



ATTENTIVE  
HEALTH

## B vitamins & their role with energy metabolism

type of B vitamin	effects of deficiency	dietary sources
<b>B1 (thiamin)</b>	Essential for carbohydrate metabolism and energy production. Aids in the production of hydrochloric acid needed for proper digestion. B1 needs increase with heavy alcohol consumption, high-carb diet and use of oral contraceptives.	barley, wheat bran, lentils, pork, quinoa, salmon, soybeans, avocado, mussels
<b>B2 (riboflavin)</b>	Converts carbs, amino acids and fats into fuel. Maintains mucous membranes in digestive tract. Necessary for red blood cell (RBC) formation. B2 needs increase under stress, pregnancy, use of oral contraceptives and strenuous exercise.	liver, eggs, mushrooms, mussels, clams, avocados, barley, quinoa, soybeans, wheat bran
<b>B3 (niacin)</b>	Essential for proper function of the gi tract, digestion and normal appetite. Catalyst in the breakdown of food into fuel.	Avocados, barley, clams, lentils, mushrooms, mussels, peanuts, pork, quinoa, salmon, wheat bran
<b>B5 (pantothenic acid)</b>	Essential role in fat and carb metabolism and assists with vitamin utilization. B5 needs increase during winter months and periods of high stress.	Avocados, lentils, mushrooms, quinoa, salmon, wheat bran
<b>B6 (pyridoxine)</b>	Helps produce RBCs and aids in breaking down amino acids. B6 needs increase with antidepressant, estrogen and oral contraception use.	Avocados, bananas, barley, lentils, pork, quinoa, salmon, soybeans, wheat bran
<b>B7 (biotin)</b>	Required for metabolism of food into fuel. Works with B5 & B9 in multiple biochemical reactions. Essential for digestive enzyme production and B3 metabolism.	brewer's yeast, banana, brown rice, eggs, oatmeal, peanut butter
<b>B9 (folate)</b>	Combined with B12 & Vitamin C, it's used to create hemoglobin. Folate is found in uncooked foods. B9 needs increase during pregnancy, heavy alcohol consumption and with use of oral contraceptives.	Lentils, asparagus, avocados, beets, Brussel sprouts, crab, mussels, oranges, peanuts, quinoa, soybeans, wheat bran
<b>B12</b>	Teams with other B vitamins to produce energy from fat and sugar, helps create RBCs. Supports proper digestion.	Brewer's yeast, clams, crab, mussels, peanuts, beef, pork, salmon