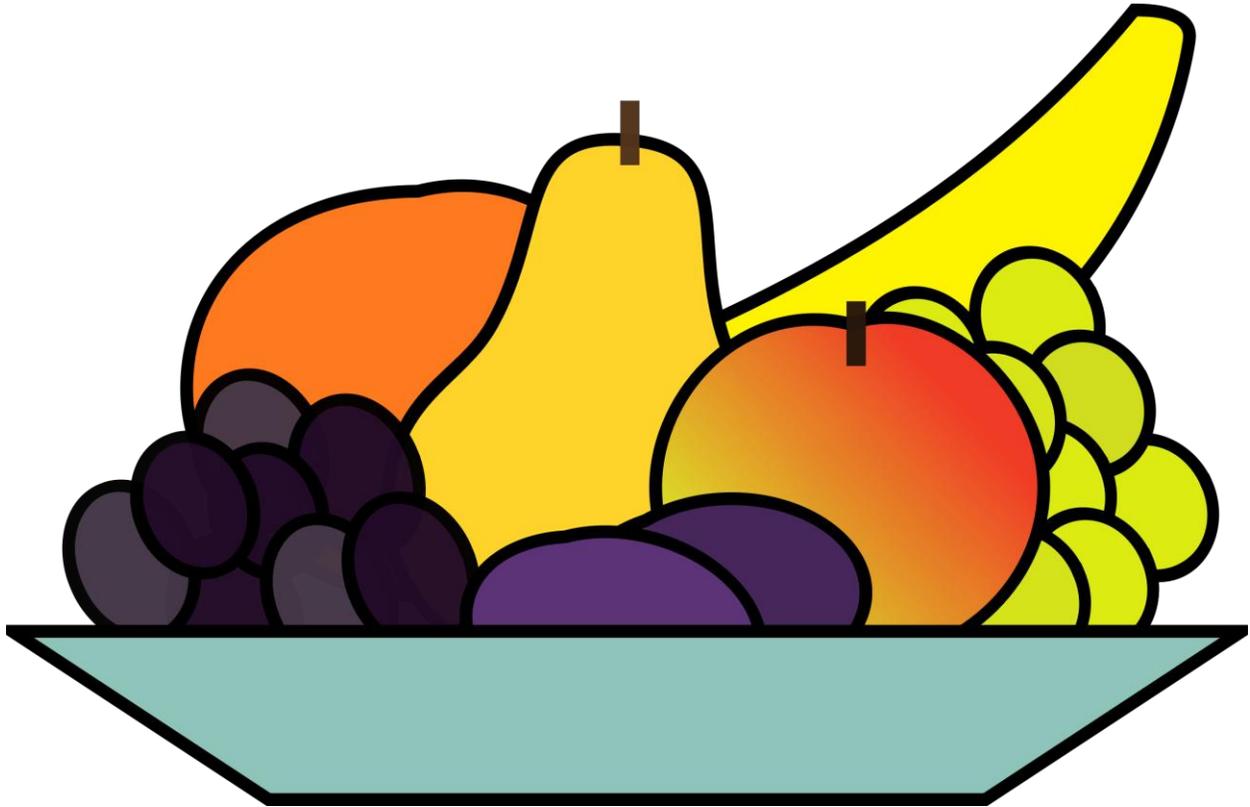


2 Week Pre-operative Liquid Protein Diet



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Pre-op Liquid Protein Diet

Two weeks prior to your bariatric surgery, your surgeon and dietitian will have you start a liquid diet. You will lose weight by making these changes before surgery, which will shrink your liver and decrease the size of your abdomen. This will help to decrease your risk of complications during surgery. Your dietitian will help you decide which protein drinks are right for you.

Protein Drinks:

Your goal is to get **80-120g protein and 600-800 calories** per day.

There are many different protein drinks available at local drug and grocery stores, as well as health food stores. Protein drinks must have 0-3 grams of sugar per serving. Please read food label before you purchase.

Protein Supplement Suggestions

<u>READY-TO-DRINK SHAKES (RTD)</u>	<u>GRAMS</u>		
	<u>CALORIES</u>	<u>PROTEIN</u>	<u>CARBS</u>
<u>Atkins Advantage Shake:</u> Café' Mocha/Caramel Supreme, Strawberry Supreme, Chocolate Royale Delight, Creamy Vanilla	160	15	2
<u>EAS AdvantEdge Carb Control</u>	100	17	1.5
<u>Zero Carb Isopure</u> (at GNC) Ready to drink Bottle: grape frost, apple melon, alpine punch, Blue raspberry, pineapple orange mango, Mango peach, passion fruit, icy orange	160	40	0
<u>Premier Protein</u>	160	30	2
<u>Pure Protein</u>	160	35	2

PROTEIN POWDERS (per scoop)

Mix with 8oz water or skim milk

(Mixing with 8oz skim milk adds 90 calories and 8g protein)

	<u>Calories</u>	<u>Protein</u>	<u>Carbs</u>
<u>Bariatric Advantage</u>	160	27	3
<u>Bariatric Fusion</u>	121	27	2
<u>Protizyme</u>	126	25	1
<u>Body Fortress</u> - Premium Whey Protein (Available at Walmart and Target) Chocolate/Vanilla	170	26	6

<u>Whey Gourmet</u> - Strawberry Banana, Peanut Butter Chocolate, Raspberry, Cappuccino, milk chocolate, Cookies & cream (www.wheygourmet.com)	120	21	1-3.5
<u>Unjury</u> - Unflavored/choc/van/straw/chicken broth	90	20	4
<u>Nectar</u> - Wide variety of fruity and creamy flavors	90	23	0
<u>GNC Soy Isolate Protein</u> - Chocolate, vanilla	130	25	3
<u>Zero Carb Isolate</u> (at GNC) - Lactose Free! Chocolate, vanilla, banana, cookies & cream, Strawberries & cream, alpine punch, mango punch	100	25	0

REMEMBER TO KEEP RATIO OF PROTEIN TO CARBS 4:1 OR GREATER

Sugar Free Clear Liquids Allowed in Unlimited Amounts

Bottled Water or Tap Water	Sugar Free Kool-Aid
Water with fresh lemon or lime	Minute Made Light Lemonade
Sugar Free Tang	Diet V8 Splash
Fruit 2o	Decaf Coffee
Diet Snapple (any flavor)	Sugar & caffeine free tea, hot or cold
Crystal Light (any flavor)	Sugar Free Popsicles (NO creamy popsicles)
Flavor H2O Walgreen's Brand	Sugar Free Jell-O
SOBE Lean Sugar Free	Low Sodium Broth
Wyer's Lite	Propel Water (any flavor)
Wal-Mart Sugar Free Lemonade	

EXCLUDE THE FOLLOWING:

- Caffeine
- Alcohol (empty calories)
- Carbonated beverage and drinking through a straw can cause gas, bloating.
- NO Palm Oil, Cottonseed Oil, Soybean Oil, Vegetable Oil, Corn Oil, Canola Oil, -
NO Sunflower Oil or Safflower Oil.
- NO HIGH FRUCTOSE CORN SYRUP, NO MALTITOL (SUGAR ALCOHOL)

Ideas for Home-Made Protein Shakes

Strawberry Lemonade:

Mix 1 scoop Strawberry protein powder in 8oz of sugar free lemonade

Dreamsicle:

Mix 1 scoop Vanilla protein powder in 8oz of sugar free Tang or Orange Crystal Light

Proteina Colada:

Mix 1 scoop Vanilla protein powder, 8oz skim milk, 2 scoops McCormick imitation Pineapple extract, 2 drops McCormick imitation coconut extract—adjust to taste

Root Beer Float:

Mix 1 scoop Vanilla protein powder, 8oz skim milk, McCormick root beer concentrate Or DaVinci Root Beer syrup to taste

Hot Chocolate:

Mix 1 scoop Chocolate protein powder in 8oz warm skim milk

Café Mocha (warm, iced, and frozen):

Mix 1 scoop Chocolate protein powder, 4oz skim milk, 4oz decaf coffee.
(Blend with ice for a Frappuccino)

Flavorings:

McCormick Extracts

Baker's Imitation Vanilla	Clear Imitation Vanilla Extract
Imitation Almond Extract	Imitation Butter Flavor
Imitation Coconut Extract	Imitation Rum Extract
Imitation Vanilla Butter & Nut Flavor	Mint Extract
Pure Almond Extract	Pure Lemon Extract
Pure Peppermint Extract	Raspberry Extract
Cinnamon Extract	French Vanilla Blend
Imitation Banana Extract	Imitation Cherry Extract
Imitation Maple Flavor	Imitation Strawberry Extract
Maple Extract	Premium Imitation Vanilla
Pure Anise Extract	Pure Orange Extract
Pure Vanilla Extract	Root Beer Concentrate

DaVinci Gourmet Syrups (Splenda sweetened)**

Amaretto	Dulce de Leche	Peanut Butter
Almond	Egg Nog	Peppermint Patti
Banana	English Toffee	Pineapple
Blueberry	German Chocolate Cake	Praline
Butter Rum	Gingerbread	Raspberry
Butterscotch	Hazelnut	Root Beer
Carmel	Irish Cream	Simple Syrup
Cherry	Kahlua Café	Strawberry
Chocolate	Macadamia Nut	Toasted Marshmallow
Cinnamon	Malibu Rum	Vanilla
Coconut	Orange	Watermelon
Cookie dough	Peach	White Chocolate

Questions:

If you have any further questions before or after surgery, please call Dr. Chavda's office 813-681-4644 or your Dietitian. You may also contact Kay Carlile, Bariatric RN 813-916-1399.

Start taking (if not already) a multi-vitamin and B-Complex and B-12, 2500 mcg. If you had had your labs completed then we may recommend additional vitamins for you to take at this time.

Start your Liver Detox Diet on: _____

Drink your Protein Shakes 4-5 times a day:

Take Real Lemon Juice 1 Tablespoon in 4 ounces of warm water first thing every morning upon rising and the last thing you do before you go to bed. Do this for the entire 2 weeks.

During these 2 weeks obtain the items:

What to have on hand and the 1st week home after surgery

Beverages that are sugar-free, calorie-free, non-carbonated, and non-caffeinated such as water, Crystal Light, Fruit2O, Diet Snapple, Sugar-free Jell-O, Fat-free Broth/Bouillon, Sugar Free Popsicles, Green Tea, Propel, A high-protein, low-sugar shakes (Pro Ti – 15, Isopure or Nectar) this is a collagen based protein that is clear.

Food scale (Walmart, Target, Amazon)

Measuring cups and spoons

Shrimp fork, Gerber Spoon, Small bowls 6 ounce in size w/ lids

1 ounce Medicine Cups (will receive at the hospital)

Gas-X strips or liquid simethicone

Food Diary/journal

You should start your Bariatric multi-vitamin 7 days after surgery (liquid or chewable)

You should start Bariatric B-12 sublingual 7 days after surgery

Start walking day 3 after surgery, walk for 15 minutes 2-3 times a day and increase to 30-45 minutes a day (4-5 days per week) starting week 3

Protein supplements should have a 4:1 ratio or higher, meaning 4 grams of protein to 1 carbohydrate.

MEDICATIONS after Bariatric Surgery

Bariatric surgery changes many aspects of one's life, and medications are no exception. Most patients will be prescribed certain medications and supplements after their surgery, but the surgery can also affect what medications are safe to take for other reasons and how you take them.

The Type of Operation Matters

Patients are at risk for nutrient deficiencies, so appropriate supplementation is necessary.

Operations that restrict food intake without bypassing the bowel, such as gastric banding, sleeve gastrectomy and vertical banded gastroplasty, do not impair food absorption, so those patients do not require strict supplementation. They still need to take proton pump inhibitors (such as Nexium or Prilosec) to decrease reflux and protect the small gastric pouch.

Some medications are not recommended after bariatric surgery, but are not strictly prohibited for patients who have had restrictive operations (see table for details).

Nutrient Supplementation

After gastric bypass, patients are prone to deficiencies of the fat-soluble vitamins (A, D, E and K) and calcium. They also have an increased risk of anemia due to inadequate amounts of iron, vitamin B12 and folate. Because of these deficits, all gastric bypass patients should take a daily multivitamin and calcium supplements, and additional supplementation with iron, vitamin B12 and folate may be necessary.

Making the stomach smaller through bariatric surgery decreases gastric acid production, which affects the absorption of calcium and can increase the patient's risk of osteoporosis. Calcium carbonate requires acid to be absorbed, but calcium citrate, which we recommend for supplementation, does not.

The duodenum is the primary site for absorption of iron and is bypassed in the Roux-en-Y procedure. Like calcium, iron requires acid to be absorbed, which is lacking in the small gastric pouch. Gastric bypass patients can take iron salts combined with ascorbic acid (vitamin C) to acidify the stomach and facilitate absorption.

Vitamin B12 absorption requires intrinsic factor, which is produced in the bypassed part of the stomach, as well as acid; a lack of these can lead to vitamin B12 deficiency and anemia. Appropriate supplementation can be achieved by taking an oral formulation (1000 µg daily) or monthly injections.

Medications and Marginal Ulcers

Non-steroidal anti-inflammatory medications (NSAIDs), such as Advil, Motrin, Aleve, Excedrin and Celebrex, are used primarily to treat inflammation, fever and mild to moderate pain from headaches, arthritis, sports injuries and menstrual cramps. Taking NSAIDs after gastric bypass surgery significantly increases the risk of developing marginal ulcers at the connection between the stomach pouch and the Roux limb. Thus, gastric bypass patients should avoid these medications.

The same risk extends to the salicylates (i.e., aspirin), but the risks and benefits of daily aspirin therapy should be considered on an individual basis. Safer options for oral pain medications include acetaminophen and opioids (Percocet, Vicodin, Tylenol #3 and Tramadol).

Oral bisphosphonates are another type of medication that may produce marginal ulcers in gastric bypass/gastric sleeve patients. These drugs inhibit the loss of bone mass associated with bone diseases like osteoporosis and Paget's disease; commonly used bisphosphonates include Actonel, Aredia, Boniva, Didronel, Fosamax, Reclast, Skelid and Zometa. However, there are alternative treatment options available, such as calcitonin salmon nasal spray, synthetic parathyroid hormone and Raloxifene.

Anti-acid medications (Nexium, Protonix or Prevacid) are prescribed to prevent ulcers in the gastric pouch.

Reduced Medication Effectiveness

The shorter intestinal length after gastric bypass or duodenal switch surgery can make extended-release drug preparations less effective. Some extended-release drugs include antidepressants (Wellbutrin XL), anxiolytics and sleep medications (Xanax XR), and anti-hypertensives (Toprol XL, Verapamil XL). Because these formulations are intended to be absorbed over 2-12 hours, the pills may pass through the gastrointestinal tract before absorption is complete.

This same principle also applies to delayed-release and enteric- or film-coated pills, which are coated with a material that prevents the medication from being released until the pill moves through the stomach to the small intestine. (Sometimes the abbreviation "EC" is added to the name of a drug to indicate that it is enteric-coated.) Immediate-release dosage forms should be substituted, although they may need to be taken more often.

Oral contraceptives are another type of medication that may not be absorbed as effectively after surgery; thus, non-hormonal barrier contraception is recommended to prevent unwanted pregnancy for women who have had gastric bypass or duodenal switch operations.

Diarrhea, Constipation and Gallstones

Some patients experience mild gastrointestinal problems after surgery. Imodium AD is safe and effective for post-operative diarrhea, and mild gas pains can be treated with Gas-X.

Since bariatric patients consume less food, smaller amounts of stool are formed, which

can lead to constipation. Some people find that taking two tablespoons of milk of magnesia every few days helps. Drinking plenty of water is very important, and nothing works well for constipation if water intake is poor. It is not uncommon for bariatric patients to have a bowel movement every two to three days once it is regulated. Patients who continue to experience constipation can take a fiber supplement, like Metamucil or Fibercon, once they are on the pureed diet. Colace, a stool softener, is sometimes necessary for patients on pain medication to prevent constipation. Some patients are given Reglan and Zofran for nausea and to assist with bowel movements.

Can I Resume My Diabetic and Water Pills?

Patients are usually instructed to resume most of their pre-operative medications. Those who are on diabetic medications will need to monitor their blood sugar closely at home. Some patients' blood sugar decreases very quickly after surgery (even before any weight loss), and they will need less of their diabetic medications. The same applies to insulin, which should be given when blood sugar is under strict control and under the supervision of an endocrinologist or primary care physician.

Diuretics (water pills or Lasix) are frequently prescribed for patients with hypertension, edema and congestive heart failure. Many patients are instructed to hold off on resuming diuretics because it is important to avoid dehydration after gastric bypass surgery; this is usually decided on an individual basis.

Other antihypertensive medications are safe to use after gastric bypass. Typically, the dose decreases as patients lose weight and their hypertension improves. Consult your doctor to discuss changing doses and types of medication.

Should I Continue My Blood Thinner Medications?

Some patients take oral blood thinners like Coumadin for atrial fibrillation, blood clots and other cardiovascular conditions. Coumadin is typically stopped before surgery and replaced with heparin injections. Following surgery, Coumadin is gradually resumed, with heparin given at the same time to "bridge" its anticoagulant effect. After this temporary period, patients should continue Coumadin therapy under strict control of INR. No major changes in Coumadin dosing are required after gastric bypass.

My Pills Are Too Big!

The opening produced by Roux-en-Y surgery is about 1.5 cm wide, and gastric banding also produces a small opening. Some pills (such as calcium, multivitamins and iron) are quite big and cannot go through this small connection easily. We advise patients to take these pills one at a time throughout the day, if possible. Very large pills can be cut in half or crushed—but only if they are not time-release medications (i.e., diabetes pills). Ask your doctors if the pills they prescribe can be safely crushed.

NSAIDs

The following drugs are NSAIDs or include NSAIDs in their formula and **should not** be taken after weight loss surgery: **NSAIDs to AVOID after Surgery. This classification of drugs will be placed on your Allergy List.**

Advil	Clinoril	Indomethagan	Oruvail
Aleve	Combunox	Lodine	Pamprin IB
Amigesic	Darvon	Lodine XL	Percodan
Anacin	Daypro	Meclomen	Ponstel
Anaprox	Disalcid	Mictainin	Relafen
Anaprox DS	Dolobid	Midol IB	Rexolate
Ansaid	EC Naprosyn	Mobic	Tab-Profen
Arthrotec	Ecotrin	Motrin	Tandearil
Ascriptin	Equagesic	Motrin IB	Tolectin
Aspirin	Excedrin	Nalfon	Tolectin 600
Azolid	Excedrin IB	Nalfon 200	Tolectin DS
Bextra	Feldene	Naprapac	Toradol
Bufferin	Ibuprofen	Naprelan	Uracel
Butazolidin	Indocin	Naprosyn	Vicoprofen
Cataflam	Indocin SR	Nupin	Voltaren
Celebrex	Indo-Lemmon	Orudis	

	Gastric Bypass	Gastric Banding	Sleeve Gastrectomy
NSAIDs	No	No	No
Baby Aspirin (81 mg)	YES, but consider individually	YES	YES
Acetaminophen	YES	YES	YES
Opiates	YES	YES	YES
Water Pills (Lasix)	NO, but consider individually	NO, but consider individually	NO, but consider individually
Vitamins (B12, C, D)	YES	NO	YES
Iron	YES	NO	NO
Calcium	YES	NO	YES
Protein Supplements	YES	YES	YES
Antacid (Gaviscon)	YES	YES	YES
Actigall (Anti- Gallstones)	YES	YES	YES
Insulin and Diabetes Pills	YES, under strict blood glucose control	YES, under strict blood glucose control	YES, under strict blood glucose control
Hypertension Pills (other than Lasix, HCTZ)	YES, under strict blood glucose control	YES, under strict blood glucose control	YES, under strict blood glucose control
Antidepressants	YES	YES	YES
Extended-Release (XL, XR), Coated Medications	NO	YES	NO

Day 4 after Surgery through Week 2

You may progress to full liquids including sugar-free applesauce, creamed soups, V-8 juice, your goal is 60-70 grams of protein each day. Your total carbohydrate intake should be less than 50 grams a day, or water/fluid intake should be 64 ounces a day (32 ounces should be water)

Protein supplements should have a 4:1 ratio or higher, meaning 4 grams of protein to 1 gram of carbohydrates.

You should start your Calcium Citrate (chewable) the beginning of week 3

You should start your Vitamin D (dry formula) 5,000 I.U. the beginning of week 3 (You must take your Vitamin D with a fat, such as a teaspoon of peanut butter or coconut oil)

DO NOT take your multi-vitamin and Calcium together if your MV contains Iron.

Week 4 after Surgery

You may add the following soft foods in small portions: Consume no more than 4 ounces at a time.

Always eat your protein FIRST!! Keep your Carbohydrates to less than 30-50 grams a day

Scrambled eggs

Low-fat cottage cheese

Sweet potatoes

Greek Yogurt

Any fruit you can mash with a fork

Any vegetable you can mash with a fork

Wendy's Chili

Lentil Soup

Thin-thin sliced deli ham or turkey (slivers of meat)