

Marie Murphy Health & Fitness

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IMPORTANCE OF VITAMINS & MINERALS

VITAMINS	SOURCE	FUNCTION	ENERGY SYSTEM
B1 Thiamine	whole grains	growth, muscle tone, nervous system	metabolism of carbohydrates
B2 Riboflavin	milk, eggs, lean meat, broccoli	production of red blood cells & antibodies	metabolism of carbs, proteins and fats
B3 Niacin	meat, poultry, fish, peanuts, wheat germ	nervous system, proper brain function	metabolism of carbs, proteins and fats
B5 Pantothenic	egg yolk, legumes, whole grains, meats	proper functioning of the nervous system	produces red blood cells
B6 Pyridoxine	whole grains, meat	formation of oxygen carrying blood cell	metabolism of proteins
B7 Biotin	found in small amounts in numerous foods	synthesis of fatty acids, metabolism of amino acids	metabolism of carbs, proteins and fats
B9 Folic Acid	green leafy vegetables	formation of red blood cells	breakdown of proteins
B12 Cobalamin	meat, dairy products eggs, fish	promotes growth, prevents nerve damage	metabolism of carbohydrates and fats
A*	milk, yellow and orange vegetables	growth and repair	building body structures
D	sunlight, dairy products, fish oils	bone growth and development	Aids in producing blood plasma
E*	nuts, seeds, polyunsaturated vegetable oil	formation of red blood cells	prevents blood clots, assist vitamin K
K	vegetables, milk, yogurt	glycogen formation, synthesis of blood clotting factors	helps convert carbs into glucose
C*	citrus fruits, juices, greens, berries, peppers	promotes healthy gums, teeth, capillaries	iron absorption, heals wounds
Beta Carotene*	fruits and vegetables	enhances immune function	enhances vitamin E

MINERALS	SOURCE	FUNCTION	ENERGY SYSTEM
Calcium	dairy products, green leafy vegetables	strong bones and teeth, muscle growth, muscle contraction, nerve transmission	cardiovascular system
Iron	red meat, green leafy veg, whole grains	increases oxygen carrying red blood cells	synthesis of enzymes
Magnesium	green veg, legumes, whole grains, seafood	assists in neuromuscular contraction	metabolism of carbs, protein
Potassium	potatoes, bananas, other fruits and veg.	maintenance of normal fluid balance, muscular contraction, assists conversion of glucose to glycogen.	synthesis of muscle protein from amino acids
Phosphorus	meat, fish, whole grains, seeds, nuts, eggs	growth repair and maintenance of cells, energy production, stimulation of muscular contraction	metabolism of carbs, protein and fat
Sodium	found in virtually all foods	maintenance of normal fluid balance, muscular contraction, nerve transmission keeps other blood minerals soluble.	metabolism of carbohydrates
Chloride	table salt (sodium chloride) kelp, rye	regulates fluid pressure in and out of cell membranes, regulates heart action and normalize blood pressure.	facilitates proper digestion
Zinc*	meat, shellfish, milk brown rice wholegrains	strengthens the immune system, promotes fast healing	breakdown of protein, fat and carbohydrate
Iodine	kelp, cranberries, potato, organic yogurt, navy beans, strawberries, gray salt	necessary for proper functioning of thyroid gland	helps in protein synthesis
Selenium*	seafood, organ meat, lean meat, grains	protects body tissue against oxidative damage from radiation, pollution	powerful antioxidant, prevents certain cancers + heart disease
Copper*	potato, beans, peas, nuts (peanut, pecan), grains (wheat, rye), fruits (peach, raisin)	stimulates immune system to fight infections, essential for proper functioning of red blood cells and brain	synthesis of enzymes