

## Minerals & Amino Acids

As important as vitamins are, they can do nothing for you without minerals. Minerals are constituents of the bones, teeth, soft tissue, muscle, blood, and nerve cells. Vitamins cannot be assimilated without the aid of minerals. They are vital to overall mental and physical well-being.

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| Calcium | <ul style="list-style-type: none"><li>• Builds and maintains bones and teeth</li><li>• Helps maintain proper nerve and muscle function</li></ul> |
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| Magnesium | <ul style="list-style-type: none"><li>• Plays an important role in regulating the neuromuscular activity of the heart</li><li>• Converts blood sugar into energy</li></ul> |
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| Iron | <ul style="list-style-type: none"><li>• Combines with protein and copper in making hemoglobin</li><li>• Prevents fatigue</li></ul> |
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| Iodine | <ul style="list-style-type: none"><li>• Aids in the development and functioning of the thyroid gland</li><li>• Regulates the body's production of energy</li></ul> |
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| Copper | <ul style="list-style-type: none"><li>• Necessary for the absorption &amp; utilization of Iron</li><li>• Helps proper bone formation &amp; maintenance</li></ul> |
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| Zinc | <ul style="list-style-type: none"><li>• Is an antioxidant nutrient</li><li>• Aids in digestion and metabolism</li></ul> |
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| Manganese | <ul style="list-style-type: none"><li>• Important in the breakdown of amino acids and the production of energy</li><li>• Necessary for normal skeletal development</li><li>• Maintains sex hormone production</li></ul> |
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| Chromium | <ul style="list-style-type: none"><li>• Works with insulin in the metabolism of sugar and stabilizes blood sugar levels</li></ul> |
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| Potassium | <ul style="list-style-type: none"><li>• Works with sodium to regulate the body's water balance and normalize heart rhythms</li></ul> |
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| Selenium | <ul style="list-style-type: none"><li>• Protects cell membranes and prevents free radical generation thereby decreasing the risk of cancer and disease of the heart and blood vessels</li></ul> |
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## Amino Acids

Amino acids are the building blocks of the body. Besides building cells and repairing tissue, they form antibodies to combat invading bacteria & viruses. They are part of the enzyme & hormonal system. Eight are essential (cannot be manufactured by the body) the rest are nonessential.

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| Tryptophan | <ul style="list-style-type: none"><li>• A natural relaxant, helps alleviate insomnia by inducing</li></ul> |
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	<ul style="list-style-type: none"> <li>normal sleep</li> <li>Reduces anxiety &amp; depression</li> </ul>
Lysine	<ul style="list-style-type: none"> <li>Insures the adequate absorption of calcium</li> </ul>
Methionine	<ul style="list-style-type: none"> <li>A principle supplier of sulfur which prevents disorders of the hair, skin and nails</li> </ul>
Phenylalaine	<ul style="list-style-type: none"> <li>Used by the brain to produce Norepinephrine, a chemical that transmits signals between nerve cells and the brain</li> </ul>
Threonine	<ul style="list-style-type: none"> <li>An important consituent of collagen, elastin, and enamel protein</li> </ul>
Valine	<ul style="list-style-type: none"> <li>Promotes mental vigor, muscle coordination and calm emotions</li> </ul>
Leucine & Isoleucine	<ul style="list-style-type: none"> <li>Provide ingredients for the manufacturing of other essential biochemical components in the body, some of which are utilized for the prodction of energy, stimulants to the upper brain and helping you to be more alert.</li> </ul>
	Non-Essential Amino Acids
Arginine	<ul style="list-style-type: none"> <li>Improves immune responses to bacteria, viruses &amp; tumor cells</li> </ul>
Tyrosine	<ul style="list-style-type: none"> <li>Transmits nerve impulses to the brain;improves memory; increases mental alertness</li> </ul>
Glycine	<ul style="list-style-type: none"> <li>Helps trigger the release of oxygen to the energy requiring cell making process</li> </ul>
Serine	<ul style="list-style-type: none"> <li>A storage source of glucose by the liver and muscles</li> <li>Helps strengthen the immune system by providing antibodies</li> </ul>
Glutamic Acid	<ul style="list-style-type: none"> <li>Improves mental capacities</li> </ul>
Aspartic Acid	<ul style="list-style-type: none"> <li>Aids in the expulsion of harmful ammonia from the body</li> </ul>
Taurine	<ul style="list-style-type: none"> <li>Helps stabilize the excitability of membranes which is very important in the control of epileptic seizures</li> </ul>
Cystine	<ul style="list-style-type: none"> <li>Functions as an antioxidant and is a powerful aid to the body in protecting against radiation and pollution</li> <li>Necessary for the formation of skin</li> </ul>
Histidine	<ul style="list-style-type: none"> <li>Used in the treatment of rheumatoid arthritis, allergic diseases, ulcers &amp; anemia</li> </ul>
Proline	<ul style="list-style-type: none"> <li>Extremely important for the proper functioning of joints</li> </ul>

and tendons

- Alanine
- An important source of energy for muscle tissue, the brain and central nervous system