

# NUTRITION & HEALTH

Good nutrition is the foundation of good health. Our body was *designed* to heal itself with proper **nutrition** and **care**; and our body was also *designed* to be compatible with the nutrients in the **vegetation** that we eat. In **fruits** and **vegetables** there are thousands of nutrients as water, carbohydrates, proteins, enzymes, fats, micronutrients (vitamins & minerals), antioxidants, phytochemicals, etc., which our bodies need to stay healthy and function properly. The following shows a brief explanation of why these nutrients are important to our body:

**Water** is an essential nutrient that is involved in every function of the body. It helps transport nutrients and waste products in and out of cells. It is necessary for all digestive, absorption, circulatory, and excretory functions, as well as for the utilization of water-soluble vitamins.

**Carbohydrates** supply the body with the energy it needs to function. They are found almost exclusively in plant foods, such as **fruit**, **vegetables**, peas and beans. **Fruits** are one of the richest natural sources of simple carbohydrates; while **vegetables**, whole grains, peas and beans are foods rich in complex carbohydrates which include fiber and starches.

**Protein** is essential for growth and development. It provides the body with energy, and is needed for the manufacture of hormones, antibodies, enzymes, and tissue. When we eat protein, our body breaks it down into amino acids. Amino acids which our body can synthesize are called *nonessential*, but amino acids which our body can't produce are called *essential* and must come from what we eat. *Incomplete proteins*, which contain some of the essential amino acids, are found in foods as grains, legumes, and leafy green **vegetables**. *Complete proteins*, which contain good amounts of all the essential amino acids, are found in meat, poultry, eggs, and milk. But by eating some foods together, as brown rice with beans, nuts, seeds, or wheat, complete proteins can be produced.

**Enzymes** are energized protein molecules that play a necessary role in virtually all of the biochemical activities that go on in the body. They are essential for digesting food, for stimulating the brain, for providing cellular energy, and for repairing all tissues, organs, and cells.

**Fats** are necessary in our diet for normal brain development in children, and to support growth and provide energy throughout our life. Only small amounts of fat are needed by our body after about 2 years of age. Fats are broken down into fatty acids when eaten. Of all types of fatty acids, monounsaturated fatty acids are best for us to eat. They reduce LDLs "bad cholesterol" while leaving HDLs "good cholesterol" alone and are found mostly in **vegetable** and nut oils.

**Vitamins**, which are essential to life, contribute to good health by regulating the metabolism and assisting the biochemical processes that release energy from digested food. They are considered *micronutrients* because the body needs them in relatively small amounts compared to the nutrients listed above.

**Minerals** are also *micronutrients* which are essential to life since every living cell on this planet depends on them for proper function and structure. Minerals are needed for the proper composition of body fluids, the formation of blood and bone, the maintenance of healthy nerve function, and the regulation of muscle tone.

**Antioxidants** are specific vitamins, minerals, and enzymes found in **fruits**, **vegetables**, grains and legumes that help prevent cancer, heart disease, diabetes, high blood pressure, and a number of other diseases by protecting cells against damage from free radicals caused by oxidation.

**Phytochemicals** are the biologically active substances in **plants** that are responsible for giving them color, flavor, and natural disease resistance. They powerfully fight cancer by blocking one or more of the steps that lead to cancer. Some examples are: sulforaphane found in broccoli; flavonoids found in citrus fruits and berries; indoles found in Brussels sprouts, cauliflower and cabbage; P-coumaric acid and chlorogenic acid found in tomatoes; and many more. Tomatoes alone are believed to contain an estimated 10,000 different phytochemicals.

\*Most of the information on nutrients comes from the 2<sup>nd</sup> Edition of "Prescription for Nutritional Healing" by Balch & Balch(pg.3-47).