Your Vitamin and Mineral Needs Before and After Bariatric Surgery

Basic guidelines

This handout for patients preparing for bariatric surgery gives basic guidelines for choosing vitamin and mineral supplements. It includes lists of brand names and prices for different supplements.

Please note that prices included in this handout are accurate as of November 2013. Your costs may vary.

Why do I need supplements?

Your Bariatric team has asked you to take certain vitamins and minerals before and after your surgery. Taking these supplements will help ensure that your body gets enough nutrients.

This handout gives basic guidelines. Your dietitian may create a special plan for you, based on your medical needs.

Please bring all your vitamins and minerals to every clinic visit.

When should I start to take them?

Start Now

Start taking supplements now, before your surgery. Take these every day:

- Multivitamin/mineral with iron (see page 2)
- Calcium: 1,500 mg (milligrams) a day (see pages 2 and 3)
- Vitamin D3: 2,000 IU (international units) a day (see page 3)

After Surgery

- Starting right after surgery, you must crush your supplements before you take them, or take them in chewable or liquid form. You will need to do this for 2 to 4 weeks.
• No later than 6 weeks after surgery, you will need to start taking vitamin B12. You can take it in one of these forms:
  - As a pill, 500 micrograms (mcg) by mouth every day
  - As an injection, 1,000 mcg once a month

**Multivitamin Minerals with Iron**
A multivitamin/mineral supplement with iron will help make sure you are getting all the nutrients you need. Iron is needed for healthy red blood cells.

Here are some brands you may want to try. You will need to crush your pills or take chewable or liquid forms for about 2 to 4 weeks after your surgery.

**Pill or Tablet**
- Nature Made Multi Complete, 130 servings ($13)
- Celebrate MultiComplete, 30 servings ($20)
- Rainbow Light Women’s One, 90 servings ($25)
- Alive! Once Daily Women’s Ultra Potency Supplement, 60 servings ($14)
- Vitamin Shoppe Multi, 180 servings ($14)
- TwinLab Daily One Caps, 90 servings ($11)
- Bariatric Advantage Ultra Multi with iron, 90 servings ($50)

**Chewable**
- TwinLab Bariatric Support Chewable Multi, 60 servings ($14)
- Flintstones Complete, 150 servings ($15)
- Centrum Chewable, 100 servings ($10)
- Opirity, 90 servings ($36)

**Liquid**
- Nature’s Way Alive Liquid Multivitamin, 30 servings ($19)

**Calcium**
Calcium is needed for healthy, strong bones. Your goal is 1,500 mg calcium a day through food and supplements.

To help your body absorb the calcium in your supplement, it is best to take divided doses. For instance, you can:
- Take 750 mg 2 times a day (morning and evening)
- Take 500 mg 3 times a day (morning, noon, and evening)
There are many forms of calcium. Your body can use either calcium carbonate or calcium citrate. Here are some brands of calcium you may want to try:

**Pill or Soft Gel**
- Schiff Super Calcium + D Soft gel, 600 mg/400 IU, 120 servings ($7.25)
- Kirkland Signature (Costco) Calcium + D, 600 mg/400 IU, 500 servings ($8.60)
- Caltrate 600+ D3, 600 mg/800 IU, 120 servings ($18)

**Chewable**
- Tums Ultra, 800 mg, 132 servings ($12.50)
- NOW Calcium Citrate, 630 mg, 75 servings ($5.25)

**Liquid**
- Lifetime Liquid Calcium Magnesium Citrate with Vitamin D, 600 mg/400 IU, 32 servings ($8.50)

**Dietary Calcium Counts, Too!**
Include calcium in your food when you add up how much you are getting each day. Here are some examples of foods and their calcium content:

<table>
<thead>
<tr>
<th>Calcium Content</th>
<th>Food Servings</th>
</tr>
</thead>
<tbody>
<tr>
<td>300 mg</td>
<td>• 1 cup nonfat or 1% cow’s milk</td>
</tr>
<tr>
<td></td>
<td>• 1 cup fortified soy or rice milk</td>
</tr>
<tr>
<td></td>
<td>• 1 cup nonfat or low-fat yogurt</td>
</tr>
<tr>
<td></td>
<td>• 1½ ounces natural cheese</td>
</tr>
<tr>
<td>100 to 200 mg</td>
<td>• 6 oz cottage cheese</td>
</tr>
<tr>
<td></td>
<td>• ½ cup fortified hot or cold cereal</td>
</tr>
<tr>
<td></td>
<td>• ½ cup tofu</td>
</tr>
<tr>
<td></td>
<td>• ½ cup spinach (cooked)</td>
</tr>
</tbody>
</table>

**Vitamin D₃**
Vitamin D₃ is also needed for healthy, strong bones. Your goal is 2,000 IU a day. Choose the form that is called cholecalciferol or vitamin D₃.

Here are some brands of vitamin D₃ you may want to try:

**Soft Gel**
- Nature’s Way Vitamin D₃, 2,000 IU, 240 servings ($10)
- Carlson Solar D Gems, 2,000 IU, 360 servings ($20)
Liquid
- Carlson Super Daily D3 drops, 2,000 IU, 365 servings ($13.50)
- Biotics Research Bio-D-Mulsion, 2,000 IU, 365 servings ($12.50)

**Your Daily Intake of Calcium and Vitamin D**
Use this table to add up the calcium and vitamin D you get from your diet and your supplements during 1 day. Compare your totals to the daily goal.

<table>
<thead>
<tr>
<th>Sources</th>
<th>Calcium</th>
<th>Vitamin D</th>
</tr>
</thead>
<tbody>
<tr>
<td>My calcium supplement (may or may not have vitamin D)</td>
<td>_______ mg</td>
<td>______ IU</td>
</tr>
<tr>
<td>My vitamin D3 supplement</td>
<td>______ IU</td>
<td></td>
</tr>
<tr>
<td>My multivitamin</td>
<td>______ mg</td>
<td>______ IU</td>
</tr>
<tr>
<td>My diet</td>
<td>______ mg</td>
<td></td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My daily goal</td>
<td>1,500 mg</td>
<td>2,000 IU</td>
</tr>
</tbody>
</table>

**Vitamin B12**
Vitamin B12 is important for healthy red blood cells and a healthy nervous system. Here are some ways to get the right amount of vitamin B12 after your surgery:

**By Mouth: 500 mcg a day**
- TwinLabs B12 dots, 500 mcg daily, 100 servings ($5.99)
- Nature Made tablets, 500 mcg, 200 servings ($12)
- Vitamin Shoppe capsules, 500 mcg, 100 servings ($4.99)

**By Injection: 1,000 mcg a month**
- *Intramuscular* (injection into a muscle), once a month from your primary care provider

**How do I know which multivitamin/mineral supplement is best for me?**
Shopping for a multivitamin/mineral supplement can be confusing. There are hundreds of products to choose from. Be prepared to read labels and compare different brands.
There are 24 essential vitamins and minerals that our bodies cannot make. This means we must either get them from the food we eat or in a supplement. A complete multivitamin/mineral supplement is an important part of meeting all your nutrient needs and feeling healthy for a lifetime.

**How to Choose Your Supplement**

Make sure that your supplement contains:

- **Vitamin A:** 100 to 200% of the daily value (DV). No more than 5,000 IU should come from retinol (pre-formed vitamin A).
- **Vitamin C:** 60 to 500 mg, or 100% or more of the DV.
- **Vitamin D:** Most supplements have vitamin D, but not enough for bariatric patients. You will need a separate vitamin D3 supplement.
- **Vitamin E:** 100% of the DV or more, ideally 30 to 200 IU, in its natural form. The natural forms of vitamin E have “d” at the beginning of their names. Some examples are d-alpha tocopheryl acetate or d-alpha tocopheryl succinate.
- **Vitamin K:** Our bodies can make some vitamin K, so it is not usually included at 100% the DV. If you are on blood-thinning medicine (anticoagulant), avoid vitamin K or take only a very small amount.
- **Thiamin, riboflavin, niacin, B6, folate, pantothenic acid, and biotin:** 100% or more of the DV.
- **Vitamin B12:** Most supplements have vitamin B12, but not enough for bariatric patients. You will need a separate vitamin B12 supplement.
- **Choline and inositol:** Some of these B vitamins should be included.
- **Calcium:** Most supplements have some calcium, but not enough for bariatric patients. You will need a separate calcium supplement.
- **Iron:** Some supplements do not have iron. If you are not taking a separate iron supplement, your multivitamin should have 18 mg. If you choose a children’s multivitamin/mineral with iron, you may need to double the dose.
- **Zinc, selenium, copper, manganese, chromium, and molybdenum:** It is best to have 100% of the DV for these trace elements.
- **Flouride, sodium, potassium, magnesium, and phosphorus:** These may not be included in all supplements. Take a separate supplement if needed.
- **Iodine:** Because some people have iodine allergies, many supplements do not contain iodine. Ask your health care provider for more information about iodine.
- **Cobalt and nickel:** These “ultratrace” elements are not needed in your supplement.
Comparing Labels

Here are 2 sample multivitamin/mineral labels to compare:

- **VitaFusion Multivites Gummies**: Do not choose this type of supplement. It is short on vital nutrients!

  ![Supplement Facts](image1)

- **Celebrate Multi-Complete**: This is a good one. It has at least 22 vitamins and minerals at 100% the DV.

  ![Supplement Facts](image2)
Budgeting for Your Vitamins and Minerals

This table gives a quick overview of different brands of supplements and their costs for 1 month.

<table>
<thead>
<tr>
<th>Multivitamin/Mineral</th>
<th>Calcium</th>
<th>Vitamin D</th>
<th>B12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature Made Multi Complete</td>
<td>Tums Ultra</td>
<td>Nature’s Way D3</td>
<td>TwinLabs B12 Dots</td>
</tr>
<tr>
<td>Celebrate Multi-Complete</td>
<td>NOW Calcium Citrate</td>
<td>Carlson Solar D Gems</td>
<td>Nature Made B12</td>
</tr>
<tr>
<td>Rainbow Light Women’s One</td>
<td>Schiff Super Calcium + D Soft Gel</td>
<td>Vitamin Shoppe B12</td>
<td></td>
</tr>
<tr>
<td>Alive! Once Daily Women’s Ultra Potency Supplement</td>
<td>Kirkland Signature (Costco) Calcium + D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vitamin Shoppe Multi</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TwinLab Daily One Caps</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Cost for 1 Month**

<table>
<thead>
<tr>
<th>Average:</th>
<th>Range:</th>
<th>Range:</th>
<th>Average:</th>
</tr>
</thead>
<tbody>
<tr>
<td>$7 to $8</td>
<td>60¢ to $2.50</td>
<td>60¢ to $1.25</td>
<td>About $1.85</td>
</tr>
</tbody>
</table>

Where to Buy Your Supplements

Drugstores such as Walgreens and RiteAid, and local chains or megastores such as Costco or Walmart, carry a wide range of supplements. For more options, and a large selection of liquid formulas, try a specialty store such as Super Supplements or Vitamin Shoppe.

To Learn More

When it comes to choosing which vitamins and minerals to take, all of the options can be confusing. Your vitamin and mineral needs are specific to you. Ask your medical team for help, or bring in your supplements if you have any doubts.