weight control—whether you are interested in losing, gaining or maintaining—all comes down to balancing the calories you eat versus the calories (energy) you expend. Exercise is a great way to increase the amount of energy you expend.

9. This is sort of a trick question. There are many foods

(proteins and fats, in particular) that are naturally low in carbohydrates but high in calories. For example, a 3.5-ounce piece of cheddar cheese (categorized as a fat) has 403 calories but is a low carbohydrate food. Remember that low carbohydrate



doesn't necessarily mean low calorie. For example, an Atkins®-Friendly Chicken Bacon Ranch Wrap from Subway has the same number of calories (440) as Subway's Chipotle Southwest Cheese Steak Hot Sandwich and slightly *more* calories as McDonald's Quarter Pounder® (430)!

10. (b) As I mentioned earlier, calories are the body's energy source and we get calories from proteins, carbohydrates and fats. But fats are actually more than twice as caloric as either proteins or carbos. Proteins and carbos both have four calories per gram and fats have 9 calories per gram. So how can you figure out how many calories in a particular food comes from proteins, carbos and fats? Let's look again at the cheddar cheese, which has a total of 403 calories. The label states that there are 25 grams of protein, 33 grams of fat, and 1 gram of carbohydrate. By multiplying 25 grams of protein by 4



calories per gram, I get 100 calories. This means that 100 of the 403 calories are from protein. By multiplying 33 grams of fat by 9 calories per gram, I get 297 calories. This means that 297 of the 403 calories are from protein. Last, but not least, multiplying the 1

gram of carbo by 4 calories per gram is 4 calories. Only 4 of the total 403 calories come from carbohydrates. If you really want to get fancy, you can figure out what percentage of the calories is a protein, carbo or fat by dividing the fat calories (297), protein calories (100), and carbo calories (4) each by the total calories (403). $297 \div 403 = 74\%$; $100 \div 403 = 25\%$; $4 \div 403 =$ less than 1%.



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