**The Body - Vitamin Chart**

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| **Vitamin** | **What the Vitamin does** | **Effects of vitamin deficiency** | **Good food sources** | | |
| **Vitamin A  (beta carotene)** | Helps to keep eyesight and promote the growth of healthy skin, hair, bones and teeth. Helps in cell reproduction and aids to strengthen the immune and reproductive systems. The body uses beta-carotene and converts it to vitamin A. | Night blindness, dry skin, poor bone and teeth growth and development. | Soy milk (and other dairy products)  carrots spinach  green peas  tomato juice  watermelon  sweet potatoes  pumpkins cantaloupe | sunflower seeds  fish liver oils  liver  lean ham  mango  broccoli  lean pork chops  egg yolks | |
| **Vitamin B1 (thiamine)** | Used by the body to help convert carbohydrates into energy. Helps to keep the normal function of the nervous system, muscles heart and digestion. | Less concentration, loss of appetite. Weakness, exhaustion and fatigue. | Lean Pork  Legumes  Yeast  Bananas  Fish (most)  Liver  Nuts and seeds | | Potatoes  sweet potatoes  peas  watermelon  avocado  Poultry  Whole-grain and fortified cereals |
| **Vitamin B2 (riboflavin)** | Important for growth in the body. Assists skin, nails and hair to grow. Helps to prevent sores and swelling of mouth and lips. Aids in reproduction and cell regeneration. Also aids in the releasing of energy from carbohydrates. | Itching and irritation of lips, eyes, skin and mucous membranes. | Eggs  Fish and shellfish  Fortified cereals  Meat  poultry  Dairy products | | Kiwi Avocado  Broccoli  turnip greens  asparagus  spinach |
| **Vitamin B3 (niacin)** | Helps to release energy from carbohydrates. Aids in the functioning of the digestive system, nerves and | Depression, diarrhoea, dizziness, fatigue, halitosis, headaches, indigestion, insomnia, limb pains, loss of appetite, low blood sugar, muscular weakness, skin eruptions, and inflammation. | Beef liver Peanuts Chicken, White meat Tuna  Salmon | | Almonds Mushrooms Corn Mango Lentils |
| **Vitamin B9 (Folate/Folic acid)** | Helps produce and maintain red blood cells and the nervous system. Essential for mental and emotional health as it helps to maintain normal brain functions. | Anaemia and a reduction in growth rates. Other subtle symptoms may include digestive disorders such as diarrhoea, loss of appetite, and weight loss can occur, as can weakness, sore tongue, headaches, heart palpitations, irritability, forgetfulness, and behavioural disorders | Dark green vegetables  Dry beans peas lentils Enriched grain products  Fortified cereals  Liver  Orange juice  Wheat germ  Yeast | | |
| **Vitamin B12** | needed for nerve cells and red blood cells, and to make DNA | Demyelination and irreversible nerve cell death. Symptoms include numbness or tingling of the extremities and an ataxic gait. | dairy products eggs cereals soy based products liver beef  clams | | |
| **Vitamin** | **What the Vitamin does** | **Effects of vitamin deficiency** | **Good food sources** | | |
| **Vitamin C (ascorbic acid)** | Important in the production of collagen in the body - helps the connective tissues and organs. Can act as an anti oxidant to help protect the body from free radical. | Scurvy (though rarely seen today) which causes bleeding and inflamed gums, loose teeth and poor wound healing. | citrus fruits (oranges, grapefruits, lemons, limes) berries melons tomatoes potatoes green peppers leafy green vegetables | | |
| **Vitamin D** | Helps to promote the absorption of calcium and phosphorus levels in the body. Helps to maintain and form strong and healthy bones. | Rickets and osteomalacia. Rickets results in soft bones and skeletal deformities | Liver  High-fat fish  Fish oils  Egg yolk  Fortified cereals  Fortified milk  Sunlight | | |
| **Vitamin E** | An antioxidant that protects your cells against the effects of free radicals, which are potentially damaging by-products of energy metabolism. | Intestinal disorders - cystic fibrosis, pancreatitis, and cholestasis. Prevent the absorption of dietary fats and fat-soluble nutrients. | Margarine  Nuts and seeds  Peanuts and peanut butter Vegetable oils  Wheat germ  Whole-grain and fortified cereals | | |
| **Vitamin K** | Helps to control blood clotting in the body and is essential for synthesizing the liver protein that controls the clotting | A shortage of this vitamin may result in nosebleeds, internal haemorrhaging. | Broccoli  Brussels sprouts  Cabbage  Leafy green vegetables  Mayonnaise  Soybean Canola Olive oils | | |

**Sources:**- Texas heart institute: www.texasheartinstitute.org  
- American Society for Nutrtional Sciences: www.nutrition.org  
- www.netdoctor.co.uk