



Welcome!

In this section, we have provided an overview of the most critical vitamins and minerals that you will need to include as part of your daily life after bariatric surgery. We have not addressed each vitamin and mineral that you will find in our products, nor is this intended to be a complete supplement review of all the vitamins and minerals that you will need. But we have tried to address the most critical needs to ensure that you understand why your body needs each of these supplements every day.

After having weight loss surgery, there are a tremendous number of things that you need to take into account and need to be aware of with regard to your change in lifestyle, particularly your eating habits. As a patient, you may choose to take any level of supplementation that you wish, but remember to choose wisely because your health will be determined by how you treat your new body.

If you are a patient looking to better understand gastric bypass vitamins or a prospective adjustable gastric band patient, this information will help to answer some of your questions. To gain a better understanding about the different vitamins and minerals that are in our products, please read below.



Vitamin A

A fat soluble vitamin that is most notable for the role that it plays in night vision, it is also important for maintaining healthy skin. Supplemental vitamin A is found commonly in two different forms: as preformed vitamin A (acetate or palmitate) or as beta-carotene. Pre-formed—Vitamin A is most readily absorbed when taken in its preformed state. But since vitamin A is a fat soluble vitamin, it is possible to get too much in your diet. Studies have shown that continual vitamin A levels of 10,000 IU per day may potentially cause long-term bone loss. Because of this, you should choose a supplement that contains preformed vitamin A levels below this amount. Celebrate contains 5,000 IU of preformed vitamin A in a daily dosage.

Beta-carotene—This is a water soluble form of vitamin A which does not have toxicity* issues. However, you must take 6X the amount of beta-carotene as pre-formed to achieve the same result. And, your body must first process the beta-carotene and convert it to vitamin A before it can be of any use. Therefore, taking a supplement that contains both preformed and beta-carotene is recommended. Celebrate Bariatric Supplements contain 5,000 IU of beta-carotene.

*While there are no serious toxic side effects associated with taking high levels of beta-carotene, it is possible to have side effects such as a tendency for orange skin.

Common Food Sources of Vitamin A: Liver (beef, pork), carrots, broccoli, sweet potatoes, kale, butter, spinach, leafy vegetables, pumpkin, collard greens, cantaloupe melon, and eggs.

Vitamin C

A water soluble vitamin that is best known for the prevention of scurvy, vitamin C is also known to be an effective antioxidant that aids in the reduction of oxidative stress. Additionally, vitamin C is also important for the proper absorption of iron. The most common form of vitamin C is ascorbic acid, but other forms are acceptable. Celebrate Bariatric Supplements deliver 240 mg of vitamin C on a daily basis between our multivitamin and our iron*.

*Based on 30 mg iron dosage.

Common Food Sources of Vitamin C: Red pepper, Parsley, Kiwifruit, Broccoli, Brussels sprouts, Papaya, Strawberry, Orange, Lemon, Cantaloupe, Cauliflower, Grapefruit, Raspberry, Tangerine, Mandarin orange, Passion fruit, Spinach, Cabbage (raw), Lime, Mango, Potato, Honeydew, Cranberry, Tomato, Blueberry, Pineapple, Grapes, Apricot, Plum, Watermelon.

Michael C. Morris, M.D.



Vitamin D

The primary function of vitamin D is to aid the body in the absorption of calcium, which makes it critical to ensure healthy bones and teeth. Vitamin D also promotes normal cell growth, weight loss, and aids in the prevention of some cancers. While it is a fat soluble vitamin, the levels associated with toxicity are fairly high, in part because vitamin D is found in almost no foods. Symptoms associated with vitamin D deficiency may include muscle pain, bone fractures, fatigue, low immunity, depression or problems sleeping. Celebrate Bariatric Supplements provide 1600 IU between our multivitamin and Calcium Plus. This is the highest level of vitamin D available in a bariatric supplement protocol.

Vitamin B1 (thiamin)

A water soluble B-complex vitamin, which aids the body in converting carbohydrates into energy. It is also essential for proper heart and muscle function. Proper supplementation is most critical in the first several weeks after bariatric surgery or at any point that persistent vomiting may occur. Thiamin deficiencies are best known for causing beriberi. Having been virtually eradicated from most societies since many foods are enriched with thiamin, it is still a potential hazard for surgical weight loss patients. Since your diet is greatly restricted and your body cannot store large amounts of thiamin (enough for about 3 weeks), it is possible to suffer a deficiency. These deficiencies can be very serious and sometimes irreversible. Celebrate Bariatric Supplements provide 800% of the RDI for Thiamin, which is well above the levels needed to maintain proper health.

Common Food Sources of thiamine: Green peas, Spinach, Liver, Beef, Pork, Navy beans, Nuts, Pinto beans, bananas, soybeans, whole-grains, bread, yeast.

Vitamin B12

Another water soluble B-complex vitamin, vitamin B-12 is responsible for maintaining red blood cells and nerve cells, as well as assisting the body in making DNA. It is probably the most talked about vitamin following weight loss surgery. Following a malabsorbtive procedure such as a gastric bypass, the body's ability to absorb vitamin B-12 is greatly diminished due to the reduced levels of gastric acid and intrinsic factor (IF). Some gastric bypass vitamins receive greater exposure than others as is the case with vitamin B-12. Symptoms associated with B-12 deficiency include weakness, fatigue, dizziness, and brittle nails. A deficiency can lead to pernicious anemia. In the case of a severe B-12 deficiency, neuropathy may develop, resulting in irreversible neurological damage. Celebrate Bariatric Supplements deliver 350 mcg (nearly 6000% RDI) daily in our multivitamin, which is the highest level of vitamin B-12 available in a bariatric multivitamin. In addition to the vitamin B-12 that is in our multivitamin, we also have developed a separate B-12 sublingual for those patients who need additional supplementation.

Common Food Sources of vitamin B12: Beef liver, fortified breakfast cereal, beef, dairy products, eggs.

Folate

More commonly known as folic acid, this B-complex vitamin plays an important role in the production and maintenance of new cells. It is especially important to women who may become pregnant to reduce the risk of premature births and some birth defects. A common effect of a folate deficiency is anemia, which can be associated with fatigue, muscle weakness, or dizziness. One concern associated with folate deficiency is that it may actually mask a vitamin B-12 deficiency, so it is important that your healthcare provider be monitoring both of these levels. Celebrate Bariatric Supplements deliver 800 mcg per day, which is the level that most bariatric professionals agree is appropriate to ensure proper health while not interfering with vitamin B-12.

Michael C. Morris, M.D.



Common Food Sources of folate: Chicken liver, fortified breakfast cereal, soy flour, beef liver, chickpeas, pinto beans, spinach, lima beans, papaya, avocado, wheat germ, asparagus, orange juice, whole wheat flour, peas, white rice, dry roasted peanuts, wheat flour, broccoli, crunchy peanut butter, banana.

Calcium

The most abundant mineral in the human body, calcium is critical to your overall health. Known primarily for its purpose in ensuring healthy bones and teeth, it is also needed for muscle contraction, the secretion of hormones and enzymes, and for sending messages throughout the nervous system. Calcium is also known to help facilitate weight loss. Early symptoms of deficiency can include muscle cramps, facial spasms and brittle nails. Long-term effects include brittle bone disease or osteoporosis. After bariatric surgery, calcium citrate is the only form of calcium recommended and it is important regardless of the type of surgery that you have had. When selecting a supplement, you need to be sure that it contains adequate levels of vitamin D to increase absorption. Magnesium is also recommended both for its benefit to bone health but also to help reduce the risk of constipation. Celebrate Bariatric Supplements provides the most complete bone health formula available in a bariatric supplement. A daily dosage contains 1000 mg of calcium citrate, 800 IU of vitamin D, 200 mg of magnesium as well as vitamin K, boron, copper and zinc.

Common Food Sources of calcium: Milk, yogurt, cheese

Iron

The most important function of iron is to carry oxygen in red blood cells to muscles. It is also essential to the production of energy. Iron deficiencies are common among patients that have undergone a malabsorptive surgical procedure but can be a potential risk associated with any bariatric surgery. Symptoms associated with iron deficiency include fatigue, lowered immunity, restless leg syndrome and pica. Pica is a condition in which a person has a desire to eat chalk, ice, dirt or other strange items. Iron deficiency can lead to anemia. Celebrate Bariatric Iron is available in 18 mg and 30 mg daily doses and includes vitamin C to increase absorption. Speak with your bariatric dietitian or surgeon to determine what is most appropriate for you.

Common Food Sources of iron: Heme(meat, fish, poultry)—beef, chicken, some fish (cod, flounder, salmon), pork, tuna, turkey. Non-heme—kidney beans, baked beans, spinach, white rice(enriched), whole wheat bread, apricots, lima beans, dates, spaghetti, bagel, peas, white bread, broccoli(raw)

Magnesium

A key mineral necessary for building healthy bones, manufacturing proteins, and regulating body temperature. Symptoms associated with deficiency include muscle cramps, muscle pain, constipation, and headaches. Insomnia, anxiety, hyperactivity, irritability and panic attacks may also be attributed to a magnesium deficiency. Much like calcium, the form of magnesium is also important. You should choose a supplement that contains high concentration of magnesium citrate, as it is more readily absorbed than other forms. Celebrate Bariatric Supplements provide the highest level of magnesium citrate available in a bariatric supplement. In most cases, magnesium is listed in multiple forms. If magnesium citrate is listed first, you can be sure that the magnesium is at least 51% citrate.

Common Food Sources of magnesium: Halibut, almonds, cashews, soybeans, spinach, mixed nuts, shredded wheat cereal, oatmeal, baked potato, peanuts, peanut butter, wheat bran, black eyed peas, yogurt, bran flakes, baked beans, brown rice, avocado, kidney beans, pinto beans, banana, milk.

Michael C. Morris, M.D.