Nutrient Notes

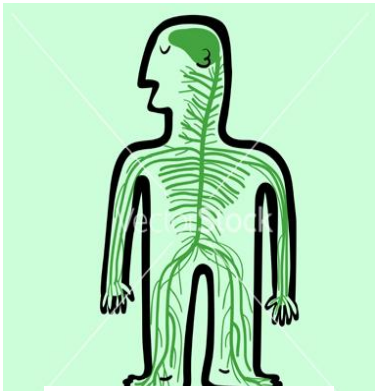
B- Vitamins

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.



Healthy Nervous System

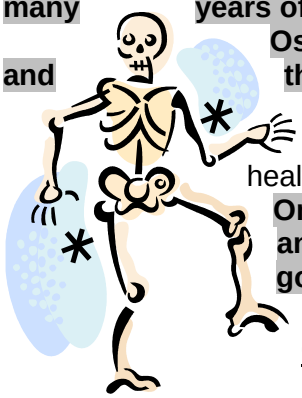
☺ Where can you find it? **Grain Group and Protein Group**

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

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 from the foods we eat, it is taken out of our bones. After many years of not getting enough calcium, our bones become very weak and brittle. Osteoporosis is the name of this disease. It can cause bones to break very easily and the jaw bone to shrink so teeth are lost. It can lead to curvature of the spine.



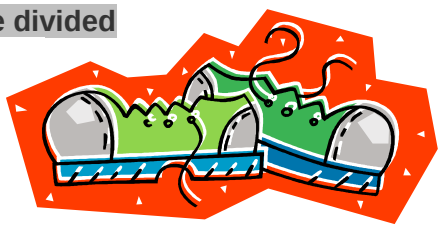
Older women are especially at risk for osteoporosis. By getting enough calcium from the food we eat all through our life, we can make sure our bones and teeth stay healthy.

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.

☺Where can you find it? Milk **Group**

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

Carbohydrates



Carbohydrates are the body's main source of energy. Carbohydrates are divided into two types, simple and complex. The classification is based on the chemical structure and reflects how quickly sugar is digested and absorbed. **Simple carbohydrates are also called simple sugars and are chemically made of one or two sugars**. A simple sugar can be just what the name implies, the sugar in your sugar bowl. **Things like candy, syrups, and soda pop are also straightforward examples of simple carbohydrates. They are absorbed quickly -- just think how fast sugar-based candy melts in your mouth. * These simple sugars may provide some short quick bursts of energy.** 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.

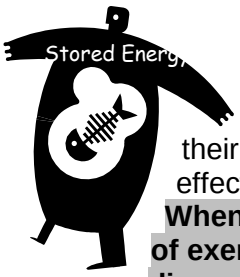
Natural sugars are found in fruits and milk. These are a good source of sugar, because they have many other nutrients.

Complex carbohydrates are also known as starches and are made of three or more linked sugars. Grains such as bread, pasta, oatmeal and rice are complex carbohydrates, as well as some vegetables like broccoli, corn legumes such as kidney beans and chick peas. **They take the longest to digest and provide the body with long lasting energy.**

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

Sources: http://www.umass.edu/nibble/director.html & http://diabetes.about.com/od/carbohydratefaq/f/typesofcarbs.htm
Young Living – Glencoe McGraw Hill

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 a lot of calories. With too many calories and lack of exercise, we may gain weight. Eating too 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.

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.

☺ Where can we find it? **Fats and Oils, Protein and Milk Groups**

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

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 intestine and absorbs water. The undigested fiber creates "bulk" so the muscles in the intestine can push waste out of the body. Eating enough fiber helps prevent constipation. **It may also reduce the risk of getting colon cancer.** Some fibers can help lower blood cholesterol.

Dried peas and beans like lentils, black-eyed peas, chickpeas and kidney beans are the best sources of fiber. The skins and seeds in fresh fruits and vegetables are good sources, too. Whole-grain cereals and breads like oatmeal, brown rice, grits and whole-wheat bread are all naturally high in fiber.

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.

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

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

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.

☺ Where can we find it? **Protein and Grain Groups**

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

Protein

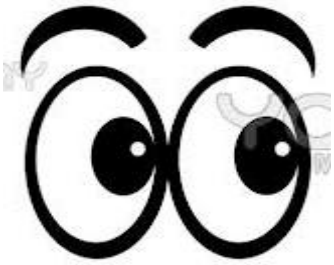
Most all the parts of our bodies are made from protein: hair, skin, blood, organs, and muscles. It is needed for cells to grow. It also repairs or replaces healthy cells and tissues. Protein in food gives us calories - 4 calories in one gram. If we do not get enough calories from fat and carbohydrates we may use protein for energy. Most Americans, even athletes, get the protein they need without using special foods, powders or shakes.

Protein is made of chains of amino acids. Amino acids are the building blocks of protein. Our bodies can make most amino acids. There are a few amino acids that we cannot make; s o, 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.

☺ Where can we find it? **Protein and Milk Groups**

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

Vitamin A



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

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

☺ Where can we find it? **Vegetable and Fruit Groups**

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

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 Vita min C may also help in preventing certain types of cancer.

Vitamin C is found in many fresh fruits like the oranges, lemons, limes, grapefruit, cantaloupes, mangoes, papayas, and their juices. Vegetables such as bean sprouts, green peppers, plantains, broccoli and greens like kale and poke greens 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.**

☺ Where can we find it? **Fruit and Vegetable Groups**

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