Dietary Guidelines after Bariatric Surgery

The purpose of the following guidelines is to reduce the symptoms associated with gastric bypass surgery, promote long-term satisfaction, and to achieve and maintain a desirable weight. The diet following surgery is divided into three phases.

Phase I: First 2 weeks* after surgery - Liquids
*(*Time frame varies according to physician)*

Acceptable beverages include:

- Water
- Flavored waters that are sugar-free and non-carbonated
- Crystal Light® (generic brands are fine)
- Broth, bouillon, consommé (chicken, beef, or vegetable)
- Sugar-free popsicles
- Sugar-free gelatin
- "Sport drinks" (Gatorade, Powerade) slightly diluted with water
- Sports drinks with less sugar such as PowerAde Zero, G-2, or Propel
- Tea: unsweetened or artificially sweetened; iced or hot; black, green, or herbal (decaffeinated is best, but caffeinated fine if less than 2 cups a day)
- Coffee (decaffeinated is best, but caffeinated fine if less than 2 cups a day)
- Sugar-free, fat-free hot cocoa (made with milk)
- Skim, 1%, Ultraskim, or Superskim milk*
- Fat-free or low-fat soy milk, Lactaid®, or Dairy Smart®
- No Sugar Added Carnation® Instant Breakfast
- Any other protein supplement as long as the first ingredient states "whey protein isolate" or "soy protein isolate" (example: Bariatric Advantage®)
- Tomato soup made with 1% or skim milk

*Use caution as some people become lactose intolerant after surgery. If you experience intolerance to dairy, try soy milk, Lactaid®, Dairy Smart®, rice milk, or almond milk.

Avoid:

- Fruit juices: both 100% fruit juice and those with added sugar
- Diet soda (or anything that is carbonated)
- Alcoholic beverages

Suggestions for Phase I Diet:

- Increase liquids as tolerated to at least 2 liters a day (64 oz., or eight 8 oz. cups). Drink enough fluid to keep your urine a clear, pale yellow color. If your urine becomes cloudy, dark or foul-smelling, drink more!
- Sip slowly throughout the day. Drink 8 oz. of fluid over a period of 1 hour. Do not gulp liquids or drink too quickly. Gulping or drinking too fast can cause abdominal pain and/or nausea.
- Protein goal is 60 to 80 grams/day; this may not be possible at first, but patients should work towards this amount of protein.
- It is very important to avoid any liquids with a high amount of sugar at this time (more than 15 g. in an 8 oz. serving). Sugary liquids may cause dumping syndrome, which is something you do not want to experience. Plus they are an added source of unwanted calories.
- Avoid drinking from a straw. When you drink from a straw you swallow more air, which may make you belch more often. Carbonated beverages are to be avoided for the same reason; they will cause excess gas.

- Pre-freeze or refrigerate plastic bottles of water, Crystal Light®, tea, etc. and carry the bottle around with you so that you can take small, frequent sips of fluid throughout the day and avoid becoming dehydrated.
- During this phase of the diet, begin taking a chewable multivitamin/mineral supplement twice a day. Other vitamin and mineral supplements (calcium, vitamin D, vitamin B12, and iron) may be started as well. (See the vitamin section of this handout for examples).

Phase I Sample Menus

Note: Times of day are irrelevant! The point is to sip constantly during your waking hours.

First 2 weeks after surgery -- generally sip on 8oz. fluid over a one-hour period of time.

8am: 8oz. water & multivitamin

9am: 8oz. decaf coffee w/ Splenda®

10am: 8oz. skim milk + one serving of approved protein supplement

11am: 8oz. Crystal Light®

12pm: 8oz. chicken broth

1pm: ½ cup sugar-free gelatin

2pm: 8oz. water

3pm: 8oz. water

4pm: 8oz. skim milk + one serving of approved protein supplement

5pm: 8oz. vegetable broth

6pm: sugar-free popsicle

7pm: 8oz. herbal tea & multivitamin

24oz. water + 8oz. Crystal Light + 16oz. broth + 16oz. decaf coffee/tea + 4oz. gelatin + 1 popsicle + 16oz. skim milk = at least 84oz. fluid and ~ 66g of protein

Note: if abdominal cramping, bloating, nausea and/or gas is experienced with cow's milk, try soy milk or Lactaid®.

8am: 8oz. water & multivitamin

9am: 8oz. Orange sugar free, noncarbonated beverage

10am: 8oz. skim milk + one serving of approved protein supplement

11am: 8oz. sugar-free hot cocoa

12pm: 8oz. beef broth

1pm: 8oz. decaf ice tea w/ lemon

2pm: 8 oz.skim milk + one serving of approved protein supplement

3pm: sugar free popsicle

4pm: ½ cup sugar-free gelatin

5pm: 8oz. water

6pm: 8oz. chicken broth

7pm: 8oz. water & multivitamin

32oz. water+ 16oz. milk + 16oz. broth + 16oz. ice tea/hot cocoa + 4oz. gelatin + 1 popsicle. = at least 84oz. fluid and ~ 66g of protein

Phase II: Week 3-6 weeks after surgery - Soft Foods

Protein (include one of the following protein foods at each meal)

- Fat-free or low-fat cottage cheese and ricotta cheese
- Fat-free or low-fat artificially sweetened yogurt. Look for versions with less than 15 grams of sugar per serving.
- Low-fat or fat-free Greek yogurt
- Sugar-free, fat-free pudding
- Eggs, egg whites, Eggbeaters® (poached, scrambled, soft-boiled)
- Sugar-free egg custard
- Tofu
- Canned baby meats/pureed meats
- Sliced/shredded fat-free or low-fat cheese
- Canned/vacuum packed tuna, salmon, chicken
- Baked fish that flakes easily with a fork (cod, salmon, tilapia, crab meat, etc.)
- Thinly-sliced lean deli turkey breast or ham
- Lean ground beef, pork, or turkey (93% lean or better)

Only include the following foods in your meal plan if you are consuming 60 to 80 grams of protein a day:

Fruits

- Unsweetened applesauce
- Diced peaches or pears (canned in own juice)
- Banana (soft)

Vegetables

- Soft-cooked vegetables such as carrots, green beans, broccoli, cauliflower (mushy, not crunchy)

Starch/Other

- Mashed potatoes, sweet potatoes, or winter squash
- Dry cereal soaked in milk
- Cooked cereals (baby oatmeal, cream of wheat/rice, farina, grits) made with milk

*May add nonfat dry milk powder or protein powder to foods and beverages to increase protein content.

Allowed Condiments

- Sugar (no more than one teaspoon per meal)
- Artificial sweetener (Splenda®, Equal®, etc.)
- Non-dairy, fat-free, or powdered creamer
- Light margarine (free of trans-fats)
- Ketchup
- Light or fat-free mayonnaise
- Sugar-free jam, jelly, or preserves
- Reduced-fat and fat-free salad dressings
- Hot sauce
- Mustard

Use Sparingly

- Butter and regular margarine
- Cream
- Regular mayonnaise
- Cream cheese
- Natural Peanut butter

Avoid--these foods usually are not tolerated well this soon after surgery.

- Raw fruits (except bananas), dried fruits, and raw vegetables
- Corn, peas, and popcorn
- Pasta, noodles, rice, bread
- Nuts and coconut
- Alcohol
- Carbonated beverages
- Greasy or fried foods

Suggestions for Phase II diet:

- During this phase, begin the practice of eating only 3 small meals a day. Do not snack or “graze” throughout the day. Grazing and snacking lead to poor weight loss after surgery. Grazing is also associated with significant weight regain after surgery.
- Make it a habit to eat very slowly (putting your fork down between each bite) and chew your food very thoroughly (to a mushy consistency). Try to make each meal last 20 minutes. Take small bites.
- Learn to stop eating when you feel full, which initially may be after only 2 or 3 bites of food. Indications of fullness include a feeling of pain or pressure in the center just below your rib cage, nausea, or pain in your shoulder or upper chest. Eat only until you feel satisfied.
- Your meals will be about 3-4 oz. (½ cup) in total size. Use small plates and cups, instead of large plates and bowls, for your meals.
- At this time, get into the habit of eating at least 2 oz. (or ¼ - ½ cup) of a protein rich food at each meal. In addition, eat the high protein portion of your meals first. If you are unsure which foods are high in protein, see the protein section of this handout. Aim for at least 60-80 grams of protein every day.
- Usually it is not hard to consume enough protein from food alone as long as you concentrate on eating high protein foods at each meal. Protein supplements (powders, shakes, bars, etc.) in most cases are not necessary. However, if you are truly concerned that you are not getting enough protein, or if you are experiencing a lot of nausea and vomiting and cannot consume high protein foods at meals on a consistent basis, then speak to your dietitian about protein supplement options and how often they should be taken.
- Continue to drink 2 liters of liquid each day (eight 8 oz. cups). However, do not drink liquids for 30 minutes prior to mealtime (to make sure your stomach is empty), do not drink anything with your meal (to allow room for food), and do not drink anything for 30 minutes after a meal (to prevent “washing” the food through the stomach too quickly). This will make a profound impact on your feeling of satiety (satisfaction and fullness) after eating.
- During this phase, begin taking the rest of your vitamin supplements (calcium, vitamin D, iron, and vitamin B12) if you have not started already. Refer to the vitamin section of this booklet.

Phase II Sample Menus

Week 3

Breakfast

½ cup fat-free cottage cheese

Mid-morning

8 oz. skim or 1% milk

Sip 16 oz. of water or non-caloric beverage throughout the morning

Lunch

3oz. lentil soup or chili

Mid-afternoon

Sip 16 oz. of water or non-caloric beverage throughout the afternoon

Dinner

¼ cup scrambled egg (needs to be 'runny')

¼ cup Greek yogurt

Evening

8 oz. skim or 1% milk

Sip 16 oz. of water or non-caloric beverage throughout the evening

The above sample menu provides about 70g. of protein and 64oz. (2 liters) of fluid.

Week 4

Breakfast

¼ c. low-fat cottage cheese

¼ c. diced peaches

Mid-morning

8oz. skim milk

16oz. water or non-caloric beverage throughout morning

Lunch

½ c. canned tuna mixed w/ 2 T. extra-firm tofu, 1 T. fat-free sour cream, seasonings to taste

Mid-afternoon

8oz. skim milk

16oz. water or non-caloric beverage throughout afternoon

Dinner

1-2 thin slices each lean deli turkey breast & reduced-fat Swiss cheese, rolled (with 1 T. light mayonnaise)

Evening

16oz. water or non-caloric beverage throughout evening

8oz. herbal tea

The above sample menu provides 510 calories, 54.5g. of protein, and 72oz. of fluid.

Week 5

Breakfast

¼ c. scrambled Eggbeaters® (moist)

2 oz. reduced-fat shredded cheddar

¼ c. diced pears

Mid-morning

8oz. herbal tea

16oz. water or non-caloric beverage throughout morning

Lunch

¼ c. canned chicken

(made with 2 tablespoon plain fat-free yogurt)

Mid-afternoon

8oz. vegetable juice

16oz. water or non-caloric beverage throughout afternoon

Dinner

2oz. baked salmon

¼ c. green beans w/ 1 t. light margarine

Evening

8oz. skim milk

16oz. water or non-caloric beverage throughout evening

The above sample menu provides 61g. of protein, 72oz. of fluid.

Week 6

Breakfast

1 scrambled egg (moist)

½ slice whole wheat toast

1 t. light margarine

Mid-morning

1 Carnation® Instant Breakfast® No Sugar Added

16oz. water or non-caloric beverage throughout morning

Lunch

2 thin slices lean deli ham

2 thin slices reduced-fat cheese

1 T. mustard

Mid-afternoon

16oz. water or non-caloric beverage throughout afternoon

Dinner

½ c. chili w/ beans

2-3 whole grain crackers

Evening

8oz. skim milk

16oz. water or non-caloric beverage throughout evening

The above sample menu provides 65g. of protein, 64oz. of fluid.

Phase III: 6 Weeks and Beyond

Time to experiment!

Six weeks following surgery, you can begin to re-introduce a variety of foods back into your diet. We recommend that you begin with softer foods before moving to solid foods (example: try cooked vegetables before eating raw vegetables and

canned fruits before eating raw fruits). But at this point in time, you can begin trying more solid pieces of meat, and raw fruits and vegetables again.

Small meals, slowly, of healthy foods.

It is important to eat at least 4 to 6 ounces of meat (protein) everyday. Be sure that the meat you are eating is moist and tender and avoid any tough, fatty or gristly meats. Your total protein goal will be at least 60 grams everyday. See the protein section to learn more about high protein foods.

Suggestions for Phase III Diet:

- Continue to eat the high protein foods first when you sit down to eat a meal. The amount of food that you are able to eat after surgery is so small that you must focus on getting enough protein in your diet before anything else.
- Continue your exercise routine. This is a critical component to your success after surgery. Exercise will help you burn more calories and build lean body mass or muscle. The more muscle you have, the more calories you will burn. You will lose weight faster and keep it off as long as you are exercising.
- Recognize when you are full (pain or pressure in the center just below your rib cage, nausea, or pain in your shoulder or upper chest). Learn to stop eating when you are full, not when you are stuffed. If you eat until you are stuffed, you will stretch your stomach pouch.
- Continue the habit of only eating 3 small meals per day and avoid snacking and grazing! Snacking and grazing throughout the day will prevent you from reaching your weight loss goals.
- Remember that the only reason to eat is because you need the nutrients to keep you healthy!

Phase III Sample Menus

Week 7

Breakfast

2 slices turkey sausage ¼-½ c. oatmeal

Mid-morning

8 oz. GNC ProPerformance® 100% Whey Protein supplement (made w/ skim milk)

16 oz. water or non-caloric beverage throughout the morning

Lunch

½c. hummus

¼c. fresh dipping veggies (cherry tomatoes, celery, red peppers, etc.)

Mid-afternoon

8oz. herbal tea

16oz. water or non-caloric beverage

Dinner

3 oz. shredded pot roast with low fat gravy

¼ c. cooked carrots

Evening

8 oz. skim or 1% milk

16 oz. water or non-caloric beverage throughout the evening

This sample menu provides 67g. of protein and 72oz. of fluid.

Week 8

Breakfast

½ c. fat-free, artificially sweetened yogurt (any flavor)

¼ c. mixed fresh berries

Mid-morning

16oz. Revival Soy Protein Shake made w/ soy milk

16oz. water or non-caloric beverage

Lunch

¼-½ c. salad greens

2oz. chicken strips

2 Tbsp. Italian dressing

Mid-afternoon

16 oz. non-caloric beverage or water throughout the afternoon

Dinner

2oz. tender pork loin

¼ baked sweet potato w/

1 T. light margarine

Evening

8oz. soy milk

16oz. water or non-caloric beverage

The above sample menu provides 800 calories, 81g. of protein, 72oz. of fluid.

TROUBLESHOOTING

Changing your eating habits will be important if the operation is to be a success. Although your smaller upper stomach and smaller opening that releases the food and liquid into the intestine will help, several of the following problems may be encountered once eating is resumed after surgery.

Managing Liquids

- Fluids are needed to replace normal water loss and to prevent dehydration. We recommend that you try to drink 2 liters (or 64 oz.) of liquid (mostly water and non-caffeinated beverages) every day.

- Avoid liquids with meals, saving room for solid foods, and preventing the “washing” of food from the stomach. Stop drinking fluids at least 30 minutes before a meal, and wait at least 30 minutes after the meal, to allow for digestion of food. This will make a profound impact on your feeling of satiety (satisfaction or fullness) after eating.

- When drinking liquids, sip them slowly. If liquids are gulped too quickly, abdominal cramping, discomfort, and/or vomiting may occur.

- Avoid carbonated beverages and drinking from a straw for approximately 6 weeks after surgery. Doing this can help you to avoid excess gas and pressure.

Nausea, Vomiting, Bloating and/or Heartburn

Nausea, vomiting, bloating and/or heartburn can occur from any of the following:

- eating and drinking too quickly
- not chewing food well enough
- drinking cold fluids
- eating too much (quantity)
- eating rich or sweet foods, fried, or high-fat foods
- eating gas-producing foods or drinking carbonated beverages

Dumping Syndrome

Dumping syndrome can be a feeling of abdominal fullness, weakness, warmth, rapid pulse, cold sweats, nausea, possible vomiting, and possible diarrhea. This happens whenever foods and beverages that are high in sugar or grease are consumed and 'dumped' into the bowel quickly. To avoid dumping syndrome, avoid concentrated sweets (ice cream, milkshakes, candy, pies, cookies, cake, sugar, syrup, honey, jelly, pastries, regular soda, fruit juices, barbecue sauces, etc). You may only be able to tolerate a teaspoonful of these items at a time, if any at all. This may also occur after eating greasy foods such as fried chicken or french fries.

Blockage of the Stoma

The new opening created by the surgery is smaller than the original opening that released food from the stomach into the intestine. This new opening may become blocked when food has not been thoroughly chewed, which can result in abdominal pain or vomiting.

If you become unable to tolerate water within the first month after surgery, call us immediately. The sooner we learn of this problem, the more likely we will be able to treat it without surgery.

To prevent blockage from occurring:

- Avoid eating high fiber foods, such as raw fruits and vegetables, and starchy foods for the first 6 weeks after surgery. After 6 weeks time, be sure to chew high fiber foods very thoroughly.

- Chew all foods to the consistency of mush before swallowing.
- Be careful when chewing gum; if accidentally swallowed it can cause a blockage.
- Use chewable or liquid multivitamins.

Overeating

The purpose of bariatric surgery is to create a smaller stomach so that it is unable to hold the large volumes of food it had held previously. Constant overeating can stretch your stomach pouch. Remember that your pouch is only 1 ounce (the size of your thumb). Meals should be about 3-4 ounces (1/2 cup). The more solid the food, the less you will be able to eat. You may be able to eat 4 ounces of applesauce, but only 2 ounces of beef. Even though the amount is smaller, choose the beef because you need the protein.

To prevent stretching the pouch:

- Eat only three small meals each day, and measure your food before you eat to prevent overfilling the stomach.
- Eat slowly so that the nerve receptors in your stomach area can relay the message to your brain that your stomach is full. It takes approximately 15-20 minutes for the message of fullness to reach the brain. Take time between bites of food and stop eating as soon as fullness is experienced.
- Recognize when you are full, which can feel like pain or pressure in the center just below your rib cage, nausea, or a pain in your shoulder or upper chest. The next step is to stop eating when you feel full.
- Constant nibbling/grazing/snacking may not stretch your stomach pouch, but it is a common bad food behavior among people who do not meet their weight loss goals and/or regain significant amounts of weight after surgery.

Undernutrition

Total food consumption is reduced after surgery, and therefore, intake may be nutritionally inadequate.

To compensate for reduced nutrient intake:

- Consume nutrient-dense foods daily, including a variety of lean meats, low-fat dairy, fruits and vegetables, and high fiber breads and cereals. Look for breads that have at least 3g of fiber per slice, and cereals that have at least 5g.of fiber per cup. Avoid empty calorie foods, including soda pop, Kool-Aid, chips, pretzels, popcorn, candy, pastries, sweets, and rice cakes. Avoid foods that are breaded and fried.
- Consume adequate high biological value protein foods each day. See the section on protein for examples of such foods.
- Take the recommended vitamins (multivitamins, calcium, vitamin D, iron, and vitamin B12 supplements) every day. THIS IS IMPORTANT! Refer to the vitamin section of this handout.

Food Intolerance

Food intolerance varies widely and one individual may tolerate a food that disagrees with another person. Therefore, it is important to try a variety of foods. Each individual must try new foods carefully to test his or her reactions after surgery.

The following foods may be difficult to eat, especially for the first few months:

- tough meats – dry, gristly meats may be difficult to digest. Meats (chicken, steak, burger, ham) should be moist and cut into very small pieces about the size of a pencil eraser. Go slowly.
- bread – fresh, doughy bread can form a ball and “gum up” the opening from the stomach
- pasta – pasta may form a paste and be more difficult to pass
- seeds and skins of fruits and vegetables, dried fruit, fibrous vegetables like corn, asparagus, and celery
- nuts and peanut butter

Do not be discouraged if a certain food does not agree with you once. Wait a few weeks and try it again. Your stomach just might not have been ready for the food yet.

VITAMIN SUPPLEMENTS AFTER GASTRIC BYPASS SURGERY

It is important that you take vitamin supplements everyday for the rest of your life after having a gastric bypass. **If you do not take your vitamin and mineral supplements after surgery you will become malnourished!** This is because not only are you unable to consume enough food (quantity) to meet your vitamin & mineral requirements, but also because you will have a decreased ability to digest and absorb certain nutrients after having gastric bypass surgery. We recommend that you take a multivitamin, plus extra calcium, iron, B12 and Vitamin D supplements.

Begin taking a multivitamin twice a day while on liquids during the first 2 weeks. Add your calcium, iron, B12, and Vitamin D supplements when you progress to soft foods in the third week following your surgery.

To make sure you are taking everything you need, in the correct dose, and in the correct form, we recommend Bariatric Advantage supplements. These are specifically designed for bariatric patients and their specific needs.

Multivitamins

Start taking one chewable multivitamin/mineral supplement **twice a day** while on liquids. When you progress to soft foods, take them with meals. We recommend one of the following:.

- Bariatric Advantage® Chewable Multi Formula
  - Available in the office or online at www.bariatricadvantage.com
- Celebrate vitamins chewable (available at www.celebratevitamins.com)
- Opurity chewable (available at www.opurity.com)
- Centrum® Chewable

About two months after surgery (or when you are able to take pills and can tolerate solid foods), you can switch to a non-chewable if desired, however, **we recommend a bariatric-specific chewable multivitamin long-term over any other product**. If you choose to take an over-the-counter vitamin, we recommend any of the following, to be taken twice a day with food (generic, store-brand equivalents are fine):

- One-A-Day® Men's/Women's Formula
- Centrum Performance®
- Centrum Silver® based on your age

Take one multivitamin, twice a day (for example 1 at breakfast, 1 at lunch), rather than both at the same time to maximize your absorption of each vitamin.

Calcium

There is typically only a small amount of calcium in multivitamins. Therefore, we recommend taking an additional 1000mg-1200mg of calcium everyday when you progress to soft foods. At this stage after your surgery, you will need to take a chewable form because most chewable supplements are too large and difficult to swallow. There are different forms of calcium such as calcium carbonate and calcium citrate. Calcium citrate is the most efficiently absorbed form of calcium following gastric bypass. However, citrate is difficult to find in a chewable form, so we recommend Bariatric Advantage calcium which provides citrate in a chewable.

- Bariatric Advantage Calcium Citrate Chewy Bites(2 chews twice a day)
- Bariatric Advantage Calcium Citrate Lozenges (one lozenge 2-3 times per day)

Switch to a non-chewable form of calcium citrate when able to tolerate a solid pill. Take one dose (500mg-600mg) twice a day with meals for a total of 1000-1200mg of additional calcium per day. Be sure to check the dose on each individual brand to be certain you are getting the correct amount.

Again, take your calcium supplements twice a day in 2 smaller doses rather than taking one large dose all at once because you will absorb the smaller doses better. Also, calcium is best absorbed with taken with food.

It is important to not take the calcium and iron supplements at the same time, as they interfere with the absorption of

each other. Take your calcium and iron supplements at least 2 hours apart from one another.

Iron

We recommend that you take an iron supplement daily when you progress to soft foods, in addition to the iron in your multivitamin. Iron does come in a chewable form, but the pill should be small enough that you can swallow it without difficulty.

Nausea and constipation are common side effects of iron supplementation. For this reason, we recommend you take one of the most absorbable forms of iron, either ferrous fumarate, or ferrous gluconate. Ferrous fumarate and ferrous gluconate can both be found in over-the-counter iron supplements. Because they are the most absorbable forms of iron, they may also cause the least side effects. Listed below are some specific products we recommend. Take your iron supplement once a day with food.

- Bariatric Advantage Chewable Iron
- GNC Iron 18
- Ferro-Sequels®
- Fergon

However, if there is still a problem with nausea and/or constipation, try taking your iron every other day instead of daily. Again, avoid taking the calcium and iron supplements at the same time, as they interfere with the absorption of each other. Take your iron and calcium at least 2 hours apart from one another. Your iron supplement is also best absorbed when taken with food. Iron supplements may also be better absorbed when taken with something acidic. This can be a vitamin C supplement (ascorbic acid) or any food high in Vitamin C such as fruit or vegetables.

Vitamin B12

Vitamin B12 is digested and absorbed differently than most vitamins. After gastric bypass surgery, you will no longer be able to digest and absorb sufficient amounts of B12 to maintain health. You must take your B12 in a form that directly enters the bloodstream, not through the digestive tract. There are two ways to do this.

- Most patients opt for a monthly vitamin B12 injection at their primary care physician's office after gastric bypass surgery. Some patients also give themselves their monthly B12 injection.
- Another option is to take sublingual (under the tongue) B12 lozenges or drops that dissolve under your tongue. A 500mcg supplement may be taken daily. A 1000-2000mcg supplement may be taken every other day. If you purchase the 5000 mcg strength, 1 per week should be sufficient. Specific products are listed below.
    - Sublingual B12 Microlozenges (all three doses are available at Vitamin World® stores or www.vitaminworld.com
    - B12 drops 1000mcg at Vitamin World
    - B12 5000 Zipmelts® (at GNC)
    - Bariatric Advantage Sublingual B12 with Folate®

Vitamin D

In addition to the amount of Vitamin D found in your multivitamin and calcium supplement, begin taking 1000 IU of a supplemental Vitamin D (cholecalciferol D3) a day. The pill is usually small enough to swallow without difficulty, but will vary among different brands. You may begin the Vitamin D when able to tolerate the size pill you purchase. We recommend the following:

- Bariatric Advantage Dry Vitamin D3 (take 1 dose per week)
- GNC Vitamin D3 1000 IU (take daily)

Sample Daily Vitamin/Mineral Schedule

(Note: This is an example based on using a bariatric-specific multivitamin)

Breakfast:

1 chewable multivitamin/mineral supplement

1 chewable calcium

Sublingual B12 lozenge or drops

Vitamin D (Note: if Bariatric Advantage Vitamin D, take one time per week, not daily!)

Lunch:

Iron

Dinner:

1 chewable multivitamin/mineral supplement

1 chewable calcium

PROTEIN

Adequate protein intake is of critical importance after bariatric surgery. At each of your 3 small meals per day there should be at least 2oz of a high protein food, and that high protein food should be eaten first. Your total protein intake each day should be at least 60 grams. There are two different kinds of protein: complete and incomplete.

Complete protein is also known as high biological value protein. This means that it contains all of the essential amino acids. Complete protein is found in most foods that come from animals. In general: 1oz. meat, fish, poultry, or cheese=7 grams; 1 egg=6 grams; ½ c. cottage cheese=14 grams; 1 c. milk=8 grams; 1 c. yogurt=6-8 grams of protein.

Lean sources of complete protein that should be a part of your diet everyday include:

- White meat chicken and turkey (not fried)
- Fish and shellfish (not fried)
- Eggs, egg whites, and egg substitutes
- Lean cuts of beef (round, sirloin, flank, tenderloin, rib/chuck/rump roast, ground round)
- Lean cuts of pork (fresh ham, Canadian bacon, center loin chop, tenderloin)
- Ham
- Veal or lamb chops and roasts
- Lean deli meats
- Reduced fat cheeses, Parmesan, Mozzarella, and Ricotta cheese
- Venison, pheasant
- Low-fat or fat-free cottage cheese and yogurt
- Skim or 1% milk, soy milk, lactose-free milk

High-fat, high-calorie sources of complete protein, which should be consumed less often include:

- Bacon and sausage
- Spareribs
- Kielbasa
- Cheese (American, Cheddar, Swiss, etc.)
- Bologna, salami, pepperoni
- Hot dogs

Incomplete protein does not contain all of the essential amino acids and is found in plant foods. This includes beans, lentils, vegetables, starches (cereals, pasta, bread, grains, etc.), nuts, and peanut butter. These foods definitely count

toward your total protein intake everyday, but a greater emphasis should be placed on complete, high biological value sources of protein. In general: ½ c. beans or lentils=10 grams; ½ c. cooked or 1 c. raw vegetables=2 grams; 1 slice bread or ½ c. potatoes=3 grams; ½-1c. cereal=3-6 grams of protein.

Soy is the one exception! Even though soy is plant based, is does contain all of the essential amino acids and is considered a complete protein! Go ahead and include tofu, tempeh, soymilk, soynuts, soybeans, soy cheese, and other soy foods in your diet on a regular basis. In general, 1 c. soy milk=8 grams and 4oz. or ½ c. tofu=7 grams of protein. For more information on soy foods, go to www.soyfoods.com to download a Soyfoods Guide for free!

Of course protein supplements count toward your total protein intake as well. There are so many different protein supplements on the market that it's hard to keep track of them all! Keep in mind, however, that protein supplements should only supplement your food intake. In other words, focus on food sources of protein first, and then perhaps add 1 supplement a day. Always be mindful of how many calories and grams of sugar are in your protein supplements. Also keep in mind that protein bars may be more filling and satisfying than a protein shake, because liquids go down quickly and easily.