

Murphy (MET's) Programme

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Importance of Vitamins & Minerals

VITAMINS	Source	Function	Energy System
B1	whole grains	growth, muscle tone, nervous system	metabolism of carbohydrates
B2	milk, eggs, lean meat, broccoli	production of red blood cells and antibodies	metabolism of carbs, protein, fat
B6	whole grains, meat	formation of oxygen carrying blood cells	metabolism of protein
B12	meat, dairy products eggs, fish	promotes growth, prevents nerve damage	metabolism of carbohydrates, fat
Niacin	meat, poultry, fish, peanuts, wheat germ	nervous system, proper brain function	metabolism of carbs, protein, fat
Folic Acid	green leafy vegetables	formation of red blood cells	breakdown of proteins
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
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
E	nuts, seeds, polyunsaturated vegetable oil	formation of red blood cells	prevents blood clots, assist K
Bata 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 and nerve transmission	cardiovascular system
Iron	red meat, green leafy veg, whole grains	increases oxygen carrying red blood cells	synthesis of enzymes
Phosphorus	meat, fish, whole grains, seeds, nuts, eggs	growth repair and maintenance of cells, energy production, stimulation of muscular contraction	metabolism of carbs, protein, fat
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
Sodium	found in virtually all foods	maintenance of normal fluid balance on either side of cell walls, 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
Magnesium	green veg, legumes, whole grains, seafood	assists in neuromuscular contraction	metabolism of carbs & protein