VITAMINS

Vitamins are organic compounds that help regulate body processes. There are Water-Soluble Vitamins and Fat-Soluble Vitamins.

WATER-SOLUBLE VITAMINS

These are vitamins that dissolve in water. They cannot be stored in the body (and excess water-soluble vitamins are excreted), so they need to be included in your daily diet!

B Vitamins [Thiamin (B1), Riboflavin (B2), Niacin (B3), Pantothenic Acid (B5), B6, Biotin (B7), Folate/Folic Acid, B12]-

Facilitates energy metabolism (from fats, carbohydrates and proteins) from the food you eat (it converts the food we eat into energy). These vitamins are good for healthy skin, hair and nails. They are needed for muscle/brain tissue and healthy cells.

*Note: B12 deficiencies are very common in vegetarian/vegan diets and supplementation is most often required.

<u>Found in</u>: eggs, meat, fish (salmon), poultry, liver, milk, whole grains (quinoa, millet), nutritional yeast, legumes, beans, nuts, seeds, vegetables, fruits

Vitamin C (Ascorbic Acid)-

Enhances the immune system, synthesizes collagen production/formation (it's good for the skin) and improves iron absorption (from non-heme sources). It is an antioxidant so it protects against pollutants and fights free radicals.

*Note: Cooking/heat destroys vitamin C (for example, oven-roasted broccoli is not a great source of vitamin C)

<u>Found in</u>: fruits (citrus), vegetables (red bell peppers, dark leafy greens)

FAT-SOLUBLE VITAMINS

These are vitamins that are absorbed into the intestine along with dietary fat (for example, to absorb the vitamin A in carrots, it's good to combine the carrots with a source of healthy fats like hummus with tahini and olive oil). They can be stored in the body, therefore, they do not need to be consumed daily (they can become toxic in excess amounts). Fat-soluble vitamins are found in many fat-containing foods.

Vitamin A-

Assists bone growth, protects eyes/vision and skin/cells from UV light and sun damage. Keeps immune system and blood vessels healthy.

<u>Found in</u>: liver, eggs, milk, spinach, kale, carrots, pumpkin, sweet potatoes, butternut squash, mango, cantaloupe

Vitamin D-

Required for calcium and phosphorous absorption while helping regulate blood calcium levels in the body, can be synthesized in the body from exposure to UV light (sunlight... not those tanning beds!), keeps your bones/teeth strong, good for the metabolism, nervous system and immune system, and can help prevent breast and colon cancer.

Found in: salmon, egg yolks, mushrooms, fortified milk/foods (and sunlight!)

Vitamin E-

Protects red blood cells and lung cells. It is an antioxidant so it protects against pollutants and fatty acid damage/oxidation, and fights free radicals.

<u>Found in</u>: nuts (almonds), seeds, olive oil, whole grains, wheat germ, soybeans, avocado, egg yolks, dark leafy greens

Vitamin K-

Required for blood coagulation (without it, your cuts would never clot and you could bleed excessively). Found in: dark leafy greens (kale, Swiss chard)

MINERALS

Minerals are inorganic substances that are required for body processes and assist in different functions.

Boron-

Assists in bone health and helps prevent osteoporosis.

Found in: fruits, dark leafy greens

Calcium-

Helps form/maintain strong teeth/bones, helps muscle contraction (muscle/heart tissue), works together with vitamin D for absorption. Helps prevent osteoporosis.

Found in: milk, dark leafy greens, chard, broccoli, turnips, sesame seeds/tahini, tofu, legumes

Fluoride-

Helps form/maintain strong teeth/bones.

Found in: water

Iodine-

Required for thyroid function and thyroid hormones.

Found in: iodized salt, vegetables (seaweed, kelp), eggs

Iron-

Assists in carrying oxygen in the body and making oxygen available to our muscles/heart for contraction. Vital for neurotransmitters, hormones and energy.

Found in: animal products, eggs, beans, legumes, nuts, seeds, dried fruit

Magnesium-

Helps in blood clotting, aids bone health, muscle contraction, nerve impulses, cell signaling and blood pressure regulation.

<u>Found in</u>: whole grains (oats), nuts, seeds, molasses, vegetables (dark leafy greens), fruits (bananas, avocados)

Manganese-

Helps with bone development and energy/carbohydrate metabolism. Maintains cholesterol. It is an antioxidant so it protects against pollutants and fights free radicals.

Found in: whole grains, nuts, seeds, vegetables, fruits

Phosphorous-

Assists proper bone/teeth formation/health, helps convert food into energy and transports nutrients throughout the body. Major component of cell membranes.

Found in: meat, eggs, dairy, legumes, vegetables

Potassium-

It is an electrolyte so it helps balance fluid/sodium/electrolyte levels within the body. Aids muscle/heart function and the nervous system. A high intake lowers blood pressure, which is good for people with high blood pressure.

<u>Found in</u>: fresh fruit (bananas, plums, avocados, tomatoes), vegetables (artichokes), potatoes, whole grains

Selenium-

It is an antioxidant so it protects against pollutants and fights free radicals. It decreases inflammation and helps with immune function.

Found in: whole grains, nuts (Brazil nuts), seeds, legumes, eggs, meat, dairy, vegetables

Sulfur-

Important component in connective tissue (stabilizes cells/proteins to keep hair/skin/nails healthy). Found in: meat, eggs, broccoli, cauliflower, kale, nuts, seeds, legumes

Zinc-

Good for the skin (and acne). Assists immune function.

<u>Found in</u>: meat, oysters, eggs, broccoli, cauliflower, kale, nuts (cashews), seeds (pumpkin seeds, sesame seeds), legumes

ANTIOXIDANTS

Antioxidants protect our cells against free radical damage from oxidation (free radicals are unstable atoms caused by pollution, UV light and toxic substances, and they cause damage to cell membranes, cell proteins and DNA).

Vitamin A (Beta-Carotene)
Vitamin C
Vitamin E
Manganese
Selenium
Zinc

Found in: fruits (raspberries, blueberries, strawberries), beans, dark chocolate, coffee