



What exactly are vitamin-B complex

They all work together for the betterment of the entire body. Besides, they also help in releasing energy from carbohydrates, proteins and fats. There are several foods available which are highly rich in vitamin-B complex, as it is equivalently distributed in most of the food items. Since, at times a food item consists of a particular vitamin from the B-complex category; it would be difficult understand which food to eat when the body doesn't has much vitamin. To stay healthy and fit, Ms. Sunita Pathania – Sr. Registered Dietician and Diabetes Educator, Healthy Living Diet Clinic, Mumbai, shares a list of best food items with Vitamin B.

Food Sources of B Vitamins

Vitamin B1 (Thiamine) - found in cereals (rice, wheat, maida, rava, poha, etc.) breads, fortified cereals and pasta, pulses or lentils (dals such as moong dal, masoor dal, chana dal etc), legumes (whole pulses such as whole moong, channa, chowli, rajmah), dark green leafy vegetables such as spinach, fenugreek, lettuce, cabbage, asparagus etc. soy foods, whole grains like wheat germ, fish, egg, milk, meat, pork ham etc, nuts such as almonds and pecans.

Vitamin B2 (Riboflavin) - some of the best sources of riboflavin are chicken, fish, eggs, legumes (like peas and lentils), milk and milk products such as yogurt and cheese, nuts, green leafy vegetables like spinach, broccoli, asparagus, and fortified cereals also supply significant amounts of riboflavin to the [diet](#).

Vitamin B3 (Niacin) – it is found in chicken, salmon and in fishes like canned tuna – they are an excellent source of niacin. Vegetarians can get their source of niacin from legumes, pasta and whole wheat.

Vitamin B6 (Pyridoxine) – foods like potatoes, beans, red meat, poultry, eggs and fortified cereals contain are very high in vitamin B6.

Folate, folic acid, or folacin - To remember which foods are high in folate, remember that the word folate has the same root as the word foliage. Leafy greens such as spinach, fenugreek, turnip greens, asparagus, etc and other fresh fruits and vegetables are all excellent sources of

folate. Liver, dried beans and other legumes, and orange juice are good sources of this vitamin. So are fortified bread, rice, and cereals.

Vitamin B12 (Cobalamin) - Animal foods are the only natural source of vitamin B12. It is found naturally in fish, red meat, poultry, milk, milk products, cheese, and eggs. But, many products, including soy products and cereals, are fortified with B12 so it is widely available in the food supply. Other good natural sources include shellfish, such as clams, mussels and crab, fin fish and beef.

Biotin - liver and egg yolks are the richest dietary sources of biotin, but fortunately this B vitamin is well distributed throughout the food supply, so it is doubtful that anyone eating a balanced, varied [diet](#) will experience a deficiency. Salmon, pork and avocado are good sources; most fruits and vegetables contain a little biotin, as do cheeses and grain foods.

Pantothenic Acid - yogurt and avocado are both excellent sources of pantothenic acid, but it is also available in a wide variety of foods such as legumes including lentils and split peas, sweet potatoes, mushrooms and broccoli.

Vitamin B Complex Food

Vitamin B complex is a big family of diverse vitamins with a specific number attached to it. Each vitamin belonging to this family has its own behavior, action and function but they are clubbed together to form a complete solution to all the body requirements.

B complex family consist of Vitamin B1, Vitamin B2, Vitamin B3, Vitamin B5, Vitamin B6, Vitamin B7, Vitamin B9, Vitamin B12 and four supplements. The numbers attached to the names of these vitamins are based on the order when they were discovered.

Richest among all the vitamin B complex foods are milk, yeast, liver, whole-grain cereals, nuts, eggs, yogurt, fruits, meats and leafy vegetables.

Vitamin B1 is an essential vitamin that aids in conversion of carbohydrates into energy. It also helps regulate normal functioning of heart, muscles and nervous system. Rich food sources are whole and enriched grains, potato, dairy products, sunflower seeds, pork and dried beans.

Riboflavin plays a vital role in forming the red blood cells. Good sources of Riboflavin are liver, milk, dairy products, yeast extracts, meat, eggs, spinach, enriched noodles and mushrooms.

Niacin is another B group vitamin that is essential for normal functioning of the digestive system, skin and nerves. It is richly found in dairy products, bread, yeast, fish, legumes, enriched bread, lean meats, nuts, poultry, fish and eggs.

Vitamin B6 is essential for the synthesis of antibodies and functioning of immune system. Good sources of Vitamin B-6 are sunflower seeds, bananas, whole grains, legumes, beans, nuts, meats, fish, eggs and fortified breads and cereals.

Folic acid is required for healthy growth and development as this vitamin acts a co-enzyme for producing energy. Rich food sources of folic acid are beans, legumes, kidneys, whole grains, peas, citrus fruits, fruit juices wheat bran, dark green leafy vegetables, poultry, pork and shellfish liver. These enriched sources enable the vitamin to function as a co-enzyme in the breakdown of fats and proteins to produce energy.

Vitamin B12 aids in regulating metabolism and promotes a healthy nervous system. B12 is mainly found in all animal food sources like poultry, certain algae, shellfish, yeast extract, eggs, meat and milk and milk products.

In case of any deficiency of B complex, take a supplement of vitamin B complex with food and fill the nutritional gap in the body. Whole food vitamin B complex is the best supplement made from naturally rich food sources without any use of synthetics or preservatives.

Vitamin B Complex Benefits:

Vitamin B complex benefits cover a wide range when it comes to the health of an individual. Vitamin B complex consists of 8 soluble water vitamins and these work together to encourage cell growth and division, enhance the immune system and nervous system, boost metabolism among other benefits.

Vitamin B complex benefits for women are many and these include more stable moods, increased energy, healthier skin, hair and eyes. The folic acid or B9 in vitamin B complex helps the body to form hemoglobin. Folic acid is important in pregnancy as it helps prevent neural tube defects in newborns.

Women who are pregnant and or planning pregnancy should consume 600 micrograms a day. Vitamin B and weight loss are connected but this is only when all forms of vitamin B are taken together.

Vitamin B Complex Supplements:

Vitamin B is a water soluble vitamin which is essential for the body to perform its natural functions. It is actually a group of 8 different vitamins that are chemically distinct from each other. Vitamin B complex is the term used for all vitamin B supplements and there are many health benefits of this supplement. Vitamin B can be taken as a preventive measure against lung and pancreatic cancer. This vitamin also helps to prevent the development of heart disease. Other Vitamin B complex benefits include maintaining good skin tone, increased energy, stronger muscles, and a healthy nervous system and so on. However, there are also side effects of taking vitamin B complex supplements, particularly if they are taken excessively and not as prescribed. These Vitamin B complex side effects are headaches, joint pain, fatigue, anemia, insomnia, high blood pressure, nausea and vomiting among others.

Vitamin B Complex Side Effects:

Vitamin B complex side effects generally occur if the vitamin is taken in excess and not according to the doctor's orders. If too much Vitamin B is taken (if the dose is high) or if there is an allergy present, it could lead to serious side effects. Too much vitamin B12 will result in anxiety and numbness in the face. Anemia, low blood pressure, nausea, vomiting could also occur due to an overdose of B2. Too much folic acid can cause kidney damage, abdominal bloating and loss of appetite. Other side effects of this vitamin B complex include chest pain, breathing problems, hives, skin rash or an itchy swollen skin, insomnia, panic attacks. Side effects may also be experienced by people who are sensitive to or have an allergy to cobalt or cobalamin.

Vitamin B Complex Foods:

Vitamin B complex is made up of 8 water soluble vitamins that take care of several functions in the body. A deficiency in any of these 8 vitamins that make up Vitamin B complex can cause serious health problems. It is for this reason that one should include vitamin B complex foods in one's diet. Here is a list of vitamin B complex foods.

- Pork, berries, legumes, lean meats. Nuts, soy milk (Vitamin B1)
- Eggs, dark green vegetables, fish, grains, lean meat, mushrooms (B2)
- Sunflower seeds, tuna, poultry, potato, cottage cheese, liver (B3)
- Organ meats, avocados, broccoli, mushrooms(B5)
- Green beans, whole grains, spinach, fish, bananas(B6)
- Soy products, egg yolks, fish, organ meats, cheese, sweet potatoes(B7)
- Green leafy vegetables, citrus juice, legumes, tofu, tomato juice (B9)
- Milk, fish, fortified breakfast cereal, eggs, shellfish (B12)

Vitamin B Complex Deficiency:

Deficiencies of any of the 8 vitamins that make up vitamin B complex causes several health problems and give rise to symptoms depending on the problems. These health problems include beriberi, amnesia, emotional disturbances, memory loss, high blood pressure, dermatitis, mental confusion, pellagra, inflammation of the tongue and so on. A deficiency of folic acid or B9 during pregnancy can lead to premature births, birth defects, miscarriages, depression among other problems. Nervous systems disorders may result due to a deficiency in vitamin B12, as this vitamin maintains the health of the nervous system. Migraine, insomnia, irritability are some of the symptoms one may exhibit when there is less Vitamin B6 being ingested.

Natural Vitamin B Complex:

Vitamin B complex comprises of vitamin B1, vitamin B2, Vitamin B3, Vitamin B5, Vitamin B6, Vitamin B7, Vitamin B9, and Vitamin B12. Many people turn to supplements in order to benefit from this vitamin but there are several natural sources of vitamin B complex as well. These are pork, liver, whole grains, legumes, all dairy products, leafy green vegetables, fish, poultry products, lean meats, sunflower seeds, mushroom, salmon, beet roots, oranges, and so on. It is best to incorporate the above foods in your diet so that you can lead a healthier life.

Foods High in Vitamin B:

Vitamin B complex boosts the immune system, promotes cellular metabolism, growth and division, helps with skin and muscle tone and boosts metabolic function as well. In order to reap these many benefits, you must follow a diet that is rich in vitamin B complex. Sources of Vitamin B complex are bananas, meats like turkey, tuna, liver, eggs, dairy products, lentils, green vegetables, chili peppers. Deactivated forms of yeast are also an excellent source of this vitamin. Different foods and beverages can have nutritional yeast added to them. Other sources which are rich in this vitamin are clams, oysters, mussels, caviar, fish, crab and lobster. Foods which are rich in folic acid (Vitamin B9) are kidney, egg yolks, almonds, wholegrain breads, peaches, oranges, brussel sprouts, spinach and beetroot among others.

Vitamin B Complex Stress:

There are many causes of stress and stress can cause many problems like depression, heart attacks, strokes, gastrointestinal distress and so on. Many people feel that taking Vitamin B complex can help combat stress. It is also believed that a deficiency of Vitamin B leads to certain stress related symptoms like anxiety and depression. Keep in mind that vitamin B complex is made up of 8 water soluble vitamins. Vitamin B 5 or pantothenic acid plays an important role in alleviating stress. It is essential to the manufacture of stress related hormones which are produced in the adrenal glands. Research has shown that B complex vitamins can help to restore the adrenal glands from stress. The Vitamins B1, B2 and B3 are helpful in dealing with physical stress.

Natural Sources of Vitamin B

Vitamin B complex can be synthetic, natural or crystalline. Synthetic Vitamin B complex are vitamins that are produced by isolating chemical versions of all B group vitamins whereas crystalline Vitamin B complex are vitamins derived from natural sources but extracted and isolated using various processing techniques that tend to alter the biological and biochemical combinations of the natural sources. Natural vitamin B also undergoes chemical reactions but the reactions are handled carefully in order to maintain the originality of natural food sources.

Natural vitamin B complex defines a blend of B vitamins with the same biological and biochemical combination as found in natural food sources. B vitamins are naturally extracted from food sources by simply removing fiber and moisture, without tampering with the natural function and action of the vitamins in the body.

Even though derived from natural sources, these vitamins are chemically similar to synthetic B complex vitamins. This is because most of the natural supplements are associated with synthetic vitamins to increase potency and stability. Formation of natural vitamins undergoes various processing techniques such as heat and pressure that tends to destroy the enzymes present in natural food sources.

Most of the natural vitamin B complex supplements consist of co-enzyme Vitamin B3, co-enzyme Vitamin B6, niacin, inositol, co-enzyme Vitamin B12, biotin, folic acid, mannitol and sorbitol. Apart from that these also contain some flavoring agents like sucrose, fructose or maltose and coloring agents like beets, carrots or chlorophylls.

Mannitol and sorbitol are used as binders and sweeteners but are not 100% safe for human body. Combination of the two tends to promote tooth decay. These vitamins with the right amount of formulations tend to go into the blood stream immediately. Most of the natural supplements are meant to dissolve under the tongue so that the digestive tract cannot destroy the remaining nutrient value. All the B group vitamins even though different in structure and function, work as a team to perform their individual, specific functions in the body.

Natural vitamin B complex is definitely associated with synthetic vitamins but yet it much better than consuming purely synthetic vitamins. Natural supplements provide a wide spectrum of B Vitamins to fill the nutritional gap by providing a balanced blend of natural B group vitamins.

Vitamin B12 Deficiency

Are you getting enough vitamin B12? Many people don't, and that deficiency can cause problems.

Vitamin B12 does a lot of things for your body. It helps make your DNA and your red blood cells, for examples.

You can get vitamin B12 from your diet, or from supplements. Exactly how much you need depends on your age.

Causes of Vitamin B12 Deficiency

Vitamin B12 deficiency can happen if you have certain conditions, such as:

- Atrophic [gastritis](#), in which your stomach lining has thinned
- Pernicious [anemia](#), which makes it hard for your body to absorb vitamin B12
- Surgery that removed part of your stomach or small intestine, including weight loss surgery
- Conditions affecting the small intestine, such as [Crohn's disease](#), [celiac disease](#), bacterial growth, or a parasite
- Heavy drinking
- Immune system disorders, such as [Graves' disease](#) or [lupus](#)
- Long-term use of acid-reducing drugs

You can also get vitamin B12 deficiency if you're a [vegan](#) (meaning you don't eat any animal products, including meat, milk, cheese, and eggs) or a vegetarian who doesn't eat enough eggs or dairy products to meet your vitamin B12 needs.

Babies born to mothers who are vegetarians may also not get enough vitamin B12.

Symptoms of Vitamin B12 Deficiency

A deficiency of vitamin B12 can lead to vitamin B12 deficiency anemia. A mild deficiency may cause only mild, if any, symptoms. But if untreated, it may cause symptoms such as:

- Weakness, tiredness, or light-headedness
- Rapid heartbeat and breathing
- Pale skin
- Sore tongue
- Easy bruising or bleeding, including bleeding gums
- Stomach upset and weight loss
- Diarrhea or constipation

If you think you have symptoms of vitamin B12 deficiency, you can ask your doctor for a blood test to check on that.

Treatment for Vitamin B12 Deficiency

Vitamin B12 deficiency treatment depends on the cause.

If pernicious anemia or a problem with absorption is the cause, you'll need to replace vitamin B12, usually by injection, or by prescription.

If the issue is that you don't eat animal products, you can change your diet or take supplements.

For most people, treatment resolves the problem. But any [nerve damage](#) that happened due to the deficiency could be permanent.

Preventing Deficiency Problems

Most people can prevent vitamin B12 deficiency by eating enough meat, poultry, seafood, dairy products, and eggs.

If you don't eat animal products, or you have a medical condition that limits how well your body absorbs nutrients, experts recommend taking a B12-containing multivitamin and eating [breakfast](#) cereal fortified with vitamin B12.

If you're using vitamin B12 supplements, let your doctor know, so he or she can make sure they won't affect any medicines you're taking.