Written by Brandi D. Phillips Friday, 10 July 2009 16:01

Being a person who is fascinated with health, I have always been curious as to why we need water, proteins, carbohydrates and fats; what are their benefits and how much do we need per day? Most if not all of us have heard of these terms at some point or another, but do not fully understand them? This article will give you more information that will hopefully answer the questions you have regarding water, carbohydrates, proteins, and fats.

According to James F. Balch, M.D. and Phyllis A. Balch, C.N.C, the authors of Prescription and Nutritional Healing- A Practical A-Z Reference to Drug-Free Remedies Using Vitamins, Mineral, Herbs and Food Supplements, the body is made up of two-thirds water which is an essential nutrient involved in every function of the body. Water transports nutrients and waste in and out of the body, as well as aiding in digestion, absorption, and circulation. Drinking the recommended 8-10 glasses of water per day also helps to maintain and adjust your body's correct temperature and give you energy.

Carbohydrates (carbs) are another basic nutrient that supplies energy to the body. Most carbs are found in such foods as vegetables, fruits, beans, milk products and peas. The Fitness Trainers Manual, provided by the National Exercise Trainers Association (NETA), recommends 55-60% of your diet consist of carbohydrates.

As stated by Joyce L. Vedral, Ph.D., in her book Top Shape, if you deprive your body of carbohydrates, not only do you feel weak, you literally cannot think straight. According to most nutritional labels in the United States, carbohydrates provide about four calories per gram.

There are two forms of carbohydrates. The first type of carbohydrate is simple carbohydrates, (simple sugars), which include fructose (fruit sugar), sucrose (table sugar), and lactose (milk sugar) as well as many other types of sugars. Balch and Balch state that fruits are one of the richest natural sources of simple carbohydrates.

The second group of carbohydrates is complex carbohydrates, which are sugar molecules that are strung together to make more complex carbohydrate chains. Fiber and starches such as beans, peas, vegetables, and whole grains are included in this group. According to the authors of Prescription for Nutritional Healing, Carbs are the main source of blood glucose (sugar) and is responsible for providing fuel to the body and is the only source or energy for the brain and red blood cells.

Complex carbohydrates provide gradually released energy, while simple, carbohydrates provide immediate energy.

Protein is another essential nutrient, providing 4 calories per gram, that is needed daily for optimum energy and health. Proteins are the basic building blocks for growth and development, giving our bodies energy, as well as creating hormones, antibodies, enzymes and body tissues. Protein also helps maintain the proper acid-alkali in the body.

Proteins come in two groups, complete proteins and incomplete proteins. Complete proteins are those that provide all of the essential amino acids (the elements that make up proteins). Complete proteins are particularly found in meat, fish, poultry, cheese, eggs and milk.

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Incomplete proteins, which are the second group, which contains only some of the essential amino acids, consist of foods such as grains, legumes, and leafy green vegetables.

Fats are the last essential nutrient to be discussed in this article. Fat is as a greasy water-insoluble solid or semisolid chemical compound that is among the chief nutritional components of food. 1 gram of food substance contains 9 fat calories.

For humans, until about two years of age, fat is necessary for normal brain development in the body. After two years of age, fat is only needed in small amounts, a number less than what is consumed in the average American diet. For the course of our lifetimes, fat is needed to provide energy and support growth.

Fatty acids make up the building blocks of fats. There are three groups of fatty acids, saturated, polyunsaturated and monounsaturated.

Saturated fatty acids are found in animal products such as cream, cheese, whole milk, beef, veal lamb, pork, coconut oil, palm kernel oil, and vegetable shortening. This type of fatty acid can cause such health conditions as high cholesterol. It is recommended by some health professionals that your daily intake should be no more than 10% saturated fatty acids.

Polyunsaturated fatty acids are found in corn, soybean, safflower and sunflower oils in large amounts. In contrast to saturated fatty acids polyunsaturated fatty acids, help lower cholesterol, as cited in "Prescription for Nutritional Healing". Consequently, this type of fatty acid can also lower good cholesterol levels -also called high-density lipoproteins (HDLs)-, in the body.

The last group of fatty acids is called monounsaturated, which are found in vegetables as well as olive, peanut, and canola oils. These fatty acids reduce the number of low-density lipoproteins (LDLs), bad proteins, without affecting the body's HDLs. The National Cholesterol Education Program recommends that individuals intake of monounsaturated fats be limited to 10-15 percent of total intake of calories.

Getting the proper amount of nutrition in key to body development and function. It is important to establish healthy eating patterns to pass on to future generations. Water, Carbohydrates, proteins and fats are the four basic nutrients that are needed for health.

With this information, you can possibly begin to adjust your diet to live a life of optimum health.

If you are considering changing your diet, please do the appropriate research as well as consult a trusted health or nutrition professional that can help you accomplish your goals.

Brandi Patterson-Phillips works as a Life Skills Coach, Personal Trainer and Dance Professional. Contact her at bodybybrandiva@gmail.com.