Important Nutrient Groups for a Healthier Lifestyle

**Potassium**, of which bananas are a prime source, helps lower blood pressure and may prevent high blood pressure, heart disease, and stroke. It controls the amount of fluid inside the cells, and sodium regulates the amount outside, so the two minerals work to balance fluid levels in the body. Potassium also enables the body to convert blood sugar (glucose), its primary fuel, into a stored form of energy (glycogen) that is held in reserve by the muscles and liver. Other sources which are very high in potassium are oranges, orange juice, and potatoes.

**Fiber** is categorized as “soluble” (like oat bran) and “insoluble” (like wheat bran). Insoluble fiber is thought to help reduce the risk of colorectal cancer, and soluble fiber helps to reduce blood cholesterol and, therefore, to lower the risk of coronary heart disease. Good sources of fiber are beans, vegetables, whole grains, and fruits. One pear has 4 grams.

**Organosulfur**, found in leeks, garlic, chives, shallots, and onions, is a compound that functions as an anti-bacterial and anti-fungi; anti-hypertension (lowers blood pressure); anti-thrombotic (reduces risk of heart disease and stroke); lipid-lowering activities; and anti-carcinogenic.

**Mono-unsaturated Fats**, found in avocados, have a double-carbon bond and are as effective as any poly-unsaturated fatty acid (vegetable fats). They reduce LDL (low-density lipids, which are bad for the heart) and triglycerides, and have no effect on the HDL’s (high-density lipids, which are good for the heart).

**Folate**, found in broccoli and asparagus, is a water-soluble B vitamin, also called folacin or folic acid. Because the body can’t store it very long, you need to replenish your supply daily. Cooking, or even long storage, can destroy up to half the folic acid in foods. In the body, folic acid is utilized thousands of times a day to make blood cells, heal wounds, and build muscle. In fact, it is necessary for every function that requires cell division. Folic acid is critical to DNA and RNA formation and assures that cells duplicate normally. This B vitamin also appears to regulate the body’s production and use of homocysteine, an amino acid that at high levels may damage the lining of blood vessels, making them more susceptible to plaque buildup. This makes folic acid an
important weapon against heart disease.

**Indoles**, found in cauliflower, are one of the phytochemical compounds produced by plants. They have either an antioxidant or hormone-like action in people who eat them. Cruciferous vegetables belong to the cabbage family, which includes broccoli, cauliflower, and brussels sprouts. All these vegetables contain certain chemicals thought to reduce the risk of colorectal cancer.

**Terpene lactones** (primarily chemicals called ginkgolides and bilobalides) are found in grapefruit, oranges, lemons and limes. They improve blood flow and are thought to protect the nerves.

**Flavonoids**, found in apples, give color to fruits, vegetables, and herbs and are found in legumes, grains, and nuts as well. They are potent antioxidants; some are even more powerful than Vitamin C or Vitamin E in preventing cell damage caused by free radicals (unstable oxygen molecules). One of these, Quercetin (found in apples and onions), also serves as a building block for other flavonoids. Rutin and Hesperidin are the most active of the so-called flavonoids, which are present in oranges, grapefruits, tangerines, and other citrus fruits. Green tea is the primary source of Polyphenols, an effective cancer-fighting flavonoid, and Genistein, found in soy products, has antioxidant properties and can also mimic the effects of estrogen. Another flavonoid, resveratrol, is abundant in purple grapes. It acts as an antioxidant that shows to have anti-cancer properties and helps prevent heart disease. This is also found in red wine, which may be beneficial if consumed in moderation.

**Anthocyanin**, found in blueberries, cranberries, and cherries (Utah’s State Fruit), has shown to prevent urinary tract infections.

**Vitamin C** is found in strawberries, citrus fruits and juices, broccoli, red peppers, dark greens, and kiwifruits. Vitamin C is active throughout the body. It helps strengthen the capillaries (the tiniest blood vessels) and cell walls, and is crucial for the formation of collagen (a protein found in connective tissue). In these ways, Vitamin C prevents bruising, promotes healing, and keeps ligaments (which connect muscle to bone), tendons (which connect bone to bone), and gums strong and healthy. It also aids in producing hemoglobin in red blood cells and assists the body in absorbing iron from foods. As an antioxidant, Vitamin
C offers protection against cancer and heart disease, lowers the rate of beginning stages of cataracts, and helps reduce high cholesterol levels.

**Phytoestrogens** are found in soybeans, beans, legumes, and nuts. They lower lipid levels (cholesterol) and reduce hot flashes, protect bone, and reduce breast and prostate cancer risks.

**Carotenoids** are the yellow-orange pigments found in fruits and vegetables. Carotenoids are used by the blood or tissues of the body to prevent certain diseases. Alpha-carotene is found in carrots and pumpkin. Lycopene, abundant in red fruits such as an watermelon, red grapefruit, guava, and tomatoes, functions as an antioxidant and has been shown to decrease the risk of prostate cancer. Zeaxanthin, found in corn, promote clear vision by absorbing the sun's harmful ultraviolet rays and neutralizing free radicals in the retina (the light-sensitive portion of the eye). This may help reduce the risk of macular degeneration, an age-related vision disorder that is the leading cause of blindness in older adults. Lutein and zeaxanthin are plentiful in spinach and other dark green, leafy vegetables, pumpkin, and red peppers. Cryptoxanthin is present in mangoes, oranges, and peaches. Beta-carotene is found in squash, sweet potatoes, cantaloupe and other yellow, orange, and red fruits and vegetables. Green vegetables, such as an broccoli, spinach, or lettuce, are also beneficial: the darker the green, the more beta-carotene they contain. Beta-carotene is an immune system booster and powerful antioxidant. It neutralizes the free radicals that can damage cells and promote disease. By acting directly on cells, it combats - and may even reverse - some disorders including pre-cancerous conditions, particularly those affecting the skin, mucous membranes, lungs, mouth, throat, stomach, colon, prostate, cervix, and uterus. Further, it has been shown to inhibit the growth of abnormal cells, strengthen the immune system, fortify cell membranes, and increase communication among cells. However, an intake of high amounts has been shown to be detrimental to smokers.