

Not Reading the Nutrition Label May Cost You Dear

Sample label for
Macaroni & Cheese

Nutrition Facts	
Serving Size 1 cup (228g)	
Servings Per Container 2	
Amount Per Serving	
Calories 250	Calories from Fat 110
% Daily Value*	
Total Fat 12g	18%
Saturated Fat 3g	15%
Cholesterol 30mg	10%
Sodium 470mg	20%
Total Carbohydrate 31g	10%
Dietary Fiber 0g	0%
Sugars 5g	
Protein 5g	
Vitamin A	4%
Vitamin C	2%
Calcium	20%
Iron	4%

* Percent Daily Values are based on a diet of other people's misdeeds.
Your Daily Values may be higher or lower depending on your calorie needs:

	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Learning how to read food labels is very important because when you eat an apple, a piece of fish, or a cereal that has only one ingredient, you pretty much know what you are eating (although nowadays, this is also debatable).

But how about when you buy processed foods that comes in a package? Do you know what you are gulping down? Because ignoring it can be hazard to your health, let's dissect a food label so you can protect yourself from greedy food manufacturers, interested only in making money at all costs.

The Nutrition Facts

Serving size

The first place to start when you look at the Nutrition Facts label is the serving size

because all the information you find on the food label is based on the size of the serving.

In this nutrition label, the serving size is 1 cup. You need to keep in mind this fact because eating more or less servings influences the number of calories and the rest of nutrients you eat from this package.

Serving sizes are provided in familiar units, such as cups or pieces, followed by the metric amount, such as the number of grams.

Every container is different so remember that a small container does not always mean one serving.

Servings per Container

This shows the number of servings in the container. The serving size on this label is 1/2 cup and the total servings per container 2. Be aware that if you eat the whole thing, the calories and other nutrients will be doubled.

Calories

In the sample label, one serving of macaroni and cheese equals 250 calories. If you eat the whole package, 2 servings, you would end up eating 500 calories. Eating the 2 servings also doubles the rest of the nutrients in the product.

Total Fat 12g	18%
Saturated Fat 3g	15%
<i>Trans Fat</i> 1.5g	
Cholesterol 30mg	10%
Sodium 470mg	20%

Calories from fat

This number indicates the total amount of calories coming from fat in one serving. In the example label there are 250 calories in one serving of this macaroni and cheese and almost half of them, 110 calories, come from fat.

Knowing how many calories come from fat is important because health authorities recommend a limit of 65 grams of fat on a 2,000 calorie diet per day. One gram of fat contains 9 calories so, 65 grams multiplied by 9 equals 585 calories. This should be the maximum amount of calories from fat per day you should eat.

When buying foods in a container, you can follow this general guide to calories:

- 40 Calories is low
- 100 Calories is moderate
- 400 Calories or more is high

Next we are going to take a look at the fats and sodium. This is an important piece of information because although food manufacturers know the damaging effects of some of the ingredients they use in their products, they keep doing it. So, here is one more proof that unless we take control of our health, nobody is going to do it, definitely, not food manufacturers. And you can take this to the bank.

Total Fat 12g	18%
Saturated Fat 3g	15%
<i>Trans Fat</i> 1.5g	
Cholesterol 30mg	10%
Sodium 470mg	20%

% Daily Value

It shows how the food fits into a 2,000 calorie diet for the whole day. A guideline to remember when checking the % Daily Value is that 5% or less is low; 20% daily value or more is high.

Total Fat

This total includes the healthy unsaturated fats as well as the harmful saturated and trans fats. Watch your total fat intake. for a 2,000 calorie diet, keep total fat intake to less than 65 grams each day.

Let's say the total fat listed in the % Daily Value is 5%. If you are following a 2,000 calorie diet per day, you are getting 5% of the maximum amount of fat recommended per day.

In other words, in a 2,000 calorie diet, the maximum total amount of fat recommended is 65 grams; one serving of this product provides 3 grams, as long as you only eat one serving.

Saturated Fat

You can tell if a fat is saturated because it is solid at room temperature. This type of fat gets stuck in the arteries and around the abdominal organs, so you want to limit its consumption. Saturated fat also causes the liver to overproduce cholesterol, a risk for heart disease.

Limit your intake of saturated fat. For a 2,000 calorie diet keep saturated fat intake to less than 20 grams each day or 10% of whatever amount of calories your diet is. If you are on a 2,500 calorie diet, then the amount of saturated fat should not be more than 25 grams per day.



Trans Fats

Trans fats or hydrogenated oils are the worst of all fats. They are produced artificially by inserting molecules of hydrogen in vegetable oils, a process called hydrogenation. Through this process, the original oil, which is liquid at room temperature, changes its original form and becomes a saturated fat.

Because the unnatural shapes of trans fats cause cells to become malformed and to malfunction, this type of fat has been blamed for the epidemic of heart disease we are experiencing in the last decades.

Avoid trans fats as the black plague. Check the list of ingredients and do not buy foods that contain hydrogenated or partially hydrogenated vegetable oils. These are the oils that contain trans fats.

Monounsaturated fat

Monounsaturated fats are healthy fats and do not get stuck inside your arteries. Canola and olive oil are mostly monounsaturated; make them the first source of fat in your diet.

Polyunsaturated fat

These fats are healthy but not as much as monounsaturated. An excess of polyunsaturated fats in your diet can cause inflammation. You can include them in your diet but with moderation. When you buy a packaged food make sure the amount of monounsaturated fats are higher than the unsaturated ones.

Cholesterol

Health authorities recommend not to exceed 300 milligrams (mg) of cholesterol per day, whether you follow a 2,000, a 1,500, or a 2,500 calorie diet. Remember that the major ingredient that causes high levels of cholesterol in the blood is saturated fat. Keep your intake of dietary cholesterol to less than 300 mg each day.

Sodium

Sodium is part of salt. Salt (sodium chloride) contains approximately 40% sodium and 60% chloride. It is a mineral essential for maintaining the proper balance of fluids in our bodies, so we need some salt in our diet. The problem is that people tend to eat too much of it. If you are sensitive to salt, going above what your body needs for proper functioning can cause high blood pressure.



Sodium is used primarily to add flavor and occasionally as a preservative in food. Read the ingredients in the food label carefully and look for the following names to identify which products contain sodium: Salt, sodium, brine, sodium alginate, sodium sulfite, sodium caseinate, di-sodium phosphate, monosodium glutamate (MSG), sodium chloride, sodium saccharin, sodium propionate, sodium hydroxide, sodium benzoate, NaCl (chemical initials for salt).

Keep sodium intake to less than 2,000 milligrams each day.

Total Carbohydrate

It seems to be a lot of confusion about this section of the food label and especially for diabetics it is extremely important to understand what it means, as this part includes good and bad carbohydrates.

Are there good and bad carbohydrates?

Many times I hear my colleagues telling patients that there is not such a thing as good or bad foods. Well, I disagree: there are bad and good foods and there are bad and good carbohydrates. It is important for the general population to be able to tell the difference between the two of them, but especially for diabetics, it is crucial.

Total Carbohydrate

Carbohydrates, also known as sugars, are the main source of energy for our bodies. They are converted into glucose (sugar in the blood) in our system to provide us the energy we need to be alive and to do our tasks.

The number listed for "Total Carbohydrate" includes the total amount of carbohydrates, sugars and fiber per serving in the product. Carbohydrates should amount to 55 - 60 percent of your daily intake. In a 2,000 calorie diet, do the following math:

1. Multiply 2,000 by 60 = 1,200 calories.
2. One carbohydrate contains 4 calories. Divide 1,200 calories by 4 grams = 300 grams.
3. The sample label shows 13 grams total carbohydrates but remember this is per serving. If you eat more than $\frac{1}{2}$ a cup of the product you will get more carbohydrate.

You can apply the same formula to any diet you follow. Just replace the 2,000 number by the amount of calories you are ingesting every day.

Dietary fiber

This number represents the amount of fiber in one serving. The recommended amount of fiber per day is between 25 and 30 grams. In this sample label the dietary fiber is 3 grams. When buying cereal in a box look for one that contains at least 5 grams of fiber.

Sugars

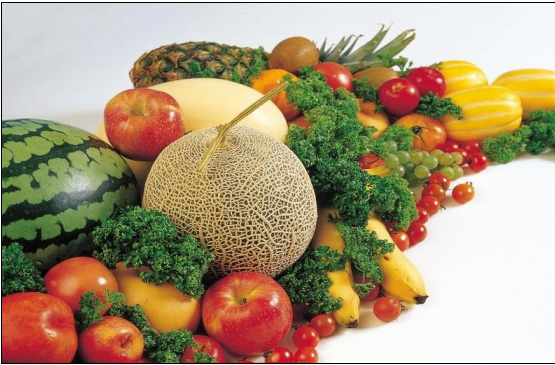
The number for sugars includes both the added and natural sugars found in the food. An example of food where you have natural sugar is milk. If you look at a carton of milk, whether whole or non-fat, it will show about 11 or 12 grams of sugar. This is the lactose that is part of the milk. Diabetics should not indulge in milk. One cup a day will be enough.

However, when you buy a cereal, preserves, or any other product that is sweet, most of that sweetness will come from added sugars. Always, always, look at the sugars in processed foods and choose items sugar free or maximum, 2 grams of sugar.

How sugar is disguised in nutrition labels

Sugar is disguised under many different names. Read the food label and look for the following:

- corn sweetener
 - corn syrup
 - corn syrup solids
 - high-fructose corn syrup
 - Fructose, glucose, lactose, sucrose, maltose (malt)
 - Honey
 - Maple syrup, syrup, rice syrup,
 - Cane juice crystals, cane sugar, inverted sugar
 - Caramel
 - Dextran
 - Fruit juice
 - Mannitol, molasses
- The amount of each one may be small but when you put all of them together it can be a lot of sugar!



Protein

The total protein is shown in grams. In this particular case is 3 grams per serving. Health authorities recommend that protein does not exceed 15% of the total diet. To know how these three grams fit into your diet, do the following calculations:

1. If you follow a 2,000 calorie-diet, multiply 15 by 2,000 = 300 calories.
2. One gram of protein has 4 calories. Divide 300 calories by 4 = 75 grams of protein (about 3 ounces). This is your upper limit of protein for the day.

A Task for You To Do

If you are at home, please stop reading and check any package of food you may have in your kitchen cabinets. Look for the Total Carbohydrate section. Is this product high in fiber? Is it high in sugar? Can you identify the sugars listed on the package? If you are at work, don't forget to do this when you get home.

Vitamins and Minerals

Each food label shows the % daily value of vitamins A and C and the minerals calcium and iron per serving. In other words, whatever percentage is listed, that's what you get when you eat one serving of the product.

Of course, if you eat more than one serving, then the total amount of the vitamins and minerals will go up. They are required to be listed by law in the food label but it doesn't mean they are the only ones in the product.

These vitamins and minerals are very important for good health and you need to know what amount, if any, you are getting in our diet. As you can see in the list below, a deficiency can cause many troubles in our body:

Vitamin A

- * Prevents many eye disorders, including night blindness
- * Promotes bone growth, teeth development and reproduction
- * Helps form and maintain healthy skin, hair, and mucous membranes
- * Builds body's resistance to respiratory infections

Vitamin C

- * Promotes healthy gums, teeth
- * Aids with iron absorption
- * Helps heal wounds and broken bones
- * Prevents and treats scurvy
- * Treats anemia, especially iron-deficiency anemia
- * Helps form collagen in connective tissue
- * Contributes to hemoglobin and red-blood-cell production in bone marrow

Calcium

- * Helps prevent osteoporosis in older people
- * Prevents muscle cramps in some people
- * Promotes normal growth and development
- * Builds bones and teeth
- * Buffers acid in stomach and acts as antacid
- * Helps regulate heart beats, blood clotting, muscle contraction

Iron

- * Prevents and treats iron deficiency anemia
- * Stimulates bone marrow production of hemoglobin, the red-blood-cell pigment that carries oxygen to body cells
- * Forms part of several enzymes and proteins in the body

Ingredients

You can find the list of ingredients below the Nutrition Facts in very small print. The printing in some of the labels is so small that every time I try to read one I get the impression some manufacturers don't want me to know what is in there.

Anyhow, if the print is too small for you, get out your reading glasses. If this doesn't help either, carry in your pocket or hand bag a small magnifying glass, but for Heaven's sake, read it. Use the list ingredients to look for:

Partially hydrogenated vegetable oils and hydrogenated vegetable oils. As I mentioned before, keep your intake of saturated fat low, 3 grams at the most, and your intake of trans fats to 0.

Sodium

Limit sodium in your diet. Check the list to identify the many names sodium can be disguised under. Buy items that have at the most 140 milligrams of sodium. This amount is considered a low sodium product. 35 mg of sodium is considered very low. Aim for a maximum of 1,500 milligrams of sodium per day in your diet.

Whole grains

When buying bread, cereal or any grains, make sure the first ingredient has the word "Whole". Ingredients are listed in order of quantity. This means the first ingredient is the most abundant in the product, the second a little less, and so on. If the first item is not "whole wheat, whole oats, etc", it means that refined grains are the main ingredient.

Added sugars

Everybody should limit foods with added sugars, but especially diabetics. Check the list of added sugars to identify them. Pay particular attention to high fructose corn syrup. This is the worst of sugars as you will see in my next articles.



Preservatives

A rule of law I apply when buying packaged foods is to check the length of the ingredient list. If it is too long I don't buy it, period, because 99 out of 100 times it includes items I can't read, I can't pronounce, and I have not a clue what they are.

A short list may also contain ingredients you may not want in your system, so if you don't understand what they are, leave the food in question alone. Will look at some of those "ingredients" in the next few days.

To your health!

Emilia Klapp, RD, BS

Your Diabetes Coach

www.TheDiabetesClub.com

www.MediterraneanDietForTheHeart.com