

Nutrient Notes

All notes are taken from the following resources:

- Pictures are from Microsoft Clipart.
- <http://www.umass.edu/nibble/director.html> (View this site for more information and review quizzes.)
- [Young Living](#) – Glencoe McGraw Hill

B- Vitamins

There are many different B vitamins, including thiamin, riboflavin, niacin which work together to help the body use energy you get from food. Some B vitamins also help the body use protein from the diet to build new cells and tissues.

* Thiamine:

Promotes growth, appetite and digestion.
Helps keep nervous system healthy.

* Riboflavin:

Helps keep eyes and skin healthy.

* Niacin

Helps in digestion process.

Helps keep nervous system and skin healthy.

Sources: <http://www.umass.edu/nibble/director.html>

Where can you find it? (Grain Group and Meat Group)



Healthy Nervous System

Calcium

Calcium is a mineral that is important for building strong bones and teeth. Almost all of the calcium we use in our bodies is for building strong bones. A very small amount is needed to help our heart, nerves, and muscles work.

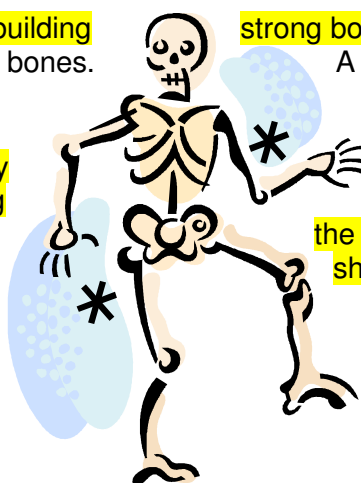
If we do not get enough calcium every day our bones. After many years of not getting very weak and brittle. Osteoporosis is to break very easily and the jaw bone to curvature of the spine.

Older women are especially at risk for calcium from the food we eat all through and teeth stay healthy.

One of the best sources of calcium is milk, and foods made from milk, like yogurt and pudding. Leafy green vegetables, tofu, and canned fish with bones are also good sources.

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Where can you find it? (Milk Group)



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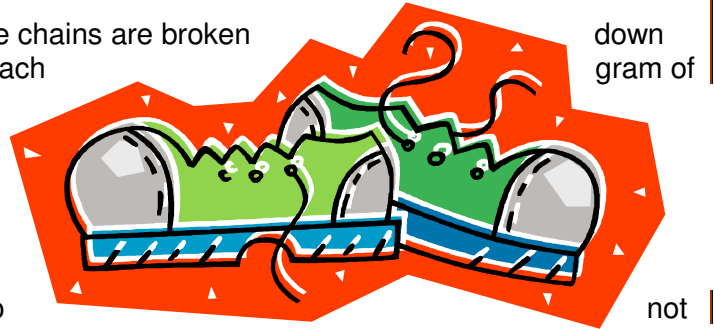
from the foods we eat, it is taken out of enough calcium, our bones become the name of this disease. It can cause bones shrink so teeth are lost. It can lead to

osteoporosis. By getting enough our life, we can make sure our bones

Carbohydrates

Carbohydrates are the body's main source of energy. There are three different kinds of carbohydrates. They include starch, sugar, and fiber.

* Starch is made from chains of small sugars. When these chains are broken down during digestion, we get energy. We get 4 calories from each starch (or sugar). Plant foods like cereals, bread, rice, pasta, potatoes, plantains and corn are good sources of starch. They give us the energy we need to do daily activities. These starchy foods give us important vitamins and minerals, too.



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* We do not get calories from fiber because our bodies do not break fiber down during digestion.

* Sugars may provide some short quick bursts of energy and are referred to as simple carbohydrates. Natural sugars are found in fruits and milk. These are a good source of sugar, because they have many other nutrients. Foods such as candy, cake, or pop also have sugar, but no other nutrients. We often call these empty calorie foods which only add calories and may increase weight.

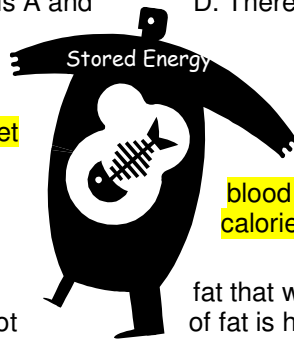
Sources: <http://www.umass.edu/nibble/director.html>
Young Living – Glencoe McGraw Hill

Where can we find it? **Grain Group (Complex Carbohydrates) and Fats and Oils (Simple Carbohydrates)**

Fat

Fat is a nutrient that is an important source of calories, which is used for stored energy. One gram of fat supplies 9 calories - more than twice the amount we get from carbohydrates or protein. Fat also is needed to carry and store essential fat-soluble vitamins, like vitamins A and D. There are two basic types of fat. They are grouped by their chemical structure. Each type of fat is used differently in our bodies and has a different effect on our health.

When we eat a lot of high fat foods, we get exercise, we may gain weight. Eating too many calories and lack of much fat may also increase the risk of getting diseases like cancer, heart disease, high blood pressure or stroke. Health experts recommend that we should get no more than 30% of our calories from fat to reduce our risk of getting these diseases.



Fat is found in many foods. Some of the fat that we eat comes from the fat we add in cooking or spread on breads, vegetables or other foods. A lot of fat is hidden in foods that we eat as snacks, pastries or prepared meals.

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We can reduce the amount of fat we eat by cutting down on the fat that we add in cooking or spread on foods. We can eat skim milk and low fat cheeses instead of whole milk and cheese. We can also use less fat, oil, butter, and margarine. Another way to cut down on fat is to drain and trim meats and take the skin off poultry. We can also read labels and compare the amount of fat in foods to make lower fat choices.

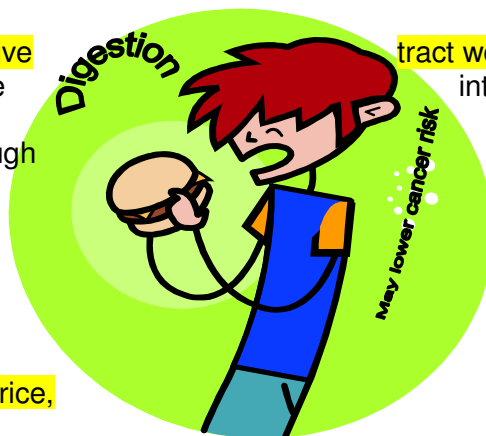
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Where can we find it? **(Fats and Oils, Meat, and Milk Groups)**

Fiber

Fiber is one kind of carbohydrate. It is sometimes called roughage or bulk. Fiber is the part of plant foods that our bodies do not break down during digestion. Because fiber isn't digested, it doesn't give us calories. Foods that contain a lot of fiber may also contain other types of carbohydrates like starch or sugar. While we do not get calories from the fiber in these foods, we do get calories from the sugars and starches found in them.

Fiber is important for keeping the digestive tract working smoothly. Since we do not digest it, the fiber in food passes into the undigested fiber creates "bulk" so the push waste out of the body. Eating enough constipation. It may also reduce the risk of getting colon cancer. Some fibers can help lower blood



tract working smoothly. Since we do not intestine and absorbs water. The muscles in the intestine can fiber helps prevent of getting colon cancer. cholesterol.

Dried peas and beans like lentils, black-kidney beans are the best sources of in fresh fruits and vegetables are good cereals and breads like oatmeal, brown rice, are all naturally high in fiber.

eyed peas, chickpeas and fiber. The skins and seeds sources, too. Whole-grain grits and whole-wheat bread

Often the fiber in plant foods (like skins, bran or seeds) is removed when the food is cooked by us or processed by the manufacturer. We get more fiber when we eat whole fruits and vegetables with the peels and seeds than we do when we eat foods like applesauce or instant mashed potatoes. When we shop we can look on food labels to find products that say "100%" whole grain. We can also compare the Nutrition Facts to find foods with more fiber.

Sources: <http://www.umass.edu/nibble/director.html>

Where can we find it? **(Grain, Vegetable, and Fruit Groups)**

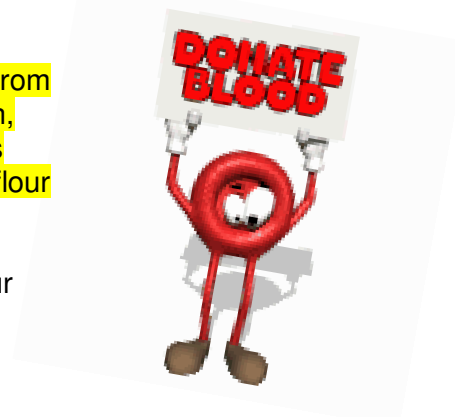
Iron

Iron is a mineral that is an important part of our red blood cells. It is needed to carry oxygen from our lungs to our cells, muscles and organs. If we do not get enough iron, not enough oxygen will be delivered to our muscles and organs. Without enough oxygen, our muscles and organs cannot work properly and we will feel tired and weak.

We get a little bit of iron from a lot of different foods. The iron that we get from meat, poultry and fish is used easily by the body. Eggs, beef, pork, chicken, turkey, clams and oysters are all good sources of iron. Plant foods such as soybeans, lentils, kidney beans, spinach and leafy green vegetables, and flour contain iron, but it may not be absorbed as well as the iron found in meat. Iron from these foods is better absorbed when it is eaten with foods rich in vitamin C. It is best to get the iron we need from many different foods in our meals and snacks.

Sources: <http://www.umass.edu/nibble/director.html>

Where can we find it? **(Meat and Grain Groups)**



Protein

Most all the parts of our bodies are made from protein: hair, skin, blood, organs, and muscles. It is needed for cells to grow. It also repairs or replaces and tissues. Protein in food gives us calories - 4 gram. If we do not get enough calories from fat carbohydrates we may use protein for energy. Americans, even athletes, get the protein they using special foods, powders or shakes.



healthy cells calories in one and Most need without

Protein is made of chains of amino acids. Amino building blocks of protein. Our bodies can make acids. There are a few amino acids that we cannot make; so, we must get them from the foods we eat. They are known as "essential amino acids." Most foods that come from animals, such as fish, chicken, beef, pork, eggs, milk, cheese, and yogurt contain all of the essential amino acids. They are known as "complete" proteins. Plant foods, such as rice, dried beans, peas, lentils, nuts, seeds, wheat, oats, corn, may be low or lacking in one or more of the amino acids. They are considered to be incomplete proteins. Incomplete proteins can be mixed together to make a complete protein.

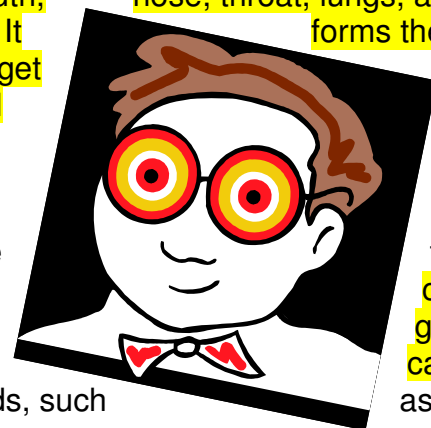
acids are the most amino

Sources: <http://www.umass.edu/nibble/director.html>

Where can we find it? (**Meat and Milk Groups**)

Vitamin A

Vitamin A keeps your skin smooth and the linings of your mouth, intestines healthy. Vitamin A is also needed for healthy eyes. It the eye that helps you to see in dim light. People who do not get vitamin A may have a hard time seeing at night. This is called blindness. Vita min A may also help prevent certain types of



nose, throat, lungs, and forms the part of enough night cancer.

You can get vitamin A from both plant foods and animal is found in the fats and oils of these foods and is stored in the your body. Dark orange and green vegetables and fruits like kale, turnip greens and other dark greens, broccoli, red and peppers, pumpkin, sweet potatoes, winter squash, and peaches are all good sources of this vitamin. Animal foods, such yolks, milk, cheese and liver are good sources, too.

foods. It fat cells in carrots, green cantaloupe as egg

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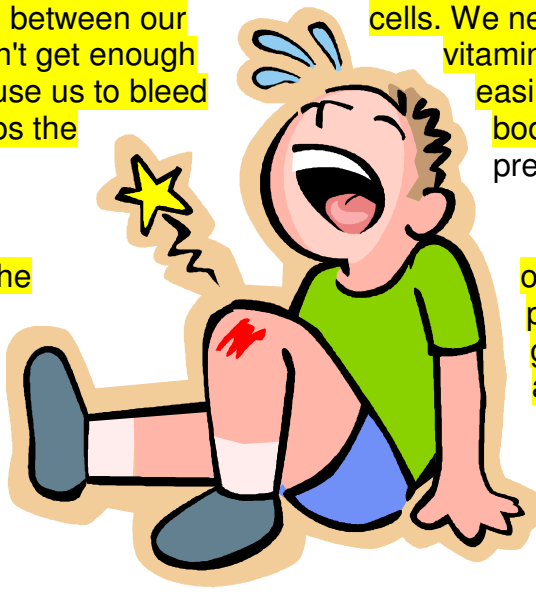
Where can we find it? (**Vegetable and Fruit Groups**)

Vitamin C

Vitamin C helps form a cement-like material between our cells. We need Vitamin C to heal cuts, wounds, and burns. When we don't get enough vitamin C the "cement" between cells loses its strength and can cause us to bleed easily. It may show up as bleeding gums or bruises. Vitamin C helps the body fight infection. Getting enough Vitamin C may also help in preventing certain types of cancer.

Vitamin C is found in many fresh fruits like the limes, grapefruit, cantaloupes, mangoes, and juices. Vegetables such as bean sprouts, plantains, broccoli and greens like kale are also good sources of vitamin C.

Vitamin C is not stored in the body. When we eat too much of the vitamin we get rid of it in our urine. Therefore, we need some vitamin C every day.



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Where can we find it? (Fruit and Vegetable Groups)