

Nutrition Handbook

Marina Weight Loss Center

How to use this Handbook:

Please have this handbook in front of you for all nutrition appointments. The purpose of the nutrition sessions is to provide you with crucial information and to establish goals in preparation for your weight loss surgery. Please be in a quiet area free from distractions during all nutrition sessions. If you are driving or the reception is poor during your appointment, your appointment will be rescheduled.

If you have any nutrition related concerns please feel free to contact me at:
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Bariatric Nutrition Coordinator
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Post-Operative Bariatric Surgery Diet Progression Overview

10 Essential Tips for Success

- ✓ Eat at planned meal times, without distraction.
- ✓ Avoid drinking fluids 30 minutes before and after meal times.
- ✓ Once cleared by your physician, take your vitamin and mineral supplements daily for LIFE!
- ✓ Strive to get at least 30 minutes of physical activity daily.
- ✓ Eat slowly, and remember to chew your food well to aid in proper digestion and absorption.
- ✓ Eat a diet rich in whole, minimally processed foods.
- ✓ Consume a minimum of 80 grams of protein daily.
- ✓ Listen to your body. Stop eating when you are feeling satisfied, not when you feel full or uncomfortable.
- ✓ When moving between diet phases, add new foods in one by one and take transitions slowly.
- ✓ Attend support group meetings.

How to Create Balanced Meals

What is a balanced meal and what does it consist of? Balanced meals should include a healthy-sized portion of each macronutrient. Macronutrients include protein, fat, and carbohydrates. Choosing whole, minimally processed foods from each macronutrient group is an essential component to losing and maintaining a healthy weight. Post-surgery, protein will be the most important macronutrient for you to consume. To ensure you meet your daily goal of 80 grams per day, eat your protein-rich foods first.

Protein

Main functions	Build and maintain lean body mass Helps to minimize blood sugar spike from eating carbohydrates Increases satiety or the feeling of fullness		
Optimal sources	Chicken Fish/seafood Bison/lean ground beef	Cottage cheese Eggs Turkey	Plain greek yogurt Whey protein

Carbohydrates

Main functions	Energy source for brain and body Helps fuel muscles during exercise Fiber, a component of some carbohydrates, helps improve digestion and promotes beneficial bacteria in the colon.		
Optimal sources: non-starchy vegetables	Dark leafy greens Broccoli Cauliflower Brussel Sprouts Celery Radishes Cucumber	Asparagus Bell Peppers Beets Artichokes Green beans Cabbage Mushrooms	Zucchini Tomatoes Sprouts Eggplant Jicama Okra
High fiber, lower sugar fruits	Strawberries Blueberries Raspberries	Apple Pear Grapefruit	Oranges Kiwi
Other	Lentils Beans	Nuts and seeds Whole fat dairy	Whole grains like oatmeal, quinoa

Fats

Main functions	Absorption of fat soluble vitamins (A,D,E,K) Helps to minimize blood sugar spike from eating carbohydrates Increases satiety or the feeling of fullness		
Optimal sources	Nuts Avocado Full fat dairy products	Olive oil Canola oil Avocado oil	Seeds (chia, ground flax, hemp) Nut butter (almond, cashew, peanut butter), no added sugar or oil

Creating Healthy Meals Practice

Instructions: Create 3 balanced meals below by choosing a food from each macronutrient. Most foods contain some components of fat, protein and carbohydrate. To determine if a food is categorized as Protein, Fat, or Carbohydrate look at the nutrition facts for that food; whichever macronutrient it is highest in will determine the category. For example, 1 cup of plain Greek yogurt typically has 9 grams of fat, 10 grams of carbohydrate, and 20 grams of protein; therefore, it is categorized as Protein.

Breakfast

Protein: _____

Carbohydrate: _____

Fat: _____

Lunch

Protein: _____

Carbohydrate: _____

Fat: _____

Dinner

Protein: _____

Carbohydrate: _____

Fat: _____

Quality Protein Sources

What are the best sources of protein?

- The best sources of protein are complete proteins, or those containing all the essential amino acids. Essential amino acids are those not naturally made in the body; thus, they must be consumed from dietary sources.
- High quality proteins also have a high protein digestibility score. Foods with a 100% protein digestibility score include milk protein (casein), egg whites, ground beef, and tuna.
- When choosing proteins, stick to whole, minimally processed proteins, such as those found in eggs, fish, meat, poultry, milk, yogurt, and cheese.
- Limit intake of highly processed meats such as those with added salt, artificial ingredients, and preservatives.

What are the best sources of protein?

- Protein recommendations after surgery aim to minimize the loss of lean body mass.
- General recommendations for protein range from 60-100 grams per day depending on activity level and body size.
- Strive to consume ~80 grams per day and/or work with the dietitian for individualized goals as needed.

How do I estimate my daily protein intake?

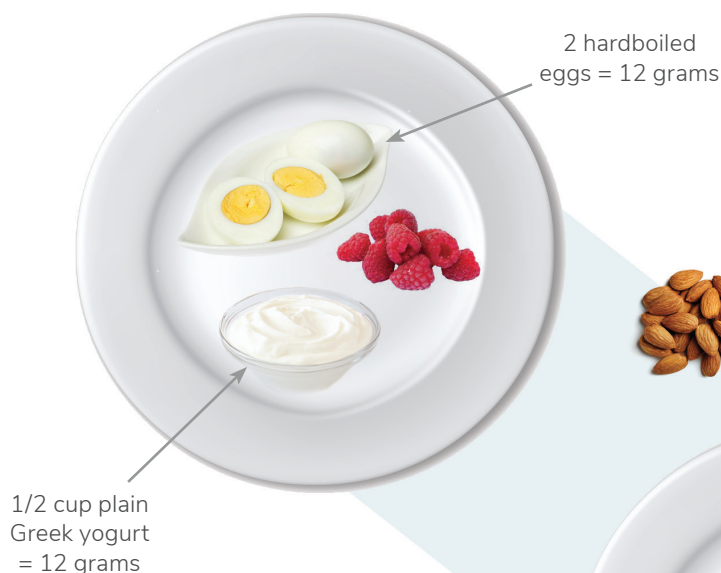
- 1 ounce of protein = ~7 grams of protein
- A deck of cards = ~3 ounces protein

Protein Food Source	Portion Size	Protein (grams)
1 Medium egg	1	7
¼ cup egg white or 2 egg whites	¼ cup	7
Cottage cheese	¼ cup	7
Tuna	¼ cup	7
Poultry, fish, beef, pork	1 oz	7
Greek yogurt (plain)	1/3 cup	7
Beans or lentils	½ cup	7
Cheese	1 oz	7

80 Grams of Protein in a Day Without Protein Shakes

While it's easy to rely on protein shakes to meet your daily protein goals, the best sources are whole, unprocessed foods such as chicken, seafood, lean meats, eggs, and dairy products. Once your diet has progressed to the final stages after surgery, opt to meet your daily needs with real-food sources of protein.

Breakfast = 24 grams protein



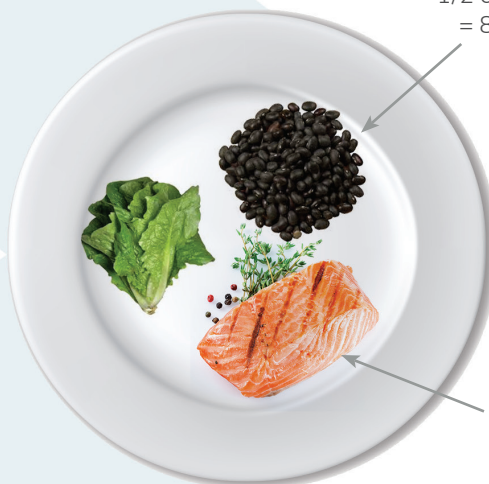
Snack #1

1/4 cup plain raw almonds = 12 grams



**Daily total =
82 grams
protein**

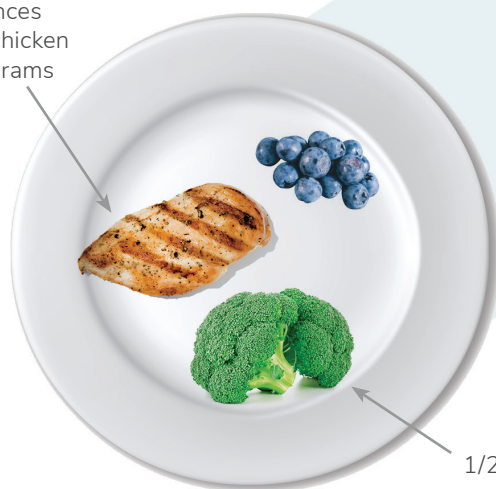
1/2 cup beans = 8 grams



**Lunch =
22 grams protein**

2 ounces salmon = 14 grams

2 ounces grilled chicken = 14 grams



1/2 cup broccoli = 2 grams

Snack #2

1/4 cup cottage cheese = 12 grams



Dinner = 16 grams protein



Aim to get at least 64 oz. of water daily between meals

Post-Bariatric Surgery Vitamin & Mineral Supplementation

Gastric Sleeve & Gastric Bypass Supplementation

Multivitamin

- Bariatric specific brand preferred.
- Vitamins should be liquid or chewable. Avoid gummies.
- Take 1 serving, twice daily. Check serving size on nutrition facts label.

Calcium Citrate

- Goal intake: 1500 mg daily.
- Take no more than 500 mg of Calcium Citrate at a time.
- Calcium Citrate does not require stomach acid for absorption.
- Wait 2 hours between the iron or multivitamin with iron or iron-rich meal and the calcium supplement.

Vitamin D3

- Goal intake: 3,000 IU daily.
- Vitamin D3 helps with calcium absorption.

Daily Probiotic

- Probiotics are beneficial bacteria that help to improve gut health.

Vitamin B12

- Goal intake: 1000 mcg daily (Sublingual preferred) or visit Bariatric Clinic for monthly B12 injection.

Vitamin B1 (Thiamine)*

- 100 mg daily,* Can stop after first 6 months post-op
- Only comes in capsule form; pour and mix contents with water to consume.

Sample Day Schedule for Vitamin and Mineral Supplementation

After Breakfast: Multivitamin, Calcium Citrate 500 mg, Vitamin D3, Vitamin B12, Probiotic, Thiamine for 6 months

After Lunch: Calcium Citrate 500 mg

After Dinner: Multivitamin, Calcium Citrate 500 mg

*Do not begin taking supplements until directed by surgeon, nurse, or dietitian.
Avoid iron supplements unless instructed otherwise by MD.

*Vitamin and mineral doses can be adjusted/individualized after post-op blood draws at follow-up visits

BARIATRIC BRAND VITAMINS

Option #1 Nascobal Covered by some insurance plans, Nascobal.com, 855-828-1488

	Vitamin Name by Brand	Amount per Day	Time
Multivitamin	Bariactiv Multivitamin Chewable	1 chewable	Anytime
	or Bariactive Capsule (After 1 month)	or 1 capsule	
Calcium + D3	Bariactive Calcium, Vitamin D3 & Magnesium Chewable	4 chewables	Morning: 2 chewables Evening: 2 chewable
	or Bariactive Calcium, Vitamin D3 & Magnesium tablet (After 1 month)	or 4 tablets	Morning: 2 tablets Evening: 2 tablets
B12	Vitamin B12 Nasal Spray	Once a week	Anytime
B1	Vitamin B1 (100mg first 6 months) must purchase separately at store	1 capsule	Anytime
Probiotic	Probiotic (Optional) must purchase separately at store	1 tablet	Anytime

Option #2: Bariatric Advantage <https://www.bariatricadvantage.com> Use code 'Marina' for discount

	Vitamin	Amount per Day	Time
Multivitamin	Multi Chewy Bite (Multivitamin)	2 soft chews	Anytime
	or Ultra Solo without Iron (After 1 month)	or 1 capsule	
Calcium + D3	Calcium Citrate Chewy Bites	3 soft chews	Morning: 1 soft chew Midday: 1 soft chew Evening: 1 soft chew
	or Bariatric Advantage Calcium Citrate Tablets (After one month)	or 6 tablets	or Morning: 3 tablets Evening 3 tablets
B12	Speedy Melts B12 (1,000 mcg)	1 tablet	Anytime
B1	Vitamin B1 (100mg, first 6 months)	1 capsule	Anytime
Probiotic	FloraVanatage Control Probiotic (Optional)	1 chewable in Grape or 1 capsule	Anytime

First Month After Surgery: no swallowing of whole pills. Chewable, soft chews, powdered, liquid and sublingual vitamins are acceptable. All tablets must be crushed. All capsules/gels must be split and poured into liquid such as a protein drink.

OVER THE COUNTER VITAMINS (OTC)

Option #1: OTC Chewable Vitamins -First Month After Surgery

	Vitamin	Amount per a Day	Time
Multivitamin	Centrum Silver Adults Chewable	2 tablets	Anytime
Calcium Citrate + D3	GNC Calcium Citrate Soft Chews	3 chews (1500 mg total)	Morning: 1 chew Midday: 1 chew Evening: 1 chew
B1	First 6 months: Superior Source B1 Sublingual (online)	1 tablet (100mg)	Anytime
B12	B12 Sublingual	1 sublingual (1000mcg)	Anytime

Option #2: OTC Pill Form

	Vitamin	Amount per a Day	Time
Multivitamin	Centrum Silver Adults 50+	2 tablets	Anytime
Calcium Citrate + D3	Target Up & Up Calcium Citrate + D3 or CVS Health Calcium Citrate + D3 (630mg Calcium/500 IU D3 per serving)	4 tablets (1260mg total)	Morning: 2 tablets Evening: 2 tablets
B1	First 6 months: B1 Thiamin After 6 months Super B- Complex (must contain at least 50mg of thiamin/B1)	1 tablet (100mg)	Anytime
B12	B12 Sublingual	1 sublingual (1000mcg)	Anytime
Probiotic	Culterelle or Florastor	1 capsule	Anytime

First Month After Surgery: no swallowing of whole pills. Chewable, soft chews, powdered, liquid and sublingual vitamins are acceptable. All tablets must be crushed. All capsules/gels must be split and poured into liquid such as a protein drink.

Protein Supplements

What should I consider when choosing a protein drink?

- All protein shakes or powders should have the following:
 - **20-30 grams** of protein per serving.
 - **< 15 grams** of carbohydrates per serving.
 - **≤200 calories** per a serving
- If you experience gas, bloating or cramping with protein supplements, choose **whey protein isolate**. It contains more protein and less lactose, fat and carbohydrates when compared to whey protein concentrate.
- Be cautious if lactose intolerant. Most whey-based protein drinks are lactose free.
- Avoid collagen-based proteins, as they do not contain all the essential amino acids.
- Try to choose a protein supplement that does not contain sucralose as it results in less gastrointestinal distress.
- Experiment with different protein supplements prior to surgery to ensure good tolerance.

Why is protein so important before and after surgery?

- Our muscle and organs are primarily made of protein.
- Protein is essential for tissue repair and immune function.
- If your body is not getting enough protein, you will break down muscle for protein, which can lead to weakness.
- Protein is essential during a period of rapid weight loss to help maintain lean body mass and keep metabolism high.
- Protein is a key component to weight loss as it helps you feel satiated or full between meals.

Ready to Drink Protein Supplements

Milk Protein Ready to Drink						
Product	Calories	Protein (g)	Carbohydrate (g)	Sweetener	Protein Source	Where to Buy
Premier Protein	160	30	5	Sucralose	Milk Protein Concentrate, Calcium Caseinate	Costco, Most Drug/Grocery Stores
Ensure Max Protein	150	30	6	Sucralose	Milk Protein Concentrate, Calcium Caseinate	Most Drug Stores, Walmart
Pure Protein	150	35	2	Sucralose	Milk Protein Concentrate, Calcium Caseinate	Trader Joe's, Ralph's
Orgain Clean Protein (Grass Fed)	130	20	11	Monk Fruit, Stevia	Grass-Fed Organic Milk Protein Concentrate and Organic Whey Protein Concentrate	Most Drug/Grocery Stores
Fairlife High Quality Protein	150	30	3	Monk Fruit, Sucralose	Filtered Low-Fat Grade A Milk, Lactase Enzyme	Target Walmart
Whey Protein Isolate Ready to Drink						
Garden of Life Sport Protein Drink (Kosher)	120	26	8	Erythritol	Whey Protein Isolate	Sprouts, Vitamin Shoppe, Whole Foods
Unjury Ready to Drink Protein Shake	110	20	2	Sucralose	Whey Protein Isolate	unjury.com
Clear Whey Protein Isolate Ready to Drink						
Bariatric Advantage Clearly Protein	80	20	0	Monk Fruit, Stevia	Whey Protein Isolate	https://www.bariatricadvantage.com/item/clearly-protein
Isopure (Natural Flavor)	100	20	5	Cane Sugar	Whey Protein Isolate	GNC, Vitamin Shoppe
Protein2O	60	15-20	1	Erythritol, Stevia	Whey Protein Isolate	Walmart, Costco, Amazon
Premier Protein Clear Protein Drink	90	20	2	Sucralose	Whey Protein Isolate	Costco, Most Drug/Grocery Stores
Plant Based Ready to Drink						
Aloha Organic Plant Based Protein	160	18	5	Monk Fruit, Coconut Sugar	Pea Protein, Brown Rice	CVS, Ralph's, Sprouts
Orgain Organic Protein Vegan Protein Shake (Bottle)	150	21	15	Erythritol, Stevia	Pea, Chia	Most Drug Stores & Supermarkets Costco
Vega Protein Nutrition Shake	160	20	14	Stevia	Pea Protein, Brown Rice	Target, Walmart, Costco

Protein Powders

Whey Protein Concentrate Powder							
Product	Scoops	Calories	Protein (g)	Carbohydrate (g)	Sweetener	Protein Source	Where to Buy
Garden of Life Organic Whey Protein Grass Fed (Kosher)	2	130	21	7	Stevia, Erythritol	Whey Protein Concentrate	Sprouts, Vitamin Shoppe, Whole Foods
Simple Truth Protein Powder	2	190	36	4	Stevia	Whey Protein Isolate, Whey Protein Concentrate	Ralph's
Whey Protein Isolate Powder							
Isopure Natural Flavor	2	180	28	4	Can Sugar, Monkfruit	Whey Protein Isolate	Sprouts, Vitamin Shoppe, Whole Foods
Unjury (mix with water)	1 packet	200	27	11	Sucralose	Whey Protein Isolate	unjury.com
Bariatric Advantage High Protein Meal Replacement	2	150	27	11	Sucralose	Whey Protein Isolate	Bariatricadvantage.com
Plant Based Protein Powder							
Orgain Organic Protein	2	150	21	15	Stevia	Pea, Brown Rice, Chia	Costco, Ralph's, Target, Most Drug Stores
Vega Protein & Greens	1	120	20	6	Stevia	Pea, Chia Seed, sunflower seed, pumpkin seed, sachai inchi	Costco, Ralph's, Target, Most Drug Stores,
Trader Joe's Organic Pea Protein	1	130	20	8	Coconut, Palm Sugar	Pea Protein Isolate	Trader Joe's
Aloha Organic Protein Powder	1	120	20	4	Monk Fruit, Coconut Sugar	Brown Rice, Chia, Pea, Hemp, Pumpkin Seed	CVS, Ralph's, Sprouts
Egg Protein Powder							
Totally Egg	2	120	24	0	Stevia	Egg Protein	Amazon
Whole Foods Cage-Free Egg White Protein Powder	1	120	24	0	Stevia	Egg Protein	Whole Foods

Mix protein powders with water, ice, milk or any type of unsweetened almond or nut milk.

Do not add any vegetables, fruit or nut butters.

Two-Week Pre-Surgery Diet

Preoperative Diet

Two weeks prior to your scheduled surgery date, you will need to begin a liver reduction diet. The purpose of this diet is to help you lose weight prior to your surgery. Weight loss will help to shrink your liver and make the surgery easier for your surgeon. Drink 64 ounces of water daily to stay hydrated. It is important to stay hydrated before surgery.

Two weeks prior to surgery (one meal per day + two liquid meals)

Breakfast

Please choose a protein drink from provided list that provides 20-30 grams of protein.

Lunch

Please choose a protein drink from provided list that provides 20-30 grams of protein.

Dinner

Eat 3-4 ounces of chicken, turkey or fish (baked, broiled or grilled). May cook in healthy fat of your choice, such as 1 teaspoon of olive oil. You may also choose to eat as many of the nonstarchy vegetables listed below as you would like with dinner.

Fluids

Drink at least 64 ounces of water daily (eight 8-ounces glasses). Begin practicing taking sips of liquid between meals versus with meals to meet your daily needs. You may also sip on bone or other types of broth between meals if needed.

Suggested vegetables to have with the one meal per day

Nonstarchy vegetables	Dark leafy greens	Artichokes	Beets
	Broccoli	Green beans	Okra
	Cauliflower	Cabbage	Bell peppers
	Brussels sprouts	Mushrooms	Jicama
	Celery	Zucchini	Eggplant
	Radishes	Tomatoes	Asparagus
	Cucumber	Sprouts	Leeks

Can use whole milk or unsweetened almond milk in coffee and tea.

Post-Operative Bariatric Surgery Diet Progression Overview

Phase I	Phase II	Phase III	Phase IV
Full liquids	Soft Foods Stage 1	Soft Foods Stage 2	Bariatric Regular Diet
Typically weeks 1-2	Typically weeks 2-3	Typically weeks 4-6	Typically 6 weeks +
Water	Any foods from Phase I	Any foods from Phase I & II	Any foods from Phases I-III
Broth *Homemade turkey, chicken, beef, or vegetable preferred.	Egg *Soft-boiled, poached, soft scrambled.	Very lean red meat (as tolerated) such as beef or bison.	Fresh fruit
			Raw vegetables
High-protein drink	Plain greek yogurt, cottage cheese, soft cheeses such as burrata or ricotta	Other fish such as salmon. *Without skin, soft, moist, fresh. Baked, broiled, or grilled. No fried.	Goal is to have 3 meals per day. Limit snacks to 1-2 x per day, listening to hunger and fullness cues. Always start your meals with protein first. All meals and snacks should be high protein, low carbohydrate. Avoid simple carbohydrates, concentrated sweets for life. No starchy carbohydrates such as white bread, pasta, potatoes. Add one new food at a time. Keep a daily food journal to monitor intake and assess tolerance.
Decaffeinated herbal tea	Beans or lentils	Other cheeses	
Whole milk or unsweetened almond milk	Ground chicken or turkey, white fish *Without skin, soft, moist, fresh. Baked, broiled, or grilled. No fried. Add broth if too dry.		
	Coffee or green tea *Limit to 8 ounces per day, no sugar or processed creamer.		
	Week 3: very soft, well cooked vegetables		
Fluid goal: drink ≥ 64 ounces of fluids daily (8- 8 ounce glasses). Phase I, consume 1 oz. fluid every 5-15 minutes or as tolerated. Do not drink with meals.			
Protein goal: consume at least 80 grams of protein per day.		Avoid alcohol, carbonated beverages, straws, chewing gum.	

*Note: Typical timing for diet advancement varies based on individual. Consult your dietitian if any questions or concerns arise.