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Meet the Team

The surgeons at PHMG Surgery are highly experienced in the field of *bariatric* surgery, also known as weight-loss surgery. Our program offers *gastric bypass surgery*, the *sleeve gastrectomy*, as well as revision surgery. The surgical program is staffed by highly trained specialists including medical assistants, LPNs, dietitians, a psychologist, and others who work as part of your team to serve you better.



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- Board-certified, General Surgery
- Fellowship: Laparoscopic Bariatric Surgery,
 Tufts New England Medical Center, Boston
- Residency: University of Calgary, Alberta, Canada
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- Member, Fellow of American College of Surgeons (FACS)
- Member, American Society for Metabolic and Bariatric Surgery (ASMBS)
- Member, Society of American Gastrointestinal and Endoscopic Surgeons (SAGES)
- Active Member, American Association of Endocrine Surgeons (AAES)

Meet the Team (Continued)



Chris Webb, PA-C Physician Assistant



Kristina Wallace, PA-C Physician Assistant



Lindsay King, Psy-D Psychologist



Jeanne Cullen, RD, LD, CDE Registered Dietitian



Kelly Peterson, MS, RD, LD Registered Dietitian Program Coordinator



Amanda Greene, RD, LD Registered Dietitian



Christie BrasseurPatient Coordinator



Nanyel Hillsberry
Data Coordinator



Catrina AdamsReferral Coordinator



Kim Given, LPN Licensed Practical Nurse



Alyssa Velez Surgery Scheduler



Trina ClaflinPatient Access Representative

Personal Notes

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What is Obesity?

It is estimated that over 72 million adults in the United States are obese, a condition that substantially raises their risk for high blood pressure, type 2 diabetes, coronary heart disease, stroke, gallbladder disease, osteoarthritis, sleep apnea, respiratory problems, and cancer of the breast, prostate, and colon. Higher body weights are also associated with increases in death from all causes. Obese individuals also suffer from stereotyping and discrimination. Health care costs associated with obesity amount to about \$147 billion in the United States annually. As the second leading cause of preventable death in the United States today, overweight and obesity pose a major public health challenge.

There are several classifications of obesity. If you have a Body Mass Index (BMI) of 40 or higher, you may qualify for bariatric surgery. If you have a BMI of 35–39.9, you may also qualify as long as one or more obesity-related conditions (such as high blood pressure, diabetes, high cholesterol, heart disease, or obstructive sleep apnea) are present. The patient coordinator can help you clarify your specific plan criteria.

The calculation for determining Body Mass Index is [weight (pounds) \div height (inches)²] x 703.

Let's say you weigh 250 pounds and stand 5 feet, 10 inches tall. To calculate your BMI, multiply your height in inches (70) by itself (70). Divide your weight in pounds (250) by this number and multiply the result by 703.

Example:

- 5 feet, 10 inches = 70 inches
- 70 x 70 = 4,900
- $250 \div 4,900 = 0.051$
- 0.051 x 703 = 35.8 BMI

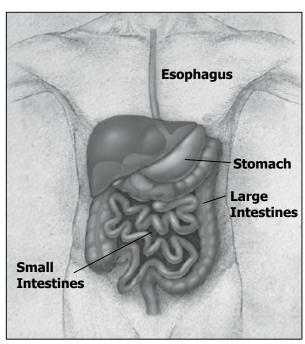
You can also estimate your BMI by checking the following table:

Height (ft)											
		4'9"	4'11"	5'1'	5'3"	5'5"	5'7"	5'9"	5'11"	6'1"	6'3"
	154	33	31	29	27	26	24	23	22	20	19
	165	36	33	31	29	28	26	24	23	22	21
	176	38	36	33	31	29	28	26	25	23	22
	187	40	38	35	33	31	29	28	26	25	24
	198	43	40	37	35	33	31	29	28	26	25
	209	45	42	40	37	35	33	31	29	28	26
	220	48	44	42	39	37	35	33	31	29	28
	231	50	47	44	41	39	36	34	32	31	29
	243	52	49	46	43	40	38	36	34	32	30
	254	55	51	48	45	42	40	38	35	34	32
	265	57	53	50	47	44	42	39	37	35	33
	276	59	56	52	49	46	43	41	39	37	35
	287	62	58	54	51	48	45	42	40	38	36
Weight (lbs)	298	64	60	56	53	50	47	44	42	39	37
t (309	67	62	58	55	51	48	46	43	41	39
igh	320	69	64	60	57	53	50	47	45	42	40
Ne	331	71	67	62	59	55	52	49	46	44	42
_	342	74	69	65	61	57	54	51	48	45	43
	353	76	71	67	63	59	55	52	49	47	44
	364	78	73	69	64	61	57	54	51	48	46
	375	81	76	71	66	62	59	56	52	50	47
	386	83	78	73	68	64	61	57	54	51	48
	397	86	80	75	70	66	62	59	56	53	50
	408	88	82	77	72	68	64	60	57	54	51
	419	90	84	79	74	70	66	62	59	56	53
	430	93	87	81	76	72	67	64	60	57	54
	441	95	89	83	78	73	69	65	62	58	55
	452	98	91	85	80	75	71	67	63	60	57
	463	100	93	87	82	77	73	69	65	61	58
	Weig	ght C	ateg	ory	В	IM					
	Norm	al We	ight		18.5	-24.	9				
	Over		t			-29.9					
	Obesi		a idea o		10000	-34.9					
	Severe Obesity Morbid Obesity					-39.9 :40					
	MOID	13 00	csity			+0					

Procedures Available

Operations for obesity fall into two categories: *restrictive* and *malabsorptive*. Restrictive procedures reduce the amount of calories or food ingested (taken in) by limiting the stomach space available for the food.

Malabsorptive procedures reduce the absorption of food (the process of food moving through the body) that has been consumed.



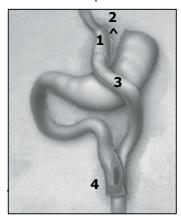
The normal digestive system

ROUX-EN-Y GASTRIC BYPASS

Roux-en-Y (roo-en-WHY) gastric bypass, commonly called gastric bypass or RYGB, combines a gastric restrictive operation with malabsorption.

The following procedure is used:

- 1. A small pouch is separated from the top of the stomach and sealed.
- 2. Staples are used to create the seals.
- 3. The small intestine is divided and attached to the new stomach pouch.
- 4. The section of small intestine that descends from the bypassed stomach is reconnected to the small intestine that descends from the new pouch to create a "Y" shape.



Roux-en-Y gastric bypass

After dividing the upper stomach, the surgeon divides the small intestine in the *upper jejunum* (jay-JOO-num) and connects it to the small stomach pouch with an opening

approximately the size of a dime. This joining together of the stomach pouch and the jejunum is called an *anastomosis* (uh-nas-tuh-MOS-sis).

The other end of the jejunum is reconnected, creating a "Y" shape. Absorption of food does not begin until the point where the two pieces of jejunum come together.

You will experience a sense of fullness very quickly after this operation, because your surgeon creates a very small stomach pouch. Your appetite is reduced and your intake of food is dramatically limited to help you lose weight.

Procedures Available (Continued)

Results

Weight loss happens rapidly in the first year after surgery. In the second year, you continue to lose weight but at a slower pace. By the end of the second year the average patient has lost as much as 2/3 of their excess weight. You may lose more than this, or you may lose less. By year 8, average excess weight loss for typical patients is greater than 50 percent. In most cases, this is enough weight loss to reduce the life-threatening dangers that come with obesity.

Risks and Complications

RYGB has the highest long-term success and low rates of mortality (death), complications, and failures. The procedure carries a mortality rate of less than 0.4% percent and a complication rate of less than 5 percent. Our surgeons have had excellent outcomes in terms of low complication rates. The following RYGB benchmark statistics were compiled from several studies:

■ Mortality: <0.4%

Deep vein thrombosis/pulmonary

embolism: 1-3%

■ Anastomotic leak: 1-3%

Wound infection: 1%

Marginal ulcer: 5-10%

■ Internal hernia: 5-10%

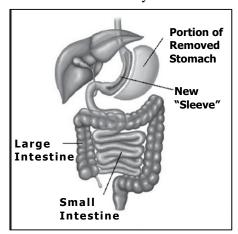
■ Re-operations: 5-10%

■ Re-admissions: <5%

VERTICAL SLEEVE GASTRECTOMY

The Vertical Sleeve Gastrectomy (VSG), like the gastric bypass, generates weight loss by restricting the amount of food that can be eaten.

In a VSG procedure, the stomach is stapled and divided vertically. This removes up to 85% of the stomach. The remaining stomach, or sleeve, is about the size of a banana. It allows for normal digestion and absorption. Food consumed passes through the digestive tract in the usual order, which allows it to be fully absorbed into the body.



Vertical Sleeve Gastrectomy

Results

The advantages of sleeve gastrectomy are the reduction in stomach size without loss of function. Weight loss occurs within the first two years and, as with gastric bypass, the procedure can improve common co-morbidities such as type 2 diabetes, sleep apnea and hypertension. Patients do not experience the dumping syndrome that can be common with gastric bypass. VSG is an option for patients with disorders such as Crohn's Disease or anemia.

Procedures Available (Continued)

Risks and Complications

VSG surgery is irreversible and potential complications can arise from the stomach stapling. However, relative to gastric bypass, VSG offers around 50% lower complication rates.

■ Mortality: <0.4%

Deep vein thrombosis/pulmonary

embolism: 0.5-1.5%

■ Staple line leak: 0.25-0.5%

Wound infection: 1%
Re-operations: <1%

Re-admissions: <5%</p>

LAPAROSCOPIC SURGERY

Your weight-loss surgery is *laparoscopic* (*lap-uh-row-SKOP-ik*) surgery. In this technique, a fiber-optic instrument is inserted through an incision in the abdominal wall to display the organs inside. It functions as an eye, sending signals that are processed and displayed on a TV screen. This technique usually requires a total of five or six incisions, most of which are less than an inch long. Surgical instruments are inserted through these incisions. The surgeon operates by manipulating the instruments, using the laparoscope, to see what is happening on the TV screen rather than by feeling the actual organs with their hands.

Laparoscopic surgery results in better cosmetic outcomes, a shorter hospital stay, and quicker return to work. This procedure also results in fewer *hernias* (tearing of tissue) at the site of the incisions, as well as fewer infections.



Only 5 or 6 small incisions are required in a laparoscopic procedure.

SURGICAL OUTCOMES

The health problems associated with obesity can be significantly reduced or cured through bariatric surgery. Past results from both the Roux-en-Y gastric bypass and sleeve gastrectomy procedures show:

- An 85% remission of diabetes
- A 90% remission of sleep apnea
- A 65% remission of hypertension
- A mortality rate of less than 0.4%
- An average hospital stay of 2 days (or less)

Personal Notes

Preparing for Surgery

During your first appointment in our office, the patient coordinator will review the steps that must be completed before surgery. It is your responsibility to complete all requirements.

1. PREOPERATIVE WEIGHT LOSS

Weight loss may be required prior to surgery. The amount of weight you must lose before surgery will be determined by your surgeon. Losing weight prior to surgery helps shrink your liver and makes your surgery safer.

- Your preoperative weight loss requirement is: ________
- Your weight must be _____ pounds or less before your surgery can be scheduled.

2. BASELINE LABS

Blood work will be ordered after your first appointment with your surgeon. If you have a history of nicotine, marijuana, or illicit drug use within the last three years you will be required to complete a nicotine and drug toxicology screen to ensure patient safety. You have 30 days from the evaluation with your surgeon to complete these labs. You will need to fast 12 hours prior to having your blood drawn and make sure to hold all supplements and vitamins for at least 24 hours beforehand.

3. MANAGE YOUR DIABETES

Uncontrolled blood sugar can increase your chances of infection and decrease wound healing after surgery. For poorly controlled diabetes, a glycohemoglobin A1C goal will be determined by your surgeon.



4. STOP SMOKING

Any use of tobacco and nicotine including cigarettes, cigars, pipes, chew, e-cigarettes, vaping, gum, or patches are very dangerous after bariatric surgery. If you need help quitting, talk with your PCP. Also consider the Oregon Heart and Vascular Institute which offers a smoking cessation support group (phone 541-222-7442 or go to www.ohvi.org). A referral is not required and you may call them directly.

- If you are currently using nicotine, you are required to quit and have a negative urine test before you can begin the program.
- If you have recently quit nicotine, your urine will be tested to confirm that you are maintaining abstinence.
- Secondhand smoke exposure can lead to a positive nicotine screen. Limit your secondhand exposure for your personal health and safety.

5. STOP USING MARIJUANA AND OTHER ILLICIT DRUGS

PHMG Surgery does not allow any form of marijuana or illicit drug use for patients seeking bariatric surgery. Marijuana, THC, or other metabolites, which are allowed legally with a Oregon Medical Marijuana Card, is prohibited within our program. If you are currently using or have recently quit, urine testing (as described above for nicotine) will be required to start the program. You will be tested again within one month of surgery. Negative results are required to continue in the program. If you are using CBD products, please discuss this with your surgeon.

6. COMPLETE NUTRITIONAL AND PSYCHOLOGICAL EVALUATIONS

After you have completed your evaluation with the surgeon and your lab work has been reviewed, you will be scheduled for evaluations with a dietitian and our psychologist. These appointments can be scheduled on the same day. Plan on spending at least two hours at the clinic to complete these two appointments.

7. TEAM REVIEW

Once all evaluations and labs are complete, the multidisciplinary team will review your case to determine your appropriateness and readiness for surgery. To optimize your readiness for surgery, the team may require additional steps to help you prepare. The results of this team review will be communicated to you by letter and/or phone call.

8. COMPLETE REQUIRED MEDICAL TESTING

Your surgeon may require additional medical evaluations and testing based on your medical history and which type of bariatric surgery you are preparing for. The most frequently ordered preoperative tests include:

- Endoscopy: All patients undergoing gastric bypass or sleeve gastrectomy are required to have a screening endoscopy. You will be referred to a gastroenterologist for this.
- Sleep apnea testing: If you are diagnosed with sleep apnea that requires CPAP (continuous positive airway pressure) for treatment, you will need to show compliance before moving toward surgery.
- Cardiac (heart) evaluation: You may be referred to a cardiologist for evaluation and testing (e.g. stress test).

9. COMPLETE INSURANCE AND PROGRAM REQUIREMENTS

Your insurance may require additional steps be completed prior to surgery. Additionally, the program requires pre-surgical patient education classes. The patient coordinator will review the specific requirements of our program and your insurance plan during your first visit.

10. INCREASE PHYSICAL ACTIVITY

Long-term success after bariatric surgery requires not only a commitment to a new way of eating but also regular moderate physical activity. Focus on getting a regular physical activity routine established prior to surgery. **Consistency** is more important than **intensity** at this stage.

People with obesity are at higher risk for falls, muscle strains and other injuries. Start slowly (3-5 minutes/session) and increase gradually, especially if you have been inactive.

Your dietitian will talk to you about physical activity at your monthly visits.



11. PRACTICE HEALTHFUL EATING HABITS

You will be working with your dietitian to start practicing the bariatric way of eating. Make sure you review the bariatric guidelines on page 15 of this book. Please remember to bring your book to each visit.

12. EXPLORE YOUR RELATIONSHIP WITH FOOD AND STRUCTURE YOUR LIFE FOR SUCCESS

Bariatric surgery alters your physical ability to eat but does not change your mental relationship with food. Success after surgery requires not only practicing new habits but exploring the reasons behind old habits that don't serve you. Set the stage for success by making the following changes before surgery:

- Eat at the table. Recognizing fullness signals at meals requires paying attention while eating. Avoid distractions. No TV, computer, or reading while eating.
- Start keeping a journal of your daily food intake and physical activity:
 - How do your current eating habits compare with the bariatric eating guidelines?
 - Which old habits are hardest for you to change?
 - Are there any situations that trigger you to eat when you are not physically hungry?
 - Do you eat in response to certain emotions? Stressful situations? Boredom?
 - How will you cope with these situations without using food after surgery?
- Rearrange your home environment to support your success. Clean out your cupboards and refrigerator and freezer of high temptation foods and restock them with healthy alternatives.
- Create a schedule for meals and exercise:
 - Plan meals **at least** one day in advance.
 - Make exercise a part of your daily routine.
 - Plan **in advance** how you will handle special events, parties, etc.
 - Discuss with other household members how your new way of eating will impact them.

13. PREOPERATIVE LABS AND NUTRITION CLASS

After your diet visits are completed, you are at goal weight, and your medical requirements are completed, you will be ready for the preoperative nutrition class. Prior to being scheduled into the nutrition class you will be required to do a nicotine and drug toxicology screen. After your labs are completed the patient coordinator will call you to discuss the next steps. Your lab results must be negative in order to be scheduled into the nutrition class.

The nutrition class is taught by one of our dietitians and teaches you about supplement needs and diet progression after surgery. It is typically scheduled 4-6 weeks before your surgery and lasts for about two hours.

14. STOP TAKING SOME MEDICATIONS

Stop 1 month before surgery	Examples
Estrogen containing birth control products and hormone replacements	Birth control pills, injections, implants
Stop 1 week before surgery	
Non-steroidal anti-inflammatories	Advil, Aleve, Ibuprofen, Motrin, Naproxen
Blood thinning products	Aspirin, Coumadin, fish oil capsules, Vitamin E

This is general information. Discuss your medication list with your surgeon at your initial consultation and again right before surgery.

15. INSURANCE APPROVAL AND PRIOR AUTHORIZATION

While you are taking the pre-op nutrition class, the referral coordinator will request prior authorization from your insurance company for your surgery (if required). It can take up to 14 business days to process. After prior authorization is obtained, you will be assigned a surgery date.

16. ARRANGE FINANCES

It is your responsibility to verify your benefits, coverage, co-pays, out of pocket maximums, and potential costs with your insurance plan. PeaceHealth offers estimates for office visits and surgery by calling Patient Financial Services at (844) 212-1049. You will need the CPT codes from our office in order to obtain the most accurate estimates.

17. PREOPERATIVE APPOINTMENTS

Preoperative appointments with your surgeon and NW Anesthesia generally take place a couple of weeks prior to your surgery. You will also attend a pre-op class with a nurse who will go over hospitalization and post-op care.

Out of Area Patients

If you live an hour or farther away, we require that you stay locally near the hospital for one week post-surgery.

Strategies for Success

BARIATRIC GUIDELINES

Losing weight and keeping it off requires a long-term commitment to a new way of approaching eating and activity. Below are some tips to keep you on track.

Dietary Recommendations:

- Eat 3 meals per day (**no** skipping meals).
- Include a lean protein source with each meal and eat it first. Aim for a total of 60-80g of protein per day.
- Focus on "protein and produce" at meals. Limit starchy foods such as crackers, bread, pasta, and rice to no more than one serving per meal.
- Focus on "whole foods," which describes foods that are less processed, whenever possible.
- Reduce portion sizes. Using a small plate (6-8 inches across) may help.
- Eat slowly (one bite per minute) and chew foods well. Put your utensil down between each bite and stop eating at the first sign of fullness.
- Limit planned snacks to 100-200 calories per day. **No grazing!**
- Consume at least 64 oz of fluid per day. Fluids should be calorie free, non-caffeinated and non-carbonated.
- Don't drink fluids with your meals and wait until 30 minutes after. Make sure that you are sipping on water throughout the day between meals.
- Avoid:
 - Alcoholic beverages
 - Carbonated beverages
 - Sugar sweetened beverages
 - Fast foods
 - Snack foods

Lifestyle Recommendations:

- Move your body every day. Regular physical activity is the best way to burn stored fat and maintain muscle mass during weight loss.
- Get adequate sleep.
- Learn to manage stress in healthy ways.
- Take your nutrition supplements as recommended.



Preoperative Nutrition Classes

A two-part preoperative class series has been designed to teach you about eating well after bariatric surgery. The purposes of these classes are to help you maximize your weight loss success while minimizing the risk of nutrition complications and deficiencies. The nutrition orientation is scheduled close to your nutrition assessment and the second nutrition class is held right before surgery. Each class meets for about two hours. Support people are encouraged to attend classes with you.

Bring your education book with you to each class. The following information will be covered:

CLASS 1: NUTRITION ORIENTATION

- Surgery as a "Tool"
- Protein and Protein Supplements
- Carbohydrates
- Fats
- Fluids
- Bariatric Eating Basics

CLASS 2: NUTRITION AFTER BARIATRIC SURGERY

- Vitamin and Mineral Supplements
- Diet Progression
- Common Concerns After Surgery
- Eating Strategies for Success

SURGERY AS A "TOOL"

The smaller stomach after surgery is your "tool" to help you feel full (satiated) with a very small amount of food. Although each bariatric procedure offers unique features, they all work by limiting the **amount** of food you can eat. However, they will not force you to eat healthy foods or prevent you from eating unhealthy foods.

PROTEIN

Good quality, lean, moist, protein rich foods will be the cornerstone of your diet for the rest of your life.

Why Protein is so Important

- Protein is a building block of every body cell.
- The body can't produce essential proteins and they must be supplied in the diet.
- Protein rich foods fill you up and keep you full after meals better than other types of foods.

Where Protein is Found

Meat, poultry, fish and shellfish, eggs, legumes (beans), seeds, and dairy products are all excellent sources of good quality protein. **Each ounce of meat or cheese provides about 7 grams of protein.** Grains, fruits and vegetables do contain small amounts of protein but the quality (based on how well it is used by the body) is lower.

Are some protein foods healthier for me than others?

Unprocessed, lean meats provide as much protein, but far fewer calories, than fatty cuts or processed forms. For example, one slice of bacon or one small sausage link is 70% fat and contains only 3g of protein. These choices should not be your primary source of protein at a meal.

What about beans?

Legumes (beans, lentils, and peas) are good quality protein but are bulky for the amount of protein they contain. It takes a half cup of beans to provide the same amount of protein in one egg or one ounce of meat. However, unlike animal products, beans also provide fiber which can help with constipation after surgery. Beans are a good choice in moderation.

High Quality Lean Sources of Protein

Source	Amount	Grams of Protein	Grams of Fat	Calories
Beans and chickpeas, cooked	½ cup	7-8	1	110
Beef: ground (extra lean) Beef: chuck roast (trimmed of fat)	1 oz 1 oz	7 9	4-5 3-4	70 70
Cheese	1 oz	7	3-5	70
Chicken breast or thigh (roasted, no skin)	1 oz	7-9	1-3	50-60
Cottage cheese	¼ cup	8	1	50
Egg	1	6	5	75
Egg whites	2	7	0	30
Fish (cod, salmon, tuna)	1 oz	7	1-3	30-50
Ham, lean, cured	1 oz	6	1-2	40
Hemp seeds	1 oz (3 Tbsp)	10	14	160
Lentils, cooked	½ cup	9	0	100
Nutritional yeast	2 Tbsp	7	1	50
Nuts (almonds, peanuts, walnuts)	1 oz	6-7	15-17g	165-175
Pork tenderloin	1 oz	8	1-2	50
Shellfish (shrimp, crab, etc.)	1 oz	6	0-1	30
Spirulina powder	2 Tbsp	8	1	40
Tofu, Edamame	½ cup	9-10	6	90-100
Turkey breast	1 oz	8	2	50
Tempeh	1 oz	5	3	55
Yogurt: Greek	3 oz	7	0-2	60-80

HOW MUCH PROTEIN YOUR BODY NEEDS

Your body's requirement for protein is highest during the first six to twelve months after surgery. Eighty grams (80g) of protein per day is recommended. Meeting this protein goal with food alone is very difficult to do, since your stomach will only hold 2–4 ounces of food per meal. A protein supplement will be used during this time to help meet the protein goal.

Your protein goal is 60-80 grams per day. Since protein foods generally supply about 7 grams of protein per ounce, you will need a total of 8–9 ounces of protein rich foods per day to meet your protein needs. A 2-3-3 pattern (2 ounces of protein foods at breakfast and 3 ounces at lunch and dinner) is recommended.

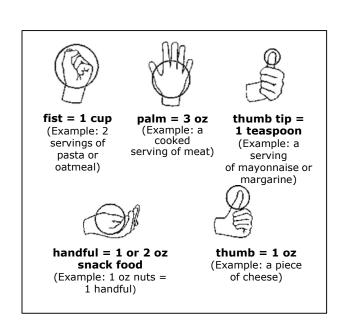
The First Six Months After Surgery

Your stomach will feel tightest during the early weeks to months after surgery and you may feel full after eating only a few bites. That is why it is important to **eat the protein rich food first** at meals. Initially protein supplements will be used to help you meet your protein needs.

Weighing and Measuring Protein

Your eyes will be bigger than your stomach after surgery so it is easy to overestimate the amount of food that you are actually eating. Use of a food scale is recommended.

When that isn't possible, the chart on the right is a useful guide.



Meeting the Daily Protein Goal

Some potential protein combinations to provide close to 60 grams of protein at meals per day:

Meal	Protein Choice	Amount of Protein
Breakfast	2 scrambled eggs	12 grams
Lunch	3 ounces deli turkey	27 grams
Dinner	3 ounces salmon	21 grams
Total Protein		60 grams

Meal	Protein Choice	Amount of Protein
Breakfast	½ cup cottage cheese	16 grams
Lunch	1 ounce ham, 1 hard boiled egg, and 1 string cheese	19 grams
Dinner	3 ounces chicken	27 grams
Total Protein		62 grams

Meal	Protein Choice	Amount of Protein
Breakfast	6 ounces Greek yogurt	15 grams
Lunch	3 ounces tuna	21 grams
Dinner	1 cup tofu	20 grams
Total Protein		56 grams

PROTEIN SUPPLEMENTS

We encourage you to start looking for a protein supplement before surgery. You are required to lose weight prior to surgery to shrink your liver and make your surgery safer. To help you achieve this weight loss and optimize your readiness for surgery, you will eat/drink a mostly liquid diet during the week prior to surgery.

Additionally, in the first few weeks after surgery, most of your nutrition will come from protein supplements. As you enter the Stage 3 diet and slowly transition to more solid foods you will have less need for the protein supplement to meet your protein needs.

Choosing a Protein Supplement

- Select a product made from whey protein isolate, soy protein, or egg white.
- Plant-based protein powders are also acceptable as long as they provide all the essential amino acids. Please talk with your dietitian to check your selection.
- Choose a product that supplies the following per serving:
 - 20-30 grams of protein
 - 3 grams or less of sugar
 - 5 grams or less of fat
- Ready-to-drink liquid supplements are okay to use but are often more expensive than powdered forms.
- Beware of liquid protein supplements packaged in small tubes. These are typically made from fortified gelatin or collagen and are of inferior quality.
- Unflavored and unsweetened supplements are also available and can be useful if taste changes occur after surgery.

After protein, what's next? PRODUCE!

CARBOHYDRATE

Carbohydrates come from plants. They include vegetables and fruit as well as the sugars and starches found in sugar cane, honey, syrups, and grains. In the United States, carbohydrates are typically eaten in a processed form in foods such as breads, pastas, rice, candy, ice cream, and sweetened beverages.

During the initial weight loss phase after surgery, carbohydrates should be severely restricted. Long term, carbohydrates may be included in moderation. The best sources of carbohydrates are fresh vegetables, fruit, and whole grains.

Why to Limit Carbohydrates After Surgery

- Encourages your body to burn its stored fat for energy.
- Carbohydrate foods don't keep you full as long after meals.
- Sugary foods can promote "dumping syndrome" after gastric bypass.
- Starchy foods such as breads may leave you feeling bloated and uncomfortable.
- Carbohydrate foods may stimulate your appetite and result in food cravings.

The Best Sources of Carbohydrate after Surgery are Vegetables and Fruits

There are multiple healthful benefits of vegetables and fruit:

- Low calorie content
- High water content which helps moisten protein rich foods
- Excellent sources of essential vitamins and minerals
- Excellent sources of fiber
- Fruits are frequently reported to naturally satisfy a sweet tooth following surgery



Alternative Sweeteners

Non-caloric sugar substitutes are acceptable in limited amounts for use following surgery and include the following:

Generic Name	Marketed As
Aspartame	Equal and Nutrasweet (blue packet)
Monk Fruit	Monk Fruit in the Raw
Saccharin	Sweet 'N Low (pink packet)
Stevia Leaf	SweetLeaf, SteviaClear, NuStevia
Sucralose	Splenda (yellow packet)
Tagatose	Naturlose

Health Benefits are Controversial

We highly recommend only consuming small amounts of artificial and low-calorie sweeteners because we still do not know the long-term effects of eating and drinking sugar-free products. Some research has shown negative impacts on gut health as well as increased sugar cravings.

Beware of Products Labeled "Sugar Free" and "Low Carb"

Read labels carefully for calorie information. Many "sugar free" products contain sugar alcohols (e.g. sorbitol, mannitol, xylitol and erythritol). These sugar alcohols not only provide calories but can also cause gas, bloating and diarrhea.

Probiotics and Gut Health

Our bodies are teeming with microscopic bacteria, most of which is good for you. We call these beneficial bacteria "probiotics." Fermented foods such as yogurt, sauerkraut, tempeh, kefir, and kimchi are great sources of probiotics.

All foods that contain at least 3 or more grams of fiber will promote the growth of these healthy bacteria. High fiber foods include beans, lentils, vegetables, fruits, nuts, seeds and whole grains. These foods also contain vitamins, minerals, and a variety of antioxidants that benefit overall health. Try to include both probiotic foods and high fiber foods often in your diet.

FATS

Fats are supplied in your diet from plant oils (e.g. olive, peanut, corn, and safflower) and animal sources (e.g. butter, cheese, ice cream, meats). Much of the fat eaten in the typical American diet comes from fried foods, pastries, chips and other highly processed foods.

Benefits of Dietary Fats

Fats add flavor, texture, and moisture to foods. They are digested slowly and can help you feel full longer after meals. Use small amounts of fat to help make meals more interesting and enjoyable.

The Downside of Dietary Fats

All types of dietary fats are higher in calories. Ounce for ounce, fat provides twice as many calories as carbohydrate and protein. High fat snack foods, like potato chips and crackers, don't take much room in a small pouch and the calories can add up quickly.

Healthiest Sources of Fat

Extra virgin olive oil, peanut oil, avocados, nuts and seeds, and fatty fish such as salmon and trout.

A Word of Caution about Nuts and Seeds

Although nuts and seeds contain healthful oils, they contain a lot of calories for the protein that they provide. Peanut butter is a very high calorie choice for the small amount of protein is supplies. Think of nut, nut butters, and seeds as a garnish rather than a main source of protein in your diet.

Food Item	Amount	Protein (grams)	Fat (grams)	Calories
Almonds	1 oz (about 22)	6	15	170
Cashews	1 oz	4	13	160
Hazelnuts	1 oz (about 20)	4	19	180
Macadamia nuts	1 oz (about 10-12)	2	21-22	200
Mixed nuts	1 oz	5	14-15	170
Peanuts	1 oz (about 28)	6–7	14-15	165
Peanut butter	2 Tbsp	7	16	190
Pecans	1 oz	2-3	21-22	200
Pistachios	1 oz (about 40)	6	13	160
Sunflower seed kernels	1 oz	4–5	11	150
Walnuts	1 oz	7	17	175

FLUID

Your fluid goal is at least 64 ounces per day to maintain hydration. Meeting this goal may be difficult immediately after surgery but will become easier over time.

Surgery not only diminishes your appetite but may also decrease your thirst drive. It is important to drink fluids, even when you don't feel thirsty.

Follow these suggestions:

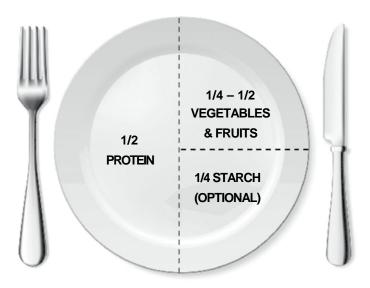
- Carry a water bottle with you at all times.
- Sip fluids slowly and consume between 4-6 ounces per hour between meals.
- A sip is not a gulp.
- Do not drink at mealtimes. Drinking with meals causes your pouch to empty more quickly and signals your body to feel hungry sooner.
- Stop drinking 10 minutes before meals and do not drink for 30 minutes after meals.
- Stick with calorie free fluids. Drink water to hydrate and flavored water (e.g. Crystal Light) occasionally as a treat.
- Avoid carbonated beverages which may cause cramping and pain.
- Minimize caffeinated beverages which are often loaded with calories and may lead to dehydration.
- Minimize consumption of alcoholic beverages.
 They are high in calories and provide no nutritional value.
- Monitor for signs of dehydration which includes dark colored urine, low urine output, dry mouth, dry skin and in extreme cases dizziness. Ideally, your urine should be clear and colorless.



Meal Composition

Use this diagram and list to help you plan for meals:

- Use a **small** plate (no bigger than 6-8 inches across).
- Fill half the plate with moist lean protein foods.
- Remember the 2-3-3 goal (2 ounces of protein at breakfast and 3 ounces at lunch and dinner).
- Fill **1/4 or more** of the plate with vegetables and/or fruits.
- Fill **1/4 or less** of the plate with one serving of starchy foods (e.g. a small potato with skin, brown rice, or whole grain pasta). Choose whole grains instead of refined grains whenever possible and stick to the serving sizes listed on page 27. Starches are not required and it's okay to have more vegetables and fruits in place of starches.
- No piling!
- Use small amounts of fats and oils to moisten foods.



Meal Plan Basics

FOOD GROUPS AND SERVING SIZES

	Protein	Vegetable	Fruit*	Starch*	Fat
Choices and Serving Sizes	Serving size is 1 ounce unless otherwise noted. Beef (lean ground, roast, sirloin and tenderloin) Chicken breast or thigh Cheese ¼ cup cottage cheese 1 egg Fish (cod, salmon, tuna, sardines, etc.) Ham Lam chop or roast Pork chop or tenderloin Shellfish (shrimp, crab) Turkey Tofu, tempeh 3 oz. yogurt (at least 12g of protein per 6 oz serving)	Serving size is 1/2 cup or 1 cup of leafy greens Asparagus Bell peppers Broccoli Brussels sprouts Cabbage Cauliflower Carrots Celery Cucumber Green beans Kale Lettuce & other leafy greens Spinach Tomatoes Note: starchy vegetables like corn, peas, and potatoes are counted in the starch group	1 small whole fruit (apple, kiwi, orange, peach, pear) ½ medium banana 4 apricots 1 cup berries ½ cup unsweetened canned fruit 12 cherries ½ large grapefruit 3 oz grapes (17 small) 1 cup cubed melon 2 small plums ¾ cup fresh pineapple 2 small tangerines	1 slice bread (1 oz) 1/4 large bagel 1/2 cup cooked cereal 1/2-3/4 cup cooked cereal 1/2 cup corn 1/2 English muffin 1/3 cup pasta 1/2 cup peas 1/2 cup mashed potatoes 1/2 medium (4 inch) baked potato 1/3 cup brown rice 2 rice cakes 1 small dinner roll (1 oz) 5 Triscuit crackers 1 small, 6-inch tortilla 1/2 small, 6-inch pita	1 tbsp. butter 1 oz cream cheese 1 tbsp. oil (olive, avocado, canola, peanut) 1 tbsp. peanut butter or other nut butter 1/2 to 1 oz nuts, depending on the type 1 tbsp. salad dressing 1 tbsp. mayonnaise 10 olives

^{*}Portion sizes listed contain approximately 15 grams of carbohydrate each. Choose mostly whole grains.

Meal Plan (Continued)

SAMPLE MEALS

Meal	Food Group	Number of Choices	Day One	Day Two	Day Three
	Protein	2 oz or equivalent	2 hard boiled eggs	½ cup cottage cheese	2 oz mozzarella cheese
Breakfast	Fruit or Vegetable	1	½ banana	½ cup canned peaches, rinsed & drained	2 tomato slices
21 041111000	Starch (optional)	1	1 piece of toast (1 oz)	½ toasted English muffin	½ thin bagel
	Fat	1	1-2 tsp. butter	1-2 tsp. butter	N/A
	Protein	3 oz or equivalent	Half a turkey sandwich or roll-up using 2 oz deli turkey and 1 oz cheese	Chef salad using 2 oz deli ham and 1 oz cheese	Tuna salad using 3 oz water packed tuna
Lunch	Vegetable	1 or more	Lettuce, sliced tomato, and pickles	Mixed salad greens with tomato, cucumbers and mushrooms	Celery sticks
	Fruit (optional)	1	1 small apple	1 small pear	1 small orange
	Starch (optional)	1	1 slice of whole wheat bread	5 croutons	½ whole-wheat pita pocket
	Fat	1	1 tbsp. mayonnaise	1-2 tbsp. salad dressing, 1/8 avocado	1 tbsp. mayonnaise, 1/8 avocado
	Protein	3 oz or equivalent	3 oz baked salmon	Chicken stir fry using 3 oz chicken with some soy sauce	Soft taco using 2 oz lean seasoned ground beef and 1 oz grated cheese
	Vegetable	1 or more	½ cup cooked broccoli	1 cup assorted vegetables	1 cup chopped lettuce, tomato, and cucumber
Dinner	Fruit (optional)	1	1 cup berries	1 nectarine	1 cup cubed melon
	Starch (optional)	1	½ medium baked potato	⅓ cup brown rice	1 6-inch tortilla
	Fat	1	1 tbsp. butter	1 tbsp. olive oil used in stir-fry	2 tbsp. sour cream

Meal Plan (Continued)

PERSONAL MEAL PLAN

Meal	Food Group	Number of Choices	Day One	Day Two	Day Three
	Protein	2 oz or equivalent			
Dural Cart	Fruit or Vegetable	1			
Breakfast	Starch (optional)	1			
	Fat	1			
	Protein	3 oz or equivalent			
	Vegetable	1 or more			
Lunch	Fruit (optional)	1			
	Starch (optional)	1			
	Fat	1			
	Protein	3 oz or equivalent			
	Vegetable	1 or more			
Dinner	Fruit (optional)	1			
	Starch (optional)	1			
	Fat	1			

Personal Notes

Nutrition Class 2: Nutrition After Surgery

VITAMINS & MINERALS

Vitamins and mineral supplements are essential after bariatric surgery and are *required for life* to prevent nutritional deficiencies. The following information is intended only as a *guide* for vitamin/mineral supplementation after bariatric surgery. You should discuss any special circumstances or changes to your vitamin/mineral regimen with your surgeon or dietitian. It is very important that you complete your first-year and annual labs with our clinic or your primary care provider so that we can catch deficiencies before they become serious.

What?	Why?	How Much?	Important Information
Complete multivitamin with iron	To prevent vitamin deficiencies due to reduced food volume	2 doses/day	The first bottle after surgery should be chewable or liquid. See multivitamin handout for specific vitamin and mineral requirements. If you choose a bariatric multivitamin, you may not need to take as many separate supplements. Ask your dietitian for more information.
Iron	To prevent iron deficiency anemia since iron from food is not absorbed as well after surgery	45-60 mg/day or as directed by your doctor	Make sure your multivitamin contains at least 18-27 mg iron per serving. If you have a history of anemia, you may need to take a separate iron supplement to prevent deficiency.
Calcium <u>Citrate</u>	To maintain bone health and prevent osteoporosis	1200-1500 mg/day Can include calcium from food if it is a consistent part of your diet	Only 500-600 mg can be absorbed at one time. Take in split doses for best absorption. For best absorption, take 2 hours apart from supplemental iron source.
Vitamin B12	To prevent vitamin B12 deficiency anemia	Oral 350-500 mcg/day OR 2500-3500 mcg/week OR Injection (IM or SQ) 1000 mcg/month	Very little B12 from food is absorbed after surgery. Oral sprays, drops, sublinguals or dissolvable tablets are best absorbed.
Vitamin D3	To help with calcium absorption	3000 IU/day or as directed by your doctor	Vitamin D should be taken to achieve adequate 25-hydroxyvitamin D levels (>30ng/mL). Higher doses may be needed to correct deficiencies.

 $Source: ASMBS\ Integrated\ Health\ Nutritional\ Guidelines\ For\ The\ Surgical\ Weight\ Loss\ Patient\ -2016\ Update:\ Micronutrients$

Nutrition Class 2: Supplements

Supplements come in many forms including liquids, chews, chewable, tablets, capsules, dissolvables, oral spray, and even injections. For best absorption we recommend against gummies and patches, as they are not able to consistently provide adequate vitamin and minerals and may not be worth the money you are spending on them.

MULTIVITAMIN

Purpose: to prevent nutrition deficiencies due to reduced food volume and possible malabsorption

Dose: two standard multivitamins with iron per day. If taking a bariatric formulated multivitamin, follow the directions on the package.

Other Information:

- You may switch to a tablet or capsule after your first bottle is finished (around 2-3 months).
- You do not need to take your multivitamin in divided doses.
- Take your multivitamin with food and at the end of a meal for best absorption and tolerance.
- You may take your vitamin B12, vitamin D, and supplemental iron (if needed) at the same time as your multivitamin. If your multivitamin contains iron, separate your calcium supplement by 2 hours.

IRON

Purpose: to prevent iron deficiency since iron is not well absorbed after surgery. Iron deficiency is the most common deficiency after surgery and it can lead to an anemia if not treated.

Dose: 45-60 mg per day

Other Information:

- Make sure you are getting 18-27mg of iron per serving in your multivitamin.
- If your multivitamin with iron is not adequate to prevent deficiency, a separate iron supplement may be needed.
- Premenopausal women and people with a history of anemia are generally at highest risk and are more likely to need additional iron supplementation.
- Take with food for best tolerance
- There are many types of iron. Ferrous fumarate, ferrous gluconate, and carbonyl iron may be better tolerated than ferrous sulfate.

Nutrition Class 2: Supplements

CALCIUM CITRATE

Purpose: to maintain bone health and prevent osteoporosis

Dose: two doses of 500-600mg per day from supplements. You need a total of 1200-1500mg of calcium per day from all sources.

Other Information:

- Make sure you choose calcium *citrate* over other forms of calcium. This is absorbed best after bariatric surgery.
- Choose a chewable wafer, chew, or liquid for the first 2-3 months.
- You may switch to a tablet after the first 2-3 months if desired.
- Only 500-600mg of calcium can be absorbed at one time so it must be taken in divided doses.
- Take separately from your iron supplement or multivitamin with iron by 2 hours.
- Magnesium and vitamin D may also be included in supplements to help optimize calcium absorption.

VITAMIN B12

Purpose: to prevent vitamin B12 deficiency anemia (pernicious anemia).

Dose: 350-550 mcg per day (or 2500-3500 mcg per week)

Other Information:

- This can be taken with your multivitamin or any other supplement.
- Oral supplementation (spray, liquid, sublingual, dissolvable) are best absorbed.
- Doses may be listed in micrograms (mcg or μg) or milligrams. 1000 mcg = 1 mg
- Long-term vitamin B12 deficiency can lead to nerve damage.

VITAMIN D3

Purpose: to help with calcium absorption

Dose: 3,000 IU per day from all sources

Other Information:

- Take with fat, if possible, for better absorption.
- This can be taken with your multivitamin and any other supplement.
- Vitamin D is important for bone health as well as supporting your immune system and brain health. Be sure to maintain blood levels above 30 mg/mL but below 80 ng/mL unless otherwise directed by your health provider.

Nutrition Class 2: Diet Progression

Diet Progression Overview		
One week prior to surgery	Start pre-operative liquid diet	
Day before surgery	Nothing to eat or drink after midnight	
Day of surgery	Nothing to eat before surgery Start stage 1 diet in the hospital (clear liquids)	
Day after surgery	Stage 2 diet (protein shakes)	
When you go home until first post-operative appointment (about 2 weeks)	Stage 2 diet (protein shakes + smooth foods)	
After your first 2-week post-operative appointment	Stage 3 diet ("protein and produce") Start the slow transition from liquid protein drinks to solid food protein and produce.	

ONE WEEK PRIOR TO SURGERY

- Start the pre-operative liquid meal plan (see next page)
- Stop taking all vitamin, mineral, and herbal nutrition supplements.
- Continue to take your medications unless directed by your surgeon.
- Make sure you have all the items you will need for after surgery:
 - Protein supplement
 - Nutrition supplements:
 - Chewable multivitamin with iron
 - Chewable or liquid calcium citrate
 - Sublingual vitamin B12
 - Vitamin D3
 - Small supply of smooth foods for the Stage 2 diet

LIQUID PREOPERATIVE MEAL PLAN

Start this meal regimen one week prior to surgery.

Quick weight loss immediately before surgery will shrink the liver and make your surgery easier and safer. Replace two meals with a protein supplement and eat one small solid meal per day.

Meal	Food/Beverage	Protein	Calories
Breakfast	Low calorie protein drink	20-30g	150-250
Lunch	Low calorie protein drink	20-30g	150-250
Dinner	Low calorie frozen meal or light protein rich meal*	15-20g	300-400
Totals		55-80g	600-900

Fluids: drink at least 48 ounces of water per day in addition to the protein drinks.

- 3-4 ounces of lean protein (e.g. chicken, fish)
- Steamed, non-starchy vegetables (no corn or potatoes)
- Small piece of fruit (no juices)

Remember: **no** bread, rice, potatoes or pasta and **no** rich sauces or gravies.

^{*}Low calorie frozen meal. Select a packaged frozen dinner that contains no more than 300–400 calories **and** at least 15–20 grams of protein. If you choose to make your own meal it should contain the following:

DAY BEFORE SURGERY

Nothing to eat or drink after midnight.

DAY OF SURGERY

- No foods or fluids. This includes water and ice.
- If you are instructed to take medications the morning of surgery, take with a sip of water.
- You will have an IV placed during surgery to provide fluids the day of surgery.

STAGE 1 DIET: CLEAR LIQUIDS

The Stage 1 diet begins the day after surgery and lasts until your surgeon decides you can move to Stage 2.

- Consists of clear, sugar-free, caffeine free fluids
- Allowed fluids: water, broth, decaffeinated coffee and tea, ice chips, sugar-free Jell-O, sugar-free popsicles, other sugar-free beverages
- Meal trays will be delivered to your room and you can also request items from the nursing staff.
- Hydration is the major focus at this stage.
- Sip fluids slowly. The goal is to consume 1/2 ounce (15mL or 1/2 of a medicine cup) every 15 minutes.
- Record your fluid intake on the self-monitoring form provided to you.
- Reminder: your new pouch is only about an ounce and you may feel full after consuming only a few sips.

STAGE 2 DIET: PROTEIN SHAKES

The Stage 2 diet begins after your swallow test and will last until your two week postoperative visit.

- Try to increase your fluid intake to 1 ounce (30ml or a full medicine cup) every 15 minutes in preparation for discharge.
- Continue to record your fluid intake on the self-monitoring form.
- The hospital has limited flavor options for protein drinks. Please bring your own flavors and brands that you prefer.
- If you are stable and able to hydrate adequately, you will likely be discharged midday.

STAGE 2: PROTEIN DRINKS & SMOOTH FOODS

The Stage 2 diet starts when you go home after surgery and should be followed until your two week postoperative appointment.

The purpose of the Stage 2 diet is to allow your pouch to rest and heal. Most of your nutrition during this period will come from a high protein liquid supplement. Use of a protein supplement during the early months after surgery helps you meet your body's need for protein while you slowly increase your intake of solid foods.

Foods Allowed on the Stage 2 Diet:

Category	Allowed Foods	
Protein supplements Milk (nonfat, low fat, Lactaid) Soy milk, unsweetened Yogurt (light and smooth, less than 20g of carbohydrates per servi		
Beverages	Water, decaffeinated coffee and tea, sugar free drinks	
Desserts	Sugar free custard, sugar free Jell-O, sugar free popsicles, sugar free pudding	
Fruits	Applesauce (unsweetened and smooth)	
Soups	Broths and bouillon, strained or blended soups	
Starches	Cream of rice or wheat	
Sweeteners	Sugar substitutes	
Miscellaneous	Salt, mild herbs	

Preparing and Drinking Your Daily Protein Supplement

Between water intake and protein shakes, some people may struggle to get down all that liquid volume. Preparing a concentrated protein shake can help. To do this, mix 2–3 scoops of protein powder (enough to provide 60 grams of protein) with 12–16 ounces of water, low fat or nonfat milk, or unsweetened soy milk. Here are some tips for preparing and drinking your protein supplement:

- It may take you an hour or more to sip and finish your supplement.
- Most protein powders dissolve easily and can be mixed in a wide mouthed plastic "shaker."
- Chilling the supplement can help reduce the sense of sweetness, which is a frequent complaint from patients following surgery.
- For variety, consider adding ice and a very small piece of fruit (3–4 frozen strawberries or 1/4 banana) and blend until smooth.
- If you choose a pre-made liquid supplement, drink enough to supply 60 grams of protein.

Taking Your Vitamin and Mineral Supplements

Once you are staying hydrated and tolerating your protein supplements well, you can begin to take your vitamin supplements. If supplements are difficult for you to tolerate at first wait a week and try again.

- Introduce supplements one at a time. Start with your multivitamin.
- Take your supplements with a meal for best tolerance.
- Many ready-to-drink protein shakes and protein powders are fortified with some vitamins and minerals. These can help you bridge the gap while you are getting into a routine with your vitamin and mineral supplements.

Your priorities during Stage 2 are:

- 1. Hydration
- 2. Adequate protein
- 3. Vitamin and mineral supplements

Putting it All Together

Meals, fluids, supplements, and water. Here is one example of what a day might look like during Stage 2:

Time	Food	Fluids	Protein	Notes
7:00 am		8 oz water		Sips not gulps
7:30-8:30	1 protein shake blended with ¼ cup frozen strawberries		25 g	
9:00-10:45		16 oz water		Walk around every hour
11:00-12:00	4-5oz Greek yogurt		12 g	
12:30-2:15		16 oz water		Walk around every hour
2:30-3:30 pm	1 protein shake blended with ¼ cup frozen blueberries		25 g	
4:00-5:45 pm		16 oz water		Walk around every hour
6:00 pm	1 cup chicken broth with unflavored protein powder added		15 g	Go on a short walk with your family after dinner
7:00 pm	½ cup unsweetened applesauce			Try to take a chewable multivitamin if you are able to tolerate it
7:30 pm		8 oz herbal tea		
Totals		64 oz	77 g	



STAGE 3: HEALTHFUL EATING FOR THE REST OF YOUR LIFE

You will be advanced to the Stage 3 diet at your 2-week postoperative appointment.

The Stage 3 diet describes the **gradual** transition from liquid supplements to solid foods. Remember that your new pouch is very small, and you may feel full after eating only a few bites. Focus on getting in enough protein and fluid. Your calorie intake will increase as you are able to eat more at each meal.

The "honeymoon period" is often used to describe the early months after bariatric surgery when weight loss is typically most rapid and physical hunger is reduced. On the other hand, this is also when the pouch can be sensitive or finicky, and patients are most likely to experience unpleasant side effects of surgery.

Start by adding in soft protein foods.

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Eating protein rich foods is important after surgery, yet many patients report difficulty tolerating them, especially during the early weeks and months after surgery. Consider the following tips:

- Continue to drink a protein supplement for one meal per day while you start trying solid foods at your other meals.
- Start with very **moist** protein sources (e.g. cottage cheese, scrambled eggs, fish)
- Your new pouch can't grind and churn foods like your old stomach. Help it out by cutting meats into very small pieces. Ground, shredded, or thinly sliced meats are often better tolerated than large pieces.
- Chop meats finely and use low calorie dressing to create "dips" and "salads." This works especially well for chicken, which patients often complain is too dry to manage.
- Don't overcook meats. The longer meats are cooked, the drier they become.
- Add moisture in the form of broths, marinades, and sauces. Beware: sauces can add a lot of flavor and moisture but they can also pack in the calories!
- Use moist cooking techniques like poaching or stewing. Broiling and grilling can dry out meats quickly.
- Pound meat into thin patties to both tenderize meat and speed up the cooking time.

After you are tolerating your protein foods well, add in some soft fruits and vegetables.

- When adding vegetables, start with soft cooked vegetables. Raw veggies may not agree with your new pouch as this point. Surprisingly, most patients tolerate lettuce quite well.
- When adding back fruits, start with soft fresh or canned fruits without large seeds, skins, or membranes. Applesauce, bananas, and melons are good choices to start with.

General Recommendations:

- Avoid starches until you are getting adequate protein and produce at meals.
- Try one new food at a time to check tolerance. If something doesn't agree with you, try it again later.
- Do not skip meals even if you don't feel hungry. Lack of appetite is common at this stage.
- Avoid underfilling your pouch. Your new pouch needs to be mildly distended at meals to send fullness signals to your brain.

Tapering Your Protein Supplement

Consuming at least 60-80 grams of protein after surgery is recommended and it may take you several weeks or months to reach this level from solid foods. Gradually decrease your protein supplements as your solid food intake increases.



SAMPLE MENUS FOR STAGE 3

The amount of solid food you can eat on the Stage 3 diet will depend on what type of surgery you have had and how far out you are from surgery. These examples are to show you combinations of protein rich foods and complex carbohydrates. Eat the protein food first and let your pouch determine how much other food, if any, can fit.

Breakfast Combinations

- ½ cup of cottage cheese served with fresh fruit.
- 2 scrambled eggs topped with grated cheese and salsa served with fresh orange slices.
- 6 ounces Greek yogurt topped with fresh or frozen berries.
- A hard boiled egg, cheese stick, and fresh fruit.

Lunch and Dinner Combinations

- Chef salad: cubed ham, turkey and cheese over mixed greens topped with light dressing and croutons.
- Chicken curry salad: cubed or shredded chicken, apples and pineapple mixed with mayonnaise and curry
- Taco salad: spicy ground beef, chopped tomatoes, olives and avocados over chopped greens served with salsa. These foods are so moist that dressing is hardly needed.
- Deli plate: sliced deli turkey, ham or beef served with vegetable slices and whole grain crackers.
- Stir fried chicken, vegetables, and cashews served with steamed rice.
- Poached salmon, steamed broccoli, angel hair pasta.
- Roasted turkey, green beans and roasted red potatoes.
- Chili con carne made with lean ground beef or turkey topped with grated cheese.
- Lettuce wrap: spicy ground beef wrapped in lettuce.



Putting it All Together

Meals, fluids, supplements, and water. Here is an example of a day in early Stage 3:

Time	Food	Fluids	Protein	Notes
7:00 am		8 oz water		Take vitamin B12
7:30 am	1 protein shake with ½ cup sliced cantaloupe		25 g	Take calcium citrate
8:00-11:30 am		24 oz water		Walk 10 minutes on morning break
12:00 pm	Half a cup tuna salad with ½ medium banana		16 g	Take calcium citrate, walk 15 minutes on lunch break
1:00-2:45 pm		16 oz water		Walk 10 minutes on afternoon break
3:00 pm	½ protein shake		12 g	
3:30-5:45 pm		16 oz water		
6:00 pm	2-3 oz crock pot roast beef, 1 soft cooked carrot		24 g	Take multivitamin and vitamin D supplement, walk around the block with family after dinner
7:00 pm	1 sugar free pudding		1 g	
7:30 pm		8 oz herbal tea		
Totals		72 oz	78 g	

Here is what a day might look like 6 months or more after surgery:

Time	Food	Fluids	Protein	Notes
7:00 am		8 oz water		Take vitamin B12
7:30 am	2 scrambled eggs topped with cheese and salsa and served with fresh cantaloupe		20 g	Take calcium citrate
8:00-11:30 am		24 oz water		Walk 10 minutes on morning break
12:00 pm	2 oz deli ham, 1 string cheese, 1/2 celery stick, and 1 mandarin orange		21 g	Take calcium citrate, walk 15 minutes on lunch break
1:00-2:45 pm		16 oz water		Walk 10 minutes on afternoon break
3:00 pm	¼ cup almonds		7 g	
3:30-5:45 pm		16 oz water		
6:00 pm	A taco salad made with 2 oz lean ground beef, 1 oz cheese, lettuce, tomatoes, avocado, and salsa		25 g	Take multivitamin and vitamin D, walk around the block with family after dinner
7:30 pm		8 oz herbal tea		
Totals		72 oz	73 g	

SUGGESTED FOOD LIST FOR STAGE 3

Food Group	Foods to Include	Foods to Avoid	
Protein Sources	Beans and legumes Beef (lean ground beef, roasts and steak) Dairy products: cheese, cottage cheese, yogurt Eggs and egg substitutes Fish: all fish & shellfish Low fat lunch meats Pork: chops, ham, roasts, tenderloin Poultry: chicken, turkey, cornish game hen Tofu and TVP (textured vegetable protein)	Beef stick, corned beef, ribs Fried fish, fish sticks Bologna, corndogs and hot dogs Bacon, sausage, salami Fried chicken or chicken nuggets	
Beverages	Water, decaf coffee & teas, herbal teas, sugar free beverages (e.g. Crystal Light)	Alcoholic beverages, anything carbonated, energy drinks, fruit drinks and juices, milkshakes, specialty coffee drinks, sports drinks, whole milk	
Desserts	Fresh fruit, dark chocolate, sugar free Jell-o, sugar free pudding, sugar free popsicles	Cake, candy and candy bars, cookies, doughnuts, energy bars, ice cream, pastries, pie	
Fats	Avocado, butter, cream cheese, cooking spray, margarine, mayonnaise, nuts, oils (canola, olive other vegetable oils), olives, peanut butter, seeds, salad dressings, sour cream		
Fruits	All fresh and frozen fruits Canned fruits in light syrup or water pack (drained)	Dried fruits	
Starches*	Whole grain bread, crackers, oatmeal, pasta, potatoes, rice	Hash browns, croissants, french fries, potato chips	
Vegetables	All fresh, frozen, and canned vegetables		
Miscellaneous	Seasonings, lemon and lime juice		

^{*}Although starchy foods are not forbidden, many patients report poor tolerance to them. You may eat them in small amounts if tolerated, but only after you have consumed your protein rich foods. Breads may be better tolerated if toasted.

Nutrition Class 2: Common Concerns

COMMON CONCERNS AFTER SURGERY

Constipation

Constipation is common after bariatric surgery because you are eating less food overall. If it is a problem for you then you can try the following:

Type of Constipation	What to do	Products
Acute/ Occasional	Ensure adequate fluids: at least 64 oz/day. Daily Exercise: Even low-impact exercises, such as walking, can help stimulate the contraction of intestinal muscles to promote bowel movements. Try drinking warm water to stimulate the colon. If this doesn't work, you may try an over the counter medication.	Milk of Magnesia MiraLax The use of laxatives, especially long-term, should be avoided.
Chronic/ Long term	Ensure adequate fluids: at least 64 oz/day. Daily Exercise: Even low-impact exercises, such as walking, can help stimulate the contraction of intestinal muscles to promote bowel movements. Bulk up your stool: While fruits and vegetables are the best source of insoluble fiber, you may need a regular fiber supplement after surgery until you can eat these foods regularly.	Metamucil (Look for sugar- free version) Citrucel (Look for sugar-free version) Tips: Always mix powdered fiber supplements with fluid before taking. Avoid tablet or chewable forms of fiber supplements.

Dumping Syndrome

Dumping syndrome is a very unpleasant physical reaction that can occur shortly after eating a sugary food. Although more commonly seen in gastric bypass, some people with sleeve gastrectomy report experiencing dumping. It results when a sugary food such as ice cream passes rapidly from the small stomach pouch into the small intestine. The intestine adjusts by drawing in fluid to dilute the sugar load. This can trigger a variety of symptoms including nausea, sweating, abdominal cramping, lightheadedness, weakness and diarrhea. The treatment is to lie down until the symptoms resolve.

Dumping is a very unpleasant experience; it can provide a powerful negative message from your new tool to avoid sugary items. However, not every patient dumps and the severity of dumping generally diminishes over time. You cannot rely on intolerance to sweets after surgery to keep you from eating them.

Nutrition Class 2: Common Concerns

Excess Gas

Excess gas is common following gastric bypass surgery. This occurs because food may not be digested as well, so bacteria in the gut can cause more gas. Over the counter products such as simethicone drops (Mylicon), Bean-O, or Gas-X are okay to use. Internal deodorizers, such as Devrom, are also being marketed.

Nausea

Mild nausea can be common during the early weeks after surgery. Make sure you are staying hydrated because dehydration can make nausea worse. Sipping herbal tea or taking a walk may help calm a queasy stomach. Be patient and stay the course. It does get better!

Vomiting

Vomiting is usually the result of eating too quickly, eating too much at a time, or not chewing well enough. Make sure you are taking plenty of time at meals and chewing thoroughly.

Hair Loss

Hair loss may occur between 3-5 months after surgery. The stress from surgery can cause a disruption to the normal hair growth cycle which results in shedding. Usually this lasts for a short period of time and goes away on its own within a few months.

Hair loss that starts more than 6 months after surgery or lasts for more than a year after surgery may be caused by nutritional deficiencies. To help prevent hair loss make sure you are getting enough protein in your diet and taking your supplements as recommended. Talk with a dietitian if this is a concern you are experiencing.

Nutrition Class 2: Common Concerns

Weight Loss Plateaus

Remember that weight loss does not happen at a constant rate. Weight loss is most rapid in the first 6 months, then it happens more slowly. Around 12-18 months weight loss will slow and you may even gain a small amount back. Everyone will experience plateaus at some point along their weight loss journey. Plateaus are **normal** and **expected** as your body adjusts to change.

Here are some tips to get you through:

- Take this time to evaluate your diet and exercise routine. Refer to the bariatric eating guidelines on page 15 to ensure that you are following all the dietary recommendations. If you feel you are doing everything right just be patient and stay the course. Your body probably just needs some time to adapt.
- Focus on non-scale victories, such as your clothes fitting better, to help you stay motivated. You can also use a tape measure to track changes in your arms, waist, and legs. Schedule a visit with your dietitian to do your body composition again to see the progress you've made since surgery.
- Do not compare yourself to others on social media. Realize that everyone's weight journey is unique to them and several factors influence speed and amount of weight loss.
- If you continue to struggle with weight loss schedule an appointment with your dietitian to make sure that you are on track. We want you to get the most out of your surgery and are here to help you along the way.



Personal Notes

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Behavioral Strategies for Success

 \sim "Our life is shaped by our mind, for we become what we think" Buddha \sim

As the bariatric program psychologist, there is one thing I hear often from post-op patients.... "this is harder than I *thought* it would be."

The most honest thing I can tell you is YOU WILL STRUGGLE after surgery but that DOES NOT MEAN YOU WILL FAIL. Some patients feel some anxiety or nervousness before and after surgery, others have some feelings of sadness (depression) or grieve the loss of food, some thought they would magically have new routines after surgery, or they would not struggle to be physically active. Expect the struggle. All of these things are NORMAL and do not mean you are not ready for surgery.

There is a lot of research about your life after surgery. This research tells us that there are patients after surgery who struggle with anxiety, depression, alcohol use issues, motivational issues, diet fatigue, cravings, emotional eating, boredom eating, and "grazing" (eating small amounts of food frequently throughout the day when not physically hungry). Again, all of these issues are normal and if you have these struggles, reach out to the program. Call and schedule an appointment with the program psychologist or with one of the program dietitians (if you feel it's more about food than anything else). We are here to help you!

In this section of the manual, I put together some resources that I believe will assist you with some of the issues you may go through after surgery.

Please remember – this is not EVERYTHING that you may need after surgery and if you find that you are struggling, either call us for help or establish your own ongoing mental health care.

Emotional vs Physical Hunger

What is the difference between emotional hunger and physical hunger?

- Emotional hunger comes on like lightning, very suddenly. Physical hunger develops over time, with first tummy rumblings, developing into grumbles, and ending in hunger pangs. Emotional hunger sets off like a rocket, it is not there one second, and very much there the next second.
- Emotional hunger demands food immediately. Physical hunger tends to be more patient. Even if you are very physically hungry, you usually can wait for food, unlike when you feel emotionally hungry, at which point immediate satisfaction is sought out.
- Satisfying physical hunger involves an awareness of what is being eaten and a deliberate choice of how much is being eaten, as well as an ability to stop when feeling full. Emotional eating, however, does not have any awareness of how or what is being eaten. Also, emotional eating demands more food even if the person is feeling stuffed.
- Physical hunger is usually open to many different types of food, but emotional eating demands very specific types of food in order to be fulfilled. When one is physically hungry, even foods that you usually don't like will look good...but when you are emotionally hungry, only cake or ice cream (or your favorite types of foods) sound good.
- Satisfying emotional hunger involves feelings of guilt afterwards, or internal promises to be "better" in the future. With physical hunger, because it is done as a way to survive, involves no quilt after we eat.
- Physical hunger results from a physical need. Emotional hunger results from something emotionally upsetting.

Coping Skills for Emotional Eating

COPING SKILLS FOR EMOTIONAL EATING

- It is important to acknowledge the difficulty about having the habit of coping with emotions via food. Awareness and acknowledgment are often the hardest, but most important first step towards change. Talk about this with someone you trust.
- Keep in mind the possibilities, and the goals that you are striving for. Honor the side of you that is ready for change, and that can visualize a healthier you.
- Validate your feelings, know that people may have different feelings that come up about emotional eating, and how important it is to validate the experience and reality of these emotions. Be curious about your emotions, don't run away from them.
- Try to gain a deeper understanding of why these feelings are difficult for you. What are these emotions trying to tell you? Realize that once you hear these feelings and uncover their messages, they will stop having to try to call for your attention. They will at some point stop coming up so much. Instead, if you continue to try to shut these feelings down by coping with them in unhealthy ways, they will only persist and keep trying to be heard, by continuing to make their presence be felt. The more you ignore them, the more they will try to be heard.
- As for your feelings related to your weight...sure, you want to be thinner, you want to be less large...then what? Is that all you want? Or do you also want to like yourself better, be more comfortable with yourself, feel pride and a sense of achievement? Recognize your needs and clarify for yourself what *other* steps you can take to achieve those needs, other than weight loss. That way, you are not relying solely on one aspect of your life, which makes it more probable that you will meet your goals.
- Seek support from others, especially family and close friends. Verbalize your goals to them, this will help you feel accountable for your actions, and those who care for you can help you stay motivated. They can also help you cope and encourage you when needed.
- Our thoughts affect our emotions and affect our health overall. Stay positive, focus on optimism, assertiveness, and on your goals for improved health. Visualize yourself reaching these goals.

Coping Skills for Emotional Eating (Continued)

Sometimes people feel emotionally deprived, empty, and eat to feel a sense of fullness and avoid unpleasant emotions. Using food for comfort rather than nourishment can get tricky and can get us into unhealthy habits. Notice though, that at one point or another, we *all* do this. If you slip and find yourself emotionally eating, recognize your action, and tell yourself that slips are part of the process.

Learn from this:

- What made you slip?
- What were you telling yourself at the time you made the choice to eat?
- What can you do different next time?
- One slip does *not* mean you have failed, or that you should stop trying. Remember that it is part of the process, and you need to keep moving towards your goal. A slip can be a learning opportunity that can get you to your goal even faster.

Try these affirmations every day:

- I am eating in a healthy way because I love and care for myself and I am worth it.
- It is not the dieting restrictions that cause my depression, anger, or anxiety. It is how I think and feel about them that make me feel depressed.

A slip is not a relapse. A mistake is not a failure.

Coping Skills for Emotional Eating (Continued)

SENSORY COPING SKILLS

Some of the best coping skills are the sensory coping skills. If you think about it, food is very sensory – it is processed by all the senses....

- **Vision** we see our favorite foods in person or on TV and know what they taste like and may even start to crave them just by seeing them
- **Smell** we definitely enjoy the smells of our favorite foods and the smell can make us start to salivate or even crave a food we were not even thinking about before
- **Hearing** the ding of the microwave, the oven timer going off, fajitas going by in a Mexican restaurant, popcorn popping; any of these sounds and many other food-related sounds can be triggering for people and start a craving
- **Touch** a lot of people say they are "texture eaters" and there are foods that we love the texture of while we are eating. There are also the handheld foods chips, popcorn, pretzels, different candy, etc.
- **Taste** save the best for last we wouldn't keep eating our favorite foods if we didn't enjoy the taste of them!

So, since food is such a sensory experience – using sensory coping skills in place of eating for different reasons (reward, celebration, boredom, sadness, loneliness, pleasure, nostalgia, stress) only makes sense. On the next page you will see some of the examples of different sensory coping skills that may be able to help you decrease eating for emotional reasons and/or out of boredom.

Coping Skills for Emotional Eating (Continued)

Here are some examples of different sensory coping skills that may be able to help you decrease eating for emotional reasons and/or for boredom.

- **Vision** Walk in a pretty part of town. Look at the nature around you. Go to a museum with beautiful art. Buy a flower and put it where you can see it. Sit in a garden. Watch the snowflakes decorate the trees during a snowfall. Light a candle and watch the flame. Look at a book with beautiful scenery or beautiful art. Watch a travel movie or video.
- Smell Notice all the different smells around you. Walk in a garden or in the woods, maybe just after a rain, and breathe in the smells of nature. Light a scented candle or incense. Bake or cook something and pay attention to the different smells
- Hearing Listen to beautiful or soothing music, or to tapes of the ocean or other sounds of nature. Sit by a waterfall. Listen to someone chopping wood. When you are listening, be mindful, letting the sounds come and go.
- **Touch** Take a bubble bath. Pet your dog or cat or cuddle a baby. Put on a shirt and feel its softness and smoothness. Sink into a really comfortable bed. Float or swim in a pool and feel the water around your body.
- **Taste** Have a special treat, and eat it slowly, savoring each bite. Drink a soothing drink like herbal tea. Let the taste run over your tongue and slowly down your throat. Go to a potluck, and eat a little bit of each dish, mindfully tasting each new thing.



Distraction Activities

Distraction Activities

Another great idea to help with changing our routines of eating when we're not actually hungry is to have <u>distraction activities</u>. These help us feel better by diverting our attention away from distressing thoughts or our boredom. It works better if you choose something that really grabs your attention! Below is a list of activities – different things work for different people, so read through the lists and choose things that you think will work for you – based on your personality (likes and dislikes).

Home and Garden

- Mow the lawn
- Do some gardening
- Purge your wardrobe (give to charity)
- Sweep your walkway/driveway
- DIY projects
- Clean something

- Clean the car
- De-clutter a room or part of a room
- Clear out the spare room (give to charity)
- Cook or bake something pleasurable
- Bathe/brush the dog or cat
- Re-arrange the furniture in one room

Going Out

- Go for a walk or jog
- Get the old cycle out!
- Go to the library
- Check out what movies are playing
- Browse an antiques or charity shop
- Go window shopping
- Go to the beach whatever the weather!
- Visit a nursery, garden center, or park
- Walk alongside the sea, river, reservoir, or lake
- Visit an aquarium or zoo
- Visit a historical or natural site
- Go for a drive

- Join a gym
- Visit a new church
- Visit a museum
- Go to a concert
- Find out what free classes are being offered
- Go out for lunch
- Learn to drive or take a driving lesson
- Visit a tourist attraction
- Take a bus ride somewhere new
- Visit a nature reserve
- Visit an art exhibition

Distraction Activities (Continued)

Leisure

- Do a crossword or sudoku
- Visit the hairdresser/barber
- Play on the computer
- Read a novel, newspaper, or magazine
- Try out aromatherapy or reflexology
- Watch television or a movie
- Watch the clouds
- Walk or sit on the beach or in a park

Being Creative

- Take up a new hobby
- Take a class to learn something new
- Learn to meditate, do yoga, or tai chi
- Write a short story or poem
- Decorate a room, or a piece of furniture
- Join a dance class
- Sew or knit
- Take photographs
- Sort out your photos

- Learn a new language
- Write a letter or article for a magazine
- Start a journal
- Take up a musical instrument
- Paint, draw, or sculpt
- Create a blog or website
- Bake or cook something new and healthy
- Make a scrapbook

Self-soothing

- Have an early night
- Listen to some favorite (calming or uplifting) music
- Take a bath or shower
- Massage your hands or feet
- Soak your feet
- Paint your nails
- Wrap yourself in a blanket
- Read a letter you've written to yourself to read at these times

- Eat something you haven't tried before
- Read a new newspaper or magazine
- Use aromatherapy oils
- Write a list of things you have achieved, great and small
- Make a list of things you are thankful for
- Meditate, relax, yoga, tai chi, reiki
- Write a letter to yourself
- Color

Distraction Activities (Continued)

Making contact with others

- Call someone you haven't spoken to in awhile
- Join any online group
- Write a letter to someone you haven't written to in awhile
- Phone a helpline
- Email/text a friend

- Join a self-help group
- Do some volunteer work
- Join an online support group or discussion forum
- Talk with a friend or family member

Express yourself physically

- Bang a drum!
- Rip up a phone book or newspaper
- Write poem, story, music, journal, blog, whatever comes into your head
- Run, walk, cycle, swim, go to the gym
- Vacuum
- Punch or kick a cushion or pillow

- Scream, shout, or sing loudly
- Dance energetically to loud music
- Write a letter to someone, but don't send it – shred or burn it
- Paint
- Kick a ball
- Cry

Positive self-talk

- I can get through this; I've managed before and I can now
- I don't need to do this; it'll only make it worse afterwards
- I'll regret it and feel awful later
- It helps for a few minutes, but then it just makes it worse in the long run
- I don't want to end up at the hospital again
- I can cope for another hour I can take one hour at a time



Coping with Strong Emotions

COPING WITH STRONG EMOTIONS

When intense emotions come up, it can be helpful to have several strategies to help you so that you don't end up eating to avoid those emotions. A change in Temperature, Intense Exercise, Progressive Muscle Relaxation, Mediation, Guided Imagery or Guided Meditation are different strategies that may help. You may have to try several different strategies and ways of doing them to find the right fit for you!

Temperature:

A change to extreme hot or cold can be helpful. Cold water, especially if you dunk your face in it, will trigger the dive reflex. The dive reflex is like resetting your "fight, flight, or freeze" response.

TRY: A hot shower. Make the water as hot as you can stand it without burning yourself.

TRY: Take a bowl and fill with cold water and as many ice cubes as you can stand. Hold your breath and dunk your face in for as long as you can stand. Repeat if necessary.

TRY: If you're at work or somewhere where you can't take a shower or dunk your face in water (a) — go to the bathroom and run the hot or cold water in the sink, let it heat up or cool down, then stick your hands under the running water and pay attention to the temperature on your hands.

Intense Exercise:

Intense exercise can get you breathing hard and get you focused on your muscles instead of your emotions.

TRY: Running up and down a flight of stairs as fast as you can for 1 minute. If you're just starting your physical activity – even walking up and down stairs for 1 minute will work.

TRY: Doing as many sit-ups, jumping jacks, or push-ups as you can in one minute. Again, if you're just starting physical activity, it does not matter how many you do, just the movement will help you focus on your body instead of what you're feeling/thinking.

Progressive Muscle Relaxation

Progressive Muscle Relaxation (PMR):

Focusing on your muscles and breathing can be helpful for getting out of an emotion and hopefully decrease the emotional or head hunger.

TRY: The following is an example of progressive muscle relaxation – you can use the whole script or parts of it that you think work best for you. It will be easier if you record yourself (with your phone or computer) reading the script and listen to the playback when you are trying the relaxation technique.

There are also pre-recorded PMR scripts you can find online, try a google/internet search for "free progressive muscle relaxation videos" and try the videos you find from this search; finding one that you find the most relaxing.

PMR Script

Sit back or lie down in a comfortable position. Shut your eyes if you're comfortable doing so.

Begin by taking a deep breath and noticing the feeling of air filling your lungs. Hold your breath for a few seconds.

(brief pause)

Release the breath slowly and let the tension leave your body.

Take in another breath and hold it.

(brief pause)

Again, slowly release the air.

Even slower now, take another breath. Fill your lungs and hold the air.

(brief pause)

(Continued on next page)

Progressive Muscle Relaxation (Continued)

Slowly release the breath and imagine the feeling of tension leaving your body.

Now, move your attention to your feet. Begin to tense your feet by curling your toes and the arch of your foot. Hold on to the tension and notice what it feels like.

(5 second pause)

Release the tension in your foot. Notice the new feeling of relaxation.

Next, begin to focus on your lower leg. Tense the muscles in your calves. Hold them tightly and pay attention to the feeling of tension.

(5 second pause)

Release the tension from your lower legs. Again, notice the feeling of relaxation. Remember to continue taking deep breaths.

Next, tense the muscles of your upper leg and pelvis. You can do this by tightly squeezing your thighs together. Make sure you feel tenseness without going to the point of strain.

(5 second pause)

And release. Feel the tension leave your muscles.

Begin to tense your stomach and chest. You can do this by sucking your stomach in. Squeeze harder and hold the tension. A little bit longer.

(5 second pause)

Release the tension. Allow your body to go limp. Let yourself notice the feeling of relaxation.

Continue taking deep breaths. Breathe in slowly, noticing the air feel your lungs, and hold it.

(brief pause)

Progressive Muscle Relaxation (Continued)

Release the air slowly. Feel it leaving your lungs.

Next, tense the muscles in your back by bringing your shoulders together behind you. Hold them tightly. Tense them as hard as you can without straining and keep holding.

(5 second pause)

Release the tension from your back. Feel the tension slowly leaving your body, and the new feeling of relaxation. Notice how different your body feels when you allow it to relax.

Tense your arms all the way from your hands to your shoulders. Make a fist and squeeze all the way up to your arm. Hold it.

(5 second pause)

Release the tension from your arms and shoulders. Notice the feeling of relaxation in your fingers, hands, arms, and shoulders. Notice how your arms feel limp and at ease.

Move up to your neck and your mouth. Tense your face and your neck by distorting the muscles around your eyes and mouth.

(5 second pause)

Release the tension. Again, notice the new feeling of relaxation.

Finally, tense your entire body. Tense your feet, legs, stomach, chest, arms, neck, and head. Tense harder, without straining. Hold the tension.

(5 second pause)

Now release. Allow your whole body to go limp. Pay attention to the feeling of relaxation, and how different it is from the feeling of tension.

Begin to wake your body up by slowly moving your muscles. Slightly move your arms and legs. Stretch your muscles and open your eyes when you're ready.

Guided Meditation

Meditation, Guided Imagery or Guided Meditation:

These techniques, like Progressive Muscle Relaxation, help you to decrease any negative emotion you may be feeling that might lead to emotional eating or head hunger. There are many different types of meditation, guided imagery, or guided meditation. So, you may try many different scripts, videos, podcasts, etc. before you find one you like. Keep trying, these techniques are some of the best ways to decrease negative emotions and with practice, you get better and better at using them to decrease any emotional eating.

TRY: Googling "meditation" or "guided imagery" or "guided meditation" and see what you find. There are so many different resources online to fit everyone's personalities (likes). What may work for someone else, may not work for you – so really research what you think will fit you best.

For example – some patients enjoy listening to sounds of the ocean, birds, rain, wind, etc. While other patients would rather listen to different types of music to relax.

Mindful Eating Exercise

Mindful Eating

Mindful eating is another great technique that allows people to slow down and enjoy their food (even tastier foods that they tend to overeat) (3)

The following is an exercise that I challenge patients to use when they feel they do not have "control" when eating their favorite foods – I compare this technique to wine tasting BUT for food...

A Mindfulness Eating Exercise: Simple Instructions

If you've heard about mindful eating but aren't sure where or how to start, here are instructions for a brief mindfulness eating exercise. The following exercise is simple and will only take a few minutes. Find a small piece of food, such as one raisin or nut, or a small cookie. **You can use any food that you like.** Eating with mindfulness is **not** about deprivation or rules.

Begin by exploring this little piece of food, using as many of your senses as possible.

First, look at the food. Notice its texture. Notice its color.

*Now, explore the food with your sense of touch. What does this food feel like? Is it hard or soft? Grainy or sticky? Moist or dry? (*Optional – depending on type of food you choose)

Notice that you're not being asked to think, but just to notice different aspects of your experience, using one sense at a time. This is what it means to eat mindfully.

Before you eat, explore this food with your sense of smell. What do you notice?

(Continued on next page)



Mindful Eating Exercise (Continued)

Now, begin eating. No matter how small the bite of food you have, take at least two bites to finish it.

Take your first bite. Please chew **very** slowly, noticing the actual sensory experience of chewing and tasting. Remember, you don't need to think about your food to experience it. You might want to close your eyes for a moment to focus on the sensations of chewing and tasting, before continuing.

Notice the texture of the food; the way it feels in your mouth.

Notice if the intensity of its flavor changes, moment to moment.

Take about 20 more seconds to very slowly finish this first bite of food, being aware of the simple sensations of chewing and tasting.

It isn't always necessary to eat slowly in order to eat with mindfulness. But it's helpful at first to slow down, in order to be as mindful as you can.

Now, please take your second and last bite.

As before, chew very slowly, while paying close attention to the actual *sensory* experience of eating: the sensations and movements of chewing, the flavor of the food as it changes, and the sensations of swallowing.

Just pay attention, moment by moment.

Using a mindfulness eating exercise on a regular basis is *only one part* of a <u>mindfulness</u> <u>approach</u> to your diet. The liberating power of mindfulness takes deeper effect when you begin to pay mindful attention to your thoughts, emotions, and bodily sensations, all of which lead us to eat. Mindfulness (awareness) is the foundation that many people have been missing for overcoming food cravings, addictive eating, binge eating, emotional eating, and stress eating.

Behavioral Strategies for Success

Conclusion

Now that I've given you a few resources/tools – it is up to you to do the work of using them and figuring out for yourself what is going to work best for you.

Take the time to develop a healthy mindset as this is key to maintaining your health over your lifetime – years after your surgery.

Below, I also included some books that are helpful resources and have more tips that you may find work for you – these books cover way more information than I would ever be able to put in this manual. I challenge you to purchase and read these books!

Books/Further Resources

- The Emotional First Aid Kit: A Practical Guide to Life After Bariatric Surgery by Cynthia
 L. Alexander, PsyD
- 50 Ways to Soothe Yourself Without Food by Susan Albers, PsyD
- Bariatric Mindset Success: Live Your Best Life and Keep the Weight Off After Weight Loss Surgery by Kristin Lloyd, LPC/LMHC and PhD candidate

Personal Notes

Your Surgery and Hospital Stay

WHAT TO TAKE TO THE HOSPITAL

Pack a bag to take with you to the hospital. Be sure to label everything you take. Include the following in your bag:

- Sleep apnea mask and CPAP machine.
- Loose clothes to wear upon discharge
- Lip balm (non-petroleum base)
- Slippers with nonskid soles and a robe
- Deodorant, toothbrush, toothpaste
- Brush or comb
- Books and magazines
- Comfortable pillow, if you use a special pillow at home
- Photo identification card
- Eyeglasses and case (no contacts)
- Dentures or partials with their case, which will be removed before surgery and returned after surgery
- Women: a bra one size larger than normal to prevent pressure on the incision
- Complete medication list
- Prescription inhalers

WHAT NOT TO TAKE TO THE HOSPITAL

- Contact lenses
- Jewelry including earrings or any other type of body piercing
- Cell phone
- Credit cards
- Cash
- All other medications (except inhalers)
- Other kinds of valuables

WHAT TO WEAR TO THE HOSPITAL

Please wear loose, comfortable clothing. Do not wear lotions, perfume, makeup, jewelry, or hairpins. It is not necessary to remove fake nails, but it is important to trim your index fingernail to 1/2 inch. Regular nail polish is okay but do not wear metallic polish. A device called a *pulse oximeter* will be clipped over your finger to measure the oxygen in your blood.

Your Surgery and Hospital Stay (Continued)

THE DAY OF SURGERY

- Arrive at the hospital at the time given to you by the admitting office, which is 2-3 hours prior to your surgery start time.
- You will report to surgery check-in on the 3rd floor of the main hospital. The closest parking garage available for surgery patients and family is Parking Garage S which is located at the north end of the hospital.
- You will meet your anesthesia provider and receive an IV. The IV gives you fluids and antibiotics for your surgery. You may receive a sedative after placement of the monitoring equipment. You may receive oral pain medications to reduce postoperative pain. You also receive an injection of Heparin or Lovenox used to prevent blood clots. You will be asked to urinate prior to going back to the operating room.

THE OPERATING ROOM

You are taken to the operating room on a gurney. A nurse greets you, reviews your charts, and asks you questions. The nurse puts compression stockings on your legs before you go to sleep to prevent blood clots. An anesthesia provider administers a general anesthesia and places a breathing tube to control your breathing during surgery.

WHAT YOUR FAMILY SHOULD DO

Upon admission, ask your nurse where the best place would be for your family or friends to wait. Volunteers in the waiting area are available to assist your family. They can explain the SmarTrack system, which allows monitoring of your progress throughout surgery.

THE RECOVERY ROOM

Following your surgery, you are taken to the recovery room, or Post Anesthesia Care Unit (PACU). Here, you begin your recovery from anesthesia. This is a gradual process when you drift in and out of wakefulness. You may notice several attachments while in the recovery room, such as a cuff on your arm or leg that monitors your blood pressure, a sensor on your finger that registers the oxygen in your blood, "boots" on your feet to lower your risk of blood clots, an IV for fluids, and nose prongs or a mask that delivers oxygen as you breathe.

There are many sounds in the recovery room. Don't be alarmed. The staff are familiar with these sounds and are trained to deal with any situation. You stay in the recovery room for about two hours before you are transferred to the surgical 7 unit.

Your Surgery and Hospital Stay (Continued)

YOUR HOSPITAL ROOM

When the anesthesiologist and nurses establish that it is safe for you to be released from the recovery room, you are moved to your room on the inpatient surgery unit. When you arrive at your room, a nurse meets you and assesses your comfort (pain level) and overall physical status (lung sounds, incision sites, vital signs). The nurse places a blood-pressure cuff on your arm and monitors your vital signs regularly. You will continue to be monitored as the anesthesia wears off and your recovery progresses.

When the nurse completes her assessment, which typically takes 10 minutes, she familiarizes you with your room and shows you how to use the nurse call system. The nurse also shows you where the bathroom is and how to use the television controls. After this, your family is welcome to join you in your room.

For your safety, all employees entering your room wear a name badge identifying them by name and role.

You will likely get a visit from an anesthesiologist the morning following your surgery.

Pain control is very important to your recovery. You will likely receive IV pain medications and will transition to oral pain medications once you begin your diet after surgery. Some patients may receive a *patient controlled analgesia* (PCA), which is a time-controlled pump that administers pain medication. These pain medications are tools for your recovery.

You and your nurses assess your pain using a 0-10 pain score. The nurses work with you to establish a pain score you are comfortable with and the amount of medication you need.

In addition to pain medication, you have other ways to ease pain. The nurses can help you find comfortable positions in bed, show you how to use pillows for support, and suggest relaxation techniques. There is even a therapeutic music channel available through the television.

YOUR ROLE AFTER SURGERY

You begin walking within 4 hours after surgery. Walking after surgery is **very** important in preventing blood clots. Your activity level progressively increases. For your first time out of bed, you need assistance from the staff, so please use your call light located on a paddle or on the bedside rail.

You perform breathing exercises using an incentive spirometer (breathing exercise machine) every hour while you are awake. Having a pillow available to embrace during coughing can help relieve some pain.

Starting the day of surgery you will be given clear liquids (Stage 1 diet). After your swallow study the next day you will start on the smooth food (Stage 2 diet) before being discharged home later in the day.

Your Discharge

Expect to be discharged 1-2 days after your surgery. Please arrange for transportation to be available on the day you expect to be discharged, and have someone else drive you home. Remember to arrange your home environment before you are discharged.

At the time of discharge, your surgeon discusses with you when to resume taking your medications. Most of your medications will remain unchanged, except blood thinners and diabetes medications.

Schedule a follow-up appointment with your primary care doctor within 1–2 weeks of your surgery. If you are on blood thinning medications, diabetes, or blood pressure medications you should have your blood checked within a week.



Out of Area Patients

If you live an hour or farther away, we require that you stay locally near the hospital for one week post-surgery. Let us know if you need information about local accommodations.

After Your Stay

WOUND CARE

Keep your incisions clean. When you go home, you can shower, but avoid submerging yourself in water for 4 weeks after surgery. No baths, pools, or hot tubs. Wash the wounds gently with soap and water, using your hand rather than a washcloth. Rinse well. You may experience muscle soreness in the left and right upper stomach areas for a few weeks. The incisions may be sensitive for several months after the operation. Do not expose incisions to sunlight for the first year, and do not use ointment on them.

It is not necessary to cover your small incisions, but you may use a band-aid or dressing if you wish. If you do, change them every day.

Drainage from the incision sites, which is sometimes clear yellow, is common. If you have Steri-strips on your incision site, they need to stay on for 2 weeks, after that they usually fall off on their own.

LIFESTYLE

- Do not smoke or drink alcohol.
- Do not donate blood.
- Do not go back to work for at least two weeks.
- Do not drive for at least one week.

ACTIVITY

- Resume CPAP as directed by your surgeon.
- Resume normal activities. Increase walking slowly. Start today! The goal is to walk every hour to prevent blood clots after surgery.
- No lifting over 10 pounds for 6 weeks.
- Stairs are okay.

After Your Stay (Continued)

OTHER THINGS TO EXPECT WHEN YOU FIRST COME HOME

- You may not have a bowel movement for up to one week after surgery due to anesthesia and pain medications. If needed, you can take a stool softener.
- The first few bowel movements may be very dark due to dried blood from surgery.
- Lack of hunger is common. Continue to eat at regular mealtimes, even if not hungry.
- It is common to feel grief over the loss of comfort foods. Call our office if you are struggling with this.
- You will probably feel weak and tired immediately after discharge from the hospital. Your body is still recovering from the stresses of a major operation. Your energy level will gradually improve. Remember to walk!

WHEN AND WHO TO CALL

Call your surgeon at 541-222-2700 if:

- persistent vomiting or inability to keep anything down for more than 24 hours
- vomit is bloody, black or like coffee grounds
- incisions are hot to the touch or have an angry red appearance or drainage that isn't clearish-pink.
- fever at or above 101 degrees
- increasing abdominal pain that is sharp and can't be controlled with pain medication.
- chest pain or shortness of breath, lightheadedness or dizziness.

Call your primary care doctor:

- to schedule an appointment of 1–2 weeks after surgery
- to reevaluate the dosages (or discontinue) medications you took prior to surgery
- for common ailments such as colds, sinus infections, urinary tract or yeast infections
- for non surgery related prescription refills

STANDARD FOLLOW-UP VISITS

Follow-up visits will be scheduled as follows:

- 1-2 weeks after surgery with your primary care provider
- 1-2 weeks after discharge with your surgeon
- 6 weeks after discharge with a surgeon or a physician assistant
- 3 months after the operation with a physician assistant
- 6 months after the operation with a physician assistant
- Yearly for the rest of your life

At each of these visits you will be weighed and your doctor or surgeon will check for medical or surgical complications. Your medications may be changed as needed.

Medications

When you are discharged, you will receive a prescription for pain medication to be taken as needed during your recovery. For mild discomfort, you may also take Tylenol capsules.

- Before leaving the hospital, review any regular prescription medications with your surgeon before resuming them at home.
- You can safely take most medications in pill form after bariatric surgery.
- For pain, take either your prescription pain medication or the Tylenol (Acetaminophen). Do not take both the prescription pain medication and Tylenol (Acetaminophen) at the same time.
- If you have been taking pain medication for a chronic condition such as arthritis, discuss this with your surgeon before resuming the medication after surgery.
- Gastric bypass patients should **not** take any products that contain aspirin or nonsteroidal anti-inflammatory medications (NSAID) such as ibuprofen (Advil, Excedrin, Motrin, Nuprin) or naproxen (Aleve, Naprosyn) **for the rest of your life**, because they can cause gastric ulcers.
- Your surgeon may prescribe nausea medication if needed, or you may be given an acid reducing medication such as Pepcid. You will be given a prescription for an acid reducing medication for the first 3 months after surgery.
- Use Milk of Magnesia or MiraLAX for shortterm constipation.
- Always check with your doctor or pharmacist before crushing tablets or opening capsules because some medications are less effective that way.

- Because food passes through your stomach very quickly, it is best to take most medicines 45 minutes to 1 hour after meals while the food is contained in the intestine.
- Avoid "sustained-release" medications if possible because they are designed to release slowly.
- You may go home with a short-term (~30 days) blood-thinning medication until your activity level is back to baseline.
- If you take medication for high blood pressure or diabetes, you should be carefully supervised by your doctor as you lose weight because your medication dosages may need to be adjusted.
- For any medication you take, you should self-monitor or measure that medicine's effect.

See your primary care doctor within 1–2 weeks of surgery to adjust medication dosages.



Exercise

HOME ACTIVITY FOR THE FIRST SEVERAL WEEKS AFTER SURGERY

You should not attempt any strenuous activity for the first several weeks. You can, however, walk, including up and down stairs. Walking promotes wound healing, circulation, bowel function, weight loss, and the health of your heart and lungs. Exposure to fresh air and sunshine can help relieve depression, anxiety, and food cravings. During your first 6 weeks after surgery, it is extremely important for you to walk as much as you can. Start slowly by taking short walks several times a day, preferably outside. Increase the distance and pace of your walks each day, but expect to tire easily at first. We recommend several walks of 15–20 minutes per day. Avoid any activities or positions that cause more than mild pain in the area of your incisions. Try to avoid bending and twisting at the waist in the first two weeks.

You should be able to return to work 2–4 weeks after your surgery if your job is not too physically demanding. Talk with your doctors about when you should return to work.

EXERCISE FOR LIFE

Exercise is an important key to long-term success following bariatric surgery. Studies show that patients who have been most successful after surgery exercise regularly. You will need to commit to, and invest time in, your exercise program. It takes only 30 minutes a day to improve fitness. With exercise, harder is not better, and the idea of "no pain, no gain" is no longer recommended. Instead, exercising at a moderate level of exertion is your best path to injury-free fitness and health.

REASONS TO EXERCISE

Regular exercise provides the following benefits:

- Prepares you for surgery
- Speeds your recovery because you walk short distances the day of surgery and during your hospital stay
- Helps you get in and out of bed, up and down from a chair, and up and down stairs
- Increases the rate of healing
- Prepares you for lifelong health habits
- Increases your energy level
- Improves muscle tone and strength
- Increases flexibility and endurance
- Helps you lose weight
- Helps control your appetite
- Improves mood and self-esteem
- Helps prevent diseases
- Enhances heart and lung health
- Lowers blood pressure
- Relieves tension and stress
- Improves sleep
- Provides enjoyment and fun

Exercise (Continued)

WHEN TO EXERCISE

It is extremely important for you to adopt a routine of regular exercise. Budget exercise time into your schedule every day.

TYPES OF EXERCISE

Always remember to warm up and cool down. For the first 5 minutes of your workout, start out slowly and easily so your muscles have a chance to warm up. End your exercise session with a 5-minute cool-down. Slow your pace and do some stretching. Here are some good exercises.

- Swimming laps using a kickboard or fins
- Water aerobics or water walking
- Walking outdoors or on a treadmill;
 walking the dog at a quick pace
- Hiking
- Riding a stationary bike
- Upper body exercise bike

BREATHING IS EXERCISE, TOO

Deep breathing and coughing are very important after surgery to help clear the lungs. While you are in the post-op unit, don't forget to use the incentive spirometer for breathing exercises, 10 times every two hours while you're awake.

BE ACTIVE, BUT BE CAREFUL

- Drink plenty of water during and after exercise to replenish fluids that you lose during activity.
- Wear comfortable, supportive shoes.
- Listen to your body. If you feel chest pain or have difficulty breathing, stop and contact your doctor.
- Don't push yourself too hard too fast. Remember to build up gradually.



Special Care

MANAGING YOUR DIABETES

It is important to regularly check your blood sugars both before and after surgery. Weight loss and healthy dietary changes often reduce the need for oral diabetic medications or insulin.

Happily, for many people, diabetes resolves after surgery. If you take oral diabetic medications or insulin injections, stay in close contact with your primary care provider or diabetes care manager (whoever adjusts the medications) throughout the entire surgical process. Oral medications and insulin dosages often need to be decreased or discontinued soon after surgery. Again, we recommend making an appointment with your primary care provider or diabetes care manager within 2 weeks after surgery. If medications are not adjusted, low blood sugars may result.

PREGNANCY BEFORE SURGERY

Some women's menstrual cycles return as they lose weight before surgery causing them to become more fertile. There is a risk of becoming pregnant before surgery, so you should use contraception. Be sure to contact your doctor and bariatric team if you suspect you are pregnant, especially if your bariatric surgery is just around the corner. Bariatric surgery is contraindicated while pregnant.

PREGNANCY AFTER SURGERY

Pregnancy is safe after bariatric surgery, but should be delayed at least 18–24 months, when weight loss stabilizes. We have seen many healthy babies born following bariatric surgery. If you do become pregnant after surgery, check with the bariatric dietitian for adjustments to your vitamin and mineral regimen as well as to discuss eating to support a healthy pregnancy.



Resources

SUPPORT GROUPS

Participation in support groups is an essential part of your continuing success. PHMG Surgery has several options with a list available in our clinic and online. We have dietitian and psychology led groups for a variety of needs and support.

LOCAL FITNESS OPPORTUNITIES

Pool Programs—Eugene

Amazon Pool (summer only)

2600 Hilyard Street Eugene, Oregon 97405 541-682-5350

Echo Hollow Pool

1655 Echo Hollow RoadEugene, Oregon 97402541-682-5525

River Road Pool

1400 Lake Drive Eugene, Oregon 97404 541-461-7777

Sheldon Pool & Fitness

2443 Willakenzie Road Eugene, Oregon 97401 541-682-5314

Pool Programs—Springfield

Lively Park Swim Center

6100 Thurston Road Springfield, Oregon 97478 541-736-4244

Willamalane Park Swim Center

1276 G Street Springfield, Oregon 97477 541-736-4080

Resources (Continued)

OTHER FITNESS CENTERS

Anytime Fitness

www.anytimefitness.com 65 Division Avenue Eugene, OR 97404 541-689-0777

2197 Olympic Street Springfield, OR 97477 541-937-9355

Planet Fitness

www.planetfitness.com 2370 W 11th Avenue Eugene, OR 97402 541-465-9000

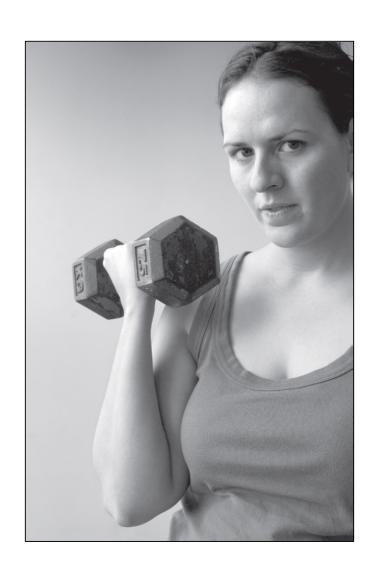
4223 Main Street Springfield, OR 97477 541-744-9000

Oakway Fitness Center

www.oakwayfit.com 170 Oakway Road Eugene, OR 97401 541-343-3314

Orange Theory

www.orangetheoryfitness.com 23 Oakway Center Eugene, OR 97401 541-636-0095



YMCA

www.eugeneymca.org 2055 Patterson Street Eugene, Oregon 97405 541-686-9622