

North Carolina Surgery

Guide to Surgical Weight Loss



REX UNC HEALTH CARE Surgical Specialists

Rex Surgical Specialists

CHOSEN FOR EXCELLENCE

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Replacement guides are available for a fee

Getting Started

Getting Started

Welcome!

Obesity presents many challenges to our patients, compromising both health and quality of life. At North Carolina Surgery, our medical experts look forward to helping you overcome this complex disease through an integrated approach that includes lifestyle education, nutritional and psychological counseling, exercise training, and the most advanced and tested weight loss surgery available. Most importantly, we offer committed and life-long support to guide you through this remarkable journey.



Our Philosophy

We believe in creating an environment that encourages you to adopt and maintain a healthy lifestyle with regular exercise, constructive psychological training, and good nutrition. Combined with our commitment to evidence based and leading edge surgery, integrated specialty care, and lifelong support and surveillance, we believe in and expect success for each of our patients.

The North Carolina Surgery Bariatric Surgery Team

Our approach to weight loss integrates several specialties for the treatment of obesity, including medical, psychological, and surgical disciplines. Our dedicated surgeons, nurses, dietitians, psychologists, and exercise trainers work together to create an individualized weight loss plan for you.

Your health care team includes:

Peter C. Ng, *M.D., Surgeon*
Lindsey S. Sharp, *M.D., Surgeon*
Dustin M. Bermudez, *M.D., Surgeon*
Erica McKearney, *PA-C*
Jillian Vari, *PA-C*

Krista Herrell, *R.N., B.S.N., Bariatric Coordinator*
Hannah Garehan, *M.S., R.D., L.D.N.*
Mary Gray Hutchison, *M.P.H., R.D., L.D.N.*
Caroline Pope, *M.S., R.D., L.D.N.*
Margaret Roberts, *M.S., R.D., L.D.N.*

(919) 784-4160 Direct Scheduling
(919) 784-7874 T
(919) 784-2801 F
rexbariatrics.com

Weight Loss Surgery Check List

Use this check list to make sure you have everything in order for surgery.



Insurance

- ❑ Call your insurance company
- ❑ Verify bariatric surgery coverage (see Financial & Insurance Information)

Education Class

- ❑ Attend at least two education class meetings

  Date _____

  Date _____

Appointments

❑ **Dietician**

Three group classes before surgery approval

Date _____

Date _____

Date _____

❑ **Bariatric Counseling (Psychology)**

Name _____

Phone _____

Date _____

❑ **Lab Work**

Date _____

❑ **Gastroenterologist**

Consultation Date _____

Procedure Date _____

❑ **Smoking Cessation** (If Applicable)

Date _____

❑ **Medical Clearance Form**

Date _____

❑ **5-year Weight History Form**

Date _____

❑ **Sleep Study** *(may need a second study if positive for sleep apnea)*

Location _____

Phone _____

Date _____

❑ **Gallbladder Ultrasound**

Date _____

❑ **Other Referrals**

Name _____

Date _____

Name _____

Date _____

Pre-op Checklist

This checklist will need to be completed before we can send anything to the insurance for approval. This also applies to self-pay patients. The checklist will need to be completed before scheduling surgery.

Step 1: Please call your insurance company and confirm what your benefits are for bariatric surgery. The insurance may ask for a procedure code. The following are the codes we use for bariatric surgery and nutrition services.

43774 - Removal of lap band
43775 - Laparoscopic Vertical Sleeve Gastrectomy with EGD
43644 - Laparoscopic Roux-En-Y Gastric Bypass with EGD
43659 - Laparoscopic Duodenal Switch with EGD. **This is an unlisted code because there is not a code for a laparoscopic duodenal switch.**
96101 and 90791 - Mental Health Coverage
97804 - Group Nutrition class
97803 - One on One Nutrition

Step 2:
Monthly/Visit Template. Everyone's template will vary depending on your insurance. Please follow the template to assure that you are meeting all requirements from your insurance company.

Step 3:
You will have three nutrition classes before we get authorization for surgery. There will be a fourth nutrition class that will be scheduled once you have a date for your surgery. **There is a $50.00 no show fee for nutrition appointments.**

1. First class (Getting Started) Date_____. **Please read your notebook that you will receive at this first class.**

2. Second Class (Protein supplements) Date _____.
   READ and BRING YOUR NOTEBOOK

3. Third Class (Vitamins/Minerals) Date_____. **Please try the samples that are given to you and mark which ones that you like on the order form. Read and BRING YOUR NOTEBOOK.**

4. Fourth Nutrition Class (Diet Progression**) Please come prepared to purchase your supplement kit.** You can purchase your protein shakes from the Rex Surgical store or bring your protein choice with you for the dietitians to check off**. This may affect your surgery date if you do not come prepared for class. BRING YOUR NOTEBOOK.**

   Gastric Bypass/Sleeve Kit. Price sheet is given at third nutrition class.

   Duodenal Switch/Sips Kit. Price sheet is given at third nutrition class.

Step 4:

Education Classes: These classes are held throughout many days and times each month. Please refer to rexbariatrics.com to see the schedule or pick up a schedule each time you are in the office. You can come to as many classes as you would like to before surgery. Education classes may also be used as a monthly visit for insurances that require a monthly visit. If you are using a class for a monthly visit then there will be a cost of $20.00 (Onoy applies to 12 month Template). Everyone is required to do at least two education classes before we submit anything to your insurance

Step 5

Psychological Exam. You may call any of the following to schedule. You will first be required to complete some bariatric testing. Then the counselor will go over the results with you and make a recommendation for you to proceed with surgery. If you use nicotine, use any form of illegal drugs, or have a high level of Depression/anxiety then the bariatric office will send a referral for you to be seen by Western Wake Counseling or Perkins Counseling.

Date (s)_____

1. Western Wake Counseling - Dr. Bolton and Dr. Tammy Moore (She participates with Medicare)
   919-467-3831
   8000 Regency Parkway, Suite 570
   Cary, NC 27518
   **Dr. Bolton will work with all smokers/nicotine users on nicotine cessation. Dr. Bolton will have office hours on Fridays in the Bariatric office.

2. Perkins Counseling & Psychological Services - They participate with Medicare
   10520 Ligon Mill Rd., Suite 108
   Wake Forest, NC 27587
   919-263-9592
   **Dr. Joanna Schechner will have office hours on Thursdays in the bariatric office.

3. Dr. Allan Bloom - He participates with Medicare
   4000 Blue Ridge Road, Suite 380
   Raleigh, NC 27612
   919-787-7307

4. Dr. Mary Anne Etheridge - She participates with Medicare.
   919-600-4906
   1120 Southeast Cary Parkway, Suite 201
   Cary, NC 27518

5. Dr. Dan Shattuck - He **does not** participate with Medicare.
   919-359-9700
   2501 Atrium Drive, Suite 100
   Raleigh, NC 27607

Step 6

Lab Work. A list of locations is in your notebook behind tab 1. Rex Lab does not require you to make an appointment. If you need to have labs done somewhere other than Rex, then please contact the bariatric office to print your lab orders for you to take to lab. **All Medicare patients will need to have a normal thyroid test before the hospital will allow us to schedule your surgery.**

☐ Date labs drawn_____

Step 7

Gall Bladder Ultrasound. Rex Radiology will call you to schedule your appointment. This test will not be ordered for Medicare patients unless you are having "gallbladder type symptoms". You cannot eat or drink after midnight before going for your ultrasound.

☐ Ultrasound Date_____

Step 8

Gastroenterologist. The upper endoscopy is an important procedure to confirm that there are not any issues, such as a gastric ulcer, which could cause complications after surgery. The gastroenterology office will call you to schedule an appointment.

☐ Upper Endoscopy Date_____

Step 9

Sleep Study. That Sleep office will call you to schedule a time for you to go to their facility to sleep over night. If you test positive for sleep apnea then you may be required to go a second night to get fitted with a mask and settings for a CPAP/Bipap machine.

☐ Sleep Test Date_____

Step 10

Specialist referrals. If you see any of the following specialists then you will need to get a medical clearance from them to proceed with surgery.

- Cardiologist - Rex Bariatrics will send this clearance to your cardiologist
- Pulmonologist
- Nephrologist
- Oncologist
- Hematologist

Step 11

Medical Clearance form will need to be signed by your primary medical physician.
Five year Weight History form - Please get your highest weight from each of the past five years. Forms are found in your notebook behind tab 1.

Step 12

Requiremnets for Nicotine Use:

- **All form of Nicotine will need to be stopped at least 3 months prior to surgery.**
- Inform the Coordinator of your quit date.
- Once you quit then you will need to do a monthly nicotine test. You are required to have 3 consecutive months with negative results.
- An appointment will be made for you to work with Dr. Clinton Bolton on smoking cessation.
- A referral will be sent to the NC Quit line for you to also work with counselors by phone.

Step 13

Exercise plan will need to be started prior to surgery. Please start with at least 90 minutes a week, which is at least 30 minutes three times a week. Your goal would be to build up to 150 minutes a week.

Step 14
Completed Checklist. You may inform the office when you have completed your checklist and you will need to turn in your signed **Required Monthly/Visit Classes form.**

1. Please allow seven business days for the insurance department to review your chart and put your packet together for the insurance company. **Please refrain from multiple phone calls to check your status. If you are missing anything from your checklist then this could delay your process. Self-pay patients will also need to have a completed checklist before scheduling surgery.**

2. Please allow an additional 15 days to get your approval from your insurance company.

*****The patient may receive authorization before the office. We will still need a copy of your letter before proceeding with scheduling.*

3. Once authorization is received then you will receive a call from our surgery scheduler. She will then give you the updated estimate of what you will need to pay prior to scheduling surgery and will help you choose a date. This payment is for surgeon's charge only. Please contact the following to get other estimates of charges.

Financial Counselor - 919-784-1053

American Anesthesia - 919-873-9533

4. **We schedule on a first come first serve basis once authorizations are received**. We will not be able to honor any requests for scheduling your surgery before others. We strive to be fair to all patients.

Step 15
Surgery Instructions Please read through your "What to Expect in the Hospital" and your discharge instructions that are located in your notebook under Tab 5.

Step 16
Pre-op surgery Goals Checklist. Please complete the Pre-op Surgery Goals Checklist prior to moving forward toward bariatric surgery. Please refer to Section 5 located in the nutrition section under Tab 9.

North Carolina Surgery
Primary Care Medical Clearance for Bariatric Surgery

Patient Name_____

DOB_____

The above patient is being seen by the North Carolina Surgery Bariatric team, to assist them with bariatric surgery. The patient is required by the American Society for Metabolic and Bariatric Surgery to complete a thorough pre-operative evaluation. A multidisciplinary team approach will ensure that the patient is ready to proceed with bariatric surgery. Rex Surgical bariatric team appreciates your participation in this process. The following is a list of what is required for the evaluation. Some of this checklist will be ordered for the patient by Rex Surgical:

- **Routine labs and nutrient screening will be ordered by North Carolina Surgery:** CBC, CMP, Ferritin, Folate, Hemoglobin A1c, TSH, Vitamin D, Vitamin B12, Thiamine, and Lipids. If you are not on the EPIC system then we can fax these results to you.
- **Clinical nutrition evaluation** and approval by a **North Carolina Surgery registered dietitian**.
- **Psychosocial-behavioral evaluation**. The patient will schedule this assessment from a list of providers on the Rex Surgical checklist.
- **Gastroenterology evaluation** will be **ordered by North Carolina Surgery**.
- **Sleep Study** will be **ordered by North Carolina Surgery** for any patient that is not currently being treated for sleep apnea.
- **Cardiac Clearance form** will be **sent by North Carolina Surgery** for any patient that currently is being seen by a cardiologist.
- **Pulmonology and Oncology clearance** will be **obtained by the patient** if they are currently being seen by either of these specialists. Clearance forms will be provided to the patient by North Carolina Surgery.
- **Complete history and physical by Primary Care Provider**. This evaluation should include a full history, physical examination, review of systems, and review of medications. An EKG and chest x-ray may also be ordered at the discretion of the Primary Care Physician.

Comments_____

_____

_____

I am in agreement that _____ is a good candidate and I recommend the patient for bariatric surgery. The patient is medically cleared for surgery.

Physician printed name_____

Physician signature_____

Questions, please call Krista Herrell, RN at 919-784-2769. Please fax forms to 919-784-2801.

Five Year Weight History

Patient Name_____

DOB_____

Date	Weight
1.	
2.	
3.	
4.	
5.	

Please stamp or sign from physician's office that gave the weight history.

_____

Sleep Study

Your study may be scheduled at one of the following locations:

[ ] 4210 Lake Boone Trail, Raleigh (Rex Campus in Raleigh – 784-1465)
[ ] 790 SE Cary Parkway, Suite 105, Cary (Coorsdale Bldg – 784-7425)
[ ] 11200 Governor Manly Way, Suite 303B, Raleigh (Wakefield Campus 570-7588)
[ ] 6602 Knightdale Blvd., Knightdale (Knightdale Campus on HWY 64 – 747-5230)
[ ] 300 Health Park Dr., Suite 114, Garner (Garner Lab – 250-2275)

If our office needs any information regarding your insurance coverage or other health information, you may receive a call from our Intake Specialist. **It is suggested that you please call your insurance company in advance to obtain information regarding your coverage for the study and what your financial responsibility may be**. If your insurance company requests the "CPT code" related to your sleep study to provide you detailed information, it is 95811 *(unless otherwise indicated)*. This is considered an "**outpatient/facility visit**". All billing is submitted under **Rex Hospital**. Patient estimates can be reached at (919) 784-3382.

You should arrive at the sleep center at 8:00 PM and you will be discharged at approximately 7:00 AM the following morning.

Please note the following instructions carefully

1. **Do not drink any alcoholic beverages the day of your study.**
2. **Do not drink caffeinated beverages after 12 noon the day of your study.**
3. **Do not take any day or evening naps.**
4. **Do not use sprays, gels or ointments in your hair. Leave hair loose.**
5. **Men, please shave prior to the study, unless you wear a beard.**
6. **Leave jewelry at home.**
7. **Bring your medications with you to the center. If prescribed by your doctor, you may take a sleeping aid. The sleep center does not provide any medication.**
8. **Bring appropriate sleepwear.**
9. **Bring insurance cards and valid identification**

If you have any questions, please call **(919) 784-1465** between 8 AM and 4 PM Monday through Friday. If you happen to reach our voice mail, please leave your name, date of birth, reason for your call, and a good contact number where we may reach you. If you cannot keep your appointment, please call at least 24 hours prior to your scheduled appointment. We look forward to serving you.

REX Laboratory Services

Conveniently located throughout the triangle.

REX Hospital Lab of Duraleigh

A Department of REX Hospital

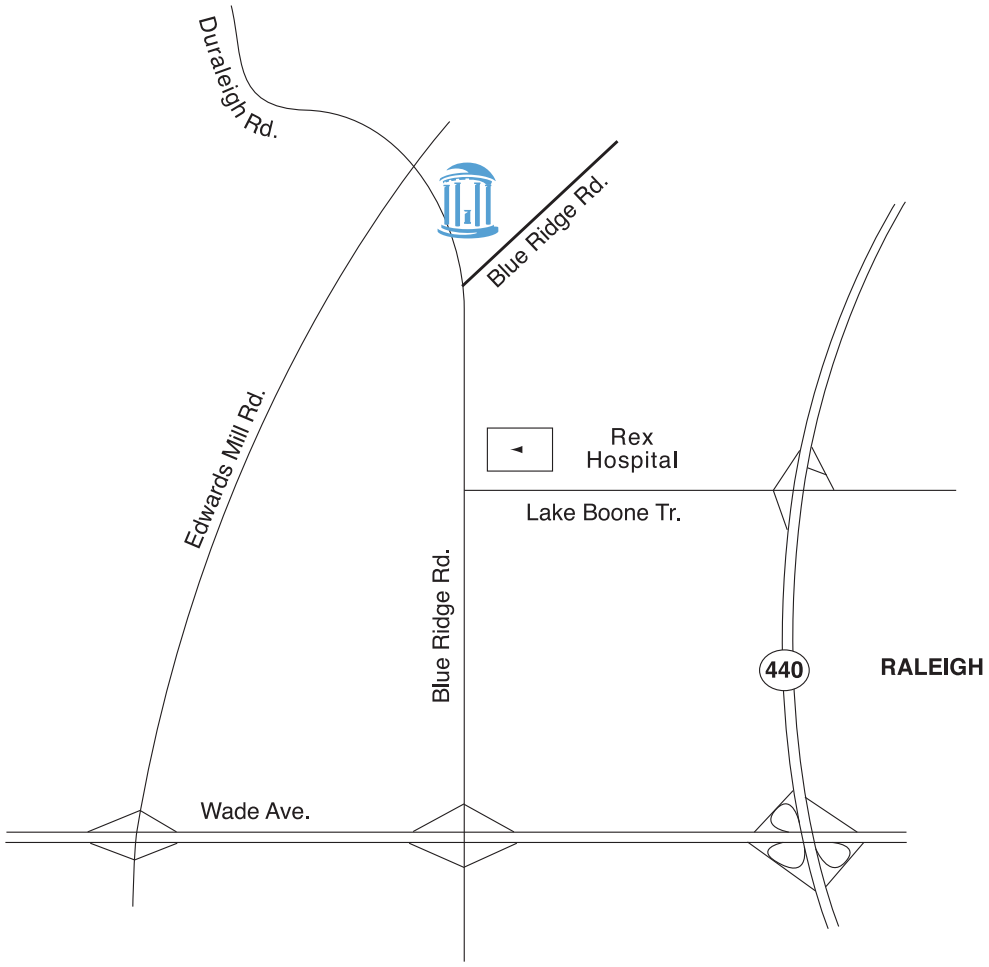
3050 Duraleigh Road, Suite 121
Raleigh, NC 27612
(984) 215-6970 / Fax: (984) 215-6971

Services provided:

- stat and routine blood and urine collection
- specimen drop-off

COLLECTION HOURS

Monday - Friday	Saturday
8 a.m. - 6 p.m.	8 a.m. - 12 p.m.



UNC REX HEALTHCARE

UNC REX Hospital Outpatient Laboratory

A Department of REX Hospital
4420 Lake Boone Trail, Room 2400
Raleigh, NC 27607
Phone: (919) 784-6000 / Fax: (919) 784-3363

COLLECTION HOURS

Monday - Friday	Saturday & Sunday
7 a.m. - 6 p.m.	8 a.m. - 1 p.m.

REX Lab of Wakefield

A Department of REX Hospital
11200 Governor Manly Way, Suite 112
Raleigh, NC 27614
(919) 570-7640 / Fax: (919) 570-7641

Services provided:
- stat and routine blood and urine collection
- specimen drop-off

COLLECTION HOURS

Monday - Friday	Saturday
7 a.m. - 6 p.m.	8 a.m. - 12 p.m.

REX Lab of Holly Springs

A Department of REX Hospital
781 Avent Ferry Road, Suite 108
Holly Springs, NC 27540
(919) 567-6210 / Fax: (919) 567-6211

Services provided:
- stat and routine blood and urine collection
- specimen drop-off

COLLECTION HOURS

Monday - Friday	Saturday
8 a.m. - 6 p.m.	8 a.m. - 12 p.m.

REX Laboratory Services of Garner

A Department of REX Hospital
300 Health Park Drive, Suite 230
Garner, NC 27529
(919) 250-5150 / Fax: (919) 250-5151

Services provided:
- stat and routine blood and urine collection
- specimen drop-off

COLLECTION HOURS

Monday - Thursday	Friday
8 a.m. - 5 p.m.	8 a.m. - 2 p.m.

REX Lab of Cary

A Department of REX Hospital
1515 S.W. Cary Parkway, Suite 120
Cary, NC 27511
(919) 387-3240 / Fax: (919) 387-3238

Services provided:
- stat and routine blood and urine collection
- specimen drop-off

COLLECTION HOURS

Monday - Friday	Saturday
7 a.m. - 6 p.m.	8 a.m. - 12 p.m.

REX Lab of Knightdale

A Department of REX Hospital
6602 Knightdale Boulevard, Suite 106
Knightdale, NC 27545
(919) 747-5240 / Fax: (919) 747-5241

Services provided:
- stat and routine blood and urine collection
- specimen drop-off

COLLECTION HOURS

Monday - Friday	Saturday
8 a.m. - 6 p.m.	8 a.m. - 12 p.m.

REX Medical Plaza Laboratory

A Department of REX Hospital
4414 Lake Boone Trail, Suite 111
Raleigh, NC 27607
(919) 784-6010 / Fax: (919) 784-2217

Services provided:
- stat and routine blood and urine collection
- specimen drop-off

COLLECTION HOURS

Monday - Friday
8:30 a.m. - 5 p.m.

UNC REX HEALTHCARE

rexhealth.com

Finance

& Insurance

Finance and Insurance



Who is going to pay for all of this?

Your insurance covering this procedure depends on your individual insurance policy. Every insurance company has an "exclusion" section that explains what the policy will not pay for. If your policy states that it does not cover the surgical treatment for obesity, then it will not pay for this surgery. It will also not pay for any tests or clinic visits pertaining to the surgery. Anyone deciding on the adjustable gastric banding procedure will need periodic adjustments. Most insurance companies will pay for these adjustments. Check with your surgeon or the billing staff to discuss this fee in the event your insurance does not cover it. It is important that you check with your insurance company before your first visit. You should also check with your employee benefits department at work to make sure they have not "excluded" this coverage from your policy. If your insurance company will not cover the cost of the surgery, you have the option of paying for the surgery out of pocket. This can further be discussed with our Bariatric Financial Specialist. Please bring your insurance card with you to the informational seminar or to your first visit so that we may keep a copy on file. If your insurance changes at any time during your treatment course, please let us know. We will then need a copy of your new card.

Insurance Approval

The surgeon will review the reports of all the required consultations once completed. He will then evaluate you and decide if you are a candidate for surgical weight loss treatment. If he decides you are a candidate for the surgery, the office will contact your insurance company for approval. All of the required information will be sent to your insurance company for them to review. This can take a few weeks in some cases. Once the insurance approval has been received, you will be contacted to discuss a surgery date as well as additional lab work required. Please realize that your surgery date is dependent upon your surgeon's availability and operating room time availability. We ask that you remain flexible as we work on scheduling your surgery as soon as it is possible. Although you may be an ideal candidate clinically, you still may not get insurance approval. You must contact your carrier regarding coverage.

Financial Lending Options

Surgical procedures can be an expensive process with ever increasing deductibles, co-insurance rates or insurance companies not covering some surgeries at all. There are lending options available for you to research and see if this would be an option to help you finance your surgery.

Company	Website	Phone Contact
1. SoFi	www.sofi.com	855-763-4466
2. Prosper Healthcare	www.prosperhealthcare.com	888-602-6066
3. Lending USA	www.lendingusa.com	800-994-6177

DISCLAIMER:
The information on this form is provided solely for your convenience. UNC REX Healthcare is not in any way affiliated or associated with the companies or entities listed above and does not endorse, warrant or guarantee the products or services offered by these third parties.

Financial Worksheet

The final estimate will be given to you once we have your authorization. You can then pay that amount and then you will be able to schedule your surgery. This is a payment for **surgeon's charges only**. This is only an estimate and the final amount will not be determined until the claim is received by your insurance company. Please refer to step 13 if you would like more information on your charges.

The following does not apply to Medicare patients. Please read the Medicare form for information on financial obligations.

Please check your benefits with your insurance company so that you have an understanding of your financial obligations.

- ☐ Deductible amount_____. You must meet this amount in order for your plan to start paying toward your surgery.
- ☐ Co-Insurance amount_____ for example 80/20 plan, 90/10 plan, etc…
- ☐ Out of Pocket amount_____. Once you meet your out of pocket then your plan should pay at 100%

Weight Loss Procedures

Weight Loss Surgery Procedures

There are four major weight loss surgery procedures.

- Roux-en-Y Gastric Bypass
- Sleeve Gastrectomy
- Bilio-pancreatic diversion with duodenal switch

Gastric Bypass

PROCEDURE DESCRIPTION

This procedure (the Roux-en-Y gastric bypass) involves dividing the top portion of the stomach to form a small pouch that holds about 1-2 ounces of food or liquid. The remainder of the stomach is not removed, but excluded (separated) from the pouch, therefore making it unable to receive food. A portion of the small intestines is attached to the pouch, constructing a "bypass". This bypass allows food to skip a portion of the small intestines which reduces the amount of calories the body can absorb. The new opening between the pouch and the small intestines (where the two were attached or anastomosed) is about the size of a quarter. This small opening, along with the restricted pouch, creates a feeling of fullness. Thus, less food will be eaten and fewer calories absorbed, leading to weight loss.

OUTCOMES - HOW MUCH WEIGHT WILL I LOSE?

The amount of weight loss will vary from patient to patient. It is possible to lose in excess of 100 pounds the first year after surgery, that is, if you have 100 pounds to lose. For instance, if you are 5'2" tall weighing 200 pounds you may only have 80 pounds to lose. Though possible, not everyone loses all of their excess weight. Typically, the weight you lose will be significant enough for you to see a difference. Generally, the weight loss will level off around the 2 year period. It is important to realize that weight loss success will not come from surgery alone. It is important for you to understand that eating the right foods and exercise are vital to your success.

Potential Complications

Fortunately, bariatric surgery has been shown to be very safe. Every precaution is taken before, during and after surgery to prevent any complications. However, the risk of complications cannot be totally eliminated. The following is a list of some of the complications that can occur during or following surgery.

This list includes, but is not limited to:

- Marginal Ulcers
- Obstruction
- Incisional Hernia
- Anastomotic Stricture (causing obstruction)
- Leak
- Bleeding (requiring transfusion)
- Wound Infection
- Gallstone Formation
- PE (blood clot to the lung)
- Nutritional Problems
- DVT (blood clot in the leg)
- Death
- MI (heart attack)
- Excessive Weight Loss
- Pneumonia
- Regaining of Weight

Vertical Sleeve Gastrectomy

PROCEDURE DESCRIPTION

The vertical sleeve gastrectomy is a restrictive type weight loss operation. After removing approximately 90% of the stomach and creating a slender tube, the remaining stomach holds a volume of only 2-3 ounces. This not only reduces your caloric intake, but also slows the transit of food, creating a sense of fullness and satiety. In addition, researchers hypothesize a hormonal effect with the sleeve gastrectomy. This metabolically reduces hunger by removing a hormonally active portion of the stomach and reducing the production of hunger hormones such as Grehlin.

OUTCOMES – HOW MUCH WEIGHT WILL I LOSE

The amount of weight loss will vary from patient to patient. On average, patients can lose 55-65% of their excess weight within one year and then weight loss tends to slow. That means if you are 100 pounds overweight, on average, you will lose 55-65 pounds in the first year. Results will vary, and some patients will do even better. It is important to realize that weight loss success will not come with surgery alone. You must understand that eating the right foods and exercise are vital to your success.

Potential Complications

Each bariatric procedure carries a unique set of potential complications. The Sleeve Gastrectomy offers an excellent safety profile but is not exempt to risk of serious complications.

The following list describes some of the possible complications:

- Staple line leak
- Vitamin deficiency
- Staple line stricture (causing obstruction)
- Gastroesophageal reflux
- Esophageal spasm and dysmotility
- Dilatation of the pouch
- PE (blood clot to the lung)
- DVT (blood clot in the leg)
- MI (heart attack)
- Pneumonia
- Bleeding (requiring transfusion)
- Gallstone formation
- Death
- Excessive weight loss
- Regaining of weight

Duodenal Switch

PROCEDURE DESCRIPTION

The duodenal switch (also referred to as biliopancreatic diversion with duodenal switch or "DS") involves two bariatric techniques in one operation: a vertical sleeve gastrectomy attached to a distal intestinal bypass. This means more of the small intestine is bypassed compared to the Roux-en-Y Gastric Bypass. During this operation, approximately 75% of the stomach is removed. The operation is more technically challenging but still performed laparoscopically. Typically, the gallbladder is removed at the same time. Most patients will spend one to two nights in the hospital after their operation. Recovery time postop is similar to that of other bariatric operations.

OUTCOMES – HOW MUCH WEIGHT WILL I LOSE?

The DS is a well established bariatric operation with excellent long term weight loss (on average 80% loss of excess weight) and a track record of being the most effective metabolic operation for treating type II diabetes mellitus, hyperlipidemia, and hypertension. The effectiveness of the procedure is based on a combination of restriction, fat malabsorption, and hormonal effects that reduce hunger, increase satiety, and decrease insulin resistance. The operation is generally recommended for BMI>50, but can be modified to meet the needs of patients with BMI<50.

With greater weight loss and resolution of metabolic problems comes a greater responsibility on the patient to take the necessary vitamin supplementation. Because of the increased intestinal bypass and reduced absorption of fat, fat soluble vitamins (Vit A, D, E, and K) and other micronutrients are reduced to a significant degree requiring special vitamin regimens containing those nutrients.

Potential Complications

A recent review of our data shows the Duodenal Switch procedure to have similar postoperative complication rates of the Roux en Y gastric bypass. The nature of the potential complications are somewhat different, however.

This list includes, but is not limited to:

- More frequent or lose BMs (on average 1-2 per day)
- Severe diarrhea (uncommon)
- Fat soluble and micronutrient deficiencies (Vit A deficiency can lead to permanent night blindness)
- Protein calorie malnutrition
- Bowel obstruction
- Anastomotic stricture (very low risk)
- Leak (<1%)
- Bleeding (requiring transfusion or reoperation)
- DVT (blood clot in the leg)
- PE (blood clot in the lung)
- MI (heart attack)
- Death (<1%)
- Excessive weight loss
- Weight regain

SIPS (Stomach Intestine Pylorus Sparing) Surgery

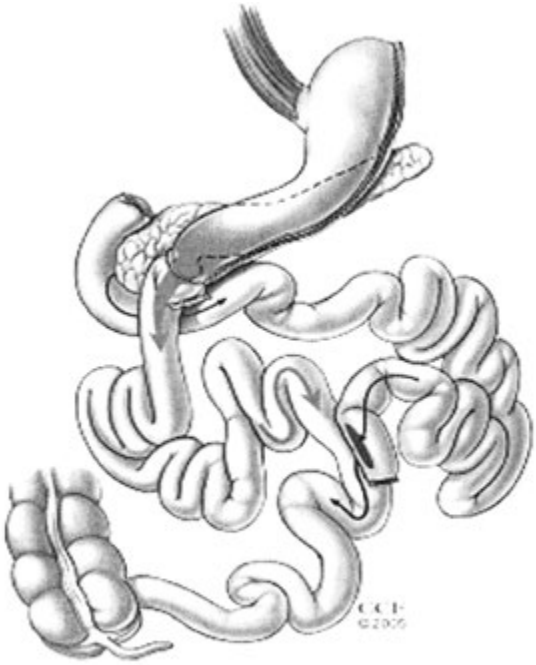
PROCEDURE DESCRIPTION

Also known as the Single Anastomosis Duodenal Switch, the SIPS procedure is a modification of the traditional Duodenal Switch (DS) such that the level of malabsorption is decreased. There is limited outcomes data with this procedure, but the data suggests lower risks of vitamin deficiencies than the traditional DS. The trade-off for this less aggressive surgery is likely to be less robust weight loss long term. Vitamin supplementation requirements are the same as the traditional duodenal switch.

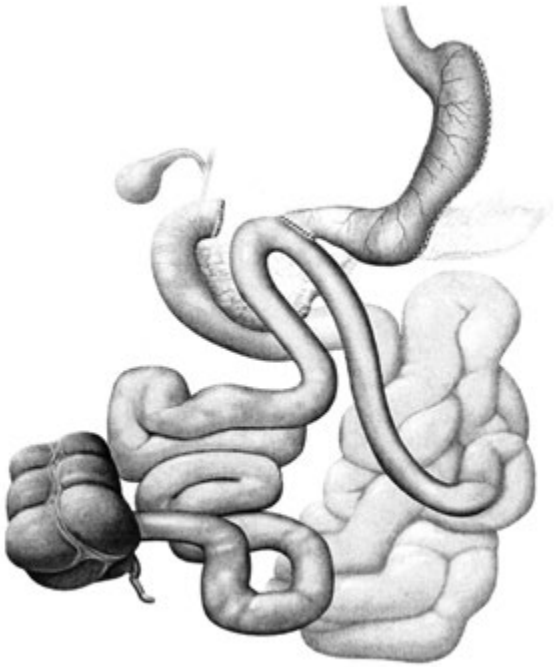
The specific differences with the SIPS procedure compared to the traditional DS are that there is a single connection of a small bowel which diverts the flow of bile and digestive enzymes further along the intestine. The loop connection of the SIPS procedure allows more time for contact between the food and the bile/digestive enzymes allowing for more absorption of calories and potentially vitamins.

Insurance coverage of this procedure in our area is limited, but this procedure is a self-pay option that we perform at an outpatient surgery center at reduced costs.

TRADITIONAL DUODENAL SWITCH



SINGLE ANASTOMOSIS DS (SIPS)



Early and Late Complications Associated with Weight Loss Surgery

The gastric bypass, sleeve gastrectomy, duodenal switch, and adjustable band (open or laparoscopic) each hold risks of complication. We prepare each patient and take careful precautions before, during, and after surgery to help reduce that risk. The following list explains the most common and significant risks related to weight loss surgery:

- **Death**: Low risk of mortality: band - 0.02% bypass/sleeve - 0.2% duodenal switch - 0.57%
- **Pulmonary Complications**: Various pulmonary issues related to surgery include: pneumonia, sleep apnea, and obesity related obstructive airway, and potential need for ventilator support (tracheostomy/ventilator) in the super morbidly obese population.
- **Infection**: Wound infections, bladder infections, skin infections and deep abdominal infection.
- **Cardiac**: Heart attacks, irregular heart rhythms
- **Leak and Erosion**: 1% of patients experience leak from the stomach or small bowel connections, causing a severe infection, abdominal abscess, or rarely death. This requires additional surgery or drainage procedures. Lap Band carries a 0.4% risk of erosion into the stomach or esophagus.
- **Bowel Obstruction**: Abdominal operations leave potential adhesions and internal passages that cause bowel obstructions and even lead to strangulation, or perforation which may require additional surgery or bowel resections.
- **Bleeding**: Bleeding occurs with surgery and sometimes requires re-operation or transfusion.
- **Anastomotic Narrowing or Ulcer:** Narrowing or ulcer formation at the connection between the stomach and the small bowel (also know as the anastomosis) occurs after some procedures, requiring endoscopy and dilation, medications, or less commonly surgery. NSAID medications (i.e. aspirin, ibuprofen) that irritate the stomach, smoking, or excessive alcohol use increase your risk of anastomotic complications.
- **Blood Clots**: Deep vein thrombosis (DVT) and pulmonary embolus (PE) occur in less than 0.4% of patients after surgery, sometimes resulting in significant illness or death.
- **Hair Loss**: Many patients experience hair loss during the 3 to 9 month post-operative period following surgery. This typically resolves in the year following surgery.
- **Vitamin and Mineral Deficiencies**: Weight loss surgery causes malabsorption of many vitamins and minerals. We require patients take vitamin and mineral supplements for life to help protect from malnutrition. We also require routine lab work to monitor the nutrient blood levels. Common deficiencies following surgery include but are not limited to Iron, Calcium, Vitamin B12, and Folate.
- **Inadequate Weight Loss**: Some patients fail any type of weight loss surgery. Reasons vary, but include breakdown of the staple line, failure to adjust the band, failure to comply with recommended dietary, psychological, and exercise recommendations, and poor follow-up.
- **Excessive Weight Loss**: Rarely some patients sustain excessive weight loss after weight loss surgery and require intervention to prevent severe malnutrition, nausea or vitamin and mineral deficiencies.
- **Nausea**: This is a common side effect of each procedure and is typically self-limited. Rare incidence of chronic nausea exists.

What to Expect Before Surgery

What to Expect Before Surgery

Initial Consultation

During the initial consultation, your surgeon wants to learn more about your motivation for weight loss, review your weight history, and discuss your personal weight loss goals. Your surgeon also reviews your medical and surgical history, medications, and performs a physical exam. This allows him to not only evaluate your candidacy for surgery but to also assess your general risks. If deemed necessary, we also recommend additional consultation with specialists such as a cardiologist, pulmonologist, sleep disorder specialist, or gastroenterologist.

We want to stress to you the importance of adequate protein and fluid intake, life-long vitamin supplemental therapy, and healthy food choices.

We also require consultation with a licensed clinical psychologist. The psychologist helps us to identify barriers that interfere with weight loss including untreated depression, anxiety, or eating disorders. More importantly, this helps you address emotional stressors associated with surgery and offers healthy mechanisms for coping with those stressors.



Decision Visit

Once you complete your medical weight loss program and evaluation by a psychologist and nutritionist, we meet with you to decide on surgery. We use the data from the pre-operative program to help assess your risk for surgery and guide your choice of operation. We also review those recommendations made by our various medical specialists and obtain pre-operative laboratory and radiographic tests to determine your qualification for surgery.

Your level of motivation, realistic weight loss goals, psychological coping skills, and surgical risks help your surgeon decide on the most appropriate recommendation. We respect your personal preference for a procedure but offer guidance to mitigate risk and optimize your satisfaction.

Once this is complete, we proceed to insurance certification. Once approval is received then we will obtain your written informed consent and schedule the preoperative testing with Anesthesiology.

History and Physical Visit *(needs to be within 30 days from your surgery date)*

Once scheduled for a particular surgical procedure, we arrange a pre-operative exam to re-assess your current medical history, perform a physical exam, review further the risks and benefits of surgery, and sign the surgical consent form. We also briefly review your preoperative and initial post-operative diet, and explain what to expect during your hospital stay.

Surgery

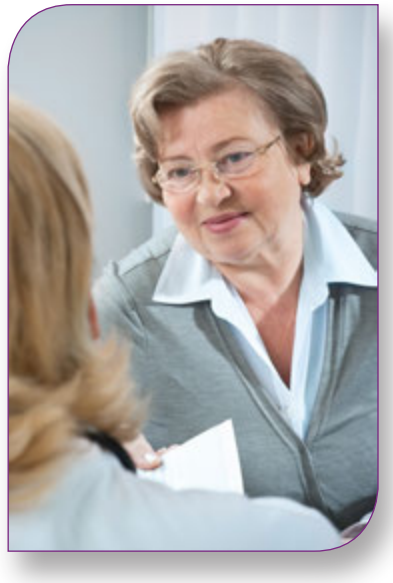
Do not drink anything after midnight the evening prior to surgery, except to take your normal medications. On your surgery day, please bring your CPAP machine (if you have sleep apnea and use CPAP), otherwise we may postpone your surgery.

Check in at the admissions desk at the hospital. The nursing staff prepares you for surgery by placing an intravenous catheter (IV), injecting you with a subcutaneous blood thinner, and interviewing you in preparation for surgery.

Your surgeon usually meets with you in the preoperative area to address any last minute questions and reiterate postoperative expectations. After induction of anesthesia, we insert a bladder catheter and, in certain cases, an arterial blood pressure monitor.

What to Expect After Surgery

What to Expect After Surgery



After recovery, we monitor your vital signs closely overnight. We emphasize the importance of early walking to preventing blood clots in the legs (DVT) which can travel to the lungs (PE) with potentially lethal consequences. We also recommend deep breathing exercises which help improve oxygenation and decrease the risk of pneumonia.

On the morning after surgery, you undergo an upper GI radiology study to evaluate for leakage (for gastric bypass). When determined as normal, we advance you to a liquid diet. The nurse removes your bladder catheter (assuming your urine output is adequate) and transitions you to oral medications.

We anticipate discharge from the hospital in the morning on the second day after surgery. You advance to a liquid protein diet on the third day after surgery (usually at home).

Commonly, we reduce or discontinue diabetes or blood pressure medications. We decide this prior to discharge and adjust accordingly at follow-up visits.

Post-operative Visits

We cannot overstate the importance of post-operative follow-up. You routinely return for scheduled follow-up appointments at 2 weeks, 2 months, 6 months, 9 months, 12 months, 1½ years, and yearly thereafter. We assess your clinical progress, weight loss, exercise, diet, medications, co-morbidities, vitamin intake, and laboratory data during the post-operative clinic appointments.

At these visits, our surgeons continually reassess for post-operative challenges and complications and provide education with regards to warning signs of long-term complications. We also strongly urge post-operative visits with the nutritionist for dietary refinement, nutritional surveillance, and diet trouble-shooting, as well as regular psychological follow-up of post-operative stressors.

Discharge Instructions

Signs and Symptoms to Report

- Have persistent nausea and vomiting
- Have abdominal pain not relieved by your pain medication
- Your incisions become red, swollen, or have foul smelling discharge
- Have a fever of 101.5 or greater
- Have redness, warmth, or pain in lower leg(s) along with shortness of breath
- Have chest pain
- Have anything that does not seem normal to you

Activity

- Do not lift anything heavier than 40 pounds for 2 weeks. If you had any type of hernia repair then it will be a 10 pound limit.
- You can drive after surgery once you are no longer taking pain medication.
- You can walk at least 30 minutes a day. Resume normal exercise after 2 weeks. You may need to take longer if you had a hernia repair. Please be advised by your surgeon.
- Do not fly within 2 weeks of surgery.

Bathing

- You can shower after surgery.
- You do not need to keep your incisions covered unless otherwise instructed by your surgeon.
- Do no soak in a tub or get in a pool until you are seen at your first post-op appointment.

Medications

- Do not stop any psychiatric/depression/anxiety medications without being instructed by your physician.
- Extended release medication may work differently after your surgery. You need to be monitored closely by your prescribing physician in case any changes need to be made in your medications.
- Do not take any anti-inflammatory medications without first discussing with your surgeon.
- You will need to take Miralax daily once you are discharged from the hospital until you have your first bowel movement.

Sexual Relations

- Sexual relations can be resumed as early as two weeks or when it is comfortable for you.
- You will need to use some form of birth control for 24 months following any bariatric surgery.

Return to Work

- Most patients can return to work in 2 to 3 weeks from surgery unless previously discussed with your surgeon.

Diabetics

- Please continue to monitor your blood sugar after surgery and keep a record to show your doctor that monitors your diabetes.

Nutrition

- Please carefully follow your diet progression that was given to you at your fourth nutrition class.

Post-operative Care

CARING FOR YOURSELF AT HOME

Once discharged home, a few simple measures allow you to optimize your recovery.



Controlling your discomfort:

- Take your prescribed pain medication as directed if you need it.
- As a less potent alternative, you may take liquid acetaminophen (Tylenol) instead of your prescribed pain medication. Do not take them together due to risk of acetaminophen toxicity.
- Splint your abdomen with a pillow when coughing or sneezing. With bariatric surgery, patients often notice increased soreness or pain at the larger abdominal incisions. This is typical and expected, especially with more movement. It can take up to 4 weeks to go away.

Understanding body changes

It is common to feel tired after surgery. Your body is adjusting to the physiologic changes and weight loss. Ironically, you may find it difficult to sleep, which is also normal. Do not sleep or nap too much during the day. You may even feel depressed for a few weeks and question your decisions to choose surgery. If you experience these feelings, you will find that after about a month's time, you will start to feel better.

Some patients may experience nausea and/or vomiting. The most common causes of vomiting following bariatric surgery are:

- Eating too fast
- Eating too much
- Drinking while eating
- Eating foods without chewing them thoroughly

Carefully follow the diet advancement plan as outlined in the "Nutrition" section. If vomiting occurs, try the following strategies to better accommodate your eating style:

- Eat your meals over a 30-minute period.
- Avoid fluids during your meal.
- Chew your food thoroughly.
- Eat softer foods for a few days following the episode.

If your issues persist, please call our office. While a decreased appetite is the desired effect of the operation, you must be careful not to forget to eat. You may need to encourage yourself to eat. It is extremely important that you follow the dietary plan as directed (starving is bad).

It is common to have soft, semi-formed bowel movements following surgery. Once you advance your diet to incorporate more solid foods, your bowel movements should have regular consistency.



You may experience constipation following surgery due to the altered structure of your stomach and intestines. The prescribed pain medication and the iron supplement may also contribute to this, as can a decrease in fluid intake. If you do not have kidney problems, you may use Milk of Magnesia as directed. You may also use stool softening suppositories as directed. You may also try adding prune or pear juice to your diet. If you do, please be mindful of the sugar content. It is common to not have a bowel movement for 5 days after surgery. Conversely, some folks may have diarrhea for a few days, partly related to the UGI contrast study on the first post-operative day.

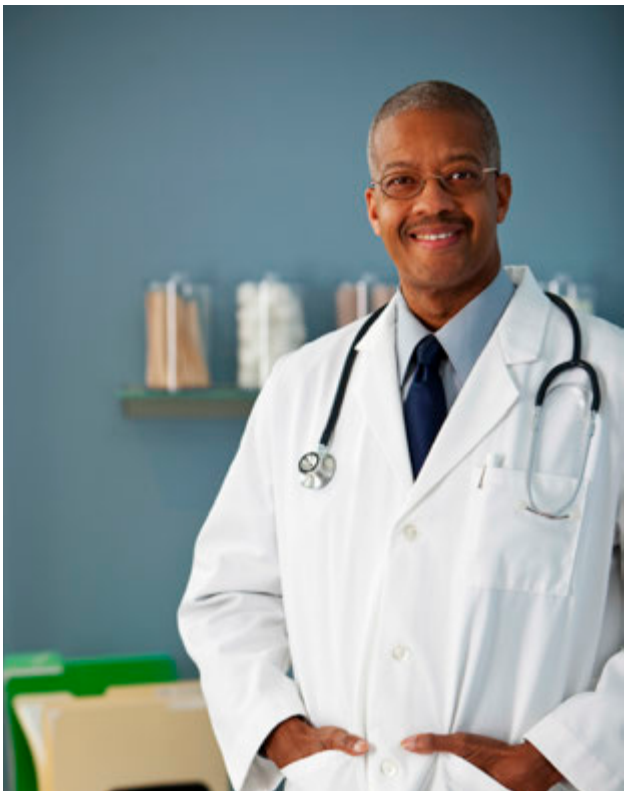
Some patients will experience hair loss following surgery. This is primarily thought to be related to the rapid weight loss during the first 9 months following surgery and will usually decrease after 9 months. If you experience this, please learn to be gentle with your hair and avoid coloring or perming your hair during this period. Use a wide-toothed comb and minimize blow drying your hair. It is also important to take your vitamins. A high fat intake in your diet is the most common cause of increased gas production following bariatric surgery. You may take anti-gas medication from your local drugstore. These medications include Beano, Gas-X and Phazyme. You might also want to try adding yogurt or acidophilus milk to your diet once your diet plan allows. These things will help change the bacterial flora in your intestines.

You or your loved ones may notice that you have bad breath following surgery. You may also notice a different taste in your mouth. A couple of things that may contribute to this are your body being in ketosis (burning excess fat) or dry mouth. This usually improves by the 6th month. In the meantime, try brushing your teeth several times daily. Maximize protein intake to the recommended level of 60-80g daily and stay well hydrated. Keep Listerine mouth strips with you. Keep your mouth moist by drinking plenty of non-sugar beverages. Sugar-free gum can also help. Keep in mind you want to avoid sugar in your diet; chewing gum with sugar can also cause bad breath to become worse. Some patients experience episodes of hypoglycemia (low blood sugar). If you experience this, try eating a protein snack such as peanut butter. The protein will help stabilize your blood sugar. If you notice that this persists, then you need to contact our office.

Some symptoms of hypoglycemia are:

- Dizziness
- Diaphoretic (sweaty)
- Irritability
- Fainting

What to Report to the Doctor's Office



At times you may feel unsure whether or not you should call our office. You may question if something is "normal" or not.
Although the list below is not all-inclusive, please call the office if you:

- **Have persistent nausea and vomiting**
- **Have abdominal pain not relieved by your pain medication**
- **Your incisions become red, swollen or have a foul smelling drainage from them**
- **Have a fever of 101.5 F or greater**
- **Have redness, warmth or pain in your lower leg(s) along with shortness of breath**
- **Have anything that does not seem normal to you**
- **Have chest pain**

NAUSEA

Nausea is common in the early post-operative period. It may be related to overeating/drinking, insufficient chewing, fullness, sensitivity to odors, pain medication, not eating, post-nasal drip, and/or dehydration. For nausea that occurs in the first days after surgery, the nausea can usually be treated with anti-nausea medications like Phenergan or Zofran. In unusual cases, nausea can be so severe that it prevents intake of adequate fluid or nutrition. If this occurs, you may need some intravenous fluids.

VOMITING

Vomiting is often associated with eating inappropriately. It is very difficult to gauge in the beginning how little food will satisfy your hunger. Chew your food well, keep it moist and eat only half of what you anticipate eating. If there is still space, and you still feel hungry, then you can always eat a little more. Chances are that you are going to feel full with very little. A couple of teaspoons may be all that you can take in at one time.

Vomiting may be caused by:

- Eating too fast—take your time and chew your food thoroughly
- Not chewing properly
- Eating food that is too dry—remember "slow, small, moist, and easy"
- Eating too much food at once
- Eating solid foods too soon after surgery
- Drinking liquids either with meals or right after meals
- Drinking with a straw

- Lying down after a meal
- Eating foods that do not agree with you

If you begin vomiting and it continues throughout the day, stop eating solid foods and sip clear liquids. Should you have difficulty swallowing foods or keeping foods down, please call your surgeon. Vomiting may indicate that the stomach pouch is blocked. If vomiting continues for more than 24 hours, call your surgeon. Or if vomiting is associated with abdominal pain, call the surgeon.

DEHYDRATION

Symptoms of dehydration include fatigue, dark colored urine, dizziness, fainting, nausea, low back pain, and a whitish coating on the tongue. Contact our office if you believe you may be dehydrated.



Tips for preventing dehydration:

- Buy a sports bottle and take it with you everywhere you go so you can sip water all day
- Drink at least 1-½ to 2 liters of fluids daily. Increase this amount if you are sweating
- Avoid beverages containing caffeine—they cause you to urinate and lose more fluid

Bowel Habits

It is unpredictable how weight loss surgery, particularly gastric bypass, will affect your bowel habits. Some people state they have loose bowel movements for a couple of weeks and others complain of dehydration. Your bowel movements may be foul smelling and associated with flatulence. Most of these changes resolve as your body adapts to its new anatomy. Call your surgeon if you have persistent diarrhea.

IF YOU HAVE CONSTIPATION:

- Just after surgery, it can be common to go 3 days **without** a bowel movement.
- Passing gas is a sign that bowels are beginning to function
- It can take several weeks for bowel movements to normalize
- Do not go for more than 4 days without a bowel movement
- Common over the counter laxatives:
  - Miralax
  - Colace
  - Dulcolax
  - Milk of Magnesia
  - Magnesium Citrate
- Suppositories or enemas are ok to use: Dulcolax, Fleet

- Remember to get in at least 64 oz. of water daily to improve constipation
- Pain medications can worsen constipation. Be sure to take a laxative or stool softener while on pain medication to avoid constipation.
- Chronic constipation is a common issue that can be addressed at your follow up visits.

IF YOU HAVE DIARRHEA:

- Occasionally after surgery while on liquid diet or after gallbladder removal you may experience diarrhea. This may be due to fats in your diet. A low fat diet is essential following DS procedure in particular.
- Be sure to call and let us know if you are struggling with diarrhea.
- Following surgery it is possible to develop a C. Difficile infection which causes foul smelling watery diarrhea and abdominal cramping. A stool sample is required and oral antibiotics will be necessary.
- Lactose intolerance may lead to diarrhea; you may be sensitive to certain types of proteins as well. You may benefit from lactose free milk.
- You may use over the counter Imodium if needed.



Anemia

All menstruating women and some men should take supplemental iron to prevent iron deficiency anemia. It is important that you follow up at the regularly scheduled appointments for laboratory testing to identify iron deficiency anemia early. Treatment with oral iron is usually sufficient; however, occasionally intravenous iron replacement is necessary.

Transient Hair Loss/Skin Changes

Hair thinning or loss is expected with rapid weight loss. It is temporary. Unfortunately, that does not make it any less disheartening. During the phase of rapid weight loss, calorie intake is markedly reduced and protein intake may be marginal.

This physical strain results in hair thinning or loss. This is a transient effect and typically resolves itself when nutrition and weight stabilize. The hair loss usually occurs anywhere from 3 to 9 months post-operatively. For the same reason, skin texture and appearance may change. It is not uncommon for patients to develop acne or dry skin after surgery. Protein, vitamins and water intake are also important for healthy skin.

Pregnancy/Sexuality

- Fertility increases during period of rapid weight loss in the first 12-18 months. Patients who have had difficulty with infertility may very rapidly become fertile. **You are at risk for unplanned pregnancy**.
- The absorption of oral contraceptives following bariatric is unreliable

- Use an alternative method:
  - Condoms
  - IUD (mirena)
  - Implemnon
  - Depo provera
  - Diaphragm
  - Patch (Orthoevera)
- Absorption of birth control pills can be unreliable; ask your gynecologist which is best for you!
- **If you become pregnant, please contact our office as well as your OBGYN**.

Emotional Considerations

Emotional Considerations

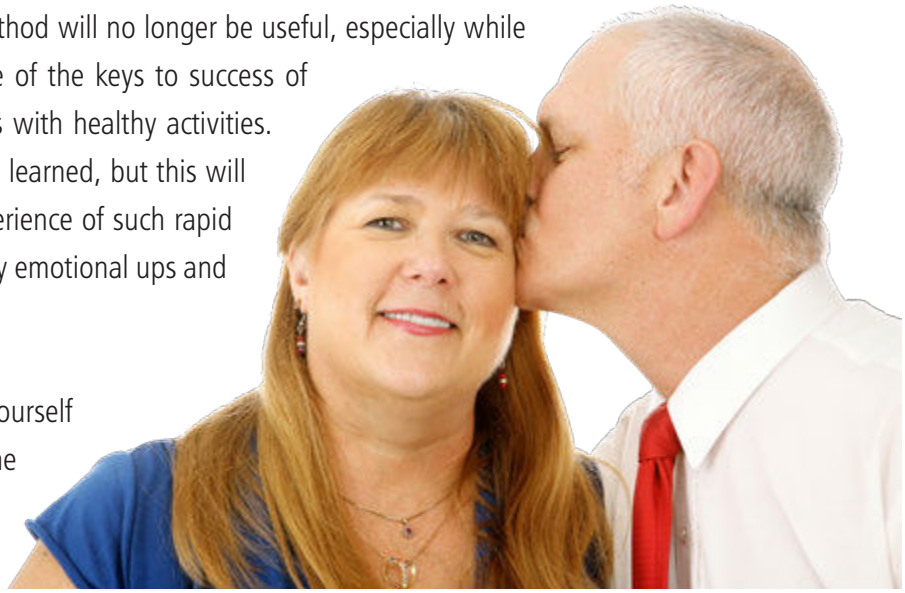
Food for Thought

Bariatric surgery has both physical and psychological effects. All patients need to consider this before and after surgery. Some of the feelings that you may experience include depression, frustration, anxiety, anger, disappointment, loss, helplessness, euphoria, excitement, joy and others. Short-term, the immediate sense of loss of food is often a cause for distress. Along with the rapid reduction in estrogen levels, you may experience symptoms of depression, not unlike the "baby blues". Long-term, you may experience changes in body image and further awareness of the social implications of obesity.

Bariatric surgery is not a fix for your everyday problems with your spouse, friends, family members, employment, or social life. This surgery will allow you to gain control over one aspect in your life - your weight. Although you have elected to have weight loss surgery to resolve your obesity, weight loss also changes the lifestyle you knew so well. Even with its problems and tensions, obesity was comfortable, simply because it was known. Now, that life is gone. When the reality of the new situation confronts you, it is natural to begin a longing for your old way of life. This expresses itself in several stages. These stages include denial, anger, bargaining, depression, and finally, acceptance.

Different people go through these stages differently. It is natural for some patients to experience denial before they have surgery because they focus on the positive. They seem to understand the risks and complications but often do not recall hearing about the emotional and physical stress that follows. After surgery is performed, some patients try to bargain for extra space in their stomach pouches. They overeat, experience the painful consequences, and may become angry for getting into this situation. This anger may also surface when other discomforts or complications develop throughout the recovery period. These feelings are difficult to accept or express openly, and depression may follow. Feelings of sadness and crying episodes can be common occurrences.

These emotional responses to surgery are understandable. They cannot be eliminated but must be experienced and worked through. Adapting to changes can take many months. The final stage of acceptance will occur when you feel at peace with the changes brought about by surgery. In the past, one of the best methods for you to cope with life stress may have been for you to eat. This method will no longer be useful, especially while your new stomach pouch is at its smallest. One of the keys to success of this surgery is to learn to replace those comforts with healthy activities. Replacement methods for coping will need to be learned, but this will take time. Try not to sabotage yourself. The experience of such rapid bodily change will likely be accompanied by many emotional ups and downs depending on your age and sex.



There are many things that you can do to help yourself through the recovery and adjustment period. One of the most important aspects is the recognition



and understanding of the experience of loss. Expect to have ups and downs as the weeks go by. If you are feeling teary and depressed, have a good cry. Do not suppress your emotions. They will surface again anyway. Going for a walk or adding other physical activities will help you manage this changing phase of your life. Your adjustment and acceptance will also be eased by the realization that bariatric surgery, with resultant weight loss, will not solve your personal or relationship problems by itself. You cannot expect a perfect body or a perfect life after the weight loss. In fact, many new problems will develop because of the many new opportunities. These will need to be recognized and attended to. Try to be as positive as possible. As new challenges pop up, recognize them and develop a problem-solving approach.

Counseling

Occasionally, personal adjustment or relationship problems will persist after surgery. These should be addressed in professional counseling. Our experience has shown us that in the period of stress, mild to severe depression is common. You and your support person should look for the signs of depression: persistent sadness, anxious or empty mood, loss of interest or pleasure in activities (including sex), restlessness, irritability or excessive crying, feelings of guilt, worthlessness, helplessness, hopelessness, changes in sleep patterns, decreased energy, fatigue, "feeling slowed down", thoughts of death and suicide, difficulty concentrating, remembering or making decisions, persistent physical symptoms that do not respond to usual treatment. Effective drug and psychological treatments are available. With treatment, patients can improve and return to normal quickly.

Body Image

Keep in mind that as your body undergoes changes in weight and size, it is likely you may not see your body as others may see it. It takes time for your mind to catch up with what your body is doing. It is similar to the phantom limb phenomenon where a person who has lost a limb continues to experience pain or feeling from the missing part , and in fact, feels they still have a limb. As you lose weight, you may actually be surprised when you see your new reflection in a store window or mirror. You may not feel like this person is you! It is normal to feel like you are still the same size as you were before, but there are some definite ways to help you work at this.

Here are some examples:

- Take a picture of yourself every few weeks during your weight loss and compare the changes.
- Try on clothes in a smaller size. You'll be surprised how quickly you will be changing sizes.
- Have someone point out a person in a public place who is about the same size as you. This helps you have a new frame for reference.
- Take measurements of yourself every few weeks and record the results.
- Save an outfit from your pre-op size and try it on every few weeks or whenever you need a lift.
- Accept compliments graciously. Don't minimize or qualify your weight loss. You have worked hard for the outcome you have been complimented for. Simply say, "thank you."

Support Groups

We consider support group meetings to be mandatory. We know realistically we cannot make you attend these meetings, but they are for you for education, support, nutritional and medical advice. Group meetings provide peer support, allow you to learn about the surgery firsthand from others who have had bariatric surgery, let you share your experiences and provide periodic guest speakers to expand your knowledge on obesity surgery-related topics. They are great for problem-solving. These support groups are a wonderful opportunity to make new friends and be with people who share what you are experiencing.



It can be reassuring to hear other's viewpoints on common concerns and to get additional information from the group leader or guest speaker. Research has shown that patients who attend support groups regularly are more successful with their weight loss and mental adjustment than people who do not, especially long term.

Stress Reducers

- **Listen to music.**
- **Breathe deeply.** Inhale through your nose and exhale through your mouth slowly and imagine that you are inhaling calmness and exhaling stress.
- **Laugh often.** Watch a comedy on video, listen to a tape or read the Sunday funnies.
- **Speak up for yourself.** People who feel they have some control over some aspects of their life are less subject to stress. If you don't like the way something is going, say so politely.
- **Let go.** Learn the difference between what you can control and what you cannot. Stop worrying about things that are beyond your control. Use that energy to make changes you can.
- **Manage your time.** To avoid feeling rushed, plan out how much time you will need to accomplish tasks, to get ready to go places, to travel, to eat, etc. . .
- **Practice meditation.** Spend at least 15 minutes a day relaxing your mind, sit comfortably, breathe calmly, perhaps listen to some soft music, and just clear your mind.
- **Treat yourself with compassion.** Give yourself permission to make mistakes, to play without feeling guilty, to change your mind, and to set aside time only for you.

Exercise

Exercise

You are now recovering from your weight loss surgery and it is time to start thinking about an exercise program that is not only right for you but one that will help you experience healthier weight loss.

Benefits of Exercise

- **Increases self-esteem**
- **Speeds up the weight loss process**
- **Strength training/weight lifting helps reduce "excess skin"**
- **Decreases stress and elevates mood**
- **Helps with heart health**



Starting An Exercise Program

Find some activity you enjoy doing. For example, if you like being outdoors, stay with an activity that allows you to be outside, such as walking, hiking or biking. Find friends and family who also enjoy these activities so that you stay motivated. Do not try to do too much in the beginning. You need to start slowly and gradually add to your routine. This may mean walking only 5 minutes the first time and adding 5 more minutes each week. You can start walking or another light activity about 2 weeks following surgery. If you have pain in weight-bearing joints, look into a local water aerobic class or try using an elliptical machine at a local gym.

Loss of Bone and Muscle Mass

When the body is in a state of stress it tends to burn muscle mass preferentially to fat mass. The way to combat this is to use your muscles regularly (i.e. daily) and eat plenty of protein. This will cause the body to use fat rather than muscle as its energy source. This concept is similar with calcium stores. Calcium is stored in the bones. Strong bones require calcium, phosphorous and other nutrients in addition to weight-bearing exercise. Obese persons tend to have strong bones because the additional weight stimulates bone growth. When major, rapid weight loss occurs and adequate mineral supplementation is lacking, osteoporosis is more likely.

Loss of muscle mass and osteoporosis are preventable. Follow the nutritional guidelines in the Diet section to maintain optimal nutritional status. In addition, it is very important during active weight loss to exercise every day. We recommend at least 20-30 minutes of aerobic exercise and weight-bearing exercise.

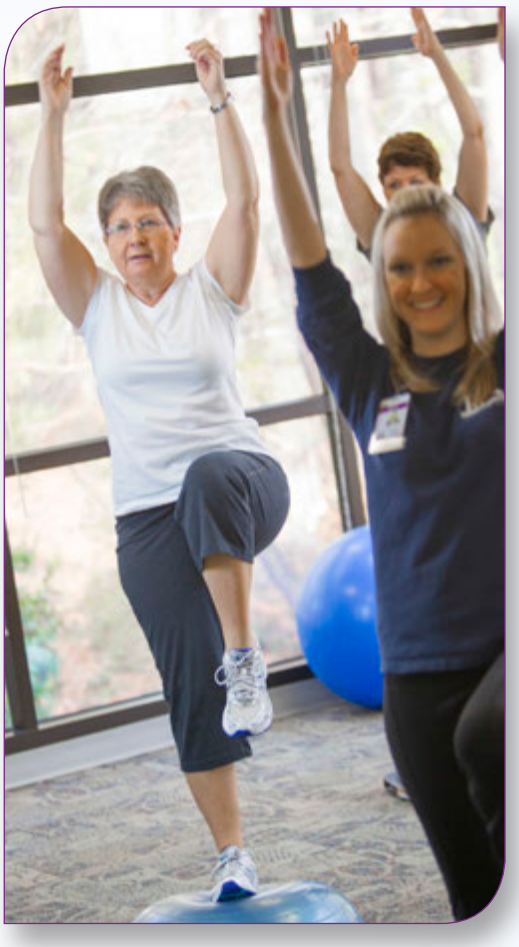
Workout Tips

- **Look at exercise like a prescription:** if your doctor tells you to take a medication every day, you are very likely to take it. Think about exercise as something you MUST get every day (or at least 4 days a week).

- **Do research:** find out what types of classes are offered at local gyms and decide what you would like to try. Or look for new walking trails in your community to change your scenery. Explore new types of exercise!

- **Change your routine:** let's say you love to walk, but you are bored with it. Change your route or find a buddy to walk with you to make it less boring.

- **Listen to some music:** treat yourself to some type of music (iPod, MP3 player, etc.). Put some music on it that you love and you'll find that 30 minutes of exercise will just speed by.



- **Know what makes you give up on a program:** if going on vacation throws off your fitness plans, try getting a little exercise while you're traveling. Can anybody say, "Walks on the beach?"

- **Make a schedule:** make exercise a priority. If you don't schedule it into your regular routine, you will be far less likely to follow through with it.

- **Stay active between workouts:** walk as much as possible between workouts. Park farther away, get off the bus a couple of stops early, walk around the store once before you put anything into your cart.

- **Participate in group sports/activities:** participating in group activities increases the chances that you will stick to the program. Choose water exercise, yoga or stretching classes will be at places and times where there are other people who are actively involved in exercise.

Choosing a Personal Trainer

There is a reason movie stars and athletes use personal trainers: working with a personal trainer is one of the fastest, easiest, most successful ways to improve your health. In fact, personal training has proved so effective that it has spread well beyond the world of the rich and famous. Today, personal trainers are used by people of all fitness, social and economic levels to help make lifestyle changes that they could not achieve by themselves. A personal trainer can help you:

- **Improve your overall fitness**. A trainer will monitor and fine tune your program as you go, helping you work your way off plateaus.
- **Reach a healthy weight.** Remember that the surgery is only one of the tools to weight loss. Body fat reduction, weight reduction and management, body shaping and toning can all be achieved with the aid of a qualified personal trainer who can help you set realistic goals and determine strategies, all while providing the encouragement you need.
- **Learn to stick to it.** Sticking with a well-intentioned plan is one of the biggest challenges that exercisers face. Qualified personal trainers can provide motivation for developing a plan that places a high priority on health and activity. A trainer can help you brainstorm an agenda to overcome your biggest obstacles to exercise.
- **Focus on your unique health concerns.** Most personal trainers are familiar with the special needs of morbid obesity, arthritis, and diabetes. Your trainer can work with your physician and physical therapist to plan a safe, efficient program that will enable you to reach your health goals.
- **Find the right way to work out.** You will learn the correct way to use equipment with the appropriate form and technique for cardiovascular work and free-weight training.
- **Stop wasting time.** Get maximum results in minimum time with a program that is specifically designed for you. Your trainer will identify workouts that use your strengths and improve on weak points in a way that is efficient and effective.
- **Learn new skills.** Want to learn to skate, golf like a pro or get ready for an adventure vacation? An individualized program can improve your overall condition and develop the specific skills you will need.
- **Enhance your mind, body, and spirit.** A personal trainer can act as a door to personal growth experiences. Many personal trainers provide mind-body activities such as Tai Chi sessions.
- **Benefit from the buddy system.** What could be better than making a commitment to regularly meet with someone who will provide you with individualized attention?

Make sure that your trainer has a college degree in the field of fitness. Ask if the trainer belongs to professional fitness and exercise associations and regularly attends workshops or conventions. You can find a personal trainer through your local health club or community center.

Walking Workout



Recent research indicates that walking is one of the best ways to be in charge of your life. Besides the well documented health benefits, the beauty of walking is you can do it at your own pace. Walking is the first type of exercise that we recommend, both before and after surgery. If you are new to exercise and you are also recovering from surgery, you can walk 10 to 20 minutes four or five days a week. As you get stronger, you can increase the distance and the speed to your comfort level.

As with any type of exercise, it is still important to warm up, then stretch. Start by walking for just 5 minutes and then do a few gentle stretches. Your muscles will stretch better if you walk a little first. Ask a fitness professional which stretches are best for you. Consistency is probably the most important part of your walking routine. The more time you can devote to walking each day, the healthier you'll be. Remember that short walks are better than none at all. Health, like life, is a journey. What you need to do is take the first step.

Water Fitness



Many of our clients like water programs. You can start water activities about 2-3 weeks after surgery. Water programs are great, since they are non-weight bearing and therefore are gentle to painful joints. Water fitness can improve strength, flexibility, cardiovascular health, decrease body fat, facilitate rehabilitation after surgery, improve functional living and even enhance other sports skills.

Water classes today offer more versatility than ever, but how do you find the right class for your goal, interests, needs and skills? Find the facility first. Look at the Rex Wellness Centers, the local YMCA, health clubs, and community centers. Look for a well maintained pool, adequate locker rooms and a life guard on duty. Hospitals usually offer arthritis or heart disease related classes through their physical therapy program and usually will let you join the class with a prescription from your Primary Care Physician. Those are favorite beginner classes since it is more of a medical environment and the cost is often covered through health insurance. Health clubs and the YMCA now also offer most specialized classes with different fitness levels.

Whichever class you decide to try, start with the lowest level and use the smallest water weights at first. Many people make the assumption that because the exercise is in the water, they cannot injure themselves. Most importantly, you should feel comfortable in the environment. If the water is too cold, you find the staff to be lacking empathy or do not feel at ease in your class, then this is not the right class for you. Water exercise, like any other type of exercise, should be done in a relaxing environment. If this is not the case, it is a sign to look for something else.

Chair Exercise

CHAIR CARDIO WORKOUT VIDEO

http://www.sparkpeople.com/resource/videos-detail.asp?video=38

- Calf raise
  - Lift and lower heels
- Heel-toe taps
  - Lengthen leg tap heel tap toe tap heel switch to other side
- March in place
- Swimming
  - Back or breast stroke, do this with legs resting or marching
- Dribble soccer ball or boxers shuffle
- Arms reach up and down
  - Can you combine dribbling with legs and arms reaching?
- Arms punch boxing speed bag, circular motion
  - Can you add in marching or boxers shuffle?
- Arms punch straight forward
  - Can you add in marching or boxers shuffle?

CHAIR BAND WORKOUT

http://www.sparkpeople.com/resource/videos-detail.asp?video=99

- Chest pull
  - Fold band in half, pull band apart
- Lateral Shoulder Raise
  - Place band under feet, arms move up to shoulder level
- Front Shoulder Raise
  - Place band under feet, arms move up to shoulder level
- Row
  - Place band under one foot, draw elbow back like starting a lawn mower
- Biceps Curl
  - Place band under feet, elbows into side, palms come to shoulder
- Triceps
  - Fold band in half, lock hand to shoulder, elbow into side, pull fist to hip
- Knee Lifts
  - Lean back slightly and engage abs, lift alternating knees
- Leg Extension
  - Lift foot up, extend leg to mostly straightened position
- Leg Press
  - Lift foot up, knee in toward chest, press away to straightened position (add band underneath foot)

Resistance Band Exercise Program

Perform 2-3 sets of each exercise for 10-15 repetitions. Keep a consistent breath; remember to exhale when the exercise is tough (muscle is contracting).

Chest Press

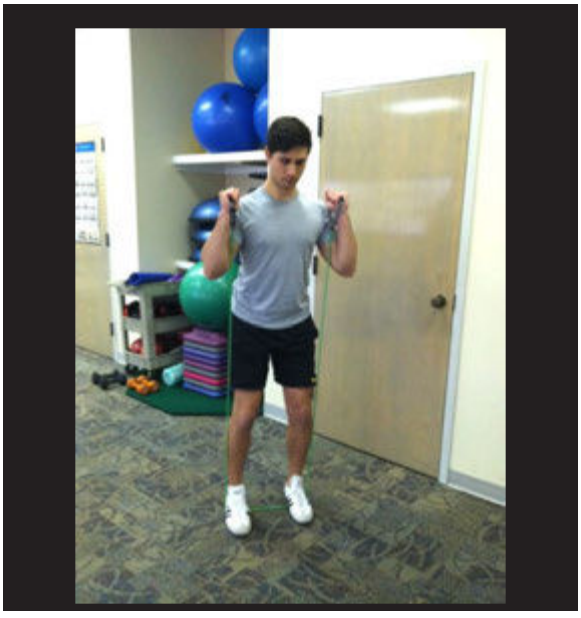
Lower shoulders toward wall and press back away to starting position. Tips: keep core muscles tight, keep a straight spine.





Squats

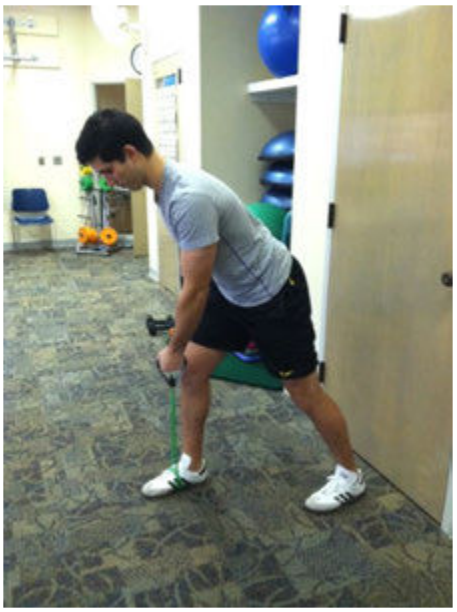
Feet shoulders-width apart, squat back like you would to sit in a chair.

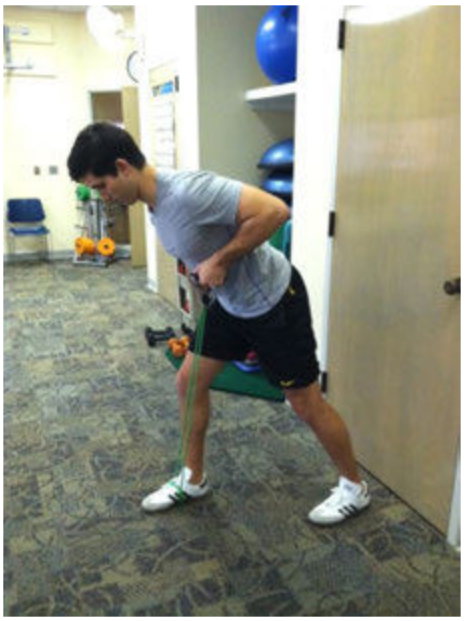




Row

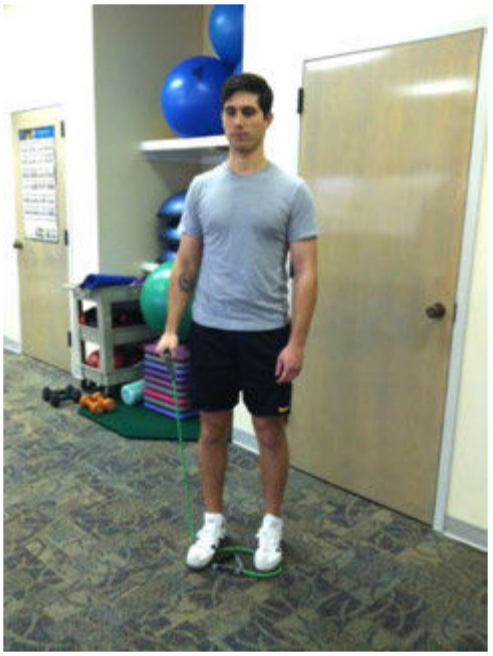
Secure band underneath foot, pull elbow up and back (like starting a lawn mower).

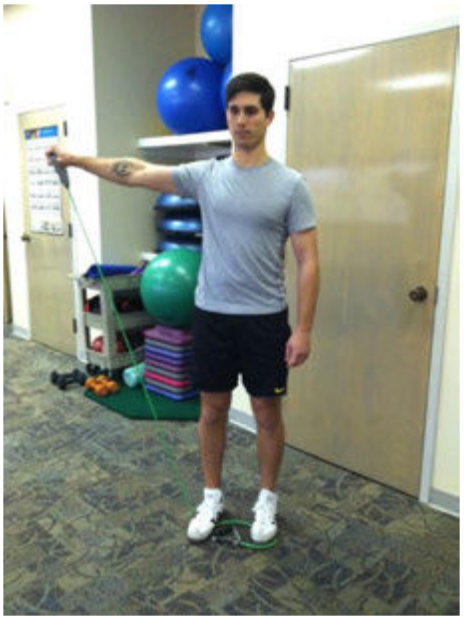




Lateral Shoulder Raise

Secure band underneath one foot, lift arm ending with wrist at shoulder level.

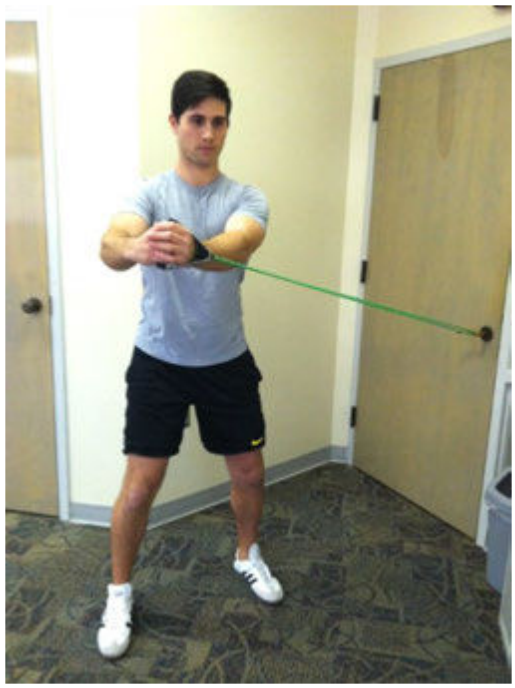




Core Rotation

Keep knees slightly bent, arms straight, rotate shoulders away from door where band is secured.





Abdominal Crunch

Keep core contracted, arms locked into position, use core muscles to bend body forward.





Split Squat

Tips: Don't let the front knee pass over toes, think about back knee moving toward floor.





Glut Extension

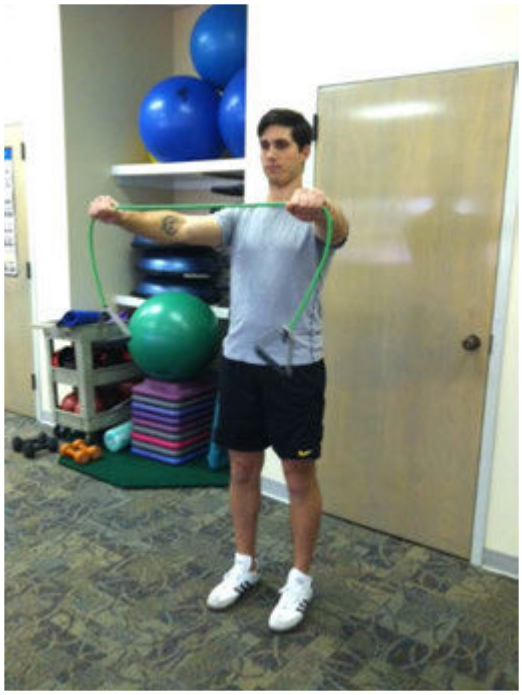
Keep core tight, extend heel away from door contracting the glut muscle.

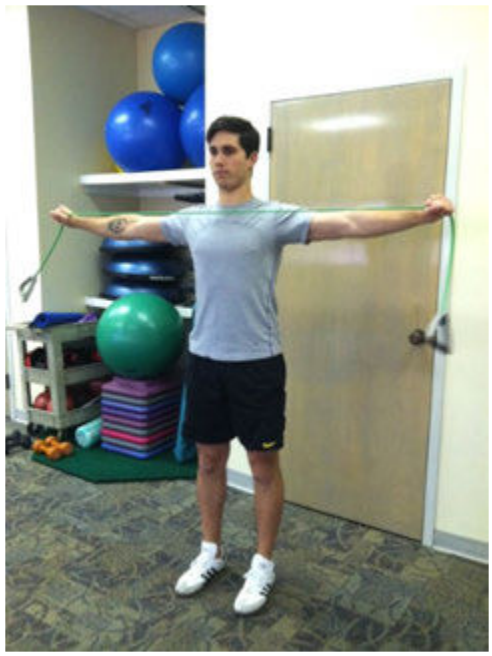




Shoulder Pull

Tip: Adjust difficulty by changing the length of band between your hands.





Bicep Curl

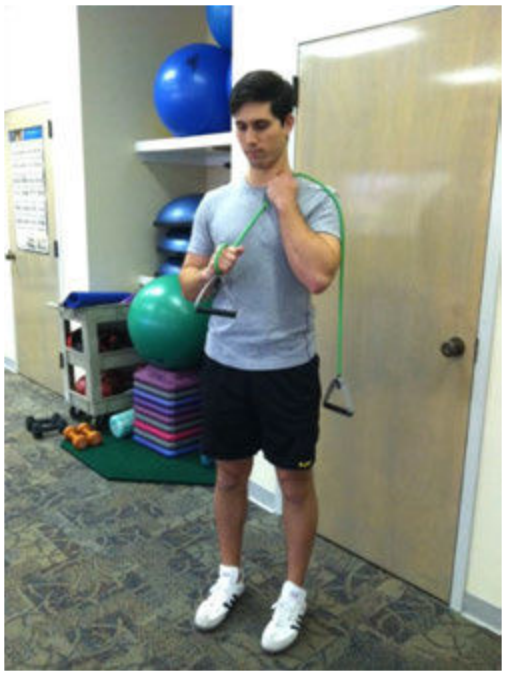
Tips: secure band underneath feet, lock elbows into your sides, keep a tall posture.

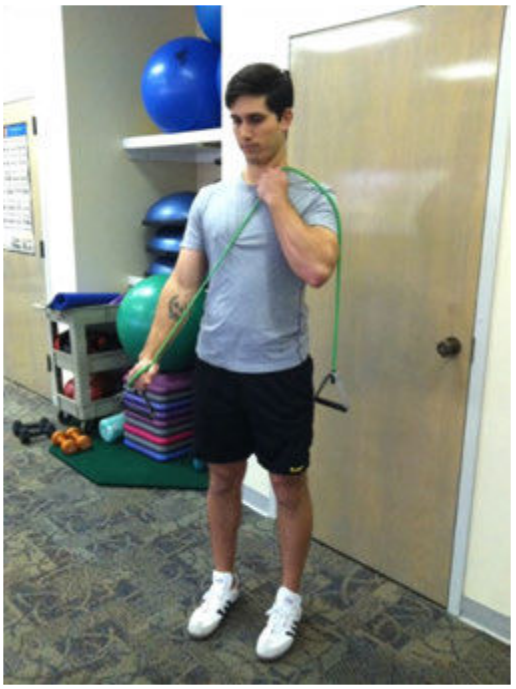




Tricep Extension

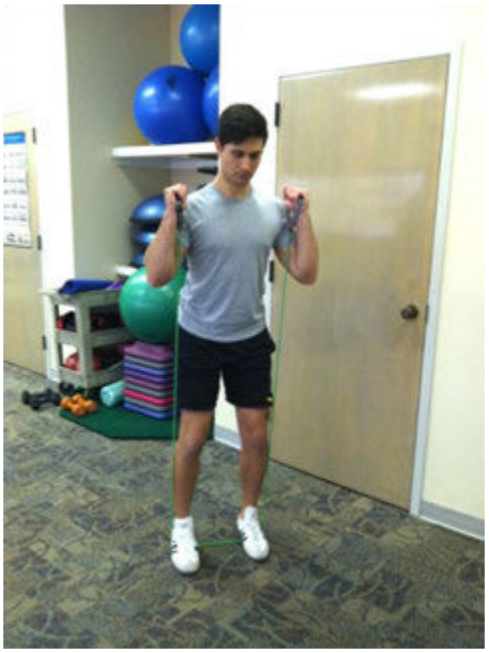
Tips: adjust difficulty by changing band length, keep elbows in close to your sides.

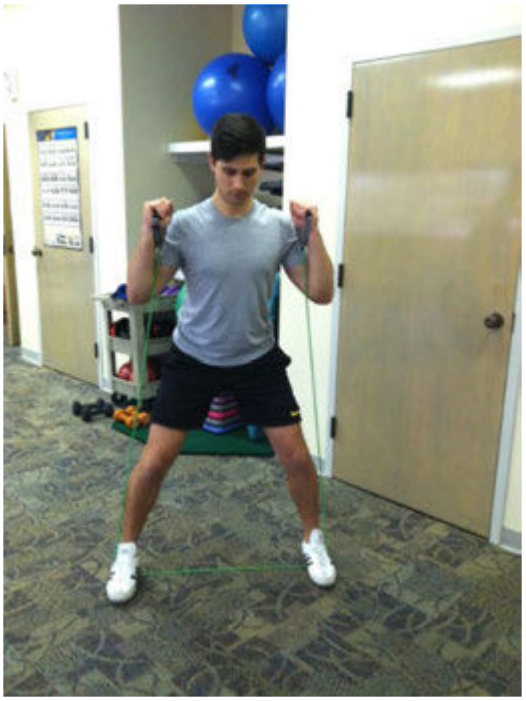




Band Walking

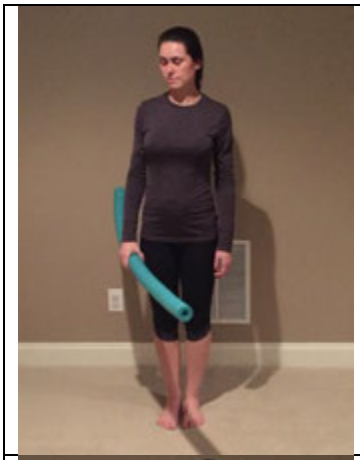
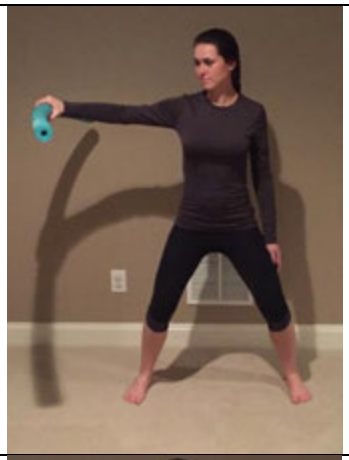
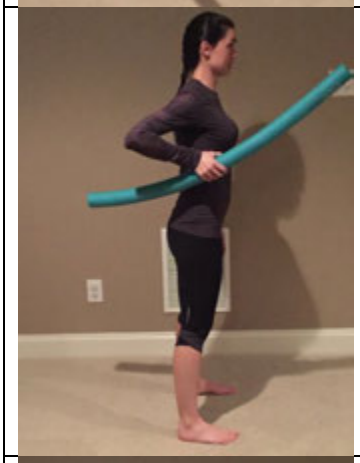
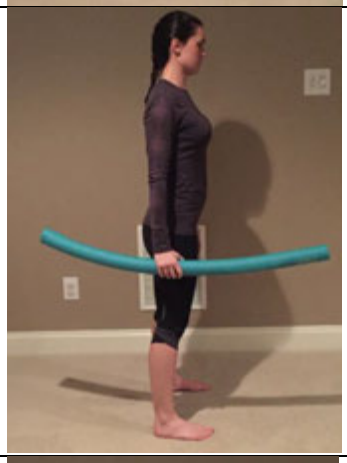
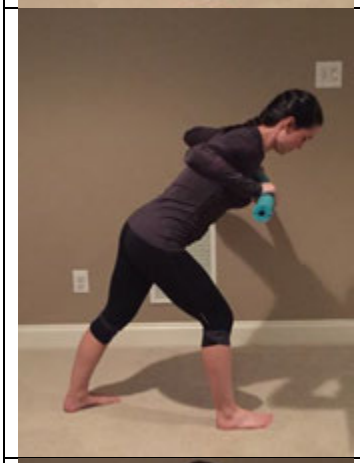
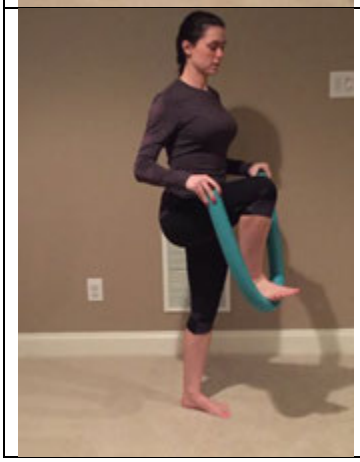
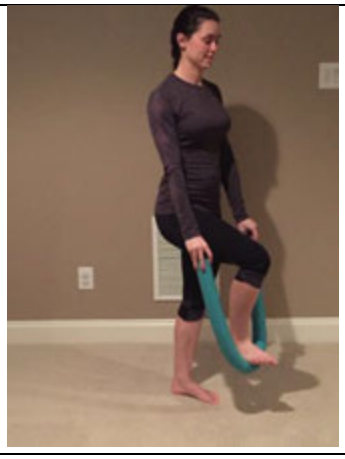
Tips: carefully secure band underneath feet.

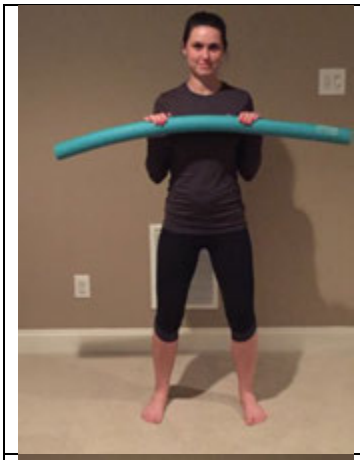
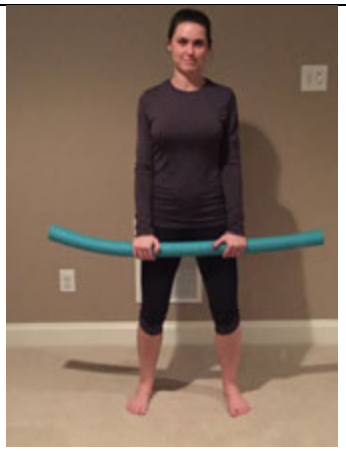
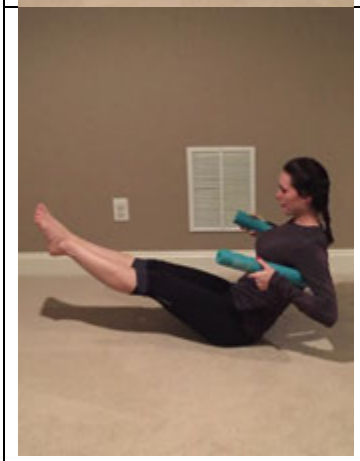
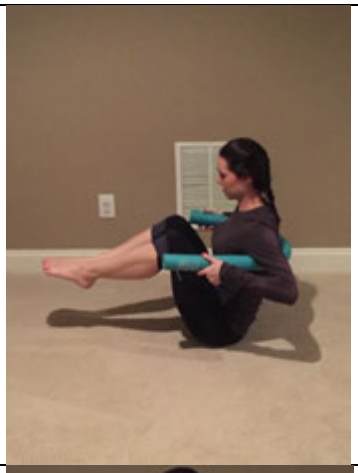
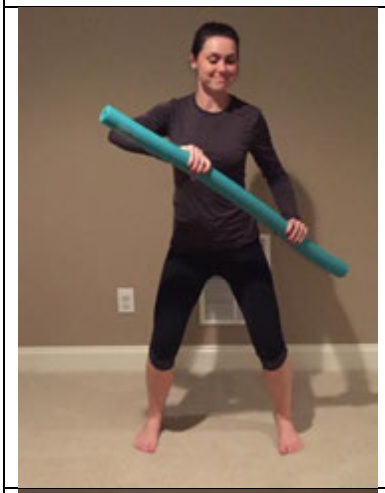
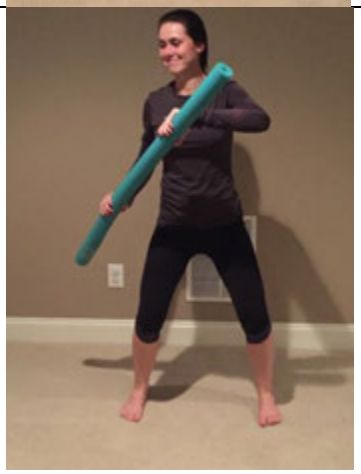
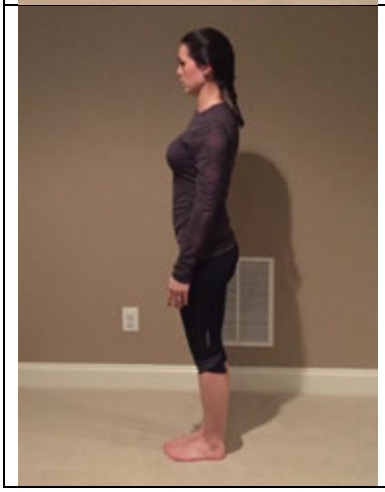


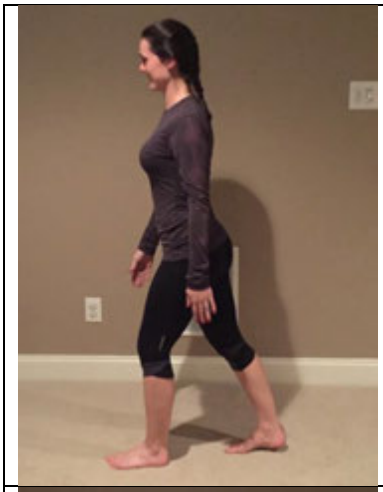
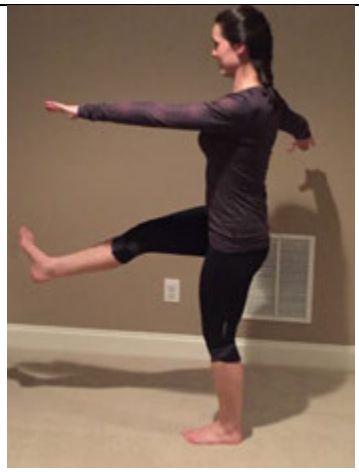
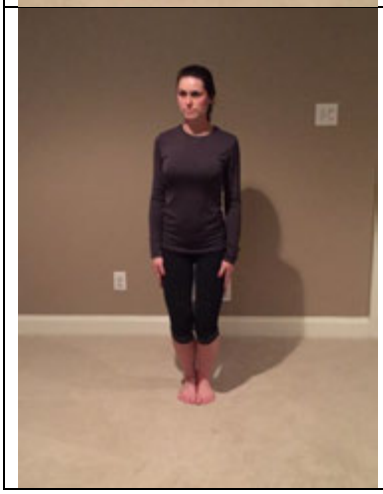
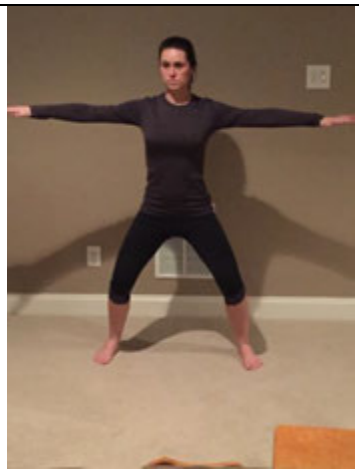


REX
UNC HEALTH CARE

WATER EXERCISE

Water Power Workout (Power meaning more impact)
https://www.youtube.com/watch?v=cBbA4-EhNf8

Class Offerings:
Aqua Aerobics - A great class for aerobic training and body toning since water offers 12-times the resistance of air! All levels are welcome. Your intensity level can be determined by your effort but the impact level in the water is always minimal.
Water Walking - This minimum-impact water workout utilizes both upper and lower body muscle groups to challenge you at various intensity levels. The entire lap pool is used to create the current and force necessary to provide appropriate resistance. Water sneakers are recommended.
Range of Motion - You will move through a series of exercises and stretches that will assist you in regaining or maintaining joint range- of- motion and flexibility. This class is perfect for those with joint or muscular discomfort as a result of arthritis, fibromyalgia or injury.

2008 Physical Activity Guidelines for Americans

Be Active Your Way: A Fact Sheet for Adults

Finding out what kind and how much physical activity you need

How do I do it?
It's your choice. Pick an activity that's easy to fit into your life. Do at least 10 minutes of physical activity at a time. Choose **aerobic** activities that work for you. These make your heart beat faster and can make your heart, lungs, and blood vessels stronger and more fit. Also, do **strengthening** activities which make your muscles do more work than usual.

Why should I be physically active?
Physical activity can make you feel stronger and more alive. It is a fun way to be with your family or friends. It also helps you improve your health.

How many times a week should I be physically active?
It is up to you, but it is better to spread your activity throughout the week and to be active at least 3 days a week.

How do I build up more physical activity?
Do a little more each time. Once you feel comfortable, do it more often. Then you can trade activities at a moderate level for vigorous ones that take more effort. You can do moderate and vigorous activities in the same week.

How much physical activity do I need to do?

This chart tells you about the activities that are important for you to do. Do **both** aerobic activities and strengthening activities. Each offers important health benefits. And remember, some physical activity is better than none!

Aerobic Activities

If you choose activities at a **moderate** level, do at least **2 hours and 30 minutes** a week.	If you choose **vigorous** activities, do at least **1 hour and 15 minutes** a week.

- Slowly build up the amount of time you do physical activities. The more time you spend, the more health benefits you gain. Aim for twice the amount of activity in the box above.
- Do at least 10 minutes at a time.
- You can combine moderate and vigorous activities.

Muscle Strengthening Activities

Do these at least **2 days** a week.

- Include all the major muscle groups such as legs, hips, back, chest, stomach, shoulders, and arms.
- Exercises for each muscle group should be repeated 8 to 12 times per session.



Be Active, Healthy, and Happy!

How can I tell an activity at a moderate level from a vigorous one?
Vigorous activities take more effort than moderate ones. Here are just a few moderate and vigorous aerobic physical activities. Do these for **10 minutes or more** at a time.

Moderate Activities

(I can talk while I do them, but I can't sing.)

- Ballroom and line dancing
- Biking on level ground or with few hills
- Canoeing
- General gardening (raking, trimming shrubs)
- Sports where you catch and throw (baseball, softball, volleyball)
- Tennis (doubles)
- Using your manual wheelchair
- Using hand cyclers—also called ergometers
- Walking briskly
- Water aerobics

Vigorous Activities

(I can only say a few words without stopping to catch my breath.)

- Aerobic dance
- Biking faster than 10 miles per hour
- Fast dancing
- Heavy gardening (digging, hoeing)
- Hiking uphill
- Jumping rope
- Martial arts (such as karate)
- Race walking, jogging, or running
- Sports with a lot of running (basketball, hockey, soccer)
- Swimming fast or swimming laps
- Tennis (singles)





For more information, visit www.healthfinder.gov/getactive

Be active **your way** by choosing activities you enjoy!

ODPHP Publication No. U0038

October 2008

Exercise Goals You Can Keep

- Hit the mat! There are a ton of exercises you can do at home, even when you can't get to the gym. Try yoga, Pilates, work out videos, squats, lunges, jumping jacks, push-ups, or crunches. Fit TV has great exercise programs for all different experience levels. Some videos to try: "Walk Away the Pounds." All it takes is a little floor space and before you know it, you're working up a sweat.

- Set realistic goals. Figure out how many days a week is practical for you. Try starting at 3 days a week. At the beginning of the week, map out your game plan for the days and times you will work out. Try to create a consistent schedule, to help you stick to it.

- Find something you like. If you hate running, try something else. Exercise classes, the elliptical machine, stationary bike and water aerobics are all good options. Finding classes that you like or working with a personal trainer 1-3 times per week are great ways to kick-start your exercise program. Find a workout partner and have gym dates. You'll be less likely to skip exercise if a trainer or friend is involved. The trick is finding something that will keep you exercising.

- Don't hibernate! Make sure you have tools around for the cold months. Stock the house with resistance bands, dumbbells, a jump rope, stability balls and exercise videos. Know that walking outside may not be possible, and plan for a back-up exercise schedule.

- Start off slowly. If you haven't been exercising regularly, don't overdo the frequency or intensity of your workouts. Start small and build up. This method will also make it more likely that you'll stick with it, because if it's too hard from the onset, you won't do it.

- Try to incorporate more calorie burning steps in your day. Take the stairs at work and park further away from the building. Bring your lunch so that you have more time to walk at your lunch break.

American Council on Exercise. Health and Fitness Tip on General Exercise. 2010. Available at: http://www.acefitness.org/fitfacts/fitbits_list.aspx. Accessed October 16, 2010.

U.S. Department of Health and Human Services. Physical Activity Guidelines for Americans. 2008. Available at: http://www.health.gov/paguidelines/factSheetAdults.aspx. Accessed July 6, 2012.

Long-term Success

Long-Term Success

Follow-up Visits

Having the proper follow-up after surgery is very important. Lab work will be drawn starting at your 1 month visit to make sure you are maintaining your health while losing weight. During these visits you will either see the surgeon or the physician assistant.

GASTRIC BYPASS/SLEEVE / DUODENAL SWITCH / SIPS
2 weeks
2 month (fasting, have labs drawn)
6 months (fasting, have labs drawn)
9 months (no labs required)
12 months (fasting, have labs drawn)
18 months (fasting, have labs drawn)
Yearly for a lifetime, unless the surgeon feels he needs to see you more frequently. You will need to have lab work done before your yearly visit.

You will also need to continue seeing your family doctor for any health problems you had prior to surgery. It will be up to him/her to adjust your medications as needed as you lose weight.

Vitamins/Medications

One week following surgery you will need to begin taking nutritional supplements, including a multivitamin, iron, B12 and calcium. Bariatric formulated vitamins include Bariatric Advantage,® and Celebrate.

Please keep in mind that as you lose weight, there may be some medications you may not need to continue. It is important to stay in close contact with your physician who prescribes those medications to decide if and when they should be discontinued or adjusted.

Medications To Avoid

- Ibuprofen
- Advil
- Motrin
- Aleve
- BC Powders
- Goody Powders
- Aspirin

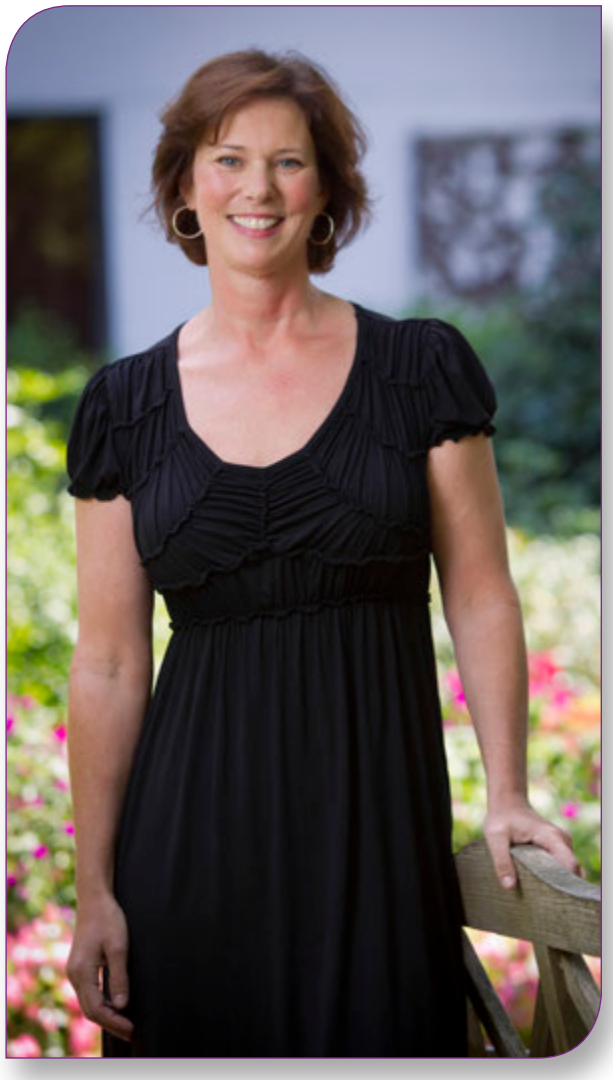
Lifestyle Changes

You cannot lose weight without having a healthy lifestyle. Do you have an unhealthy lifestyle? Here are some simple things you can do right now to keep yourself, your friends and family on track:

- **Get rid of all the junk food in your house**. (No, the kids don't need junk food).
- **Restock your cupboards** with healthy snacks your whole family can enjoy
- **Have allotted time** for fun and outside play
- **Have a daily schedule** to ease the chaos and decrease some of the stress in your life. This may mean taking some activities out of your schedule or your kid's activities. Often, we plan to do more than we have time for.
- **Cut the time** you and your family spend each day watching TV or using the computer.
- **Spend more time doing** more active things such as playing outside with the kids or going for a walk.
- **Plan your social life** with activities that do not include food such as going out dancing rather than going out to dinner.

Maintaining the Weight

Weight loss surgery is a powerful tool in the armamentarium against obesity. Only in conjunction with appropriate diet, exercise, and psychological support can long term success be maintained. The goal of surgery is to allow you to eat less but not be hungry.



Your window of weight loss is anywhere from 12 to 18 months. With exercise you can control the weight loss and may see weight loss for up to 24 months.

By eating only at mealtime and only until you feel full, your daily food intake will be decreased enough to provide weight loss. The weight loss will vary from week to week and may plateau for days and up to 2 weeks at a time. If you are at a plateau during the first 6 months post-op that lasts longer than 2 weeks, please call the office. Gradually, the rate of weight loss will decrease and your weight will stabilize. Your responsibility is to avoid snacking, grazing (continuous nibbling), to choose healthy foods, be active, exercise daily and nurture the process of recovery from obesity. Participate in group meetings and continue to use this guide to help you through the surgery process. Be sure to keep your regular office appointments so that your weight loss can be maximized and your health monitored.

8 Rules of Weight Loss

There are 8 rules that we have found helpful for weight loss success. All successful patients who have had surgery have these things in common.

1. **Consumption of an adequate amount of liquids, preferably water, is crucial.** You should consume a minimum of 1½ to 2 liters of liquid each day. This can only be done slowly, sipping fluids throughout the day.

   Never drink more than about 2 ounces over a 10-15 minute period. On hot days or when exercising, you should drink additional glasses of water.

2. **Follow your meal plan.** Unplanned eating between meals ("grazing") will sabotage your weight loss and result in the inability to lose an adequate amount of weight.

3. **The primary source of nutrition should be protein**. A diet consisting of 600-800 calories and 60-120 grams of protein should be the goal for the first 6 months.

4. **Never drink liquids when eating solid foods.** Liquids should be avoided for a period of 30 minutes before and 30 minutes after eating meals.

5. **Avoid foods and liquids which contain sugar sources, such as high fructose corn syrup.**
   Not only will they slow down your weight loss, but they may make you sick! Sugar may cause "dumping syndrome" in patients with gastric bypass.

   Dumping is when sugars go directly from your stomach pouch into the small intestine resulting in heart palpitations, nausea, abdominal pain, and diarrhea.

6. **Stop eating and drinking when you begin to feel full.**
   Listen to your body's signals. Do not look at the food that is left on your plate. Overfilling your stomach pouch will cause your pouch to stretch and may prevent weight loss success—or worse—cause long-term problems and complications.

7. **It is essential that you begin a regular exercise program before surgery and continue after surgery.** Our research indicates that this will increase your overall weight loss by 15% in 6 months.

8. **Attend support group meetings and workshops regularly.** They will help you stay focused and motivated and help you work through the changes that weight loss brings. Plus, you might just make a few new friends.

Nutrition

SECTION 1:

Pre- and Post-Op Nutritional Guidelines and Expectations

Patient Nutrition Information

Pre-Op Guidelines and Expectations for Post-Op Preparation

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Developed for Rex Surgical Specialists by:
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SECTION 1:

Overview of Bariatric Surgery and Changes to Start Making Now

Overview of Bariatric Surgery

Bariatric Surgery is an excellent tool to aid you in weight loss. You will experience very rapid weight loss after your bariatric surgery. Proper nutrition is essential to maintain lean body mass (muscle), hydration, skin elasticity and to minimize hair loss. A significant change in dietary habits and meal planning may be required to optimize long term success.

The primary nutrition goals after surgery

- Eat a balanced diet and practice appropriate eating behaviors that will promote weight loss while maintaining health.
- Consume adequate amounts of protein, which are needed to minimize loss of lean body mass and facilitate healing.
- Obtain adequate amounts of fluid that are also needed to maintain hydration.
- Obtain adequate nutrients for optimal health through healthy food choices and lifelong vitamin and mineral supplementation.

A significant change in dietary habits and meal planning is required after bariatric surgery.

We recommend that you begin adapting your current diet to prepare for this change. You can do this by choosing: *(see dietary exchange groups in subsection 2 for additional information)*

LEAN/LOW FAT PROTEIN FOODS

- Chicken, Meat, Fish, Soy Products, Beans
- Low fat dairy

COMPLEX CARBOHYDRATES

- Vegetables
- Fresh fruits
- Whole grain bread, pasta and cereals

HEALTHY FATS

- Olive, Canola, Corn, Soybean oil
- Nuts, avocados

Behavior Changes to Make in Preparation for Surgery

- **Avoid skipping meals; Plan for 3 small meals and I-3 protein rich snacks per day.**
- **Drink only decaffeinated, non-carbonated, and non sugar-sweetened fluids. You will need to eliminate carbonated, caffeinated and sugar-sweetened beverages.**
- **You will need to practice eating slowly and allow yourself 20-30 minutes to finish a meal.**
    - **It takes between 20-30 minutes for your stomach to tell your brain that you are full.**

Tips for slowing down include

- Pace yourself. Try putting your fork down between bites
- Use your left hand instead of your right hand, if right handed (or vice-versa)
- Use chopsticks or baby utensils
- Chew slowly and deliberately while taking time to enjoy the taste of your food
- Use ½ plate method of dividing your plate in half and set timer; consume only ½ plate within 15 minutes and if finished before 15 minutes half elapsed, wait; Then, consume other ½ of plate in remaining 15 minutes

Chew foods well…. Chew a food between 15-30 times per bite

- Due to the reduction in the size of your stomach, the ability to digest is limited
- Chew each bite 15-30 times to aid digestion

Drink fluids 30 minutes before or after meals to ensure that you have enough room in your stomach for foods that provide your body with the nourishment it needs

- Examples: protein rich foods, vitamins, & minerals

Foods to Avoid

Surgery will change the size and function of your stomach. Due to these changes, there are foods and fluids that should be avoided lilfelong.

***It is best to start adopting the diet changes for these starred foods prior to your surgery.**

AVOID	SMARTER CHOICES
*Carbonated drinks and sugar sweetened beverages	Use sugar free flavored waters like Crystal Light, Propel, decaf. tea sweetened with non-caloric sweetener
*High sugar foods (i.e. cakes, cookies, candy, pastries	Use sugar free pudding, sugar free Jello, or fresh fruit
*Fried or high fat foods (i.e. chips, fatty meats, chicken skin, biscuits, etc.)	Bake, broil or grill and use added fats conservatively. Choose lean meats and limited added fats.
*Tough dry meats	Use moist heat preparation for meats: stew, boil, roast
*Full fat dairy (i.e. milk, yogurt, cheese, ice cream)	Use skim or 1% milk products or lower sugar milk alternatives such as light soy milk or unsweetened almond milk
*Doughy bread, in addition to white rice & white pasta	Use toast or crackers (preferably whole grain)

*In the first 3-6 months after surgery

- Caffeine should be avoided. Caffeine is an irritant and can contribute to dehydration.
- Fibrous fruits and vegetables, as well as tough skins and membranes may be difficult to digest. (i.e. corn, strings of celery, stringy sweet potatoes, eggplant skin)

Nutrition Facts Label: Understanding Food Labels

Food labels are placed on products to help consumers make healthier food choices, but all of the information that manufacturers provide can be overwhelming and confusing. Here is some information to help you navigate through food labels and make the best food decisions possible.†

① START HERE →

② CHECK CALORIES

< 5g per serving →

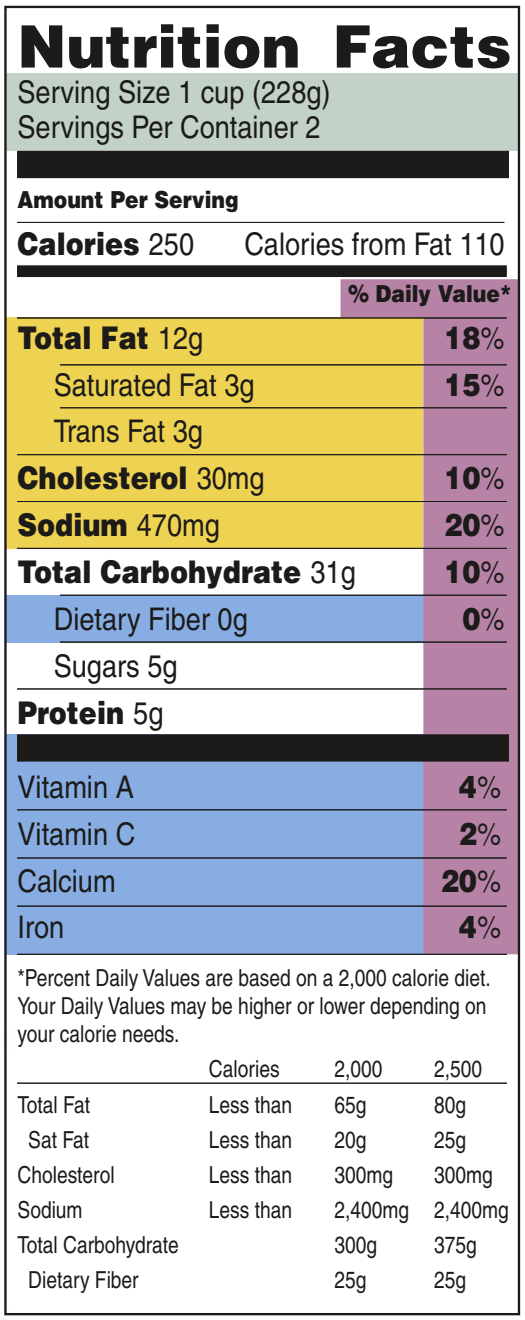
③ LIMIT THESE NUTRIENTS

< 5g per serving →

60-120g per day →

④ GET ENOUGH OF THESE NUTRIENTS

⑤ FOOTNOTE



⑥ QUICK GUIDE TO %DV

- 5% OR LESS IS LOW
- 20% OR MORE IS HIGH

* It is also just as important to read the ingredient list. This way you can see if there are any added fats or sugars. Ingredients on the label are listed from most to least.

① Serving Size

The serving size should be the first place you look on the nutrition label. All of the information on the food label applies to ONE serving of that food item. Remember: if a serving size = 1 cup and you consume 2 cups, you must remember to double the calories and all other nutrients!!

A serving size on the food label may differ from serving sizes based on the dietary exchanges. For example a serving of cereal in the dietary exchanges equals ½ cup, however a cereal food label might list 1 cup as a serving.

② Calories & Calories from Fat

The number of calories you consume is determined by how many servings you have.

General Guide to Calories (per serving/based on 2000 calories/day)

- 40 Calories = low
- 100 Calories = moderate
- > 400 Calories = high

Determining Calories from Fat:

(Calories from Fat/Total Calories) * 100 = % of calories from fat

Example from Sample: (110/250) * 100 = 44% of calories from fat

**Try to keep total calories from fat under 30% per serving!*

③ + ④ Nutrients: How much?

Saturated fat, trans fat, sodium and cholesterol (Orange Shading)

Try to limit these nutrients as much as possible. These nutrients are known to increase your chances of developing heart disease, high blood pressure, and some cancers.

**A good rule of thumb is to choose food items that have no more than 3 grams of fat for every 100 calories. Keep saturated fat less than 1 gram for every 100 calories.*

Fiber, vitamins and minerals (Blue Shading)

Make sure that you are getting enough of these nutrients. A diet rich in fruits, vegetables, and grain products that are high in fiber and low in saturated fat and cholesterol may reduce the risk of heart disease.

⑤ + ⑥ Footnotes and % DV

The footnote is responsible for giving you information about the % daily values. This is based on the requirements for all Americans and will be the same on every product.

The % daily values help to let the consumer know if the product is high or low in that specific nutrient.

- 5% or less = low
- 20% or more = high

† *These are generic food label reading instructions to assist you in choosing foods that are healthier than others. For more specific information on how to fit foods for your particular stage within the Weight Loss Surgery process, please contact your registered dietitian.*

Plate Method: Volumetric Eating Before Surgery & Portion Plate After Surgery

Before surgery, while attempting to improve your diet and lose weight, it is important to think volumetrically, meaning that you want to aim for 1/2 your plate consisting of non-starchy vegetables and fruits, ¼ of your plate consisting of protein, and ¼ of your plate consisting of starchy vegetables and whole grains.

After surgery, particularly during rapid weight loss, this changes significantly in terms of your plate size and portions. Your plate will need to be much smaller (i.e. saucer size) and the portions that make up your plate should consist of ½ protein, ¼-½ fruit/vegetable, and optional starch (no more than ¼ plate).

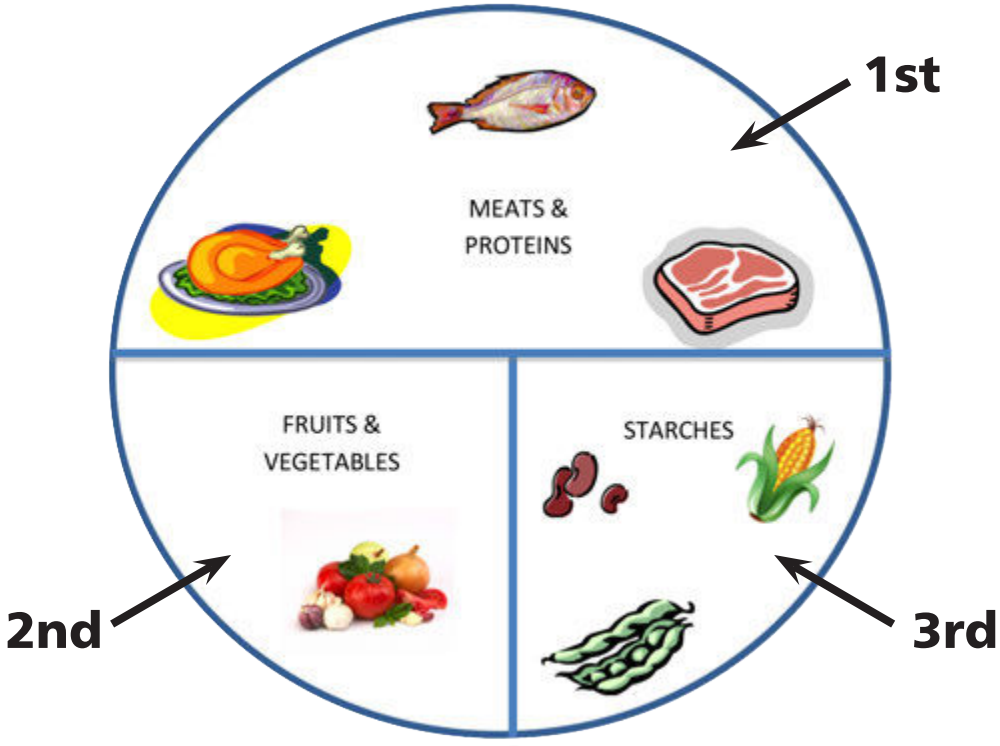


Plate Portion After Surgery
4-inch Plate (or less)

SECTION 2:

Menu Pattern and Exchange Lists

Dietary Exchange Groups

BREAD/STARCH — 15 grams carbs; ~3 grams protein — 80 cals/serving

- 1 oz bread
- 1 slice bread
- 2 slices high fiber/light bread
- ½ bun or English muffin
- ¼ bagel
- ½ cup dry or cooked cereal
- 1 whole grain sandwich thin
- ½ cup cooked whole grain or starchy vegetable (beans/corn/peas/potatoes/winter squash)
- ⅓ cup cooked rice/pasta
- ¾-1 oz most snack foods

NON-STARCHY VEGETABLES — 5 grams carbs; ~2 grams protein — 25 cals/serving

- ½ C Cooked vegetables (carrots, broccoli, zucchini, cabbage, etc.)
- 1 C Raw vegetables or salad greens
- ½ C Vegetable juice

FRUIT — 15 grams carbs; ~0 grams protein — 60 cals/serving

- 1 Small fruit (apple, orange, peach/nectarine, kiwi)
- ½ Large fruit (banana, grapefruit, mango, pear)
- ¾-1 C Fresh berries (strawberries, raspberries, or blueberries)
- 1 C Fresh melon cubes
- 4 oz Unsweetened juice

MEAT (1 oz.= 1 serving) — 0 grams carbs; ~7 grams protein

Very Lean: 35 cals

- Skinless white meat poultry
- Lean deli meats
- Lean fish
- ¼ cup egg substitute
- ½ cup beans
- 1 oz FF cheese

(0-1 gram fat)

Lean: 55 cals

- Lean beef - 93/7 & pork loin
- Skinless dark meat poultry
- Salmon/Tuna
- White meat poultry (skin)
- ¼ cup cottage cheese
- 2 TB Parmesan cheese

(3 grams fat)

Medium Fat: 75 cals

- Ground beef - 80/20
- Prime rib
- Dark meat poultry (skin)
- Ground poultry - 93/7
- Feta, Mozzarella, Ricotta
- 1 egg, whole
- ½ cup firm tofu

(5 grams fat)

High Fat: 100 cals

- Sausage, ribs
- Full fat cheese
- 3 slices bacon
- Turkey hotdog
- 1 TB peanut butter
- 12-20 nuts (¾-1 oz)
- High fat deli meats

(8 grams fat)

MILK/DAIRY — 12 grams carbs; 8 grams protein — 90 cals/serving

- 1 cup skim/1% milk
- 6 oz FF (low sugar) yogurt
- ½ cup fat free/low fat cottage cheese
- 1 oz. fat free cheese
- ¾ oz low fat cheese

FATS/OILS — 5 grams fat; 0 grams protein — 45 cals/serving

Mono and Poly Unsaturated Fats:

- 1 tsp oil (olive, canola, soybean, etc)
- 1 tsp margarine (trans fat free)
- 1 TB reduced fat mayonnaise
- 2 TB reduced fat salad dressing
- ½ TB peanut butter OR 6-10 nuts OR 1 TB seeds
- 2 TB avocado

Saturated Fats:

- 1 slice bacon
- 1 tsp butter
- 1½ TB reduced fat cream cheese
- 3 TB reduced fat sour cream
- 2 TB coconut

 *Refer to Exchange Lists for additional information (Next Page).

Exchange Lists

INTRODUCTION

Eating a well balanced diet and maintaining a healthy body weight is critical to your overall health. Increases in body fat can lead to serious health problems, such as high blood pressure, heart disease, and diabetes. This information was developed to help you learn how to choose the foods and portion sizes that are right for you, so that you can healthfully manage your weight while reducing your risk for disease.

Weight management can be achieved through the integration of five major principles:

Volumetrics: A principle based on the caloric density of foods. You can consume a larger volume of food when you include low calorie foods to your meals, such as fruits and vegetables. By adding these foods into your diet, you can feel satisfied while consuming fewer calories. This means that you can eat healthy and lose weight without the feeling of deprivation.

Healthy Fats: All fats have 9 calories per gram, which is more than twice the calories you get from carbohydrates or protein. Consuming excess calories from fat can easily lead to weight gain. Eating too much fat can contribute to heart disease and other vascular health problems. However, there are several different kinds of fat, including monounsaturated, polyunsaturated, saturated, and trans fat. The healthiest type of fat is monounsaturated and is found in canola oil, olive oil, nuts, and avocado. Polyunsaturated fats are found in corn oil, soybean oil, or sunflower oil and are also a better choice. Omega-3 fat is a type of polyunsaturated fat that is found in fatty fish, such as tuna and salmon, and protects the heart. Try to limit your consumption of saturated and trans fats. Saturated fats are found in meats, dairy products, coconut, palm/palm kernel oil, and hardened shortenings, such as lard. Trans fats are fats that have been "hydrogenated" during processing, making them more shelf stable. Examples of foods that contain trans fats include hard margarine and baked, "dessert-type" foods. Saturated and trans fats can raise your cholesterol, and trans fats decrease your good cholesterol as well!

Fiber: Foods that are high in fiber are filling and may help you reduce your intake of higher calorie choices. Fiber also may keep cholesterol levels down and keep your digestive tract working smoothly. Foods that are rich in fiber include whole grains, such as oatmeal and whole wheat breads. Fruits and vegetables are also good sources of fiber.

Meal frequency: Eating meals and snacks no more than 3-5 hours apart from one another prevents your metabolism from slowing to a crawl. It also prevents you from becoming famished, and eating the first thing that comes along, which is not always the healthiest food choice.

Physical Activity: The simplest weight management tool that you have is physical activity. You can easily incorporate more activity into your life by taking the stairs at work instead of the elevator, walking with a friend around the neighborhood, or simply parking a few blocks away when running errands and walk to your destination. If you're already

fairly active, gradually work in some regular physical activity. Start slow and work your way up to 30-60 minutes per day. You can also break the activity up, so that you do 10-15 minutes of physical activity, 3-4 times throughout the day.

Groups/Lists	Carbohydrates (Grams)	Protein (Grams)	Fat (Grams)	Calories
CARBOHYDRATE GROUP				
Starch	15	3	0-1	80
Fruit	15	-	-	60
Milk				
Fat-Free/Low-Fat	12	8	0-3	90
Reduced Fat	12	8	5	120
Whole	12	8	8	150
Other Carbohydrates	15	varies	varies	varies
Non-starchy vegetables	5	2	-	25
MEAT & MEAT SUBSTITUTES GROUP				
Very Lean	-	7	0-1	35
Lean	-	7	3	55
Medium-fat	-	7	5	75
High-fat	-	7	8	100
FAT GROUP	-	-	5	45

Your personalized menu pattern for weight loss incorporates all six food groups. It includes adequate, but not excessive, net calories, and emphasizes fruits, vegetables and whole grains. Low- fat dairy and lean meats, fish, poultry and nuts are also included. Lastly, your healthy menu pattern is low in saturated and trans fats, cholesterol, sodium, and added sugar.
The exchange lists can be used when you are deciding on foods to choose when following your personalized menu pattern. Foods are listed with their serving sizes, which are usually measured after cooking. When you first begin, measuring the size of each serving will help you to "eyeball" the correct serving sizes. Also, please refer to the FAQ section of this booklet for other ways to visualize the appropriate serving sizes.

The exchange lists provide you with a lot of food choices. Their purpose is to allow you variety in your meals. Several foods, such as beans, peas, lentils, bacon, and peanut butter fall into more than list. This allows you to have more flexibility in your meal planning. Foods on the starch, fruit, and milk lists are similar in that they contain 12-15 grams of carbohydrate per serving. These groups can be "exchanged" for one another when trying to fit particular foods into your menu pattern.

STARCH LIST

One Starch Exchange equals: 15 grams of carbohydrate, 3 grams of protein, 0-1 grams of fat, and 80 calories

BREAD

Bagel	(4 oz) ¼ (1 oz)
Bread, reduced-calorie	2 slices (1 ½ oz)
Bread, white, whole-wheat, pumpernickel, rye	1 slice
English muffin	½
Hot dog bun or hamburger bun	½ (1 oz)
Pancake, 4 inch across, ¼ inch thick	1
Pita, 6 inch across	½
Roll, plain, small	1 (1 oz)
Tortilla, corn or flour, 6 inch across	1
Tortilla, 12 inch across	½
Waffle, 4 inch square or across, reduced fat	1

CEREALS & GRAINS

Bran cereals	½ cup
Cereals, unsweetened, ready-to-eat	¾ cup
Cereals, puffed	1½ cups
Cereals, sugar frosted	½ cup
Cereals, shredded wheat	½ cup
Cornmeal, dry	3 Tbsp
Couscous	1/3 cup
Breadcrumbs	1/3 cup
Flour, dry	3 Tbsp
Granola, low-fat	¼ cup
Grape-Nuts	¼ cup
Grits	½ cup
Kasha	½ cup
Muesli	¼ cup
Oats, dry	¼ cup
Oats, cooked	½ cup
Pasta	1/3 cup
Rice, white or brown	1/3 cup
Wild rice	½ cup
Wheat germ	3 Tbsp

STARCHY VEGETABLES

Baked beans	1/3 cup
Corn	½ cup
Corn on the cob	3" cob
Mixed vegetables with corn & peas	1 cup
Peas, green	½ cup
Potato, baked	½ medium
Potato, mashed	½ cup
Squash, winter (acorn, butternut, pumpkin)	1 cup
Yam or sweet potato, plain	½ cup

CRACKERS & SNACKS

Animal crackers	8
Graham crackers, 2 ½" squares	3
Melba toast	4
Oyster crackers	20
Popcorn, popped, no fat added or low fat microwave	3 cups
Pretzels	¾ oz
Rice cakes, 4" across	2
Saltine-type crackers	6
Snack chips, fat-free or baked, potato or tortilla	15-20 (¾ oz)
Whole wheat crackers, no fat added	4-5
WASA crackers	2

BEANS, PEAS & LENTILS

Beans & peas, garbanzo/pinto/kidney/ white/split/black-eyed	1/3 cup
Lima beans	½ cup
Lentils	1/3 cup

STARCHY FOODS PREPARED WITH FAT

(count as 1 starch & 1 fat exchange)

Biscuit, 2 ½" across	1
Chow mein noodles	½ cup
Corn bread, 2" cube	1 (2 oz)
Crackers, round butter type	6
Croutons	½ cup
French fried potatoes, crinkle cut	12-15 pieces (2 oz)

Granola..... ¼ cup
Hummus..... 1/3 cup
Muffin, 5 oz..... 1/5 (1 oz)
Popcorn, microwaved..... 3 cups
Sandwich crackers, cheese or peanut butter filling..... 3
Snack chips, potato or tortilla..... 9-13 (¾ oz)
Stuffing, bread (prepared)..... 1/3 cup
Waffle, 4" square or across..... 1

NONSTARCHY VEGETABLE LIST

One Vegetable Exchange (1/2 cup cooked or 1 cup raw) equals: 5 grams of carbohydrate, 2 grams of protein, 0 grams of fat, and 25 calories

Artichoke
Artichoke hearts
Asparagus
Beans (green, wax, Italian)
Bean sprouts
Beets
Broccoli
Brussels sprouts
Cabbage
Carrots
Cauliflower
Celery
Cucumber
Eggplant
Green onions or scallions
Greens (collard, kale, mustard, turnip)
Kohlrabi
Leeks
Mixed vegetables (without corn, peas, or pasta)
Mushrooms
Okra
Onions
Pea pods
Peppers (all varieties)
Radishes
Salad greens (endive, escarole, lettuce, romaine, spinach)
Sauerkraut
Spinach
Summer squash
Tomato
Tomatoes, canned
Tomato sauce
Tomato/vegetable juice
Turnips
Water chestnuts
Watercress
Zucchini

FRUIT LIST

One Fruit Exchange equals: 15 grams of carbohydrate and 60 calories (The weight includes skin, core, seeds, and rind)

FRUIT

Apple, unpeeled, small ..... 1 (4 oz)
Applesauce, unsweetened ..... ½ cup
Apples, dried ..... 4 rings
Apricots, fresh ..... 4 whole (5½ oz)
Apricots, dried ..... 8 halves
Apricots, canned ..... ½ cup
Banana, small (approximately 4) ..... 1 (4 oz)
Blackberries ..... ¾ cup
Blueberries ..... ¾ cup
Cantaloupe, small ..... 1/3 melon (11 oz) or 1 cup cubes
Cherries, sweet, fresh ..... 12 (3 oz)
Cherries, sweet, canned ..... ½ cup
Cranberries ..... 3 Tbsp
Dates 3
Figs, fresh ..... 1 ½ large or 2 medium (3 ½ oz)
Figs, dried ..... 1 ½
Fruit cocktail ..... ½ cup
Grapefruit, large ..... ½ (11 oz)
Grapefruit sections, canned ..... ¾ cup
Grapes, small ..... 17 (3 oz)
Honeydew melon ..... 1 slice (10 oz) or 1 cup cubes
Kiwi ..... 1 (3 ½ oz)
Mandarin oranges, canned ..... ¾ cup
Mango, small, (5 ½ oz = ~½ cup ..... ½ fruit
Nectarine, small ..... 1 (5 oz)
Orange, small ..... 1 (6 ½ oz)
Papaya ..... ½ fruit (8 oz) or 1 cup cubes
Peach, medium, fresh ..... 1 (6 oz)
Peaches, canned ..... ½ cup
Pear, large, fresh ..... ½ (4 oz)
Pears, canned ..... ½ cup
Pineapple, fresh ..... ¾ cup
Pineapple, canned ..... ½ cup
Plums, small ..... 2 (5 oz)
Plums, canned ..... ½ cup
Plums, dried (prunes) 3
Raisins ..... 2 Tbsp
Raspberries ..... 1 cup
Strawberries ..... 1 ¼ cup whole berries
Tangerines, small ..... 2 (8 oz)
Watermelon ..... 1 slice (13 ½ oz) or 1 ¼ cup cubes

MEAT & MEAT SUBSTITUTE LIST

	Carbohydrates (Grams)	Protein (Grams)	Fat (Grams)	Calories
Very Lean	-	7	0-1	35
Lean	-	7	3	55
Medium-fat	-	7	5	75
High-fat	-	7	8	100

VERY LEAN MEAT AND SUBSTITUTES LIST

One Meat Exchange equals: 0 grams of carbohydrate and 7 grams of protein, 0-1 grams of fat, and 35 calories

POULTRY:

Chicken or turkey (white meat, no skin) ..... 1 oz
Cornish Hen (no skin) ..... 1 oz

FISH:

Fresh or frozen cod, flounder, haddock, halibut, or trout ..... 1 oz
Lox (smoked salmon)..... 1 oz
Tuna, fresh or canned in water ..... 1 oz

SHELLFISH:

Clams, crab, lobster, scallops, or shrimp..... 1 oz
Imitation shellfish ..... 1 oz

GAME:

Duck or pheasant (no skin) ..... 1 oz
Venison, buffalo, ostrich ..... 1 oz

CHEESE WITH I GRAM OF FAT PER OUNCE OR LESS:

Fat-free or low fat cottage cheese ..... ¼ cup
Fat-free cheese..... 1 oz

OTHER:

Processed sandwich meats with 1 gram of fat or less per ounce, such as deli thin, shaved, chipped beef, turkey, or ham..... 1 oz
Egg whites..... 2
Egg substitutes, plain ..... ¼ cup
Hot dogs with 1 gram of fat or less per ounce..... 1 oz

Kidney (high in cholesterol)..... 1 oz
Sausage with 1 gram of fat or less per ounce..... 1 oz

**Count the following items as one very lean meat and 1 starch exchange:*

Beans, peas, lentils (cooked)..... ½ cup

LEAN MEAT AND SUBSTITUTES LIST

One Meat Exchange equals: 0 grams of carbohydrate and 7 grams of protein, 3 grams of fat, and 55 calories

BEEF:

USDA Select or Choice grades of lean beef, trimmed of fat, such as round, sirloin, and flank steak.....1 oz
Tenderloin..... 1 oz
Roast (rib, chuck, rump) ..... 1 oz
Steak (T-bone, porterhouse, cubed) ..... 1 oz
Ground round ..... 1 oz

PORK:

Lean pork, such as fresh ham ..... 1 oz
Canned, cured, or boiled ham ..... 1 oz
Canadian bacon..... 1 oz
Tenderloin or center loin chop..... 1 oz

LAMB:

Roast, chop, or leg ..... 1 oz

VEAL:

Lean chop, roast ..... 1 oz

POULTRY:

Chicken, turkey (dark meat, no skin) ..... 1 oz
Chicken (white meat, with skin) ..... 1 oz
Domestic duck or goose
(well-drained of fat, no skin) ..... 1 oz

FISH:

Herring (uncreamed or smoked) ..... 1 oz
Oysters ..... 6 medium
Salmon (fresh or canned) ..... 1 oz
Catfish ..... 1 oz
Sardines (canned) ..... 2 medium
Tuna (canned in oil, drained) ..... 1 oz

GAME:

Goose (no skin) ..... 1 oz
Rabbit ..... 1 oz

CHEESE:

45% fat cottage cheese ..... ¼ cup
Grated Parmesan ..... 2 Tbsp
Cheeses with 3 grams of fat or less per ounce ..... 1 oz

OTHER:

Hot dogs with 3 grams of fat or less per ounce ..... 1 ½ oz
Processed sandwich meat with 3 grams of
fat or less per ounce, such as turkey pastrami
or kielbasa ..... 1 oz
Liver, heat (high in cholesterol) ..... 1 oz

MEDIUM FAT MEAT AND SUBSTITUTES LIST

One Meat Exchange equals: 0 grams of carbohydrate and 7 grams of protein, 5 grams of fat, and 75 calories

BEEF:

Ground beef, meatloaf, corned beef, short ribs ..... 1 oz
Prime grades of meat, trimmed of fat,
such as prime rib ..... 1 oz

PORK:

Top Loin or chop ..... 1 oz
Boston butt ..... 1 oz
Cutlet ..... 1 oz

LAMB:

Rib roast ..... 1 oz
Ground ..... 1 oz

VEAL:

Cutlet (ground or cubed, unbreaded) ..... 1 oz

POULTRY:

Chicken (dark meat, with skin) ..... 1 oz
Ground turkey or ground chicken ..... 1 oz
Fried chicken (with skin) ..... 1 oz

FISH:

Any fried fish product ..... 1 oz

CHEESE WITH 5 GRAMS OF FAT OR LESS PER OUNCE:

Feta ..... 1 oz
Mozzarella ..... 1 oz
Ricotta ..... ¼ cup (2 oz)

OTHER:

Egg (high in cholesterol, limit to 3 per week) 1
Sausage with 5 grams of fat or less per ounce ..... 1 oz
Tempeh ..... ¼ cup
Tofu ..... 4 oz or ½ cup

HIGH-FAT MEAT AND SUBSTITUTES LIST

One Meat Exchange equals: 0 grams of carbohydrate and 7 grams of protein, 8 grams fat, and 100 calories

PORK:

Spareribs..... 1 oz
Ground pork ..... 1 oz
Pork sausage..... 1 oz

CHEESE:

All regular cheeses, such as American, cheddar, Monterey Jack, and Swiss..... 1 oz

OTHER:

Processed sandwich meats with 8 grams of fat or less per ounce, such as bologna, pimento loaf, and salami .....1 oz
Sausage, such as bratwurst, Italian, knockwurst, Polish, smoked ..... 1 oz
Hot dog (turkey or chicken)..... 1 (10/lb)
Bacon ..... 3 slices (20 slices/lb)
Peanut butter (contains unsaturated fat)..... 1 Tbsp

**Count the following as 1 high-fat meat plus 1 fat exchange:*
Hot dog (beef, pork, or combination) 1 (10/lb)

MILK LIST

One Milk Exchange equals: 12 grams of carbohydrate and 8 grams of protein

	Carbohydrates (Grams)	Protein (Grams)	Fat (Grams)	Calories
Fat-Free/Low-Fat	12	8	0-3	90
Reduced Fat	12	8	5	120
Whole	12	8	8	150

FAT-FREE & LOW-FAT MILK

(0-3 grams fat per serving)

Fat-free milk ..... 1 cup
½% milk ..... 1 cup
1% milk ..... 1 cup
Buttermilk, low-fat or fat-free ..... 1 cup
Evaporated fat-free milk ..... ½ cup
Fat-free dry milk ..... 1/3 cup dry
Soy milk, low-fat or fat-free ..... 1 cup
Yogurt, fat-free, flavored, sweetened with nonnutritive sweetener ..... 6 oz
Yogurt, plain fat-free ..... 6 oz

REDUCED-FAT MILK

(5 grams fat per serving)

2% milk ..... 1 cup
Soy milk ..... 1 cup
Sweet acidophilus milk ..... 1 cup
Yogurt, plain low-fat ..... 6 oz

WHOLE MILK

(8 grams fat per serving)

Whole milk ..... 1 cup Evaporated whole milk ½ cup Goat's milk ..... 1 cup Kefir 1 cup Yogurt, plain (made from whole milk) ..... 8 oz

FATS

One Fat Exchange equals: 5 grams of fat and 45 calories

MONOUNSATURATED FATS LIST

Avocado, medium ..... 2 Tbsp (1 oz)
Oil (canola, olive, or peanut) ..... 1 tsp
Olives, ripe (black) ..... 8 large
Olives, green, stuffed ..... 10 large
Nuts, almonds or cashews ..... 6 nuts
Nuts, mixed (50% peanuts) ..... 6 nuts
Nuts, peanuts ..... 10 nuts
Nuts, pecans or walnuts ..... 4 halves
Peanut better, smooth or crunchy ..... ½ Tbsp
Sesame seeds ..... 1 Tbsp
Tahini or sesame paste ..... 2 tsp

POLYUNSATURATED FATS LIST

Margarine, stick, tub or squeeze ..... 1 tsp
Margarine, lower-fat spread
(30%- 50% vegetable oil) ..... 1 Tbsp
Mayonnaise, regular ..... 1 tsp
Mayonnaise, reduced-fat ..... 1 Tbsp
Nuts, walnuts, English ..... 4 halves
Oil (corn, safflower, or soybean) ..... 1 tsp
Salad dressing, regular ..... 1 Tbsp
Salad dressing, reduced fat ..... 2 Tbsp
Miracle Whip Salad Dressing, regular ..... 2 tsp
Miracle Whip Salad Dressing, reduced-fat ..... 1 Tbsp
Seeds (pumpkin or sunflower ..... 1 Tbsp

SATURATED FATS LIST

Bacon, cooked ..... 1 slice (20 slices/lb)
Bacon, grease ..... 1 tsp
Butter, stick ..... 1 tsp
Butter, whipped ..... 2 tsp
Butter, reduced-fat ..... 1 Tbsp
Chitterlings, boiled ..... 2 Tbsp (½ oz)
Coconut, sweetened, shredded ..... 2 Tbsp
Coconut milk ..... 1 Tbsp
Cream, half and half ..... 2 Tbsp
Cream cheese, regular ..... 1 Tbsp (½ oz)
Cream cheese, reduced-fat ..... 1½ Tbsp (¾ oz)
Shortening or lard ..... 1 tsp
Sour cream, regular ..... 2 Tbsp
Sour cream, reduced-fat ..... 3 Tbsp

FREE FOODS LIST

Free foods include any food or drink that contains less than or equal to: 5 grams of carbohydrate and 20 calories

FAT-FREE OR REDUCED FAT FOODS

Nonstick cooking spray
Salad dressing, fat-free, Italian ..... 2 Tbsp
Whipped topping, regular ..... 1 Tbsp
Whipped topping, light or fat-free ..... 2 Tbsp

SUGAR-FREE FOODS

Candy, hard, sugar-free ..... 1 candy
Gelatin dessert, sugar-free
Gelatin, unflavored
Gum, sugar-free
Jam or jelly, light ..... 2 tsp
Sugar substitutes, including:
- Equal® (aspartame)
- Splenda® (sucralose)
- Sprinkle Sweet® (saccharin)
- Sweet One® (acesulfame K)
- Sweet-10® (saccharin)
- Sugar Twin® (saccharin)
- Sweet 'N Low® (saccharin)

Syrup, sugar-free ..... 2 Tbsp

DRINKS

Bouillon, broth, consommé
Bouillon or broth, low sodium
Cocoa powder, unsweetened ..... 1 Tbsp
Coffee, decaffeinated
Drink mixes, sugar-free
Tea

CONDIMENTS

Ketchup ..... 1 Tbsp
Horseradish
Lemon juice
Lime juice
Mustard
Pickle relish ..... 1 Tbsp
Pickles
Dill ..... 1 ½ medium
Sweet (bread and butter) ..... 2 slices
Sweet (gherkin) ..... ¾ oz
Salsa ..... ¼ cup
Soy sauce, regular or light ..... 1 Tbsp
Taco sauce ..... 1 Tbsp
Vinegar
Yogurt ..... 2 Tbsp

SEASONINGS

Flavoring extracts
Garlic
Herbs, fresh or dried
Pimento
Spices
Tabasco or hot pepper sauce
Wine, used in cooking
Worcestershire sauce

FAQs

1. Will this plan always work for me?

Remember, your meal plan is written with you and considers your likes and dislikes. It is flexible and can be adjusted to your needs. The exchange groups are provided so that you can make appropriate choices for yourself without the typical restrictions that people run into when following a diet. This plan is provided as a guide to living a healthy life. It allows you to substitute particular exchange groups for other foods so that it can be easily followed, long term! For example, 1 starch/carbohydrate exchange can easily be substituted for 1 fruit or milk exchange, allowing you to have an incredible amount of flexibility in your food choices.

2. Is there an easy way to estimate my portion sizes?

You can estimate portion sizes easily by referring to the general guidelines provided below. However, using measuring cups, spoons and kitchen scales is most effective.

- 1 teaspoon (tsp)—about the size of a (pointer) fingertip
- 1 tablespoon (Tbsp)—about the size of your thumb or a tube of lipstick
- ¼ cup (C)—one large egg
- ½ C—1 handful
- 1 C—the size of a tennis ball or as much as a woman's palm can hold

Common Measurements

3 tsp = 1 Tbsp	8 oz = 1 cup
4 oz = ½ cup	5⅓ Tbsp = ⅓ cup
4 Tbsp = ¼ cup	1 cup = ½ pint

Use these serving sizes to estimate portions and/or exchanges:

- 1 oz chicken, poultry, or meat—size of a matchbook
- 1 oz meatball—size of a golf ball
- 3 oz cooked fish, poultry, or meat—size of a deck of cards, the palm of your hand, or a checkbook
- 1 oz cheese—size of a lipstick tube or thumb
- 1 tsp peanut butter—size of the tip of your thumb
- 2 Tbsp peanut butter—size of a golf ball
- 1 medium piece of fruit—size of a baseball
- 1 medium bagel—size of a hockey puck
- 1 C dry cereal—a mounded handful
- 1 oz cheese—size of four dice

- 2 oz cheese—size of a pair of dominos
- 1 small baked potato—size of a computer mouse
- 1 C raw vegetables, yogurt, or sliced fruit—as much as would fit into an average woman's hand

3. What if I eat out at fast food restaurants?

Fast food restaurants should provide nutrition information for all of their food products. However, this information is often difficult to find. Therefore, take time to research healthier choices served at fast food restaurants before you arrive. There are many resources available on the web, including:

- http://www.dietfacts.com
- http://www.calorieking.com
- http://www.foodfacts.com

4. What if the foods I eat differ from the foods found in the exchange booklet?

Exchange information is based on foods found in grocery stores. However, food companies often change the ingredients in their products. That is why you need to check the Nutrition Facts panel of the food label. The nutrition facts tell you the number of calories and grams of carbohydrate, protein, and fat in one serving. Compare these numbers to the exchange information in this booklet to see how many exchanges you will be eating. Remember to pay attention to the serving sizes provided. The serving sizes that food companies choose when labeling their foods is not necessarily the same as an exchange serving size.

5. How do I read food labels? What should I look for?

Take a look at the US Food and Drug Administration's Center for Food and Nutrition Sciences lesson on reading nutrition facts labels. It is a great resource for you to learn what information to focus on when you are looking for healthy food choices.

- http://www.cfsan.fda.gov/~comm/vltlabel.html
- http://www.cfsan.fda.gov/~dms/foodlab.html

SECTION 3:

Post Bariatric Surgery
How Does This All Work?

Post-Bariatric Surgery

Basic Nutrition Needs After Surgery

- 60 to 120 grams of protein/day
  - RYGB/VSG: 60-80g/day
  - DS/SIPS: 80-120g/day
- 64 fluid ounces of clear and full liquids
- Lifelong vitamin and mineral supplementation (chewable for 3-6 months post-op)
- Exercise
- Limit sugars and fats within the diet (<5g/serving)

How does this all work?

Protein Needs After Surgery

- Always eat your protein first. The first 2 to 4 ounces (or ¼ to ½ cup) of food consumed during a meal should be high in protein.
- Your body needs a minimum of 60-120 grams of protein each day for proper healing and repair, as well as for the preservation of your lean body mass throughout the weight loss process.
- Inadequate protein consumption, combined with rapid weight loss, such as with weight loss surgery, can lead to muscle wasting. This may cause you to feel nauseated and weak.
- Because protein will be such a crucial part of your diet post-surgery, it is important to think about what foods you will consume to obtain the appropriate amount in your diet.

Below is a list of some foods and their protein contents to assist you:

FOOD	SERVING	PROTEIN GRAMS
Hamburger, extra lean*	3 ounces	24.3
Chicken, roasted*	3 ounces	21.2
Fish*	3 ounces	20.6
Tuna, water packed*	3 ounces	20.0
Egg	1 large	6.3
Cheese, Cottage cheese	½ cup	14.0
Cheese, Mozzarella	1 oz	8.0
Cheese, Cheddar	1 oz	7.1
Skim/1% milk	1 cup	8.4
Soy milk, light	1 cup	6.7
Almond milk, unsweetened	1 cup	1.0
Yogurt, low fat (& low sugar)	½ cup	5.0
Yogurt, Greek, low fat (& low sugar)	½ cup	10
Tofu	½ cup	10.1
Textured soy protein (frozen)	½ cup	11.0
Textured soy protein (dry; TVP)	¼ cup	11.0
Soy beans (edamame), boiled	½ cup	10.5
Lentils, cooked	½ cup	9.0
Split peas, cooked	½ cup	8.1
Kidney beans, cooked	½ cup	7.6
Peanut butter	1 tbsp	3.8
Almonds	¾ oz	3.0
Walnuts	½ oz	2.0
Soy nuts	¾-1 oz (~2 TB)	11.0
Oatmeal, dry	½ cup	5.5

*1 oz meat = 7 grams protein

NOTE: Milk/Dairy products may not be well tolerated by patients after gastric bypass or sleeve procedures. Investigate alternatives.

Protein Supplements

- Also, you will want to consider protein powders, due to the limited volume of food that can consume post-surgery. Experiment with various products prior to surgery in order to ensure that they are palatable. And choose at least TWO to have on hand, in case your tastes change after surgery.

WHEY/SOY PROTEIN ISOLATE OR SOY PROTEIN CONCENTRATE OR MILK PROTEIN ISOLATES

- Look at the ingredients list, typically found under the nutrition label, to make sure that "isolate" is the first ingredient on the list; this will ensure a pure protein product;
- Words such as "hydrolyzed gelatin" and "collagen" are clue words that the protein is incomplete and NOT desirable; often, only 35-40% of the protein on the label is absorbed.

The first ingredient on the ingredient list (typically found under the Nutrition Label) should be:

Appropriate/High Quality	Not Appropriate/Incomplete
Whey Protein Isolate	Gelatin
Soy Protein Isolate	Collagen
Soy Protein Concentrate	Whey Protein Concentrate
Milk Protein Isolates (Casein)	
Egg/albumen Proteins	

Pre-op Full Liquid Diet

PRE-OPERATIVE PROTOCOL:

- BMI>50: 2 weeks
- BMI<50: 1 week

DIET

- 3-5 shakes per day (RTD or powders)
  - 1 Ketogenx bar can be substituted for 1 shake per day
- 64-96 oz. clear liquids
- 700-1000 calories per day

* More information on this diet is in the Pre-Operative Planning Section.

How to Mix a Protein Shake (Pre-op Full Liquid Diet)

For each of the 3-5 protein shakes choose....

OPTION A

- 1 serving protein powder
- 8 oz water
- Choose 1 serving fruit
  - 1/2 banana
  - 3/4 cup blueberries
  - 1 1/4 cup whole strawberries
  - Small peach
  - 3/4 cup fresh pineapple cubes

OR

OPTION B

- 1 serving protein powder
- 8 oz milk
  - Skim milk
  - 1% milk
  - Lactose free milk (skim/1%)
  - Unsweet almond milk
  - Unsweet/light soy milk

PROTEIN POWDERS

Examples of protein powders that are well tolerated and high quality include, but are not limited to:

- Unjury
- Bariatric Advantage
- Celebrate Protein 20
- Nectar (& Nectar Medical)
- BioChem Whey Protein Isolate
- IsoPure
- ProtiZyme
- Max Protein
- About Time (sweetened with stevia)
- Precision Engineered
- Chike
- Dymatize Elite
- Designer Whey
- AMP Wheybolic Extreme 60 (from GNC)
- Revival Soy
- Jay Robb
- Super Advanced Whey Isolate (by Body Fortress)
- Cellucor
- Isolyn (sweetened with stevia)
- Plant Fusion
- Six Star Protein Whey Isolate

***1 serving = 15-30 grams of protein**

There are also ready to drink shakes that some individuals prefer and these include, but are not limited to:

- Ensure Active High Protein
- Premier Protein
- EAS Myoplex Light
- Isopure
- Boost Glucose Control
- Oh Yeah
- Extreme Smoothie
- GNC Total Lean Shake
- Bipro

These drinks should have <5 grams of fat, < 5 grams sugar, and at least 15 grams of protein per 8 fl.oz.

Vitamins and Mineral Supplements

Understand that from the moment of surgery and on, if you do not take your supplements, undergo scheduled lab testing, and eat the proper foods, you will not be healthy…it is guaranteed! **You will be required to use chewable supplements for the first 3 months after surgery.**

After weight loss surgery your anatomy is altered. The stomach can no longer absorb nutrients as well as it did before surgery therefore it is mandatory that all patients take supplements for life.

VITAMINS AND MINERALS

The Bariatric Advantage® vitamin brand, as well as various other quality vitamin brands are available to bariatric patients looking for convenience. High quality vitamins and minerals will prevent the occurrence of deficiencies.

Common Deficiencies

Nutritional deficiencies are **guaranteed** to occur if you do not adhere to the supplemental guidelines set by your surgeon and dietitian and if you do not commit to the periodic blood work as prescribed. Patients that do not adhere to the requirements of supplements and periodic blood testing can/will have serious problems.

Deficiencies can be devastating to your body, and can result in irreversible neurologic damage, cardiac problems, anemia, or even death.

VITAMIN AND MINERALS

Vitamins and minerals are essential for energy metabolism, protein metabolism, bone formation and maintenance; protect tissues from disease and premature aging, proper neurologic function, immune function and a host of other functions.

CALCIUM DEFICIENCY

Bone is the primary tissue that suffers with calcium deficiency. Inadequate calcium may lead to osteoporosis, bone fractures and negative changes in blood pressure. Monitoring parathyroid hormone levels (PTH) is essential post-operatively. Often times PTH is elevated when you are not taking enough calcium. An elevated PTH level is abnormal.

IRON DEFICIENCY

Anemia is the most common effect of iron deficiency. The reduced iron supply to tissues results in decreased energy, lethargy, tiredness, pallor, headache, and heart enlargement.

VITAMIN D DEFICIENCY

Osteomalacia (softening of the bones) is the most common effect of low vitamin D levels in adults. Bone pain and muscle weakness may also been seen. Prolonged deficiencies can cause cardiac and neurological problems.

VITAMIN A DEFICIENCY

Effects of Vitamin A include reversible night blindness and non-reversible corneal damage known as Xerophthalmia. Lack of vitamin A can also lead to hyperkeratosis or dry, scaly skin.

ZINC DEFICIENCY

Symptoms of a zinc deficiency are varied. Some common symptoms include diminished senses of taste and smell, poor wound healing, hair loss, roughening of skin/rashes, low libido (men), canker sores, deformed nails, and lethargy. If this deficiency is left untreated more serious effects may result, such as severe diarrhea, severe (or total) hair loss, loss of night vision, and significant rashes around the mouth and genitals.

Daily Vitamin Routine Intake After Bariatric Surgery

RYGB & VSG

- Multivitamin with Iron - 2x
- Calcium citrate - 1200-1500mg (3 chewy bites/lozenges)
- Vitamin D - per patient labs

DS AND SIPS

- High ADEK Multivitamin - 3x
- Calcium citrate - 1800-2400mg (4 chewy bites/lozenges)
- Iron - 18-60mg
- Vitamin D - 5000 iu

Taking your Vitamins After Weight Loss Surgery: Timing for Maximum Absorption

Rex Surgical Specialists has created this easy-to-follow schedule for your daily vitamin and mineral intake. We hope this schedule will assist in eliminating any confusion as well as assist you in taking your supplements on a daily basis. We recommend **Bariatric Advantage®** and **Celebrate®** products as an option, as they are the two leading companies in post-operative vitamin and mineral supplementation for weight loss surgery patients. However they are not your only option.

Vitamins and Minerals should begin once full liquid diet is initiated (~2 days after surgery). You will be expected to purchase (or bring in) the supplements that you plan to use after surgery. This will be at your last nutrition session prior to surgery.

Bariatric Advantage®

*You have the option of ordering these supplements online through BariatricAdvantage.com. If you choose to do this, type in REX in the validation code box on the homepage and it will take you to our online store.

Celebrate®

*You have the option of ordering these supplements online through CelebrateVitamins.com.

Regardless, supplements that you plan to use should be brought with you to the last nutrition session **prior** to surgery.

The supplements you will need to take after surgery include: (chart is for chewable vitamins)

PROCEDURE	BREAKFAST	SNACK	LUNCH	DINNER	BEDTIME
Gastric Bypass/ Sleeve Gastrectomy **please note – no matter which calcium citrate you take, you are required to take **1500 mg each day***	1 Multivitamin w/ Iron	500 mg Calcium Citrate	500 mg Calcium Citrate	1 Multivitamin w/ Iron	500 mg Calcium Citrate
Duodenal Switch/SIPS **please note – no matter which calcium citrate you take, you are required to take **1800-2400 mg each day***	1 Celebrate ADEK Multivitamin 500 mg Calcium Citrate 5,000IU Dry Vitamin D	500 mg Calcium Citrate	1 Celebrate ADEK Multivitamin 500 mg Calcium Citrate	1 Celebrate ADEK Multivitamin 500 mg Calcium Citrate	Iron

** Our bodies have the ability to absorb no more than 500-600mg calcium at a time; calcium should be taken in divided doses, at least 2 hours apart from one another.*

** Iron and calcium block each other's absorption and should be taken at least 2 hours apart from one another.*

If choosing to utilize alternative vitamins and minerals for use after RNYGBP & Sleeve, there are several other appropriate options. Ask a dietition for info. Currently there are not alternatives for High ADEK multivitamins.

ALTERNATIVE VITAMINS

ALTERNATIVE MULTIVITAMIN FOR GASTRIC BYPASS AND VERTICAL SLEEVE	ALTERNATIVE MULTIVITAMIN FOR DUODENAL SWITCH AND SIPS
Your multivitamin should be taken 2x per day for bypass and sleeve patients and should contain: ■ Thiamin: 12mg ■ Folic Acid: 400mcg ■ Zinc: 8-22mg ■ Copper: 2mg As many over-the-counter multivitamins do not contain the level of nutrients needed for bariatric patients, we strongly recommend using our approved vitamin and mineral kits for the first 3 months after surgery. Please speak with one of our dietitians if you would like a list of approved over-the-counter multivitamins.	Your multivitamins should contain additional Vitamin A, Vitamin D, Vitamin E, and Vitamin K. *Unfortunately, at this time, there are no appropriate over-the-counter supplements available.

CALCIUM CITRATE: 1200-1500 mg per day (Gastric Bypass and Sleeve) OR 1800-2400 mg (Duodenal Switch and SIPS) per day is required.

- Take 500-600 mg, 3-4 times per day
- Choose liquid or chewable
- **Do NOT use calcium carbonate**
- **Please note: Avoid taking iron or multivitamins containing iron and calcium within 2 hours of one another.

Examples include:

- Chewable: Solaray Calcium Citrate Chewable, Country Life Chewable Cal-Max tablets, Calcet Creamy Bites (Mission Pharmacy), KAL Calcium Citrate Chewable plus Vitamin D, Bariatric Advantage chewable lozenges and chewy bites, Twin Labs Bariatric Support
- Liquid: Wellesse Celexcel Liquid Calcium Citrate, Tropical Oasis Liquid Calcium Magnesium, Life Time Liquid Calcium Magnesium Citrate

IRON:

- General needs for nutrition include:
  - Men: 18-30 mg Iron
  - Women: 29- 60 mg Iron
- Menstruating women and those at risk of anemia require: 60-65+ mg of Iron
- Please note: Avoid taking iron or multivitamins containing iron and calcium within 2 hours of one another

Dietary Information: Post-Bariatric Surgery

Dietary Stages & Duration

Clear Liquid	1-2 days, begins in hospital
Full Liquid	14 days, begin on first full day home
Pureed	14 days
Soft, Mechanically Altered	14 days
Regular	Lifelong

*These are estimated durations but may vary from procedure to procedure and from person to person.

Descriptions of Dietary Stages

STAGE 1

CLEAR LIQUID DIET:

Sugar-free or low-sugar bariatric clear liquids supply fluid, electrolytes, and a limited amount of energy, as well as encourage the restoration of gut activity following surgery. The foods that are included in a bariatric clear liquid diet are liquid at room temperature and leave a minimal amount of gastric residues.

**Examples- diet gelatin, broth, herbal tea, sugar-free popsicles, and sugar-free beverages*

STAGE 2

FULL LIQUID DIET:

Sugar-free or low-sugar full liquid diets follow the clear liquid diet phase. Full liquid diets include milk, milk products, milk alternatives, and other liquids that contain solutes. The liquid diet has slightly more texture and increased gastric residues than clear liquid diets. The liquid texture is thought to promote further healing and the caloric restriction provides energy and protein equivalent to that provided by very-low-calorie diets; Protein supplements can be added to these fluids to assist in meeting post-operative protein needs

**Examples- milk, milk alternatives, low sugar protein shakes, vegetable juice, low fat/low sugar yogurt (strained), low fat strained cream soup, sugar-free puddings*

STAGE 3

PUREED DIET:

Foods ranging from applesauce to pudding consistency fit into a pureed food diet.

**Examples- Pureed scrambled eggs and egg substitute, pureed meat, flaked fish, pureed fruit and vegetables, soft cheese (i.e.: cottage cheese, ricotta), very thin runny cream cereal (i.e.: cream of wheat), applesauce.*

STAGE 4

SOFT, MECHANICALLY ALTERED DIET:

Bariatric soft diets include foods that require minimal chewing. The diet is considered a transition diet that is achieved by chopping, grinding, mashing, flaking, or pureeing foods

**Examples- pureed meats, canned fruit, soft fresh fruit, soft cooked vegetables, hot cereals, and grains as tolerated*

STAGE 5

REGULAR DIET:

Eventually a soft, mechanically altered diet can be transitioned to a regular diet, as tolerated

Adapted from : ASBS.org L. Aillis et al. ASMBS Allied Health Nutritional Guidelines for the Surgical Weight Loss Patient. Surgery for Obesity and Related Diseases 4 (2008); S73-S108.

Sample Diet Progression: Post Weight Loss Surgery

STAGE 1

HOSPITAL MEALS

- Clear liquids

STAGE 2

SAMPLE DAY ON FULL LIQUIDS

- Consume at least 64 oz total fluids/day (24-32 oz full liquids + at least 32 oz clear liquids) Begin taking multivitamins (refer to individualized schedule)
- You may find it helpful to sip slowly at first (2 fl. oz protein shake (or other high protein "food") every hour and work your way up to 1 shake within a 30-60 minute period over time)

Morning Meal

- Upon waking, slowly sip 8 fluid ounces water or clear liquid to hydrate
- Protein shake made with milk/milk alternative, protein powder and small amount fruit
- *Sip at least 8 oz clear liquids between breakfast and lunch

Noon Meal

- High Protein Pudding (ex. sugar free pudding with protein powder added)
- *Sip at least 8 oz clear liquids between lunch and afternoon snack

Afternoon Snack

- Protein shake with optional ½ cup unsweetened applesauce
- *Sip at least 8 oz clear liquids before dinner

Evening Meal

- Fruit smoothie made with milk, protein powder and banana
- *Sip 8 oz clear liquids after evening meal

STAGE 3

SAMPLE DAY ON PUREED DIET

*Follow guidelines for supplement and fluid intake from Stage 2, Full Liquids

Morning Meal

- 8 oz protein shake, sipped very slowly, or one egg (scrambled) with 2 TB low fat shredded cheese

Noon Meal

- 6-8 oz yogurt OR 8 oz protein drink

Afternoon Snack

- 4 oz sugar-free pudding OR 1 cup nonfat (skim) OR 1% milk

Evening Meal

- 8 oz protein shake OR condensed, low sugar tomato soup made with milk

Evening Snack

- 4 oz yogurt OR 4 oz cottage cheese OR ½ cup egg salad

STAGE 4

SAMPLE DAY ON SOFT DIET

*Follow guidelines for supplement and fluid intake from Stage 2, Full Liquids

Morning Meal

- Cottage cheese and blueberries

AM Snack

- Skim milk – 8 oz

Noon Meal

- Tuna fish mixed with avocado

Afternoon Snack

- Low fat, light yogurt with unsweetened applesauce

Evening Meal

- Chopped meat with stewed tomatoes

STAGE 5

SAMPLE DAY ON REGULAR DIET

*Follow guidelines for supplement and fluid intake from Stage 2, Full Liquids

Morning Meal

- Spinach omelet OR Steel cut oats made with milk and added protein powder

AM Snack

- Skim milk – 8 oz OR low fat string cheese

Noon Meal

- Sliced turkey on tomatoes OR ham and cheese rollups

Afternoon Snack

- Low fat, light yogurt with strawberries or peaches

Evening Meal

- Pork Tenderloin in a mango chutney sauce OR Filet Mignon with steamed broccoli

Also, if seeking additional information on dietary progression following weight loss procedures, please visit www.rexbariatricspecialists.com for further information, including document/chart called: "Diet Staging for Weight Loss Surgery Procedures."

Adapted from: Biesemeier CK, Garland J. ADA pocket guide to bariatric surgery. Chicago, IL. American Dietetic Association. 2009

Don't forget about Hydration…

After bariatric surgery, dehydration is one of the most common complications. It can lead to constipation, malnutrition, electrolyte imbalances, as well as many others. That is why it is important to aim to consume at least 64 oz of fluid per day. Post-operatively, when progressing to full liquids, all options listed below are encouraged. Recommendations for the rate at which fluids are consumed should be followed as well. Definitions and recommended rates of these fluids can be found below.

DESCRIPTIONS OF INITIAL DIETARY STAGES

Clear Liquid Diet (Stage 1):

- Sugar-free or low sugar bariatric clear liquids supply fluid and electrolytes
- Limited amount of energy
- Encourage the restoration of gut activity following surgery
- Examples:
  - Diet gelatin
  - Broth
  - Herbal tea
  - Sugar-free popsicles
  - Sugar-free beverages

Full Liquid Diet (Stage 2):

- Full liquid diets include milk, milk products, milk alternatives, and other liquids that contain solids
- Slightly more texture than clear liquid diets
- Liquid texture thought to promote further healing
- Caloric restriction provides energy and protein equivalent to that provided by very-low-calorie diets
- Examples
  - **Low sugar/high protein shakes (before and after surgery)**
  - Milk and milk alternatives (Note milk products may not be well tolerated by gastric bypass & sleeve patients)
  - Vegetable juice
  - Low fat, low sugar yogurt & Sugar Free Pudding
  - Low fat, strained cream soup
  - Low sodium broth

SAMPLE RATE AND FLUID GOALS (***TOTAL OF 64 FL. OZ PER DAY)

Days 1 & 2 Post-Op: Water and clear liquids only

- Sip Slowly
- No straws
- 4 fl. oz water/clear liquids every hour while awake

Day 3 Post-Op: Full Liquids

Goal of 4-8 fl. oz per hour total, EVERY HOUR WHILE AWAKE

- **8:00AM**: 2-3 fl. oz. high protein full liquid (i.e. ~ ¼ protein shake)
  - 8:15AM: 1 fl. oz. water
  - 8:30AM: 1 fl. oz. non-caloric beverage
  - 8:45AM: 1 fl. oz. water
- **9:00AM**: 2-3 fl. oz. high protein full liquid (i.e. ~ ¼ protein shake)

Days 4-16 Days Post-Op: Full Liquids

May be used as a guide but can try drinking shakes over the course of a 30-60 minute period when comfortable with pace of fluid intake

Goal of 4-8 fl. oz. per hour total, EVERY HOUR WHILE AWAKE

- **8:00AM**: 2-3 fl. oz. high protein full liquid (i.e. ~ ¼ protein shake)
  - 8:15AM: 2 fl. oz. water
  - 8:30AM: 2 fl. oz. non-caloric beverage
  - 8:45AM: 2 fl. oz. water
- **9:00AM**: 2-3 fl. oz. high protein full liquid (i.e. ~ ¼ protein shake)

*NOTE: Approved full liquids (per 8 fl. oz):

- <5 grams sugar
- <5 grams fat
- ~15 grams protein

  Examples: whey/soy protein isolate (or other high quality protein powder) added to clear or full (such as milk/milk alternative) liquids, Boost Glucose Control, Ensure High Protein, EAS Myoplex Lite, Premier Nutrition protein shake

Pureed & Soft Foods (Dietary Stage 3 & Stage 4): FAQs

When preparing to transition to pureed and soft foods, which will occur 2+ weeks post- operatively, after you have completed your follow up visit with your surgery, many questions often arise. Many individuals find that these stages are the most difficult dietary stages after weight loss surgery (WLS). Most patients handle the clear and full liquid dietary stages after WLS very well, but when it comes to talking about pureed and soft foods with patients, their confidence seems to drop. If trying to come up with tasty recipes to incorporate into your diet during this phase of your diet progression seems bleak, never fear. Our dietitians will be there every step of the way to help you along.

Why do I have to eat pureed & soft foods?

Allow your stomach and intestines to continue to heal, and to slowly introduce soft, semi liquid foods into your pouch. Eating solid foods too soon may put pressure on the staple line and may cause breakage or leaking so be patient and do not push the limits of this stage. You have your whole life ahead of you and although it is frustrating to be 'stuck' in these special texture phases, advancing too rapidly into foods that are too dense and hard can cause problems with vomiting and even result in foods getting stuck. If at any time you find that you are not doing well with these foods or experience vomiting, back down to the liquid phase, remain there for a day or so and then bump up again to the more liquid spectrum of this phase.

When can I eat whole foods again?

It is important to not rush through the time frame for each dietary stage. Initially, make sure that all foods are puréed in an extremely soft semi-liquid state; the consistency of applesauce is a good reference for texture for the initial stages of this phase. You will later progress at the end of the phase to foods that can be finely mashed with a fork. There is a blurred line between purees and soft foods, which is why we address these stages together, even though there are slight differences.

If at any time you are repeatedly vomiting liquids or water, or if food and water is causing great pain, call your doctor.

Why is protein so important?

In this stage protein will begin to be an essential part of your diet. Protein helps with wound healing, muscle and skin re-growth, and repair, creating fullness or satiety, as well as preventing hair loss. Every meal and snack should have a good source of protein in it.

You should eat 3 small high protein meals per day, plus high protein snacks (mid-morning and mid- afternoon) in order to get in adequate nutrition.

What foods are considered pureed?

The pureed diet includes:

- soft scrambled eggs*
- low-fat small curd cottage cheese*
- part skim ricotta cheese*
- poached fish filets mashed with a little of the cooking liquid*
- small amounts of mashed banana for flavoring
- no sugar added cinnamon applesauce

** Denotes high protein foods*

How do I make other foods fit into the pureed and soft dietary stages?

A food processor works better than a blender and produces a more finely ground texture while a blender creates a dense paste that is often stickier and not as easy to eat. Most of these foods can be chewed into pureed form.

What should a typical day following a pureed and/or soft food diet look like?

Here are examples of pureed and soft meals below:

Breakfast:

- Softly scrambled egg with a slice of low fat cheese and a spoonful of smooth liquid from a jar of mild salsa
- Organic plain yogurt blended with a little protein powder and a slice of mashed banana
- Low fat cottage cheese and no sugar added applesauce sprinkled with Splenda and cinnamon
- A frosty blended protein shake. Example: Unjury Strawberry Protein blended with water and lots of ice in the blender!
- Mixture of yogurt and cottage cheese for a salty & sweet combination

Lunch and Dinner:

- Pouch or canned tuna finely mashed with a small amount of 'light' mayonnaise and/or low salad dressing; add a few drops of water so that mixture is fairly loose and not gummy
- Pureed pinto beans with shredded cheese, warmed in microwave
- Part skim ricotta cheese, with a spoonful of a very low sugar spaghetti sauce and shredded mozzarella, warmed in microwave *NOTE: Read labels…Classico, Barilla, & Gia Russo all do not have sugar or high fructose corn syrup in their ingredient list. Choose flavors with the least sugar grams per 2 tablespoon serving*
- A good quality canned soup, such as Progresso Black Bean or Lentil pulsed in the blender or food processor *NOTE: Avoid choosing high carb flavors containing pasta or rice*
- Tilapia fish filet, poached in tomato juice or chicken broth; finely mashed with a little bit of the inside of a baked potato
- An egg poached or simmered in very low sugar spaghetti sauce
- Yogurt blended with mashed banana and sweetened with Splenda
- Part skim ricotta blended with a little sugar free vanilla instant pudding powder and a drop of vanilla extract
- A scrambled egg whisked into a cup of simmering chicken broth

TIPS FOR SUCCESSFUL TRANSITION TO SOLID FOODS

*Total volume of foods should be no more than 6-8 ounces (or ¾ -1 cup), depending on a foods' texture and density, every 3-5 hours for ~4-6 meals/snacks per day.

- As you transition through the diet stages (from clear liquids to full liquids, to pureed/soft), try one new food at a time to determine what foods you tolerate best
- Always eat your protein first
  - The first 2-4 ounces (or ~1/4-1/2 cup) of food should be high in protein
- Eat slowly & allow yourself 20-30 minutes to finish a meal; It takes between 20-30 minutes for your stomach to tell your brain that you are full. Tips for slowing down include:
  - Pace yourself
  - Try putting your fork down between bites
  - Use your left hand instead of your right hand, if right handed (or vice-versa)
  - Use chopsticks & baby utensils
  - Chew slowly and deliberately while taking time to enjoy the taste of your food
  - Use ½ plate method of dividing your plate in half and set timer; consume only ½ plate within 15 minutes and if finished before 15 minutes half elapsed, wait; Then, consume other ½ of plate in remaining 15 minutes
- Chew well…. Chew a food between 15-30 times per bite
  - Your stomach's ability to digest is now limited, therefore chewing will help to compensate for this and increase the likelihood of a food's tolerance
- Drink fluids 30 minutes before or after meals to ensure that you have enough room in your stomach for foods that provide your body with the nourishment it needs
  - Examples: protein rich foods, vitamins, & minerals
- Limit or avoid sticky/stringy/crunchy foods, which are often not tolerated well initially, and can cause blockages/plugging
  - Sticky/stringy foods include: fresh bread, sticky rice, pasta, and melted cheese
  - Crunchy foods to use caution with include: raw veggies, nuts and seeds, and popcorn
- Limit or avoid tough, fibrous foods, which include skins/membranes, seeds, and fibrous foods such as corn, celery, and sweet potatoes for 3-6 months after surgery
  - If you love these foods and would like to incorporate them into your diet, cooking them until tender and/or chewing them very well may allow you to add them to your meals
- Learn to identify true hunger vs. emotional hunger
  - What are some signs of true hunger?
    - Weakness & Lethargy
    - Tired & Fuzzy thoughts
- Learn to recognize fullness/satiety
  - Indications of fullness may be:
    - Pressure or fullness in the center of your abdomen
    - Feelings of nausea or heartburn
    - Hiccups (sometimes)

Dumping Syndrome

For gastric bypass and sleeve patients: Limit high sugar and high fat foods, as they can cause "dumping." For duodenal switch patients, excess fat intake causes a similar effect, with the addition of loose, fatty stools and foul smelling gas.

- This is caused by the fast rate of emptying or "dumping" of sugary fluids and foods from the pouch, directly into the "re-routed" intestines
  - Symptoms include:
    - Rapid heart rate, sweaty, light-headedness
    - Nausea and vomiting
    - Stomach cramping, bloating, and diarrhea
  - As a general rule, read your food labels and:
- Limit simple sugars to <5 grams per serving (You can increase up to 15-25g as tolerated)
- Limit simple carbohydrates, such as table sugar, high fructose corn syrup, corn sweeteners, honey, molasses, and syrups, which are often added to processed food. Avoid products containing these words in the first three ingredients
- Caution should also be used with some of the naturally occurring simple sugars, such of fructose (from fruit) and lactose (from milk), as well
  - Lactose intolerance (or the unmasking of lactose intolerance) has been known to occur. If you experience adverse symptoms, eliminate dairy and dairy containing products immediately
- Sorbitol or Mannitol- SUGAR ALCOHOLS- usually found in "sugar free" products, can cause dumping symptoms as well if eaten in large amounts

Malabsorption

- At times, rapid emptying occurs with the ingestion of foods high in fat as well, and/or foods are malabsorbed, leading to similar symptoms
- As a general rule, read your food labels and:
  - Limit fat to <5grams per serving (you may increase to 10 g as tolerated) due to malabsorption of these fats, leading to diarrhea and some symptoms similar to dumping

SECTION 4:

Pre-operative Planning

Pre-Operative Plan & Other Information

Pre-Op Plan for Weight Loss Surgery

Pre-operative weight loss is desirable to decrease the risk of complications for our patients scheduled for weight loss surgery. Weight loss before surgery reduces the risk of conversion from laparoscopic surgery to an open procedure. Pre-operative weight loss also reduces the severity of co-morbidities and reduces operating room and recovery time. To be specific, pre-operative weight loss:

- Reduces liver size and intra-abdominal fat
- Improves visual field
- Reduces co-morbidities
- Increases patient understanding of post-op requirements
- Reduces operating time
- Reduces post-operative risks

It is very important that you adhere to the pre-op diet that your surgeon and dietitian are recommending for you. Situations have occurred where patient's surgery was cancelled due to non-compliance with the pre-op diet. Please understand this can happen to you if you do not follow the guidelines. If you find yourself struggling with the guidelines, please call the office for support and guidance.

Our program recommends whey protein isolates, such as Bariatric Advantage® or Unjury®, and soy protein isolates and concentrates for our pre-op surgery patients. Protein powders come in a great variety of flavors - chocolate, vanilla, strawberry, banana and unflavored, as well as many more, and provide variety while following the pre-op diet. See the list of appropriate protein supplements on page 104.

PRE-OPERATIVE PROTOCOL

- BMI > 50: 2 week protocol
- BMI< 50: 1 week protocol

GUIDELINES

- 3-5 shakes per day
  - Choices: Powder with 8 fl. oz.low fat milk/milk alternative OR powder with 8 fl. oz. water and 1 serving fruit blended in OR ready to drink protein shake. See page 104.
  - Note: 1 Ketogenx bar can be substituted for 1 shake per day, meaning 2-4 shakes per day plus 1 Ketogenx bar
- 64 - 96 ounces of clear liquids
  - Choices: water, decaf coffee/tea, herbal teas, low-sodium broths, Crystal Light, sugar-free gelatin, sugar-free popsicles
- 700-1000 calories per day

THE FIRST 48 HOURS

The first 48 hours on the full liquid diet is the most challenging. You will be very hungry until your body induces ketosis. Ketosis occurs when the amount of carbohydrate fuel (fuel that is needed to run the body) drops below a critical level, forcing the body to turn first to protein and then to fat reserves to do the work carbohydrates normally do.

Side effects of a liquid diet:

- Dry mouth
- "Ketosis breath"
- Headache
- Fatigue & Dizziness
- Bowel changes

You will experience a sensation of improved well-being and have less hunger in the second or third day of a full liquid diet. This feeling is due to a chain of reactions set off by the release of ketones. Ketones inhibit the release of insulin and the stress hormones. As a result, the blood sugar becomes more stable and hunger is calmed. Anxiety is reduced. You must drink 64 - 96 ounces of water daily to remove the waste products in the blood stream.

Recipes and Hints

HOW TO MIX A PROTEIN SHAKE

Combine 1 serving of protein powder with either:

- 8 oz. skim milk, 1% milk, or other unsweetened milk alternative
- 8 oz. water with optional 1 serving of fruit (see exchange list on page 89)

BASIC BLENDING INSTRUCTIONS:

1. Pour cold skim milk or cold water into a blender. Begin mixing on a low speed
2. Slowly add your meal replacement or high quality protein powder, while blender is mixing for about 15 seconds
3. Add ice cubes, replace lid and blend until smooth

SHAKER DIRECTIONS:

1. Pour cold skim milk or cold water into shaker
2. Slowly add the meal replacement or high quality protein powder
3. Add small ice cubes if desired
4. Replace lid and shake until smooth

HINTS:

- To increase sweetness, add Splenda or other non-caloric sweetener
- Addition of ¼ tsp extracts (almond, vanilla, coconut, butter) or ¼ tsp sugar free gelatin powder mix will add flavor
- Add ice or frozen fruits (without any added sugars) to make the shakes creamier
- For thicker consistency add sugar-free yogurt or 1 tsp sugar free instant pudding powder mix
- You may freeze the shakes for an ice cream consistency. It is best to eat it frozen
- Remember you can interchange low fat milk or milk alternative in any of the recipes—**BUT DO NOT ADD FRUIT IN ADDITION TO THIS—TOO MANY CARBOHYDRATES WILL PREVENT KETOSIS—CHOOSE EITHER MILK OR FRUIT**

Recipes

Please use these recipes as suggestions. The consistency of the shakes will depend on the fluid added. You may want to increase or decrease fluids depending on your likes and dislikes. You may be creative and make recipes of your own. Remember the key is to adhere to the guidelines. **Please do not forget to call the office should you need additional information and support.**

Mocha Shake

4 ice cubes
1 tbsp milk
6 oz. decaffeinated coffee
1 scoop whey/soy protein powder (check label for serving size)
Additional calories: 11
Additional carbohydrate: 1.5
Additional fat: 0.1 grams
Total Calories: 161 calories, if using Bariatric Advantage®

Frozen Chocolate Banana

8 oz. Water
4 to 5 ice cubes
½ medium banana
1 scoop whey/soy protein powder (check label for serving size)
Additional calories: 60
Additional carbohydrate: 15 grams
Additional fat: 0.2 grams
Total Calories: 210 calories, if using Bariatric Advantage®

Pineapple Blast

4 ice cubes
6 oz. water
1 scoop whey/soy protein powder (check label for serving size)
1/3 cup pineapple chunks
1 tsp sugar free, instant pudding powder mix
Additional calories: 75
Additional carbohydrate: 15 grams
Additional fat: 0.1 grams
Total Calories: 225 calories, if using Bariatric Advantage®

Piña Colada

6 oz. water
4 ice cubes
1 scoop whey/soy protein powder (check label for serving size)
1/3 cup Pineapple chunks
1 tsp. Sugar free Coconut extract
Additional calories: 60
Additional carbohydrate: 15 grams
Additional fat: 0.1 grams
Total Calories: 210 calories, if using Bariatric Advantage®

Chocolate Strawberry Shake

1 scoop whey/soy protein powder (check label for serving size)
6 ounces of water
4 to 6 ice cubes
6 small strawberries
Additional calories: 60
Additional carbohydrate: 15 grams
Additional fat: 0
Total Calories: 210 calories, if using Bariatric Advantage®

Raspberry Chocolate

1 scoop whey/soy protein powder (check label for serving size)
6 ounces water
6 ice cubes
3/4 cup fresh raspberries
Additional calories: 60
Additional carbohydrate: 15 grams
Additional fat: 0.1 grams
Total Calories: 210 calories, if using Bariatric Advantage®

Orange Creamsicle

1 scoop whey/soy protein powder (check label for serving size)
6 ounces of water
4 to 6 ice cubes
1 small orange (size of tennis ball)
Additional calories: 60 calories
Additional carbohydrate: 15 grams
Additional fat
Total Calories: 210 calories, if using Bariatric Advantage®

Blueberry Blaster

1 scoop whey/soy protein powder (check label for serving size)
6 ounces of water
4 to 6 ice cubes
¾ cup blueberries
Additional calories: 60
Additional carbohydrate: 15 grams
Additional fat: 0.1 grams
Total Calories: 210 calories, if using Bariatric Advantage®

SECTION 5:

Pre-operative Goals Checklist

Pre-Op Surgery Goals Checklist

MAINTAIN WEIGHT TO: ■ Within 2-3 pounds of your weight OR initiate weight loss	☐
BEGIN PRE-BARIATRIC SURGERY MEAL PLAN: ■ Follow menu pattern provided at first nutrition class ■ Low fat, high protein, no concentrated sugar ■ 4-6 smaller meals ■ Eat every 3 to 5 hours and **do not skip meals**	☐
ALLOW 20-30 MINUTES TO FINISH A MEAL, CHEWING THOROUGHLY	☐
ELIMINATE DISTRACTIONS WHILE EATING	☐
BE MINDFUL OF YOUR EATING AND STOP EATING WHEN FULL	☐
OFF LIMIT BEVERAGES ■ Eliminate carbonated, sugar sweetened, and caffeinated beverages ■ Eliminate all alcoholic beverages from diet and avoid for minimum of 12 months post-op	☐
FLUID INTAKE ■ Increase to a goal of 64 oz. per day ■ Non-carbonated, decaffeinated, low or no calorie beverages ■ Practice sipping fluids between meals ■ Do not drink with meals, leaving 30 minutes before and after meals with no beverages	☐
ELIMINATE HIGH FAT/FRIED AND HIGH SUGAR FOODS ■ Begin reading food labels ■ Limit to <5 grams fat per serving ■ Limit to <5 sugar per serving	☐

EXERCISE PROGRAM: ■ Work up to a goal of 30 minutes of intentional (moderate to vigorous) cardiovascular activity, 3 to 5 times per week or 150 minutes per week (with a long term goal of 300 minutes per week) ■ My exercise plan: ▪ Type of exercise: ▪ Days per week:	☐
MULTIVITAMIN FOR WOMEN: ■ Pre-Op - Begin taking a multivitamin containing 18 mg of Iron, 400 mcg of Folic Acid and Zinc fortified, as well as other trace minerals; additional iron may be required for some individuals ■ Post-Op - Chewable for at least 3 months post op	☐
MULTIVITAMIN FOR MEN: ■ Pre-Op - Begin taking a multivitamin containing 18 mg of Iron, 400 mcg of Folic Acid and Zinc fortified, as well as other trace minerals ■ Post-Op - Chewable for at least 3 months post op	☐
SMOKING CESSATION: ■ Eliminate all nicotine products in preparation for surgery	☐
SEEK SUPPORT: ■ Join a local support group: www.rexbariatrics.com or www.bsciresourcecenter.com ■ Facebook page of RSS Bariatrics ■ Monthly support groups (see calendar at www.rexbariatrics.com)	☐
LOCATE/PURCHASE NECESSARY SUPPLEMENTS* ■ Bring any protein supplements that you plan to use while on the pre-op full liquid diet and following surgery with you to the pre-op group session for review ■ Be ready to purchase your bariatric supplement vitamin kit (i.e. **Bariatric Advantage®** and **Celebrate®**) at the time of your last pre-op session. ** If you do not bring supplements or purchase supplements at this meeting, your surgery may be rescheduled.*	☐
OTHER....	☐

SECTION 6:

Shopping and Resources

SHOPPING LIST

1-2 WEEKS BEFORE & 2 WEEKS AFTER SURGERY

- ¼ & ½ cup measuring cups
- Measuring spoons (teaspoon & tablespoon)
- 16-32 ounce water bottle
- Baby utensils
- Smaller plates
- Small food storage containers
- Recommended vitamin and mineral supplements (see supplement section)
- High quality protein supplement of your choice (see protein section)
- Low Sodium Broth
- Sugar Free Jello (gelatin)
- Sugar Free Popsicles
- Crystal Light (or any calorie free liquid)
- Skim/1% Milk OR milk alternative
- Notebook for Food Journal

AFTER SURGERY (Pureed & Soft Diet)

- Skim/1% Milk
- Crystal Light (or any calorie free liquid)
- Sugar Free Popsicles
- Sugar Free Jello
- Protein Supplements if needed
- Low Sodium Broth
- Blender or food processor
- Egg Beaters
- Fat Free no added sugar Greek Yogurt
- Soft Tofu OR TVP
- Jello Sugar Free Instant Pudding
- Nonfat, 1% or 2% Cottage Cheese
- Fish (tuna, crab meat, sole, flounder)
- Chicken Breast
- Extra Lean Turkey, Beef, Pork or Chicken (choose 93/7)
- Fat Free Ricotta Cheese
- Fat Free Refried Beans
- Canned or Frozen Vegetables
- Bananas (ripe, in small amounts)
- Unsweetened Applesauce
- Canned Fruit (not in syrup)
- Unsweetened oatmeal
- Cream of Wheat

AFTER SURGERY (Regular Diet)

PROTEIN (60-80+ GRAMS/DAY)

- Skim milk or 1 % milk
- Nonfat, 1% or 2% Cottage Cheese
- Fat Free Greek Yogurt
- Egg Beaters
- White meat chicken and turkey
- Fish (not battered)
- Beef (round or sirloin)
- Extra lean ground beef (93/7)
- Pork tenderloin
- 95% fat-free lunch meals or low-fat deli meats (chicken, turkey, roast beef, ham)
- Tofu

CARBOHYDRATES

- Whole Wheat Bread (35-40/ slice)
- Low Carbohydrate Wrap
- Quinoa
- Unsweetened/low sugar Oatmeal
- No sugar added, high fiber Cereal
- Beans & Lentils
- Corn, peas or potatoes

NON STARCHY VEGETABLES

- Fresh, Canned or Frozen Vegetables
- Low sodium V-8

FRUITS

- Fresh fruits
- Canned fruit, in water or own juice
- Frozen fruit (no sugar added)
- Unsweetened Applesauce

FATS

- Olive or Canola Oil (1 teaspoon)
- Soft (tub) margarine (1 teaspoon)
- Low Fat Mayonnaise (1 Tablespoon)
- Avocado (2 TB)

MISCELLANEOUS

- Sugar-Free Jello
- Sugar-Free Popsicles
- No-calorie drink mixes
- Sugar Substitute
- Mustard

Other Resources

Books

- *Before and After- Living and Eating Well After Weight-Loss Surgery* by Susan Maria Leach
- *Exodus from Obesity: The Guide to Long-Term Success after Weight Loss Surgery* by Paula F. Peck
- *Weight Loss Surgery: Understanding and Overcoming Morbid Obesity – Life before, during, and after Surgery* by Michelle Boasten
- *Dying to Change: My Really Heavy Life Story* by Katie Jay
- *I'd Kill for a Cookie: A Simple Six-Week Plan to Conquer Stress Eating* by Susan Mitchell and Catherine Christie
- *Weight Loss Surgery: Finding the Thin Person Hiding Inside You*, Second Edition by Barbara Thompson
- *The Success Habits of Weight-Loss Surgery Patients* by Colleen M. Cook
- *Weight Loss Surgery for Dummie*s by Marina S. Kurian, Barbara Thompson, and Brian K. Davidson
- *The Complete Idiot's Guide to Eating Well After Bariatric Surgery* by Margaret Furtado
- *Integrating Body Self and Psychological Self: Creating A New Story in Psychoanalysis and Psychotherapy* by David W. Kruegar
- *How to Say No Without Feeling Guilty* by Patti Breitman
- *Eat, Drink and Be Mindful: How to End Your Struggle with Mindless Eating and Savoring Food with Intention and Joy* by Susan Albers, Psy.D.
- *Mindless Eating: Why We Eat More Than We Think* by Brian Wansink
- *Eating the Moment: 141 Mindful Practices to Overcome Overeating One Meal at a Time* by Pavel Georgievich Somov
- *The Beck Diet Solution (and workbook)* by Judith Beck, PhD
- *Intuitive Eating* by Evelyn Tribole
- *Recipes for Weight Loss Surgery Success: Starting Your Journey Step-By-Step* by David Foust
- *Ditch Your Diet in 30 Days (bariatric friendly, 1200 calorie, 30 day meal plan that includes all recipes)* by David Foust
- *Shakin' It Up* by David Foust (protein shakes for that important preop diet or for added variety post op)
- *Cookwise* by David Foust
- *Eating Well After Weight Loss Surgery: Over 140 Delicious Low-Fat High-Protein Recipes to Enjoy in the Weeks, Months and Years After Surgery* by Patt Levine, Michele Bontmpo-Saray, William B. Inabnet and Meredith Urban-Skuros
- *Recipes for Life after Weight-Loss Surgery* by Margaret M. Furtado
- *Skinny Jeans* by Dr. Cliff Thomas
- *Never Goin' Back* by Al Roker

Exercise Resources, Products, and Information

- *Walk Away the Pounds* by Leslie Sansone
- Weigh to Win Bariatric Workout (DVD)
- *Prevention Magazine* website (exercises with tutorials and variations depending on level of fitness)

Websites & Blogs

(with various resources, including online support and recipes)

- www.asbs.org – American Society for Bariatric Surgery
- www.bariatricsupportcenter.com – International Bariatric Support Group Registry and Home of The Success Habits of Weight-Loss Surgery
- www.edap.org - Eating Disorders Awareness and Prevention, Inc. (EDAP)
- www.nawls.com – National Association for Weight Loss Surgery, an online community offering support, information and resources
- www.wlsfriends.com - an online support community www.wlslifestyles.com – a weight loss surgery magazine
- www.obesityhelp.com – an online support community www.bariatriceating.com
- www.bariatrictimes.com
- www.thinnertimes.com
- www.eatingwell.com
- www.goodfoodnearyou.com
- www.livingafterwls.blogspot.com
- www.weightlosssurgerychannel.com
- www.flourishyourlife.com
- www.theworldaccordingtoeggface.blogspot.com
- www.nutritiondata.self.com
- www.bariaticeating.com
- www.wlslifestyles.com - a weight loss surgery magazine

Bariatric Products

- www.BariatricAdvantage.com
- www.CelebrateVitamins.com
- www.Unjury.com
- www.mybariatricpantry.com
- www.bariware.com
- www.mydietdinnerware.com
- PortionMate.com (measuring)
- Portionware - www.portionware.net
- Measure Up Bowl - www.shopmeasureupbowl.com
- Sunsella Mighty Pops Popsicle Molds
- Jokari Portion Control Dressing Cap

Nutrition Information

- www.nutritiondata.com
- www.myplate.gov – USDA MyPlate.gov

Free Online Food Logs (& Other Phone Apps)

- www.thedailyplate.com – The Daily Plate
- www.maintainfit.com – Maintain Fit
- www.fitday.com – Fit Day: calorie tracking website with weight loss & exercise information
- www.sparkpeople.com
- www.myfitnesspal.com
- www.loseit.com
- www.mynetdiary.com
- Endomondo app (for tracking routes)
- Eat Slower app
- Seafood Watch app
- Dirty Dozen app

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RECIPES

Most Recipes Adapted from: Flourish Your Life Cookbook &
Recipes for Life after Weight Loss Surgery

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Breakfast Recipes

Berry Delicious Cream of Wheat

Blueberries, blackberries, strawberries, or huckleberries can also be substituted for the raspberries in this recipe.

Ingredients

- ¾ cup (135g) instant Cream of Wheat, no salt added
- ½ teaspoon vanilla extract
- ½ cup (60g) fresh raspberries
- 2 tablespoons (15g) protein powder supplement (make sure the protein is appropriate for hot foods)
- 4 cups (94 ml) nonfat milk or low-fat, low-sugar soy milk (less than 14grams of sugar per cup)
- 2 sprigs spearmint

Prepare Cream of Wheat per the package instructions for 2 servings, adding the vanilla to the water before boiling. Just before removing the Cream of Wheat from the pan, stir in the raspberries. Add the protein powder just prior to serving. Serve in warmed bowls, topped with the milk and garnished with the fresh spearmint sprigs.

Diet Stage: Soft

Yields: 2 servings

Nutritional Analysis

Each with: **Calories:** 219 **Protein:** 24 g **Carbs:** 23 g **Total Fat:** 3 g **Sat Fat**: 1 g

Cholesterol: 0 mg **Sodium:** 84 mg **Sugars:** 4 g **Fiber:** 4 g

Greek High-Protein Berry-Licious Milkshake

You can play around with the ingredients to make a new smoothie, such as, substituting the fruit for pumpkin with a touch of cinnamon or a ½ of a banana and a teaspoon cocoa powder.

Ingredients

- 1 cup (235 ml) nonfat milk or low-fat, low-sugar soy milk (less than 14grams of sugar per cup)
- 1 cup (150g) fresh or frozen blueberries, raspberries, strawberries, or blackberries
- 2 ounces (55g) protein powder supplement
- 7 ounces (200g) Greek yogurt (2% fat)
- 1 tablespoon (14 ml) sugar-free vanilla syrup
- 1 cup (150g) crushed ice (optional)

In a blender, combine the milk, blueberries, protein powder, yogurt, syrup, and ice (if using). Blend until the ingredients are emulsified. (The milkshake will be a creamy consistency and blue color throughout.)

Diet Stage: Pureed

Yields: 3 servings (about 1 cup each)

Nutritional Analysis

Each with: **Calories:** 179 **Protein:** 23 g **Carbs:** 15 g **Total Fat:** 3 g **Sat Fat**: 1 g

Cholesterol: 5 mg **Sodium:** 108 mg **Sugars:** 12 g **Fiber:** 1 g

Zucchini-Bran Muffins

These muffins hold well in the freezer, as well.

Ingredients

- 1/3 cup (50g) unpacked light brown sugar or brown sugar substitute
- ¾ cup (30g) bran cereal
- 1 cup (110g) oat bran flour
- ½ cup (55g) whole wheat flour
- 2 teaspoons baking powder
- ½ teaspoon salt
- 1 teaspoon cinnamon
- ¼ teaspoon nutmeg
- 1 egg
- 1 tablespoon (14 ml) vegetable oil
- ¼ teaspoon vanilla extract
- ¼ teaspoon almond extract
- 1 cup (240g) nonfat plain or vanilla yogurt
- ¾ cup (95g) grated zucchini (press out the moisture by squeezing it in paper towels)
- ¼ cup (60g) unsweetened applesauce

Preheat the oven to 400 degrees F (200 degrees C). Spray a muffin tin with cooking spray. In a large mixing bowl, combine the brown sugar or sugar substitute, bran cereal, oat bran flour, whole wheat flour, baking powder, salt, cinnamon and nutmeg. Stir to combine. In a medium mixing bowl, whisk together the egg, oil, vanilla, almond extract, yogurt, zucchini, and applesauce just enough to combine. (The batter should be slightly lumpy.)

Fill 8 of the muffin cups two-thirds full with batter. Bake for 20 to 25 minutes, until a toothpick inserted into the middle of a muffin comes out clean. Let the muffins cool for 15 minutes before turning the tin over to release the muffins. (If the muffins stick to the pan, a slight tap on the back should help to release them.)

Diet Stage: Regular

Yields: 12 servings (2-ounce muffins)

Nutritional Analysis

Each with: **Calories:** 121 **Protein:** 4 g **Carbs:** 24 g **Total Fat:** 2 g **Sat Fat**: 0 g

Cholesterol: 20 mg **Sodium:** 157 mg **Sugars:** 9 g **Fiber:** 3 g

Appetizer Recipes

Edamame

Pop the shells open and eat the beans inside. You can find them fresh or frozen at most local grocery stores.

Ingredients

- 2 ½ quarts (2.5 L) water
- 1 tablespoon (18 g) salt
- 2 pounds (1 kg) fresh or frozen edamame
- 1/8 teaspoon coarse sea salt

In a –quart (3-L) pot, bring the water and table salt to a boil over high heat. Add the edamame, reduce the heat, and simmer for 3 minutes if using fresh beans or 4 minutes if using frozen.

Drain the beans and transfer them to a serving bowl just large enough to hold the edamame. (If the serving container is too large, the beans will cool off too quickly.) Toss the beans with the coarse sea salt and serve immediately.

Diet Stage: Soft

Yields: 14 servings (about 1 cup)

Nutritional Analysis

Each with: **Calories:** 91 **Protein:** 8 g **Carbs:** 7 g **Total Fat:** 4 g **Sat Fat**: 0 g

Cholesterol: 0 mg **Sodium:** 30 mg **Sugars:** 2 g **Fiber:** 3 g

Traditional Hummus

Serve this with cucumber slices, tomato wedges, and Greek olives. Note that five Greek olives equals one serving of fat.

Ingredients

- 3-5 cloves garlic, crushed
- 1 ½ tablespoons (21 ml) extra-virgin olive oil, divided
- 3 cans (15 ounces, or 430g each) cooked chickpeas (garbanzo beans), rinsed and drained
- ¼ cup (60g) sesame tahini
- ½ teaspoon toasted sesame oil
- 2 tablespoons (28 ml) cold water
- 2 tablespoons (28 ml) fresh lemon juice
- ½ teaspoon salt
- 2 teaspoons ground cumin

Place the garlic in a food processor with 1 ½ teaspoons of the olive oil and process until the garlic is minced, almost paste-like. (You will need to stop the process and scrape down the garlic from the sides of the container a few times.) Add the chickpeas, tahini, sesame oil, water, lemon juice, salt, and cumin, and continue processing. While the puree is still processing, slowly add the remaining olive oil. (The consistency should have a smooth, but grainy texture. If a thinner consistency is preferred, add additional water in small increments.)

Diet Stage: Soft

(with harder vegetables (i.e. carrots), diet stage is Regular)

Yields: 16 servings (about ¼ cup)

Nutritional Analysis

Each with: **Calories:** 112 **Protein:** 5 g **Carbs:** 14 g **Total Fat:** 5 g **Sat Fat**: 1 g

Cholesterol: 0 mg **Sodium:** 40 mg **Sugars:** 2 g **Fiber:** 4 g

Flat-Out Chips

Ingredients

- 2 Flat-Outs® Wraps (recommended: Multi grain made with Flax)
- Butter-flavored cooking spray
- Splenda®
- Cinnamon

Heat oven to 350°. Using kitchen shears, cut flat-outs into "chip-size' dippable triangles or squares. Spray a baking sheet with cooking spray. Place the cut-up Flat-Outs® on the baking sheet, leaving ½ inch between each. Spray the tops of Flat-Outs® with butter-flavored cooking spray. Sprinkle with cinnamon & Splenda®. Put in oven for about 10-12 minutes or until desired crispiness. Watch them carefully! They can burn easily.

Diet Stage: Regular

Yields: 4 servings (1 serving is ½ Flat-Out® Wrap)

Nutritional Analysis

Each with: **Calories:** 50 **Protein:** 4 g **Carbs:** 8 g **Total Fat:** 1 g **Fiber:** 4 g

Pumpkin Yogurt Dip

- ½ cup canned pumpkin
- 6 oz nonfat plain greek yogurt
- 2 tsp Splenda®
- ¼ tsp cinnamon
- ⅛ tsp nutmeg

Combine all of the ingredients in a bowl. Serve chilled with Flat-Out Chips

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Diet Stage: Pureed

(with Flat-Out Chips diet stage is Regular)

Yields: 3 servings

Nutritional Analysis

Each with: **Calories:** 48 **Protein:** 6 g **Carbs:** 6 g **Total Fat:** 0 g **Sugars:** 4 g

Stuffed Mushrooms

Ingredients

- 1 pound (455g) medium mushrooms (about 18)
- 1 tablespoon (14 ml) olive oil
- 1 clove garlic, minced
- 6 teaspoons finely diced red bell pepper
- ¼ cup (40g) finely diced yellow onion
- 2 tablespoons (15g) thinly sliced green onion (green and white parts)
- 1 tablespoon (4g) chopped fresh parsley
- ¼ teaspoon dried basil
- ¼ teaspoon dried oregano
- ¾ cup (75g) whole-wheat bread crumbs (about 1 ½ slices bread, toasted)
- 2 tablespoons (10g) grated Parmesan cheese

Preheat the oven to 375 degrees F (190 degrees C). Clean the mushrooms and remove the stems. Finely chop or mince the stems and set aside. Place the mushroom caps in a 9-x-13-inch (22.5-x-32.5-cm) baking dish.

In a medium nonstick skillet, heat the oil over medium-high heat. Add the mushroom stems and garlic and sauté for about 3 minutes. Add the bell pepper, yellow onion, green onion, parsley, basil, and oregano and continue cooking for about 4 minutes, until the peppers are soft. Remove from heat and add the bread crumbs and cheese. Stir to combine. Fill the mushroom caps with the stuffing mixture and bake for 20 minutes, until the mushrooms are soft.

Diet Stage: Soft

Yields: 6 servings (about ½ cup)

Nutritional Analysis

Each with: **Calories:** 76 **Protein:** 4 g **Carbs:** 7 g **Total Fat:** 4 g **Sat Fat**: 1 g

Cholesterol: 1 mg **Sodium:** 82 mg **Sugars:** 2 g **Fiber:** 1 g

Sweet and Smoky Sugar Free BBQ Sauce

Ingredients:

- 1 can Tomato Paste, 6 oz
- 1 cup water
- 1 cup Sugar Free Apricot Jam
- 1 Tbsp each:
    - Cider vinegar
    - Yellow mustard
    - Worcestershire sauce
    - Sugar free maple syrup
    - Splenda® brown sugar
- 2 Tbsp each:
    - Chili powder
    - Liquid smoke
- 1 tsp each:
    - Onion powder
    - Garlic powder
    - Paprika
    - Ground ginger
    - Cumin (may omit or use less)
    - Red pepper (if prefer spicy)
- Salt & Pepper to taste

Combine the tomato paste and water in pan. Add the jam and stir to mix. Whisk in the remaining ingredients/spices. Add more or less spices depending on your taste. Simmer for 20 minutes stirring occasionally. Longer if you wish or put in a Crockpot. Flavors get better the longer it sits.

Diet Stage: Soft

Serving Size: 2 Tbsp

Nutritional Analysis

Each with: **Calories:** 30 **Protein:** 0 g **Carbs:** 4 g **Total Fat:** 0.3 g **Sat Fat:** 0 g **Trans Fat:** 0 g **Cholesterol:** 5 mg **Sodium:** 46 mg **Sugars:** 1 g **Fiber:** 0 g

Baked Tofu Bites

Ingredients:

- 6 oz extra-firm tofu
- ¼ cup of soy sauce
- 3 Tbsp sugar-free maple syrup
- 2 Tbsp ketchup
- 1 tsp toasted sesame oil
- 2 tsp Worcestershire sauce
- 1 dash sweet chili sauce or hot sauce
- 1 Tbsp sesame seeds
- ¼ tsp garlic powder
- ¼ tsp ground black pepper
- ¼ tsp salt
- 1 Tbsp rice wine vinegar

Drain Tofu of excess liquid. Cover with paper towel, place in ziploc bag, or on plate & refrigerate overnight. Preheat oven to 375° F. Cut tofu into ½ to 1" cubes. In a bowl, whisk the rest of the ingredients. Gently stir tofu cubes into sauce. Cover and marinate at least 5 minutes (or up to 2 hours). Place tofu on baking sheet. Bake 20 minutes, turn tofu and bake 20 minutes more (until toasty). Turn off oven and leave Bites in the oven for 20 minutes more or until they look toasted and are dried out (note: baking time dependent on size of Tofu bites).

Diet Stage: Soft

Serving Size: 1 oz

Nutritional Analysis

Each with: **Calories:** 50 **Protein:** 4 g **Carbs:** 3 g **Total Fat:** 2 g **Sat Fat:** 0 g **Trans Fat:** 0 g **Cholesterol:** 0 mg **Sodium:** 340 mg **Sugars:** 1 g **Fiber:** 0

Soups

Fall Harvest Pumpkin Soup

Ingredients

- 3 cups (735g) pureed canned pumpkin (no salt) or 1 (5 pound, or 2.5 kg) sugar pumpkin
- 1 large yellow onion, diced
- 2 large celery ribs cut into ½ inch (1.25 cm) pieces
- 1 quart (1 L) low-sodium chicken stock
- ½ cup (120 ml) white wine, cooking sherry, chicken broth, or vegetable broth
- 2 teaspoons cinnamon, plus more for garnish
- 2 teaspoons allspice
- 2 teaspoons curry powder (optional)
- 2 teaspoons paprika
- ½ teaspoon cumin
- 1 teaspoon cayenne pepper (optional)
- ½ teaspoon ground white pepper
- ¾ cup (175 ml) nonfat half and half

If using fresh pumpkin, preheat the oven to 375 degrees F (190 degrees C). Cut the pumpkin in half and scrape out the seeds and strings. Cut the halves into quarters. Place the pumpkin, skin-side down, in a 9 ½ x 13 ½ inch (22.5 x 32.5 cm) or 3 quart (3 L) baking dish, with about ½ inch (1.25 cm) of water in it. Bake the pumpkin for about 60 minutes, until the flesh is tender throughout. Let cool and scrape out the flesh. Puree the pumpkin using a hand mixer, blender, or food processor (it should be about 3 cups puree). In a 4 quart (4 L) soup pot, place the chicken stock, onion, and celery. Cover and bring it to a simmer. Continue cooking for about 15 minutes, until the vegetables are soft and translucent. With a slotted spoon or small mesh strainer, remove the vegetables and puree using the same method as the pumpkin. Return the vegetables to the chicken stock and add the pumpkin puree. Add the win (or sherry or broth), cinnamon, allspice, curry powder (if using), paprika, cumin, cayenne pepper (if using), and white pepper. Slowly stir in the half and half. Bring it back to a simmer and continue cooking for about 20 minutes, stirring occasionally. Serve in warmed soup bowls, and garnish with a light sprinkle of cinnamon.

Diet Stage: Pureed

Yields: 6 servings (about 1 cup)

Nutritional Analysis

Each with: **Calories:** 151 **Protein:** 6 g **Carbs:** 22 g **Total Fat:** 4 g **Sat Fat**: 1 g **Cholesterol:** 5 mg **Sodium:** 252 mg **Sugars:** 7 g **Fiber:** 5 g

Lentil Soup

Ingredients

- 1 tablespoon (14 ml) extra-virgin olive oil
- 1 cup (130g) diced carrot (about 1 large)
- ¾ cup (120g) diced yellow onion (about 1 medium)
- 1 cup (100g) diced celery (about 1 large rib)
- 2 cloves fresh garlic, chopped
- 2 bay leaves
- 1 tablespoon (14 ml) low-sodium tamari soy sauce
- ½ teaspoon black pepper
- 1 teaspoon dried oregano
- 1 teaspoon dried thyme
- 1 can (14.5 ounces, or 415g) plum tomatoes, drained
- 2 cups (385g) green lentils, soaked for 30 minutes
- 4 ½ cups (1 L) water
- Water or low-sodium vegetable broth (optional)
- 6 sprigs fresh thyme

Heat the oil in a 3-quart (3 L) stockpot or soup pot over medium-high heat. Add the carrot, onion, celery, garlic, bay leaves, tamari soy sauce, pepper, oregano, and dried thyme, and cook until the carrots begin to soften. Break apart the tomatoes by crushing them with your hands, then add them to the pot. Drain the lentils, and then add them to the pot. Add the water and bring to a boil. Reduce the heat to a soft boil, cover partially, and cook for 20 minutes, until the lentils become soft throughout. If a thinner consistency is desired, add additional water or low-sodium vegetable broth in small amounts at a time. (Adding too much water to the soup will decrease the strength in flavor). Remove the bay leaves prior to serving. Garnish with the thyme sprigs and serve in warmed soup bowls.

Diet Stage: Pureed

Yields: 6 servings (about 1 cup)

Nutritional Analysis

Each with: **Calories:** 313 **Protein:** 20 g **Carbs:** 49 g **Total Fat:** 5 g **Sat Fat**: 1 g **Cholesterol:** 0 mg **Sodium:** 394 mg **Sugars:** 11g **Fiber:** 23 g

Black Bean Soup

- 1 small onion, diced
- 2 cloves garlic, minced
- 1 Tbsp olive oil
- 2 cans black beans (15 oz. each)
- 2 cans diced tomatoes (15 oz. each)
- 2 cans fat free chicken broth (15 oz. each)
- 1 Tbsp balsamic vinegar
- 1 tsp thyme
- 2 bay leaves

Saute onion and garlic in olive oil until onions start to sweat. Add black beans and mush about a quarter of the beans with a potato masher. Add remaining ingredients. Bring to a boil, then turn down heat. Simmer for 10 minutes until done. Remove bay leaves and serve.

Diet Stage: Pureed

Yields: approx. 10 servings (about ½ cup)

Nutritional Analysis

Each with: **Calories:** 79 **Protein:** 5 g **Carbs:** 11 g **Total Fat:** 1 g **Sat Fat**: 0 g
Cholesterol: 0 mg **Sodium:** 410 mg **Sugars:** 2 g **Fiber:** 5 g

Dinner Recipes

Whole Roasted Chicken with Potatoes and Brussels Sprouts

Ingredients

- 1 (5-pound, or 2.5 kg) whole chicken
- 2 teaspoons sea salt or kosher salt
- ½ teaspoon black pepper
- 1 teaspoon dried basil
- 4 cloves fresh garlic, halved
- ½ cup (120 ml) white wine or chicken stock
- 2 cups (475 ml) water
- 2 tablespoons (28 ml) lemon juice (about ½ lemon)
- 12 small to medium baby red potatoes, washed and halved
- 18 Brussels sprouts, washed, trimmed, and halved
- Fresh sprigs parsley

Preheat the oven to 400 degrees F (200 degrees C). Remove all innards from the chicken. Using kitchen shears or a filet knife, remove all of the skin and trim all of the excess fat.

In a small cup or bowl, combine the salt, pepper, and basil and mix well into a dry rub. Rub the seasonings evenly on all surface areas of the chicken. Place the chicken breast side down in a 6-quart (6-L) roasting pan with a lid. Add the garlic, wine or stock, water, and lemon juice to the pan. Place the potatoes on one side of the pan, and the Brussels sprouts on the other, along with the chicken.

Cover with the lid and bake for about 1 hour and 15 minutes, basting with the liquid in the pan three or four times. Remove the cover and continue baking for an additional 30 minutes, until a leg can easily be separated from the body when checked with a fork, and the juices from the chicken run clear. (If using a meat thermometer, the internal temperature of the breast should be about 180 degrees F) Remove the chicken from the pan and let stand for about 5 minutes before carving. For an elegant presentation, serve the chicken, potatoes, and Brussels sprouts on the same serving platter, decorated with fresh parsley sprigs.

Diet Stage: Regular

Yields: 6 servings (about 3-4 ounces chicken, 6 Brussels sprout halves, and 4 potato halves)

Nutritional Analysis

Each with: **Calories:** 357 **Protein:** 29 g **Carbs:** 46 g **Total Fat:** 5 g **Sat Fat**: 0 g

Cholesterol: 76 mg **Sodium:** 464 mg **Sugars:** 4 g

Fillet of Salmon with Sesame-Orange Glaze

Ingredients

- 1 ½ pounds (700g) wild Atlantic salmon, cut into 6 (4-ounce, or 115g) pieces
- ¼ teaspoon salt
- ¼ teaspoon black pepper
- 3 tablespoons (45 ml) light soy sauce
- 3 tablespoons (45 ml) fresh or premixed 100% orange juice
- 1 teaspoon orange zest
- ½ teaspoon toasted sesame oil

Preheat the oven to 375 degrees F (190 degrees C). Sprinkle the top and bottom of the salmon with the salt and pepper and set aside for 15 minutes in the refrigerator. In a small mixing bowl, combine the soy sauce, orange juice, orange zest, and sesame oil. Vigorously whisk with a wire whip or fork. Pour the glaze mixture into a small saucepan and cook over medium-high heat until glaze reduces in volume by one-fourth. Place the salmon in a 9 - x 13 – inch (22.5 – x 32.5 cm) glass baking dish skin side down and spoon the glaze on top. Bake the salmon fillets 12 to 15 minutes for every 1 inch (2.5 cm) of thickness.

Diet Stage: Soft

Yields: 6 servings (about 3 ounces)

Nutritional Analysis

Each with: **Calories:** 176 **Protein:** 23 g **Carbs:** 2 g **Total Fat:** 8 g **Sat Fat**: 1 g

Cholesterol: 62 mg **Sodium:** 350 mg **Sugars:** 2 g **Fiber:** 0 g

Slow-Cooked Bone-In White Chicken Chili

Ingredients

- 1 pound (455g) skinless chicken thighs
- 1 pound (455g) dry Great Northern White beans, rinsed (about 2 ½ cups)
- 6 cups (1410 ml) low-fat, low-sodium chicken broth
- 2 tablespoons (30g) low-sodium tomato paste
- 1 medium green bell pepper, cored and diced (about ¾ cup, or 105g)
- 1 large medium yellow onion, diced (about 1 ½ cups, or 240g)
- 3-6 cloves fresh garlic, chopped
- 1 jalapeno pepper, seeded and minced (optional)
- 1 tablespoon (4g) dried oregano
- 3 teaspoons ground cumin
- 2 teaspoons paprika
- 1 tablespoon (9g) chili powder
- ½ teaspoon cayenne pepper (optional)
- Fresh cilantro sprigs
- Nonfat sour cream

Rinse the chicken and pat them dry with paper towels. Place the beans in the slow cooker, along with broth and tomato paste. Stir to dissolve the tomato paste and add the chicken, bell pepper, onion, garlic, jalapeno pepper, oregano, cumin, paprika, chili powder, and cayenne pepper (if using). Cook on high for 10 hours. Serve in warm bowls and top each with a sprig of cilantro and a teaspoon of sour cream.

Diet Stage: Soft

Yields: 8 servings (about ¾ cup)

Nutritional Analysis

Each with: **Calories:** 270 **Protein:** 26 g **Carbs:** 32 g **Total Fat:** 4 g **Sat Fat**: 1 g

Cholesterol: 47 mg **Sodium:** 112 mg **Sugars:** 4 g **Fiber:** 12 g

Chicken, Broccoli, and Mushroom Casserole

Ingredients

- 6 (4-ounce, or 115g) boneless, skinless chicken breasts
- 1/8 teaspoon salt
- 1/8 teaspoon black pepper
- 1 package (10 ounces, or 280g) frozen broccoli florets
- 2 teaspoons light butter
- ¾ pound (340g) fresh mushrooms, cleaned and sliced
- 1 can (8 ounces, or 225g) low-fat condensed cream of celery soup
- 2 teaspoons lemon juice
- ½ cup (120 ml) nonfat milk
- ¼ cup (25g) sliced green onions (white and green parts)
- ¼ cup (25g) seasoned bread crumbs
- 2 tablespoons (10g) grated Parmesan cheese
- 2 tablespoons (8g) finely chopped fresh parsley

Preheat the oven to 375 degrees F (190 degrees C). Spray a medium-large (about 9 x 13 – inch, or 22.5 x 32.5 – cm) baking dish with cooking spray. Sprinkle the chicken with the salt and pepper and place them in the prepared baking dish. Bake the chicken for 15 minutes. (It will finish cooking in the following process). Leave the oven on.

Meanwhile, thaw and drain the broccoli florets. Remove the chicken from the baking dish, cool in the refrigerator for 15 minutes, and then cut it into 1-inch (2.5cm) pieces. Place the chicken back into the baking dish. Add the broccoli.

In an 8 or 9 – inch (20 or 22.5cm) nonstick skillet, melt the light butter over medium-high. Sauté the mushrooms for about 8 minutes, until soft, then distribute them evenly along with any juices over the chicken and broccoli. In a small bowl, mix together the bread crumbs, cheese, and parsley. Remove the casserole from the oven and sprinkle the bread crumb mixture over the top. Return the dish to the oven and bake for 10 minutes more, until the crumb topping is golden brown.

Diet Stage: Regular

Yields: 8 servings (about 1 cup)

Nutritional Analysis

Each with: **Calories:** 161 **Protein:** 24 g **Carbs:** 9 g **Total Fat:** 3 g **Sat Fat**: 1 g

Cholesterol: 52 mg **Sodium:** 386 mg **Sugars:** 3 g **Fiber:** 2 g

Easy Oven-Baked “Fried” Chicken

Ingredients

- ½ cup (40g) instant oats
- 1 teaspoon garlic powder
- 1 teaspoon onion powder
- 1 teaspoon ground celery seed
- 1 teaspoon paprika
- 1 teaspoon dried basil
- ½ teaspoon salt
- ½ teaspoon black pepper
- 1 tablespoon (4g) finely chopped fresh parsley
- 1 ½ tablespoons (20g) Dijon mustard
- ½ teaspoon lemon juice
- 4 (4-ounce, or 115g) boneless, skinless chicken breast halves

Preheat the oven to 375 degrees (190 degrees C). Coat a baking sheet with cooking spray. Ina a shallow dish, combine the oats, garlic powder, onion powder, celery seed, paprika, basil, salt, pepper, and parsley and stir to mix.

In a small bowl, combine the mustard and lemon juice. With a pastry brush, coat the chicken with the mustard mixture on both sides. Gently press the chicken into the oat mixture to coat both sides. Place the coated chicken on the prepared baking sheet and bake for 20 minutes, until chicken is golden brown.

Diet Stage: Regular

Yields: 4 servings (about 3-ounce)

Nutritional Analysis

Each with: **Calories:** 168 **Protein:** 28 g **Carbs:** 7 g **Total Fat:** 3 g **Sat Fat**: 1 g
Cholesterol: 66 mg **Sodium:** 272 mg **Sugars:** 0 g **Fiber:** 1 g

Spaghetti Squash with Pomodoro Sauce

If you would like to make a complete meal out of this, add about 3 ounces (85g) shredded part-skim mozzarella cheese or shredded vegetarian (soy) cheese.

Ingredients

- 1 medium spaghetti squash (enough to yield 2 cups, or 310g cooked)
- 1 ½ cups (570 ml) water
- 1 can (14 1/5 ounces, or 415g) diced tomatoes in juice, no salt added
- 2 cloves garlic, minced
- 6 tablespoons (3 ounces, or 90 ml) white wine or chicken broth, or vegetable broth
- ½ teaspoon kosher salt
- ½ teaspoon ground white pepper
- 1tablespoon (14 ml) extra-virgin olive oil
- 1 tablespoon (5g) grated Parmesan cheese
- Fresh parsley sprigs

Preheat the oven to 375 degrees F (190 degrees C). Cut the squash in half lengthwise and scrape out and discard seeds. Place the halves in a baking dish, skin sides up. Add the water to the baking dish and bake about 40 minutes, until the squash will gently peel away from the skin with a fork.

In a 1 or 2-quart (1 or 2 L) saucepan, place the tomatoes with juice, garlic, wine, or broth, salt, white pepper , and oil, cover, and bring to a simmer. Once a simmer is reached, remove the cover and continue cooking for 20 minutes. For a smoother consistency, an emersion blender can be used to slightly puree the sauce.

Remove the cooked spaghetti squash by gently peeling away from the skin with a fork. Arrange in 1 cup (155g) mounds and serving plates or in serving bowls as you would pasta and top with the sauce. Garnish with the cheese and parsley.

Diet Stage: Soft

Yields: 4 servings (about ¾ cup)

Nutritional Analysis

Each with: **Calories:** 96 **Protein:** 2 g **Carbs:** 10 g **Total Fat:** 4 g **Sat Fat**: 1 g
Cholesterol: 0 mg **Sodium:** 275 mg **Sugars:** 4 g **Fiber:** 2 g

Side Dishes

Green Bean Casserole

Ingredients

- 2 teaspoon extra-virgin olive oil
- ¼ cup (40g) diced onion
- 1 tablespoon (6g) white flour
- 1 cup (235 ml) nonfat milk
- ½ cup (55g) low-fat, shredded Swiss cheese
- ¼ cup (50g) nonfat sour cream
- 2 ¼ cups (250g) fresh green beans, cut in half lengthwise
- 1 large egg white
- 1 tablespoon (14g) margarine or light butter, melted
- 1 ½ cups (60g) seasoned croutons

Preheat the oven to 350 degrees F (180 degrees C). In a 3 quart (3 L) saucepan, heat the oil over medium heat. Add the onion and sauté for approximately 5 minutes, until the onion is tender, but not brown. In a small mixing bowl, mix the flour and milk with fork, until all the lumps are gone. Add the flour and milk mixture to the onion and continue cooking, stirring constantly, for an additional 3 minutes, until the mixture is thick and bubbly.

Spray an 8x8 inch (20x20 cm) baking dish with cooking spray. Place the green beans in the dish and pour the cheese mixture evenly over the beans. In a medium bowl, combine the egg white, margarine or butter, and seasoned croutons. Stir the mixture well and pour it evenly over the green beans. Bake for about 25 minutes, until the casserole is thoroughly heated.

Diet Stage: Regular

Yields: 8 servings (about ½ cup)

Each with: **Calories:** 97 **Protein:** 5 g **Carbs:** 10 g **Total Fat:** 4 g **Sat Fat**: 1 g

Cholesterol: 9 mg **Sodium:** 240 mg **Sugars:** 5 g **Fiber:** 2 g

Herb and Cheese Mashed Cauliflower

Ingredients

- 2 ½ cups (570 ml) water
- 3 cups (450g) cauliflower florets (about 1 inch, or 2.5 cm pieces)
- 2/3 cup nonfat milk
- ¼ cup (155 ml) nonfat sour cream
- ½ teaspoon salt
- 1/8 teaspoon ground white pepper
- 2 tablespoons (15g) finely chopped green onion
- 1 tablespoon (4g) finely chopped fresh parsley
- 1 tablespoon (14g) butter substitute

In a 2 ½ quart (2.5 L) saucepan with a steamer basket, bring the water to a boil. Place the cauliflower in the steamer basket and steam for about 15 minutes, until the cauliflower is very tender throughout. Place the cauliflower in a food processor fitted with a metal S blade and puree until smooth. Add the milk and sour cream and carefully pulse the mixture until smooth. (Pulsate the mixture briefly to avoid the liquids splashing out of the processing bowl). Add the salt, white pepper, onion, parsley, and butter substitute and continue pulsating until evenly incorporated. Serve warm as a side dish.

Diet Stage: Pureed

Yields: 4 servings (about 1 cup)

Nutritional Analysis

Each with: **Calories:** 88 **Protein:** 6 g **Carbs:** 14 g **Total Fat:** 2 g **Sat Fat**: 0 g

Cholesterol: 3 mg **Sodium:** 252 mg **Sugars:** 7 g **Fiber:** 4 g

Sweet Potatoes au Gratin

Ingredients

- 1 tablespoon (14g) light butter
- 1 medium onion, finely diced
- 1 small clove fresh garlic, minced
- 2 ½ cups (570 ml) low-sodium vegetable broth
- ½ cup (50g) green onions, finely chopped
- ¼ cup (15g) chopped fresh parsley
- 1 cup (235 ml) nonfat milk
- ¼ teaspoon salt
- ¼ teaspoon ground black pepper
- 3 medium sweet potatoes, peeled and thinly sliced (about 2 ½ pounds, 1.25 kg)
- ½ cup (55g) shredded reduced-fat Cheddar cheese
- ¼ cup (20g) shredded Parmesan cheese

Preheat the oven to 375 degrees F (190 degrees C). Coat a 9x13 inch (22.5x32.5 cm) baking dish with cooking spray. In a 2 quart (2 L) saucepan, melt the butter substitute over medium heat. Add the onion and garlic and sauté until the onion begins to soften, about 5 minutes. Add the broth, green onion, parsley, milk, salt, and pepper and bring to a simmer. Cook until the liquid is reduced to about 2 ¾ cups (650 ml). Add the sweet potatoes and return to a simmer. Continue cooking for an additional 5 minutes.

Pour the mixture into the prepared baking dish and bake for about 35 minutes, until the potatoes are tender, basting the potatoes occasionally with the liquid in the dish. Top the dish evenly with the Cheddar and then the Parmesan and continue to bake for about 20 minutes, until the cheese is bubbly and golden brown.

Diet Stage: Pureed

Yields: 16 servings (about ¾ cup)

Nutritional Analysis

Each with: **Calories:** 104 **Protein:** 4 g **Carbs:** 18 g **Total Fat:** 2 g **Sat Fat**: 1 g **Cholesterol:** 5 mg **Sodium:** 117 mg **Sugars:** 4 g **Fiber:** 2 g

Citrus-Roasted Carrots with Honey

Ingredients

- 1 tablespoon (14 ml) olive oil
- 2 teaspoons light butter
- Juice of ½ lemon
- 1 teaspoon honey
- 1/8 teaspoon sea salt or kosher salt
- 1/8 teaspoon ground white pepper
- 1 pound (455g) baby carrots, peeled
- 1 tablespoon (4g) chopped fresh parsley

Preheat the oven to 375 degrees F (190 degrees C). Spray a 7x9 inch (17.5x22.5 cm) baking dish with cooking spray. In a medium skillet, heat the oil, butter, lemon juice, honey, salt, and pepper over medium heat. Add the carrots and turn until coated with the mixture. Transfer mixture to the prepared baking dish. Roast on the medium rack for 20 to 30 minutes, until the carrots are tender and caramelized.

Diet Stage: Soft

Yields: 6 servings (about ½ cup)

Nutritional Analysis

Each with: **Calories:** 60 **Protein:** 1 g **Carbs:** 8 g **Total Fat:** 3 g **Sat Fat**: 0 g

Cholesterol: 0 mg **Sodium:** 93 mg **Sugars:** 4 g **Fiber:** 1 g

Desserts/Beverages

Sugar-Free Ginger Applesauce Cake

Ingredients

- 2 cups (220g) all-purpose flour
- 1 teaspoon baking powder
- 1 teaspoon baking soda
- 1 ½ teaspoons allspice
- ½ teaspoon salt
- ¾ cup (20g) brown sugar substitute
- 2 eggs
- 2 tablespoons (16g) fresh grated gingerroot
- 1 ½ cups (360g) unsweetened applesauce
- 1 ½ teaspoons vanilla extract

Preheat the oven to 350 degrees F (180 degrees C). Spray a 1 ½ quart (1.5 L) loaf pan with cooking spray. In a medium mixing bowl, sift together the flour, baking powder, baking soda, allspice, and salt. In a separate bowl, mix together the sugar substitute, eggs, ginger, applesauce, and vanilla.

Pour wet mixture into the dry mixture in thirds, stirring all the while with a wire whisk. Continue mixing until just smooth. (Do not over mix). Pour batter into the prepared pan and bake for about 50 minutes, until a toothpick inserted into the center comes out clean. Cool the cake at room temperature for 30 minutes before releasing it from the pan.

Diet Stage: Regular

Yields: 12 servings (about 2-ounce)

Nutritional Analysis

Each with: **Calories:** 107 **Protein:** 3 g **Carbs:** 20 g **Total Fat:** 1 g **Sat Fat**: 0 g

Cholesterol: 40 mg **Sodium:** 199 mg **Sugars:** 4 g **Fiber:** 1 g

Holiday Pumpkin Parfait

Ingredients

- 1 cup (255g) pumpkin puree
- 1 package (1 ounce, 28g) sugar-free instant vanilla pudding mix
- 2 cups (475 ml) cold nonfat milk
- 1 teaspoon cinnamon
- 1 teaspoon allspice
- ½ teaspoon vanilla extract
- 6 tablespoons (18g) nonfat whipped cream topping
- 6 cinnamon sticks
- ½ teaspoon ground nutmeg

In a medium mixing bowl, combine the pumpkin puree, pudding mix, and milk. Add the cinnamon, allspice, and vanilla and mix thoroughly. Evenly spoon the mixture into 6 parfait or martini glasses. Chill in the refrigerator for about 30 minutes, until the mixture is set. Place 1 tablespoon (3g) whipped cream topping on top of each parfait. Garnish each with a cinnamon stick and nutmeg.

Diet Stage: Pureed

Yields: 6 servings (about ½ cup)

Nutritional Analysis

Each with: **Calories:** 55 **Protein:** 3 g **Carbs:** 9 g **Total Fat:** 1 g **Sat Fat**: 0 g

Cholesterol: 2 mg **Sodium:** 100 mg **Sugars:** 5 g **Fiber:** 1 g

Unjury Chocolate Peanut Butter Balls

Optional Ingredients: dried fruit (raisins, cranberries or cherries) in small quantities, spices (cinnamon or nutmeg), etc.

Ingredients:

- ¾ cup reduced fat JIF peanut butter
- 3 scoops Chocolate UNJURY

Measure ¾ cup peanut butter and add to mixing bowl. Add 3 scoops of Chocolate UNJURY, 1 scoop at a time, stirring well after each scoop, until dough is formed. Roll into 14 balls & freeze overnight.

Diet Stage: Regular

Yields: 14 servings (about ½ cup)

Nutritional Analysis

Each with: **Calories:** 103 **Protein:** 8 g **Carbs:** 7 g **Total Fat:** 5 g

*Varies depending on brand/type protein powder used.

Peppermint Mousse

Ingredients

- 1 box sugar-free, fat-free instant white chocolate pudding mix
- 2 cups skim milk
- ½ teaspoon peppermint extract
- 3 drops red food coloring
- 1 ½ cups of sugar-free Cool Whip

In a bowl, mix pudding mix, milk, peppermint extract, and food coloring. Whisk for 2 minutes. Refrigerate for 5 to 10 minutes. Add Cool Whip and mix for 2 additional minutes. Spoon into parfait glasses.

Diet Stage: Pureed

Yields: 8 servings (about ¼ cup)

Nutritional Analysis

Each with: **Calories:** 80 **Protein:** 2 g **Carbs:** 15 g **Total Fat:** 0 g

Protein Hot Chai Tea Mix

Ingredients:

- 6 scoops vanilla protein powder
- 1 ½ cups non-fat powdered milk
- ¾ cup instant unsweet tea mix
- ¾ cup Splenda
- 1 TB chai spice mix (or use half cinnamon and half ground ginger)
- 1 tsp ground cloves
- 1 tsp cardamom

Mix all dry ingredients in bowl until well blended. Add ½ cup of mixture to mug and add either splash of cold water. Stir to create smooth paste. Add 8 oz hot water and mix well. Top with sprinkle of chai spice.

Diet Stage: Full Liquid

Yields: 7 servings (about ½ cup)

Nutritional Analysis

Each with: **Calories:** 146 **Protein:** 27 g **Carbs:** 9 g **Total Fat:** 1 g

*Varies depending on brand/type protein powder used.

UNJURY Fall Spice Latte

Ingredients

- 1 scoop Vanilla UNJURY
- ½ cup Skim Milk
- ½ cup coffee (decaf)
- 1 tsp Cinnamon
- ¼ tsp Ginger

Measure skim milk into a microwave safe mug. Heat skim milk in the microwave (below 130°F). Stir ½ cup coffee (below 130°F) into warm skim milk. Slowly add 1 scoop of Vanilla UNJURY and stir until dissolved. Sprinkle cinnamon & ginger and mix well *(amount of cinnamon and ginger may vary depending on your personal taste)*

Diet Stage: Full Liquid

Nutritional Analysis

Each with: **Calories:** 149 **Protein:** 24 g **Carbs:** 12 g **Sugars:** 9 g

Sugar Free Eggless Eggnog

Ingredients

- 5 cups of skim milk
- 1 – 2 cups fat free, half & half (depending on how thick you like eggnog)
- 1 pkg (4 serving size pkg) fat free, sugar free instant pudding, vanilla flavor
- 3 Tbsp. Splenda®
- 1 ½ tsp nutmeg
- ¼ tsp cinnamon
- 2 tsp rum extract
- 1 tsp vanilla extract

Whisk all ingredients together and then let chill for at least an hour. If you like a thinner consistency, add more skim milk

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Diet Stage: Full Liquid

Yields: approx. 14 servings (about ½ cup)

Nutritional Analysis

Each with: **Calories:** 62 **Protein:** 4 g **Carbs:** 10 g **Total Fat:** 1 g **Sat Fat**: 0 g **Cholesterol:** 4 mg **Sodium:** 190 mg **Sugars:** 2 g **Fiber:** 0 g

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