Vitamins & Their Nutritional Friends

Most people know that vitamins are, as the word suggests, nutrients vital to well-being. But what's not as well known is that no vitamin is capable of supporting health all by itself. Vitamins can only function properly in the presence of other nutrients, whether they are *macronutrients* such as fat and protein (including protein building blocks called amino acids) or *micronutrients*, which include minerals and other vitamins. That's one reason nutrition authorities encourage people to consume a diet that primarily consists of whole foods, which naturally contain vitamins and their required cofactors. To learn which nutrients are required by each of the major vitamins, turn the page.

Just as an orchestra's sections create beautiful music by playing together, vitamins foster health in tandem with other nutrients.

VITAMIN	FOOD SOURCES
A	Eggs, liver, milk; **beta-carotene**, which the body converts to vitamin A: bell peppers, carrots, chard, collard greens, kale, spinach
B1 (thiamine)	Asparagus, brussels sprouts, eggplant, mushrooms, peas, romaine lettuce, spinach, sunflower seeds, tuna
B2 (riboflavin)	Almonds, eggs, liver, milk, mushrooms, spinach
B3 (niacin)	Asparagus, chicken, halibut, tuna, salmon
B5 (pantothenic acid)	Avocado, broccoli, cauliflower, liver, mushrooms, sunflower seeds, turnip greens, sweet potatoes, whole grains
B6 (pyridoxine)	Bananas, bell peppers, poultry, spinach, turnip greens
B12 (cobalamin)	Liver, sardines, salmon, shellfish, snapper
Choline [1]	Eggs, liver, milk, peanuts
Folic Acid [2]	Asparagus, beets, cauliflower, collard greens, lentils, parsley, romaine lettuce, spinach
C	Bell pepper, broccoli, brussels sprouts, cauliflower, kale, lemons, oranges, parsley, strawberries
D	Cod, eggs, mackerel, milk (enriched), salmon, sardines, shrimp; also created in skin exposed to sunlight
E	Almonds, chard, spinach, sunflower seeds, whole grains
K	Asparagus, broccoli, brussels sprouts, chard, green beans, kale, parsley, spinach

1. Although technically not a B vitamin, choline is often classified as part of the B-complex because it works closely with other compounds in this class
2. A member of the B vitamin family
3. Folic acid supplementation can mask B12 deficiency; see a practitioner for appropriate testing before use

WHAT IT DOES	WORKS BEST WITH
Supports immune health and low-light vision; required for normal cell growth and proper gene function	Healthy fats, iron, magnesium, manganese, phosphorus, potassium, protein, selenium, zinc, vitamins B1, B2, B3, B5, B6, C, E
Supports nervous system function; helps the body turn glucose into energy	Magnesium, other Bs, especially B1, B6, B12, folic acid
Supports energy production; recycles glutathione, a crucial antioxidant	Folic acid, iron, magnesium, zinc, vitamins B1, B3, B6, B12
Helps the body process fats and regulate blood sugar; promotes proper cellular functioning	Tryptophan, vitamin B12
Promotes the release of energy; used in making coenzyme A, required for numerous bodily processes	Biotin, folic acid, vitamins B12, C
Needed for amino acid and red blood cell creation; helps control homocysteine (linked with heart disease)	Folic acid, magnesium, vitamins B1, B3, B12
Required for production of red blood cells; helps control homocysteine	B-complex, especially B6 & B12, vitamin E
Helps keep cell membranes healthy; required for fat metabolism and nerve impulse transmission	Folic acid, methionine, vitamins B3, B6, B12
Supports cell formation and growth, especially red blood cells; helps control homocysteine	Vitamins B1, B2, B3, B6, B12[3]
Acts as an antioxidant; helps produce collagen, used in building skin, bone and connective tissue	Bioflavonoids, iron, magnesium, vitamin E
Needed to build healthy bones; helps regulate blood pressure, immune function and glucose usage	Boron, calcium, lycopene, magnesium, selenium, zinc, vitamins A, C, E, K
Acts as an antioxidant; supports cardiovascular health	Glutathione, magnesium, selenium, vitamins B3, C
Allows blood to clot properly; required for bone formation and healthy cell growth	Bioflavonoids, calcium, copper, vitamins B5 & D

NOTE: Optimal dosages will vary from person to person; some people may need dosages higher than the Recommended Daily Allowance. Consult a nutritionally aware practitioner who can help you formulate an individualized supplementation plan.