

## Info-zone group B vitamins their role in a complex

Vitamin	Role*	Allies	Deficiency signs
B1 (thiamine)	<ul style="list-style-type: none"> <li>Balances the nervous system.</li> <li>Necessary for the production of energy.</li> </ul>	<ul style="list-style-type: none"> <li>Vitamin C</li> </ul>	<ul style="list-style-type: none"> <li>Intense fatigue.</li> <li>Loss of appetite, nausea, digestive troubles, abdominal pain.</li> <li>Muscular weakness.</li> <li>Lack of concentration.</li> <li>Depression.</li> </ul>
B2 (riboflavin)	<ul style="list-style-type: none"> <li>Transforms carbohydrates, lipids and proteins into energy.</li> <li>Muscle and tissue growth and restoration.</li> <li>Production of hormones and red blood cells.</li> </ul>	<ul style="list-style-type: none"> <li>Vitamin C</li> <li>B5</li> </ul>	<ul style="list-style-type: none"> <li>Dizziness.</li> <li>Trembling.</li> <li>Headaches.</li> <li>Muscular cramps.</li> <li>Insomnia.</li> <li>Dry and/or cracked lips that may peel, inflammation of the tongue or in the mouth.</li> <li>Acne.</li> <li>Inflammation in the eyes (impression of having sand in the eyes or a burning sensation, tears), cataracts.</li> <li>Learning difficulties.</li> </ul>
B3 (niacinamide)	<ul style="list-style-type: none"> <li>Breakdown and use of proteins, lipids carbohydrates.</li> <li>Treatment of hypercholesterolaemia.</li> <li>Necessary in the synthesis of sexual hormones and the production of neurotransmitters.</li> </ul>	<ul style="list-style-type: none"> <li>B2</li> <li>B6</li> </ul>	<ul style="list-style-type: none"> <li>Pins and needles in the feet and hands.</li> <li>Loss of appetite.</li> <li>Fatigue.</li> <li>Headaches, dizziness.</li> <li>Skin's hyper responsiveness to sun exposure.</li> <li>Mood swings.</li> </ul>
B5 (pantothenic acid)	<ul style="list-style-type: none"> <li>Decrease cholesterol and triglyceride levels.</li> <li>Acts on the nervous system and the suprarenal glands (anti-stress vitamin).</li> <li>Formation and regeneration of skin and mucus.</li> <li>Adrenaline and insulin regulator.</li> </ul>	<ul style="list-style-type: none"> <li>B6</li> <li>B12</li> <li>Biotin</li> <li>Folic acid</li> <li>Vitamin C</li> </ul>	<ul style="list-style-type: none"> <li>Insomnia.</li> <li>Leg cramps.</li> <li>Hand and feet paraesthesia (feeling of pins and needles, burning or numbness).</li> <li>Fatigue.</li> <li>Gastrointestinal troubles.</li> <li>Depression.</li> <li>Respiratory infections.</li> <li>Hypoglycaemia.</li> <li>Immune deficiency.</li> </ul>
B6 (pyridoxine)	<ul style="list-style-type: none"> <li>Synthesis of certain antibodies in haemoglobin and certain neurotransmitters (serotonin, melatonin, dopamine...) to maintain mental balance.</li> <li>Regulation of blood sugar levels.</li> <li>Immune system maintenance.</li> <li>Help in the formation of tissues.</li> </ul>	<ul style="list-style-type: none"> <li>B3</li> <li>B12</li> <li>Folic acid</li> </ul>	<ul style="list-style-type: none"> <li>Irritability, depression, confusion.</li> <li>Inflammation of the tongue (glossitis).</li> <li>Seborrheic dermatitis and inflammation at the corners of the mouth.</li> </ul> <p>nb: People suffering from kidney failure, alcoholism, cirrhosis, hyperthyroidism or congestive heart failure are more likely affected by vitamin B6 deficiency.</p>
B12	<ul style="list-style-type: none"> <li>Production of the genetic material of cells and red blood cells.</li> <li>Prevention of cardiovascular illness.</li> <li>Maintenance of nerve cells and those that make bone tissue.</li> </ul>	<ul style="list-style-type: none"> <li>B6</li> <li>Folic acid</li> <li>Vitamin C</li> </ul>	<ul style="list-style-type: none"> <li>Fatigue, weakness, breathlessness.</li> <li>Nausea.</li> <li>Constipation, flatulence, loss of appetite and weight loss.</li> <li>Pins and needles and numbness in the limbs, difficulty walking, mood swings, memory loss and dementia.</li> </ul> <p>nb: vegetarians and people suffering from iron-deficiency anaemia should consider taking a vitamin B12 supplement</p>
Biotin (B8)	<ul style="list-style-type: none"> <li>Necessary for the transformation of carbohydrates and fats.</li> <li>Necessary for cell growth.</li> <li>Production of fatty acids.</li> <li>Also helps in carbon dioxide transfer.</li> </ul>	<ul style="list-style-type: none"> <li>B12</li> <li>Folic acid</li> </ul>	<ul style="list-style-type: none"> <li>Hair loss.</li> <li>Dermatitis.</li> <li>Alopecia (hair loss) and achromotrichia (absence or loss of pigmentation in the hair).</li> <li>Red scaly skin eruptions around the eyes, nose, mouth and genital area.</li> <li>Neurological symptoms in adults include depression, lethargy, hallucinations and numbness or pins and needles in the extremities.</li> </ul> <p>nb: Alcoholics, pregnant women and people who have had a partial gastrectomy or with other causes of achlorhydria, burn victims, epileptics, the elderly and athletes have increased needs for Biotin.</p>
Folic acid (B9)	<ul style="list-style-type: none"> <li>Protective effects against congenital malformations of the neural tube in the foetus (pregnant women's vitamin).</li> <li>Production of all the cells in the body, particularly red blood cells.</li> <li>An essential role in the production of DNA and RNA (genetic material), in the nervous and immune system functions.</li> <li>Scarring of wounds and cuts.</li> </ul>	<ul style="list-style-type: none"> <li>B5</li> <li>B12</li> <li>Biotin</li> </ul>	<ul style="list-style-type: none"> <li>Fatigue, general weakness, insomnia.</li> <li>Memory loss.</li> <li>Anaemia.</li> <li>Lesions at the corners of the mouth, red and shiny tongue.</li> <li>Stomach ulcers.</li> <li>Intestinal disorders.</li> <li>Spontaneous abortion, congenital malformations of the foetus.</li> <li>Dull hair.</li> </ul>
Vitamin C	<ul style="list-style-type: none"> <li>Essential for the metabolism of many B-group vitamins.</li> </ul>		

\*reference: passeportsante.net

## B-Complex Comparison of formulas by 15 ml (tablespoon)

Vitamins	Role*	Original Formula	Energy Formula	Zen Formula
B1 (thiamine)	<ul style="list-style-type: none"> <li>Balances the nervous system.</li> <li>Necessary for the production of energy.</li> </ul>	45 mg	45 mg	40 mg
B2 (riboflavin)	<ul style="list-style-type: none"> <li>Transforms carbohydrates, lipids and proteins into energy.</li> <li>Muscle and tissue growth and restoration.</li> <li>Production of hormones and red blood cells.</li> </ul>	36 mg	25 mg	36 mg
B3 (niacinamide)	<ul style="list-style-type: none"> <li>Breakdown and use of proteins, lipids carbohydrates.</li> <li>Treatment of hypercholesterolaemia. Necessary in the synthesis of sexual hormones and the production of neurotransmitters.</li> </ul>	30 mg	45 mg	30 mg
B5 (pantothenic acid)	<ul style="list-style-type: none"> <li>Decrease cholesterol and triglyceride levels.</li> <li>Acts on the nervous system and the suprarenal glands (anti-stress vitamin).</li> <li>Formation and regeneration of skin and mucus.</li> <li>Adrenaline and insulin regulator.</li> </ul>	82 mg	48 mg	100 mg
B6 (pyridoxine)	<ul style="list-style-type: none"> <li>Synthesis of certain antibodies in haemoglobin and certain neurotransmitters (serotonin, melatonin, dopamine...) to maintain mental balance.</li> <li>Regulation of blood sugar levels.</li> <li>Immune system maintenance.</li> <li>Help in the formation of tissues.</li> </ul>	27 mg	18 mg	27 mg
B12	<ul style="list-style-type: none"> <li>Production of the genetic material of cells and red blood cells.</li> <li>Prevention of cardiovascular illness.</li> <li>Maintenance of nerve cells and those that make bone tissue.</li> </ul>	78 mcg	78 mcg	75 mcg
Biotin (B8)	<ul style="list-style-type: none"> <li>Necessary for the transformation of carbohydrates and fats.</li> <li>Necessary for cell growth.</li> <li>Production of fatty acids.</li> <li>Also helps in carbon dioxide transfer.</li> </ul>	90 mcg	60 mcg	60 mcg
Folic acid (B9)	<ul style="list-style-type: none"> <li>Protective effects against congenital malformations of the neural tube in the foetus (pregnant women's vitamin).</li> <li>Production of all the cells in the body, particularly red blood cells.</li> <li>An essential role in the production of DNA and RNA (genetic material), in the nervous and immune system functions.</li> <li>Scarring of wounds and cuts.</li> </ul>	720 mcg	780 mcg	780 mcg
Vitamin C	<ul style="list-style-type: none"> <li>Essential for the metabolism of many B-group vitamins.</li> </ul>	9 mg	9 mg	9 mg
Inositol		-	100 mg	100 mg
Eleuthero	<ul style="list-style-type: none"> <li>Tonic in case of generalized weakness and / or to help during convalescence.</li> <li>Helps improve mental and / or physical performance</li> <li>Periods of effort.</li> </ul>	-	1000 mg	-
Guarana/caffeine	<ul style="list-style-type: none"> <li>Improves alertness.</li> <li>Fights fatigue and drowsiness.</li> </ul>	-	20 mg	-
Chamomile	<ul style="list-style-type: none"> <li>Soothing.</li> </ul>	-	-	10 mg
Hop	<ul style="list-style-type: none"> <li>Relieves nervousness.</li> </ul>	-	-	500 mg

\*source: passeportsante.net