

# NICHOLSON CLINIC

For Weight Loss Surgery

Here is your next step after your appointment:

## **Patient Care Advocate**

Every Nicholson Clinic patient is assigned to a Patient Care Advocate. Patient Care Advocates are here to help guide you through the surgery process and to serve as your primary point of contact within the Nicholson Clinic. They will be able to assist you with most, *but not all*, of your needs. Your Patient Care Advocate's primary goal is to ensure that you have the best experience throughout the surgical process. Please inform your Patient Care Advocate if you are ever dissatisfied with any aspect of your surgical process.

- Your Patient Care Advocate will contact you, by phone, within one week of your consultation. If you are unavailable, all of the information will be sent to you via email (if you have provided your email address).
  
- Our staff will send an order to \_\_\_\_\_ for additional testing.  
The facility will call you to schedule your testing.  
NOTE: EGD & Upper GIs will NOT be performed on the same day.
  
- Your Patient Care Advocate will assign you to an Insurance Case Manager if you have insurance criteria to complete prior to surgery. Your Insurance Case Manager will guide you through the insurance approval process. They will mail or email you a criteria letter within two weeks of your consultation. This letter will list what your insurance company requires for surgery approval. Please contact your Case Manager with any questions related to your insurance approval; their contact information will be located on the letter you receive.

**Your Patient Care Advocate is:**

## Prescriptions

After your surgery is scheduled, our pharmacy coordinator will contact you concerning your prescriptions. The pharmacy coordinator will discuss your prescribed medications and address any questions you might have.

## Pre-Op Diet

**EVERYONE IS REQUIRED TO START THIS 2 WEEKS BEFORE SURGERY.**

The Pre-Op diet is mandatory in order to shrink your liver and ensure a safe operation. Surgery can be cancelled if your liver is too large to safely operate. and Post-Op diet. See page 32 for more information. You are also required to have a Pre-Op dietitian visit to discuss your two-week Pre-Operative diet. The information for the dietitians can be found on page 6 of your patient folder. Please call the dietitian directly and schedule a Pre-Operative visit as soon as possible.

# NICHOLSON CLINIC

For Weight Loss Surgery

## Consult Folder Table of Contents

- Important Contact Information	Page 3
- Financial Information for The Nicholson Clinic	Page 4
- Hospital Information	Page 5
- Additional Recommended Providers	Page 6
- Who Do I Call	Page 7
- What You Should Know Before Surgery	Page 8
- Why Stop Tobacco Before Surgery	Page 9
- Why is a Sleep Study Necessary	Page 10
- Pre-Operative Medications	Page 11
- Disability / FMLA / Return to Work Policy	Page 12
- Hospital Pre-Admission Procedure	Page 13
- Instructions for Pre-Operative Testing	
o Laboratory Testing	Page 14
o Upper GI	Page 15
o EGD	Page 16
- Are You Ready for Surgery?	Page 17
- Having Surgery	Page 18
- Sequence of Events for Day of Surgery	Page 19
- Discharge Instructions	Page 20-21
- Frequently Asked Questions	Page 22-23-24
- Issues Associated with Eating/Nutrition Basics	Page 25-26
- Nutrition Basics	Page 27-28
- Prescription Medications After Surgery	Page 29
- Post-Operative Appointments	Page 30
- Support Group Information	Page 31
- Pre-Op and Post-Op Diets & Vitamin Information	Page 32-58

## Important Contact Information

**Phone Number**  
(972) 494-3100

**Fax Number**  
(972) 608-0005

**Billing & Mailing Address**  
5000 Legacy Drive, Suite 200  
Plano, Texas 75024

### Clinic Addresses

**Plano Clinic**  
Independence Medical Village  
8080 Independence Parkway  
Suite 115  
Plano, Texas 75025

**Dallas Clinic**  
Forest Park Medical Center –  
South Tower Building  
11970 N. Central Expressway  
Suite 460  
Dallas, Texas 75243

### Medical Team

<b>Denise Cleere, Business Office Manager</b>	(214) 440-3007
<b>Rick Fisher, PA-C, Physician Assistant</b>	(972) 494-3100
<b>Adam Brown, PA-C, Physician Assistant</b>	(972) 494-3100
<b>Gloria Gonzales, RN, APN, Nurse Practitioner</b>	(214) 919-0786
<b>Kelly Ray, RN, Triage Nurse</b>	(972) 646-8001
<b>Adrienne Rule, Surgery Scheduler</b>	(214) 440-3009
<b>Silvia Quiroz, MA, Pre-op Coordinator</b>	(972) 432-6821
<b>Jordan Mitchell, MA, Patient Care Advocate</b>	(214) 785-6888
<b>Rachel Galloway, MA, Patient Care Advocate</b>	(214) 919-0788
<b>Candace B. Peppers, MA, Patient Educator</b>	(214) 699-4076
<b>Sherri Creech, MA, FMLA Coordinator</b>	(972) 426-9010
<b>Billing Department, Nicholson Clinic</b>	(214) 919-0785

# Financial Information for Nicholson Clinic Charges ONLY

## Self-Pay Patients

You will be given the cash pay guidelines that will explain everything covered in your “package price” once surgery has been scheduled.

## Insurance Patients

Your insurance company will be billed for the following:

- Office visits prior to surgery
- Surgical procedure
- Office visits past the 90-day insurance global period after surgery
- Lap band fills past the 90-day insurance global insurance period after surgery

***NOTE: You will be responsible for ALL co-pays, co-insurance, and deductibles not previously met. You will be responsible for your specialist office visit co-pay at the time of your office visit.***

Once your insurance company has paid our charges, you will be sent a statement for any outstanding amount that your insurance company approved but applied to your co-pay, co-insurance or deductible amount.

If outstanding balances are not paid in a timely manner, future appointments with the clinic **will not** be made.

## Other Billing Questions

For all questions regarding our charges or billing issues please call our office and speak to a billing department representative at (214) 919-0785.

## Hospital Information

<b>Baylor Scott &amp; White Medical Center – Plano</b> 4700 Alliance Blvd., Plano, Texas 75093 <a href="http://www.BaylorHealth.com">www.BaylorHealth.com</a>	
<b>Main Number</b>	<b>(469) 814-2000</b>
Hospital Pre-Admission	(469) 814-5500
Central Scheduling (Upper GI, Testing, etc.)	(469) 814-5500
Financial Concerns – Business Office	(469) 814-2312

<b>Baylor Surgicare of Garland</b> 530 Clara Barton Blvd. #100, Garland, Texas 75042 <a href="http://www.PAS-Garland.com">www.PAS-Garland.com</a>	
<b>Main Number</b>	<b>(972) 494-2400</b>

<b>Medical City Frisco</b> 5500 Frisco Square Blvd., Frisco, Texas 75034 <a href="http://www.Medicalcityfrisco.com">www.Medicalcityfrisco.com</a>	
<b>Main Number</b>	<b>(214) 618-0500</b>
Surgery Scheduler	(214) 618-0502

<b>Texas General Hospital</b> 2709 Hospital Blvd., Grand Prairie, Texas 75051 <a href="http://www.Texasgeneralhospital.com">www.Texasgeneralhospital.com</a>	
<b>Main Number</b>	<b>(469) 999-0000</b>

<b>Crescent Medical Center Lancaster</b> 2600 West Pleasant Run Road Lancaster, Texas 75146 <a href="http://www.cmcl.us">www.cmcl.us</a>	
<b>Main Number</b>	<b>(972) 230-8888</b>

## Additional Recommended Providers

### Psychology

**PsyMed**

Clinical Psychologist  
(214) 348-5557

**Jay Ashmore, PhD**

Clinical Psychologist  
(469) 814-4850

**Steven Patrick, PsyD**

Clinical Psychologist  
(972) 934-1485

**Legacy Assessment Group**

Clinical Psychologists  
(214) 760-1964

**Lori Golden, PhD**

Clinical Psychologist  
(214) 228-0796

### Dietitians

**PsyMed**

1708 Coit Rd  
Suite 150  
Plano, Texas 75075  
(214) 348-5557

**Amber Odom, RD/LD**

8080 Independence  
Parkway Suite 200  
Plano, Texas 75025  
(972) 596-9511

**Melanie Wilder,  
RD/LD**

5425 W. Spring  
Creek Parkway,  
Suite 200  
Plano, Texas 75024  
(972) 599-9600

### Cardiologist

**Cottonwood Cardiology**

[www.CottonwoodCardiology.com](http://www.CottonwoodCardiology.com)  
(972) 607-2525

**Legacy Heart Center**

[www.LegacyHeartCenter.com](http://www.LegacyHeartCenter.com)  
(469) 800-6300

### Gastroenterologist

**Dr. Harry Sarles, Dr. Mark Miller, Dr. Bilal Khan, and Dr. Kristie Blank**

Digestive Health Associates of TX, PA  
(972) 771-2222

### Plastic Surgery

**Dr. Richard Ha**

**Dallas Plastic Surgery Institute**  
[www.HaPlasticSurgery.com](http://www.HaPlasticSurgery.com)  
(214) 818-0935

**Dr. Matthew Trovato**

[www.DrMJTrovato.com](http://www.DrMJTrovato.com)  
(214) 827-2873

### Primary Care

**Village Health Partners**

5425 W. Spring Creek Parkway #200,  
Plano, Texas 75024  
[www.VillageHealthPartners.com](http://www.VillageHealthPartners.com)  
(972) 599-9600

**Village Health Partners**

8080 Independence Parkway #200,  
Plano, Texas 75025  
(972) 596-9511

## Who Do I Call?

### Business Hours

If you have an urgent or non-urgent medical matter during business hours, please contact our office.

### Nicholson Clinic Office Hours

Monday – Friday

9 am – 5 pm

**(972) 494-3100**

### After Hours, Weekends or Holidays

If you have an **URGENT** medical matter after hours, on the weekend, or holiday contact Nicholson Clinic at (972) 494-3100 and our after-hours answering service will contact Dr. Nicholson, Dr. Roshek, Dr. Kilgore, Dr. Long, Rick, Adam, Gloria or the bariatric doctor on call.

**If you have an EMERGENCY, call 911 or go to your local emergency room.**

# What You Should Know Before Choosing to Have Weight Loss Surgery

## 1. **WEIGHT LOSS SURGERY ISN'T MAGIC – IT'S ONLY A TOOL.**

There is no magic cure for obesity. Weight doesn't magically appear and it won't magically disappear. Even with the surgery, losing weight takes discipline, exercise and self-control. If we were masters of these traits, this surgery wouldn't be needed in the first place. Surgery is only a tool to assist you in achieving your goal.

## 2. **ANSWER THESE QUESTIONS BEFORE YOU CONTINUE THE QUEST.**

What is my motivation for wanting the surgery? How's my stress level? How is my life going in general? Determine why you want the surgery. Understand that the surgery won't change the problems and people around you. Keep your expectations realistic.

## 3. **WEIGHT LOSS SURGERY HELPS YOU DROP POUNDS – NOT PROBLEMS.**

For most people, issues in our lives cause overeating. Even when you arrive at your goal weight, those issues will remain if not addressed along the way. You must be willing to discover and deal with the issues that caused your obesity in the first place.

## 4. **LEARN HOW TO TURN STRUGGLES INTO STRATEGIES.**

For those of us who live with obesity, healthy eating is a daily struggle. To be successful, you have to find a way to turn those struggles into strategies. Eating may be your pastime. It may be the only true pleasure you get from life. Stop and think. When your stomach is the size of your thumb and you can no longer eat at every whim, what strategy will you use to overcome the battle between head hunger and real hunger? Why aren't you using that strategy now?

## 5. **BASE YOUR DECISION ON INNER PRIDE – NOT OUTWARD PRESSURE.**

Do you really want this surgery or is someone pressuring you to lose the weight? To be truly successful, you've got to do this for yourself! When those plateaus hit and you struggle with old habits, no one else can handle it for you. You'll be on your own. How badly do YOU want this surgery?

## 6. **DON'T COUNT ON DUMPING – COUNT ON DISCIPLINE.** \*\*This normally applies to patients who undergo the Roux-en-y gastric bypass procedure.

As you learn more about the surgery, you'll discover that some patients "dump", or feel very sick when they eat something they shouldn't. This sick feeling discourages them from eating that food again. You need to know that not all patients dump. Most patients have to resort to self-discipline. If you have trouble with discipline now, you'll have trouble with discipline after surgery. If you don't dump, what's going to keep you from returning to the old habits that sabotaged your other weight loss attempts? If you don't have self-discipline now, where are you going to find it after surgery? The surgeons will change your anatomy. Changing your lifestyle will still be up to you.

## 7. **DECIDE TO MOVE FROM EXHAUSTION TO EXERCISE.**

Obesity causes exhaustion. When we're exhausted, the last thing we want to do is exercise. There'll be times when you won't "feel" like exercising. You need to know that exercise is not optional. To get maximum results, you have to exercise...even when you don't feel like it. Even after you reach your goal weight, to maintain those results, you have to exercise for the rest of your life.

## 8. **MOVE FROM SHAME TO SHARING.**

Most people who suffer from obesity also suffer from the shame it brings. Many refrain from pursuing dreams and becoming the person they know they can be. If you choose to have this surgery, you need to prepare to move from a life of shame to a life of sharing yourself with others. The transformation is amazing, but be prepared along the way to face important truths in your life that may surface for the very first time.

## 9. **MAKE YOUR DECISION INTELLIGENTLY, NOT OUT OF IGNORANCE.**

Do your research and find out all you can about this surgery. Make an intelligent, informed decision. It's the only body you have. The success of this surgery lies within you. Remember, you are making a lifetime commitment to a new way of eating, exercising and living. And a lifetime is a very long time!



## Why Stop Tobacco Before Surgery?

Tobacco is bad for your health. It causes your blood vessels to constrict and decreases your oxygen supply. Tobacco also increases your chance of developing complications after surgery including wound infections, poor healing, and heart and lung problems. You will want to stop **ALL TOBACCO PRODUCTS (including cigarettes, vapor cigarettes, snuff, chewing tobacco, and marijuana)** at least 6 weeks before your surgery and refrain from tobacco afterwards.

### What are the health benefits for smokers who quit?

- **20 minutes after quitting:** your heart rate and blood pressure drops.
- **12 hours after quitting:** the carbon monoxide level in your blood drops to normal and your smoker's breath disappears.
- **2 weeks to 3 months after quitting:** your circulation improves and your lung function increases.
- **1 to 9 months after quitting:** coughing and shortness of breath decrease; cilia (tiny hair structures that move mucus out of the lungs) regain normal function in the lungs, increasing the ability to handle mucus, clean the lungs, and reduce the risk of infection.
- **1 year after quitting:** the excess risk of coronary heart disease is half that of a smoker's.

When you quit smoking, you'll feel better. You'll breathe more easily and your lungs will work better. Your heart won't have to work as hard and your risks for both heart attack and cancer will decrease. After surgery, you will heal and recover faster. Each day that you do not smoke is a small victory which adds up to a huge victory over time. You'll be living a healthier life!

### Where can I get more information?

Ask your health care provider for help and discuss your smoking cessation plan. In addition, the American Cancer Society is a great resource for people who are trying to quit. They may be contacted at 1-800-ACS-2345 or [www.cancer.org](http://www.cancer.org). Or you may contact the Dallas office of the American Lung Association of Texas at 214-631-5864. For more information or to enroll in their free online smoking cessation program, go to [www.texaslung.org](http://www.texaslung.org).

## Why Is A Sleep Study Necessary?

One of the main reasons a sleep study is done is to look for OSA (obstructive sleep apnea). This occurs when you have an apnea, which is a pause of breath for a minimum of 10 seconds, on average minimum 5 times per hour during a night's sleep. There are a number of necessities for a sleep study and the identification of OSA or other sleep disorders. In the case of surgery, it is important to have one done before you are put under anesthesia for surgery to help the surgeon and anesthesiologist better monitor your breathing and provide you optimal care. Complications during and after surgery have been attributed to undiagnosed OSA. Other reasons are for overall health and wellness. OSA is linked to hypertension, strokes, diabetes, and even cancer.

This requirement also remains in effect, even in patients already diagnosed with sleep apnea under the following circumstances:

- ❖ Greater than one year from a previous sleep study
- ❖ Weight loss/gain greater than 15 lbs. since the time of your last sleep study.

*We will have someone contact you to schedule your sleep study.*

## Medications Before Surgery

1. You should **STOP** taking Ibuprofen, Aspirin, Aleve and/or NSAIDS one (1) week prior to your surgery. Oral contraceptives and hormone replacement therapy should be stopped two (2) weeks prior to surgery and may be resumed two (2) weeks after surgery.

[If you are on blood thinners, blood pressure medications or a diuretic please contact our office for specific instructions.](#)

2. You should not eat any solid foods the day before surgery. You are welcome to drink liquids, protein drinks or soups for meals. You should have nothing to eat or drink after 10:00pm.
3. If you usually take your thyroid medication or antidepressants in the morning, you may take them the morning of surgery with a small sip of water.
4. If you take insulin, you should take half (1/2) of your scheduled dose the evening before surgery.
5. You will see the anesthesiologist in the Pre-Op holding area before your surgery. When you speak with him/her, be prepared to discuss ALL of the medications you take, their dosages and how often you take them. –It is best to bring a list with you.

## Disability, Family Medical Leave Act (FMLA) & Return to Work Policy

Please be aware that we provide this service in an effort to assist our patients with necessary completion of forms for leave from work following surgery. We have a system established to assist you in the completion of this paper-work. We will help you as much as possible, but want to make you aware that our top priority is providing quality medical care for our patients. Consequently, the completion of these forms will be executed by our staff as time permits and the **following fees will be charged: \$25.00 for first form. The fee must be paid before the form can be sent to your employer or disability carrier.** Thanks for your understanding in this matter.

**Please read the following information very carefully.**

It is the patient's responsibility to determine their employer's leave requirements. Please contact your employer (e.g.: Human Resources Dept.) to understand their requirements before your consult with the surgeon.

Submit paperwork in person or by fax to (972) 608-0005. Please be advised that paperwork submitted in person will not be completed while you wait.

Paperwork submitted is completed within 5 to 7 business days of the surgery date. Upon completion, the paperwork will be faxed to your company. To assure that your company receives the paperwork in a timely fashion, please be sure to include the correct remittal information when paperwork is submitted. Generally, two fax numbers are needed, one for FMLA forms and one for disability forms.

Should you submit paperwork and a surgery date is not scheduled, **you** must contact our office once you receive a surgery date. Paperwork **cannot** be completed unless you have informed our office of the surgery date.

Return to work release forms will be completed at your two-week Post-Operative follow-up appointment. You have signed an authorization to release medical information for FMLA and Short Term Disability purposes. Please be advised that the Weight Loss Surgery Center will not release that information until a written request is received from your employer and/or Disability Company. Your employer and/or Disability Company may fax a written request to (972)608-0005. When one request has been answered, another request must be submitted for new or additional medical information.

**Please call Nicholson Clinic for any questions or concerns at (972) 494-3100.**

# Hospital Pre-Admission Procedure

The pre-admission process may be required for your admission to the hospital for surgery. In the weeks before your surgery, if required, go to the Pre-Admission office to sign various forms for insurance and consents for surgery. Please contact the facility to inquire if this is required prior to the day of surgery.

Please bring a list of your current medications (name, dose, times), including vitamins and over the counter drugs. Also bring a copy of your living will if you have one, or you can verbally indicate that you have a living will and name the person you have indicated.

**Pre-Operative testing is required for surgery.** This can include blood work, Urinalysis, EKG, EGD, and, Upper GI though other tests may be ordered by your surgeon. These tests must be completed **no less than 2 weeks** prior to surgery; otherwise your surgery may be cancelled or rescheduled. If your surgeon ordered tests that you completed with another physician or at another facility, you must have the results sent to our office at least **2 weeks** prior to your surgery; otherwise your surgery may be cancelled or rescheduled.

### Call to schedule your Pre-Admission Appointment

Baylor – Plano

(469) 814-5500

If there is not a number listed for the facility at which you are having surgery, please contact Silvia (medical assistant) at Nicholson Clinic by calling (972) 432-6821.

***PLEASE NOTE: If something shows up on the Pre-Op testing that requires treatment or a consult with a specialist for surgical clearance, your surgery date may be delayed.***

**If you have any questions, please call Nicholson Clinic at (972) 494-3100.**

## Pre-Op Laboratory & EKG Testing

*Provided by Clinical Pathology Labs (CPL)*

To better meet your needs, your physician has ordered your pre-surgical tests through Clinical Pathology Labs (CPL).

Your testing may be performed while at your office visit or with your personal physician.

Things to remember:

- Test results must be received in our office **at least three business days prior to your scheduled surgery.**
- Your surgery date could be affected if your test results are not received timely.
- When pre-surgical labs are done, a urine specimen may be required. Please come prepared.

## Upper GI Series

*This only applies to those who have an Upper GI ordered*

An Upper GI is a test the doctors require in order to obtain some baseline information about your upper digestive tract prior to surgery. It is important to assess the entire stomach and duodenum (first part of the small intestine) prior to surgery. An Upper GI can detect such complications as ulcers or polyps that would require further assessment and possible treatment prior to surgery. Following a Roux-en-Y Gastric Bypass these areas will no longer be easily accessible.

### Before Your Test

- Stop eating and drinking 8 hours before your test.
- Do not smoke the morning of the test.
- You may take your regular medications with a few sips of water early in the morning of your test.
- The test takes 30-60 minutes. Allow extra time (about 15 minutes) to check in.
- Bring your driver's license and insurance card to verify information at check in.

### Let the technologist know if:

- You have any allergies
- You ate or drank within the last 8 hours
- You are pregnant or think you may be
- You have had any previous surgery
- You take any medications

### During Your Test

- You will change into a patient gown.
- You will drink **barium** (a liquid that improves x-ray images).
- You also may swallow "fizzies," a substance that makes air build up in your stomach.
- Don't burp, even if you feel you have to.
- You may need to stand or lie in different positions for the x-rays.
- You will be asked to hold your breath for a short time during the x-ray.
- Ask for a CD copy of your test and bring it with you to your next appointment.

### After Your Test

- Your stool may appear white or lighter than normal.
- The radiologist will send the results to your surgeon's office for review.
- Your doctor will discuss the test results with you during a follow-up appointment or over the phone.
- You will be notified if further tests or a consult with a gastroenterologist (GI doctor) is necessary.

Occasionally, the surgeon will order an Upper GI after weight loss surgery. The procedure is the same. Gastrografin may be used instead of Barium for the contrast.

**Call Scheduling to schedule your appointment:**

Baylor Plano  
(469) 814-5500

If you have any Pre-Op test completed at another facility,  
please have the results sent to the Nicholson Clinic.  
Fax to (972) 608-0005

# Upper Endoscopy

## (Esophagogastroduodenoscopy or EGD)

*This only applies to those who have an EGD ordered*

**Upper Endoscopy** (EGD) allows your doctor to look directly into the beginning of your gastrointestinal (GI) tract. The esophagus, stomach, and duodenum (first part of small intestine) make up the upper GI tract. The exam is done with a fiber optic endoscope; a flexible lighted tube that allows the doctor to see, obtain samples and take pictures of the inside of your GI tract.

### Before the Exam

Follow these and any other instructions you are given before your endoscopy. If you don't follow the doctor's instructions carefully, the test may need to be cancelled or done over.

- Do not eat any solid food after 8:00pm and nothing to eat or drink after midnight the night before your exam.
- Take your morning medications with a sip of water. Do not take diabetes, blood thinning or aspirin medications that morning.
- If you take any type of blood thinners such as Aspirin, Lovenox, Coumadin, etc. Please notify us as you will be required to obtain clearance from our prescribing physician prior to the EGD.
- Because you will be sedated, arrange for an adult to accompany you to the facility and to drive you home after the procedure.
- Tell your healthcare provider before the exam if you are taking any medications or have any medical problems.

### The Procedure

- You lie on the endoscopy table. The nurse will place a "bite block" in your mouth to protect your teeth.
- You are given sedating (relaxing) medication through an intravenous (IV) line.
- The endoscope is placed in your mouth and is advanced to the stomach.
- Air is inserted to expand your GI tract. It can make you burp.
- The endoscope carries images of your upper GI tract to a video screen. If you are awake, you may be able to look at the images.
- After the procedure is done, you rest for a time, and an **adult must drive you home.**

#### CALL YOUR DOCTOR IF YOU HAVE:

- Black or tarry stools; blood in your stool
- Fever
- Persistent pain in your abdomen

If you have any Pre-Op test completed at another facility,  
please have the results sent to the Nicholson Clinic.  
Fax to (972) 608-0005



## Are You Ready For Surgery?

### *A checklist to help guide you*

- Have you been to the hospital Pre-Admission department to complete the admission procedure?** Refer to “Hospital Pre-Admission Procedure” and “Instructions for Pre-Op Testing” (Upper GI Exam / EGD Exam).
  - Sign required forms (e.g.: consent for treatment)
  - Pre-Op testing complete (as ordered by your surgeon). This may include:
    - Blood Tests
    - EKG
    - Chest X-ray
    - Upper GI (swallow test)
    - EGD
    - Urinalysis
  
- If your surgeon has ordered an EGD for you, this will be scheduled at the appropriate time prior to surgery by our office.**
  - Refer to “Instruction for Pre-Op Testing” (EGD Exam).
  
- If your surgeon ordered tests that you completed with another physician or at another facility, have the results been sent to our office?**
  - In not, please fax them to (972) 608-0005
  
- Have you been following your 2-week Pre-Op diet?**
  - Refer to “1200 Calorie Pre-Op Diet.”
  
- Do you know where to go the day of surgery?**
  - Refer to “Sequence of Events for Day of Surgery.”
  
- Have all of your questions been answered and your concerns addressed?**
  - If not, please call Nicholson Clinic at (972) 494-3100

## Having Surgery?

If so, you will get a phone call from the **NICHOLSON CLINIC** one business day prior to surgery informing you of your arrival time on your day of surgery.

**Please disregard arrival times given to you prior to this date or from anyone other than someone from our office.**

Our surgeons arrange surgical patients according to their procedure and how many surgical rooms they are able to use. This decision is not made until the day before surgeries are to be performed.

If you did not receive a phone call or could not understand the message, please call Nicholson Clinic for your arrival time.

**If you are on any birth control or Estrogen products, please stop 2 weeks before surgery and 2 weeks after surgery.**

**If you are on any blood thinners, please check with your surgeon for directions. Please DO NOT take Aspirin or NSAID's one week before surgery.** Aspirin can be resumed one week after surgery but it will need to be chewable and always followed with large amounts of water.

## Sequence of Events for Day of Surgery

1. **You should not eat any solid foods the day before surgery.** You are welcome to drink liquids, protein drinks or soups for meals. You should have nothing to eat or drink after 10:00pm. Place your Scopolamine patch behind your ear. This will help control nausea following surgery. You can take it off three days following your surgery. Remove the patch if you have blurred vision or extreme dizziness.
2. The morning of surgery, take only blood pressure pills, antidepressants, and/or thyroid medications with a sip of water. Do not eat, drink or take any other medications. If it will come off of your body, leave it at home (ALL jewelry, piercings, watch, contacts, etc.) Do bring glasses and hearing aid. Wear comfortable clothing. If you have one, bring your C-PAP/BiPAP machine with you. If you give yourself insulin, take only ½ the usual dose the night before surgery.
3. Check in at Registration at the time given to you by the **Nicholson Clinic**.
4. Here you will sign paperwork and get checked in. You might be asked to sign more consent forms even if you signed some in our office. This is to verify to the hospital that you have been informed about this surgery and understand the procedure, its risks and expected outcomes.
5. Next, you will go to Day Surgery (Pre-Op Holding). Here you will be asked to change into a gown and lay on a stretcher. Compression pumps will be attached to your feet or legs to promote circulation. The surgeon and anesthesiologist will meet you here and talk with you. Then the anesthesiologist will give you some medicine to relax you. You may have 1 or 2 family members with you in this area.
6. From Pre-Op holding, you will be transported on the stretcher into the operating room (OR). Your family will be instructed to wait in the surgery waiting room. Once you are in the OR, the anesthesiologist will give you medication to put you to sleep. When your surgery is finished, a nurse will call the waiting room to notify your family. The surgeon will talk with your family there.
7. You will wake up in the recovery room on a stretcher or in a hospital bed. A highly trained registered nurse will be with you at all times. For your safety, you may spend 2 to 4 hours in recovery. Family may or may not be able to visit here, depending on the facility. There is no secure place for your belongings in the recovery room, so leave them at home or give them to a trusted family member or friend prior to your surgery. Cards and flowers are also not permitted in the recovery room.
8. After you leave the recovery room, you will be transferred back to the Post-Operative area or to a hospital room. Sit up on the side of the bed and walk as soon as you feel able (within 1-2 hours of arrival). This will help prevent blood clots in your legs. Coughing and deep breathing are a must to help expand your lungs, reduce Post-Operative fever, and prevent pneumonia. You can use a pillow for support and to splint your incisions while coughing and deep breathing. It is normal to experience discomfort after surgery. Some common complaints are: shoulder pain, left-side abdominal soreness, hiccups, nausea, gas pain, constipation/loose stools, weakness and fatigue. Immediately report any complaints of sudden severe pain or shortness of breath.
9. You will be given a breathing apparatus called an Incentive Spirometer. Be sure to take it home with you and use it 10 times a day, every hour while awake until you are back to your normal level of activity.
10. Patients having a Gastric Band or Sleeve Gastrectomy will be discharged to home the same day once tolerating clear liquids without difficulty, are able to walk, are able to use the bathroom and pain and nausea are under control. All vital signs must also be stable prior to discharge.
11. Patients having a Gastric Bypass will stay in the hospital for 1 or 2 nights.
12. There is no medical or surgical reason why you are unable to wear your seatbelt after surgery.

# Hospital Discharge Instructions

## Medications to be taken at home the first two weeks after surgery:

1. **Pain medication:** Take pain medications as prescribed. **Do not take Aleve™ (naproxen), Advil™ (ibuprofen) or aspirin products.** Tylenol™ (acetaminophen) is good and comes in adult strength liquid (follow package directions) or you may use Extra Strength Tylenol in tablet form, broken to small size. **Try using an abdominal binder.**
2. **Fiber supplement (e.g.: Benefiber™) or Stool softener (e.g.: Colace™):** Smooth Move Tea or Milk of Magnesia may be used if needed for constipation. Take per package instructions. Constipation is common after surgery.
3. **Scopolamine patch:** take off 3 days after surgery; or remove it if you have blurred vision.

**NOTE: Contact your prescribing physician regarding medications prescribed *PRIOR* to surgery, as dosages may need to be adjusted with weight loss.**

## Supplements to begin 1-2 weeks after surgery:

1. **“Complete” Chewable Multivitamin:** Take 1 adult chewable tablets twice daily. (Band patients only need once a day)
2. **Calcium Citrate + D:** 500 mg. (e.g.: Calcet™ Creamy Bites or chewable) Take 2 daily.
3. **Vitamin B-12:** Take 2500 mcg under the tongue (sublingual) once per week. (May take 2 if needed), or a prescription for Nascobal (a once a week B12 nasal spray) can be called in for you.
4. **Vitamin D3:** Take 5000 IU daily
5. **Vitamin B1, - Thiamin:** Take 50mg daily.
6. **Iron:** Only take if instructed by doctor or nurse.

## Follow-up Appointments

Nicholson Clinic office hours are Monday through Friday 9:00 a.m.-5 p.m. Call the Nicholson Clinic at (972)494-3100 to schedule your post-surgery follow-up appointment for two weeks after surgery.

## Incisions

Incisions are commonly pink/red or bruised. You may remove any gauze dressings, but glue and tape have been applied to incisions and should be left to fall off by themselves. Hardness under or around the incision is a normal healing process and should subside in a few weeks. It is also common to have some clear, pink or red drainage from incisions. If redness around incision increases over 1 inch, or if drainage is thick or smells bad, contact the clinic. Dark stools are common and may last for 7-10 days. Diarrhea may occur up to seven days. No anti-diarrheal medication is needed. Several days of shoulder area pain is common after laparoscopic surgery. Walking and heat/cold packs may help.

## Diet

From the time you get home from the hospital to three weeks after your day of surgery, a full liquid diet is required (beverages, broths, protein drinks). Please see the Post-Operative Diet specific to your procedure. It is important to stay hydrated by sipping at least 64 ounces of fluid per day.

## Activity

Once you are home from the hospital, you may return to daily activities such as showering, dressing, walking, etc. Do not get into a tub, hot tub, or swimming pool for 6 weeks or until all scabs have healed and fallen off. Keep the incision sites clean and dry. Gently clean your incisions with soap and water and gently pat dry. Avoid lifting anything over 10 pounds until cleared by the surgeon. You may drive in 3-4 days as long as you are not taking any narcotic pain medication and you are able to turn your neck/head to see behind you. Sexual activity may be resumed as you feel able. Women of childbearing age may experience an irregular menstrual cycle for the first month or two following surgery. If this persists, consult your primary care physician or gynecologist. With weight loss, women may experience increased fertility (ability to get pregnant) and should take full measures to prevent pregnancy until 1 year after surgery. Flying is not recommended until after six weeks, unless you are a patient from out of town. For out of town patients who come in for surgery, we will request that you spend at least three days in Dallas before flying so your recovery can be monitored. We will work with you ahead of time to finalize your surgical plan and recommend travel timing.

***If you have questions regarding diet and lifestyle after your surgery, you may contact Kelly Ray, RN at [Kellyr@nicholsonclinic.com](mailto:Kellyr@nicholsonclinic.com) or Candace Peppers, MA at [candace@nicholsonclinic.com](mailto:candace@nicholsonclinic.com).***

## Potential Problems & Suggested Solutions

### Frequently Asked Questions Roux-en-Y Gastric Bypass

If you have any of the following symptoms, call 911 or go to your nearest emergency room:

- Increasing abdominal pain
- Bright red blood in stool (BM's)
- Fever of 101.0 or above
- Difficulty breathing, shortness of breath
- Pain in leg(s) or chest
- Heart rate more than 120 beats/minute
- Ongoing vomiting, more than twice per week
- Incision that is red and hot
- Incision drainage is thick, green, brown or has a bad smell
- Uncontrollable belching or hiccups
- Diarrhea lasting more than 7 days

**\* = Follow Package Directions**

**WLS = Weight Loss Surgery**

Symptom	Suggested Solution
<i>Nausea &amp; Vomiting</i>	Eat and drink slowly. Warm liquids may go down better. Chew foods well. If you vomit more than 2 times in one week, call our office at (972) 494-3100.
<i>Pain to Incision(s)</i>	Take pain medication as prescribed. <b>Do not take Aleve™ (naproxen), Advil™ (ibuprofen) or aspirin products.</b> Tylenol™ (acetaminophen) is good and comes in adult strength liquid*. <b>Try using an abdominal binder when up walking around. This can be purchased at a medical supply store.</b>
<i>Shoulder pain</i>	Common due to inflation of the abdominal cavity during surgery with gas. Walk frequently!! You may also try massage, and warm or cold packs to area.
<i>Gastric Reflux (GERD), Heartburn, Acid Reflux</i>	Zegerid 40mg or Pantoprazole 40mg – Take one capsule daily, on an empty stomach, with water for 90 days to prevent ulcers.
<i>Other pain</i>	<b>Please report any new pain not related to surgery as soon as possible.</b>
<i>Incision sites</i>	<b>Common:</b> slightly red or bruised; may feel hard due to swelling. This will gradually decrease over the next few weeks. Clear, reddish pink drainage may occur. Cover with Band-Aid™ or light gauze dressing if desired
<i>Constipation</i>	Constipation is common the first month after surgery. Start Colace once daily if you've gone four days without a bowel movement. After bowels are moving you may need to use Miralax*, Benefiber*, Milk of Magnesia* or Smooth Move Tea* as needed to stay regular. Walking/drinking water are the best ways to avoid constipation. Narcotics can also cause constipation. Switch to Tylenol™ (acetaminophen) as soon as you can.
<i>Diarrhea</i>	Avoid sugars and sweets. Limit high fat and greasy foods. Drink lactose free milk, if intolerant. Imodium™ is OK to use*.
<i>Gastric Distention</i>	Avoid straws, concentrated sweets and carbonated beverages. Try Gas-X™ strips (Simethicone).
<i>Dehydration</i>	Sip adequate fluids between meals (not with meals). Drink at least 64 ounces of fluid each day. Drink until urine cannot be seen in the toilet.

Symptom	Suggested Solution
<i>Bathing/Swimming</i>	<p>You can take a shower once you get home from the hospital. Do not scrub incisions, but let warm water run over them. Gently pat dry. Do not remove glue and tape directly over incisions. Let them fall off on their own.</p> <p>No bath, hot tub or swimming for 6 weeks after surgery or until dressings and/or scabs fall off.</p>
<i>Medications Prescribed by Nicholson Clinic</i>	<p>See “Discharge Instructions” from the hospital. Take medications as needed/prescribed. The scopolamine patch can be taken off three days after surgery. Remove the patch if you experience blurred vision or dizziness.</p>
<i>Medications <b>Not</b> Prescribed by Nicholson Clinic</i>	<p><b>Contact prescribing physician for any medication/dose changes or questions.</b> Pills larger than a pencil eraser should be split into small pieces, crushed (if possible) or taken in another form (liquid, chewable, melts, or capsules etc.). Consult pharmacist for more information/questions /concerns. It is dangerous to crush or open some medications (time release/enteric coated).</p>
<i>Activity – first 2 weeks after surgery</i>	<p>Resume normal activity as soon as possible. Walking is great and should be done every 1-2 hours, starting in the hospital until you are at normal activity (4-7 days). Take deep breaths and cough often. These will help prevent blood clots, fever and pneumonia. Be sure to use the Incentive Spirometer for the 1st week after surgery, 10 times a day, every hour while awake.</p>
<i>Lifting/exercise</i>	<p>Do not lift &gt;10 pounds or do strenuous exercise for 6 weeks after surgery (or cleared by surgeon). Walk as frequently and as long as you are able to tolerate. The more you walk, the better you will feel.</p>
<i>Weakness and Fatigue first 2 weeks after surgery</i>	<p>Anesthesia makes everyone feel this way and it takes time for your body to work it out of your system. Make sure to drink lots of fluids and keep moving.</p>
<i>Car Seatbelt</i>	<p>WEAR IT!!!! During an accident, it is safer to have the belt on than off!!</p>
<i>Vitamins and Supplements</i>	<p>Begin taking 1-2 weeks after surgery (for all procedures); Complete multivitamin (chewable); 1 adult twice daily.</p> <p>Calcium Citrate + Vitamin D: 500mg chewable, twice daily, start 3 weeks after surgery.</p> <p>Vitamin B-12: 2500mcg once per week.</p> <p>Vitamin D3: 5000 IU once daily.</p> <p>Vitamin B1 (Thiamin): 50mg Daily</p>
<p><i>Diet first 6 weeks after WLS</i></p> <p><i>It is VERY important to follow diet to prevent Post-Op complications!!</i></p> <p><i>See Post-Op Diet in Consult Book</i></p>	<p><b>Day 1-21:</b></p> <p>Thin full liquids – follow Post-Op Diet specific to your procedure (see Post-Op Diet in consult book). <b>No straws.</b> The following is okay: Beef/chicken broth, Crystal Light™, decaf tea/coffee, protein drinks with 25 grams of protein or more, Isopure™ skim or 1% milk, unsweetened almond milk, sugar free popsicles. Can add whey protein powder. <b>Avoid:</b> Jell-O™, pudding, yogurt, mashed potatoes, tomato based fluids and cooked cereals. Blending soups is not acceptable during this stage. Do not chew gum or suck on hard candy due to the risk if they should be accidentally swallowed. <b>No alcohol – avoid the 3 C’s – carbonation, caffeine and calories. If it does not flow easily and independently through a fine wire strainer it cannot go in your mouth.</b></p> <p><b>Day 22-42:</b></p> <p>As above plus soft cooked vegetables, eggs, unsweetened applesauce/fruit (no seeds, skins or membranes), thin sliced deli or ground meat, creamy peanut butter, cottage/ricotta and low-fat sliced cheese. <b>Avoid:</b> fibrous vegetables (broccoli, celery), skins (peas, corn), raw veggies, nuts, rice, pasta, bread, crackers, tortillas, wraps. <b>No alcohol – avoid the 3 C’s – carbonation, caffeine and calories.</b></p>

Symptom	Suggested Solution
<i>Diet after WLS and for Life</i>	Drink ≥ 64 ounces of fluid every day. Protein: ≥ 60 grams of protein every day (>70 for men). Always eat protein first. Can be protein drink/shake, powder additive, tofu, meat, etc. No alcohol– AVOID – carbonation, bread, rice, pasta, crackers, chips, tortillas, sugar and all other empty calories.
<i>Stretching of the Pouch</i>	Do not eat large quantities of food at one time. Eat small bites slowly over a 20 to 30 minute period. <b>Avoid carbonated beverages for the rest of your life.</b>
<i>Weight gain or lack of continued weight loss</i>	Do not drink high calorie beverages including fruit juice. Avoid high fat, high calorie foods. Control portion sizes, usually 1-1 ½ cups of food at a time. Eat protein rich foods first, at least 60 grams per day. No drinking with meals, 10 minutes before meals, or 30 minutes after meals. KEEP MOVING (exercise)!! Make an appointment with the clinic and dietitian. Continue to avoid simple carbohydrates, such as bread, pasta, rice, crackers, tortillas, sugar, etc. Use tracking programs to help you monitor your intake (i.e.: <a href="http://www.myfitnesspal.com">www.myfitnesspal.com</a> )
<i>Sexual Activity</i>	Resume when you feel able.
<i>Menstrual Cycle</i>	Irregular menstrual cycles can occur the first 1-2 months after surgery. If it persists, consult your primary care physician or gynecologist.
<i>Pregnancy</i>	Increased fertility is common after WLS and you should take steps to avoid pregnancy until at least 1 year after surgery. Pregnancy is not dangerous, but can hinder the amount of weight loss overall. <b>Please notify us if you do get pregnant, so we can provide a letter to your OB/GYN.</b>
<i>Hair Loss-usually occurs 6-12 months after WLS</i>	Common with weight loss. Can be associated with hormonal changes. Will stop and grow back when weight loss stabilizes. If concerned, call clinic. Continue vitamins and at least 60 grams’ protein per day. May take Zinc and Biotin supplements.
<i>Bands &amp; Staples at Airport – MRI scans</i>	Gastric Bands and Titanium staples will not set off airport scanner alarm. All bands and staples are safe with all imaging tests, including MRI’s, but notify Radiologist prior to having scan.



## Issues Associated with Eating

### “Outsmarting” your surgery

A percentage of patients will not lose as much weight as they would like. This occurs because it is possible to “outsmart” or “overeate” the Roux-en-Y (RYGB) or Gastric Sleeve. For example, liquids slide right through the pouch and are nearly fully absorbed further down the intestine. If a person with a RYGB ingests high calorie liquids or solids, or drinks with meals, weight will not be lost. In fact, he or she may regain the weight that has already been lost.

### Stretching your pouch

If a person repeatedly overeats, the increased pressure may cause the small pouch to stretch and the opening from the pouch to the intestine (stoma) could enlarge. These changes could lead to weight gain by allowing the person to eat larger amounts of food or allowing the pouch to empty too soon. Eat no more than 1 to 1 ½ cups of food per meal.

### Dumping Syndrome

Dumping is caused by food moving too quickly through your digestive system. This can force your blood glucose levels to drop even if you are not a diabetic. You can dump ANY type of food, but it is usually associated with foods that are high in sugar or fat. This is due to the body’s natural tendency to process sugars quickly in the stomach. Overeating can also trigger dumping. Symptoms may be subtle at first and last thirty to ninety minutes. They include weakness, lightheadedness, sweats, chills, intense abdominal pain, cramping, nausea, diarrhea or a feeling similar to severe motion sickness. There is little a patient can do to halt dumping once an episode has begun. The best thing to do if dumping occurs is to lie down. The experience of dumping usually eliminates the tendency towards eating sweets. While many patients do not experience dumping, all should be aware of the possibility.

### Pregnancy after Weight Loss Surgery

Women should avoid pregnancy during the period of rapid weight loss. There is evidence of nutritional deficiencies occurring in the development of the fetus at this time. Waiting at least one year from the time of surgery to conceive is recommended. It is important to note that difficulties with ovulation experienced prior to having surgery may resolve during your recovery, which could increase the chance of becoming pregnant. This emphasizes the need for caution during the period of rapid weight loss. There should be no difficulties with pregnancy after weight loss has stabilized. If you do get pregnant we will provide a letter to your Ob/Gyn.

### The difference between food tolerance and fullness

Every patient has some types of foods that “don’t agree with them.” Typically, these are usually the foods which fill up the pouch the fastest. If a bite or two of chicken fills up your pouch and makes further eating difficult, often it is not because the “chicken doesn’t agree with you,” but rather the chicken filled up your pouch too quickly. STOP eating right then and there. To eat more at that time is to overeat. Your stomach’s intake restrictions can’t handle any more, and even one more bite will stretch your pouch or create nausea or vomiting and make you miserable. Train yourself to recognize an adequate amount of food visually before consumption, and avoid the pain and discomfort. Bites of food should be no larger than a nickel. Remember to put your fork/spoon down between bites.

### Overeating: When is enough?

When your stomach is full, your brain receives a signal that you’ve eaten enough. This process takes time and it will take time for you to become aware of this signal. If you eat too quickly, you may miss this signal and overeat. The secret is to take your time during meals and learn to identify the point at which you no longer feel hungry and stop eating at that point, as opposed to waiting until you feel full. Be aware that your pouch can only hold a few ounces of food, and even a bite beyond this can cause painful nausea and/or vomiting. Realistically, all patients experience this at least once or twice and hopefully identify these feelings with their eating limits. Remember what kind of food caused this feeling and how much was eaten. Experience will teach you to visually recognize your food limits.

### Pouch irritation

Your pouch gets irritated every time you vomit, dump or overeat. Just the simple act of stretching your pouch early after surgery can irritate it. If your pouch gets irritated, it may stay irritated for a day or so, affecting not just the current meal, but several meals down the line. Once the pouch has been irritated, even the smallest amount of food can set off nausea and vomiting. If you experience pouch irritation, a safe response is to sip only liquids for two to three days to give your system time to recover. You should apply this to any situation that results in an upset stomach. For instance, medications or illness may make you feel unable to eat. Just keep hydrated until you feel better. Remember, if you are unable to hold down fluids, contact the Weight Loss Surgery Center right away.

### Vomiting / Regurgitation

Due to the sharply restricted pouch size and size of the outlet, ingestion of too much during any meal (even a teaspoonful) may result in food abruptly coming up into the mouth. It may take some time for a person to accurately and consistently judge meal size. It is worth emphasizing the need to concentrate on chewing well and eating slowly. Eating too fast, eating bites that are too large, or eating a food that gets stuck in the pouch may cause obstruction and produce vomiting or regurgitation. If regurgitation or vomiting occurs more than twice a week, call the clinic to schedule an appointment as soon as possible.

### Do not graze between meals

After a meal, do not eat anything until the next meal. Try to schedule your mealtimes and eat regularly. Grazing between meals is a major reason for weight loss failure. If you do need a snack then use a protein source, approximately 10 mgs of protein.

### Do not drink 10 minutes before meals, during meals, and 30 minutes after meals

Drinking fluids while you eat your meal can flush the bite of food through your pouch too quickly, preventing the stretch of receptors in the stomach that send the “you are full” signal to the brain.

### Foods to avoid

Stringy foods such as pineapple, asparagus, broccoli, artichokes and celery may not digest well because of their fibrous properties. Dried fruits may swell and get stuck in the pouch. Doughy or sticky foods such as breads, pastas, rice, and coconut could also obstruct the pouch opening (stoma) as well as hamper weight loss. These should not be a regular part of your diet, if at all. Also avoid foods with a high number of calories and low nutritional value. These foods include sugar and foods containing large amounts of sugar such as soft drinks, fruit juices, milk shakes, smoothies, cakes, candies, syrups, honey, pies, ice cream and cookies. Avoid any type of carbonation including, soda, sparkling waters, beer, and champagne for the rest of your life. Alcohol has been associated with increased levels of dependence after weight loss surgery and can cause serious problems due to the rapid ability to move through the gut into the blood stream. Alcohol should be avoided completely in the first year after surgery and taken in only rarely, with caution and care afterward.

### Do Not Hesitate to call our office!

**If you have any questions or concerns, please call the clinic at (972) 494-3100.** Post-Operative problems and issues are very important to address early to prevent major complications. For questions or concerns about your diet, please do not hesitate to call any of our registered dietitians.

## Nutrition Basics

The number one goal is to improve your health! With that in mind, we urge you to adopt the following principles:  
Try to schedule your meals three times a day. Eat regularly.

- Allow 20-30 minutes for each meal. Chew food slowly and thoroughly.
- Stop drinking 10 minutes prior to a meal – you may resume drinking 30 minutes after you complete a meal and **avoid** drinking during a meal. Drinking while you eat flushes food through the pouch too quickly, preventing the stretch of receptors in the pouch that send the “you are full” signal to the brain.
- Eat foods high in protein first. Aim for 100 grams of protein a day.
- Prevent dehydration and constipation! Sip at least 64 oz. of fluid a day.
- Sip only noncarbonated, low-calorie or zero-calorie beverages.
- Avoid alcohol and tobacco as they can damage the sensitive lining of the pouch and stomach. Alcohol is also associated with a higher rate of dependence in weight loss surgery patients and can seriously hamper weight loss.
- ***Do not take steroids, aspirin, or anti-inflammatory medications unless approved by your weight loss surgeon, as these can cause ulcers to form. Call your weight loss surgery surgeon if another physician prescribes these for you. Most physicians and dentists are not aware of this restriction for weight loss surgery patients. Be your own best advocate and educate those caring for you!***

### Key Points for Healthy Eating Habits

**Eat slowly:** Immediately after surgery, the pouch is swollen and needs time to heal. Eating too quickly may cause you to overfill your new pouch and cause discomfort, nausea and vomiting.

**Drink small amounts:** Learn to sip slowly. Try not to fill your entire mouth with fluid. Use a 1-ounce (30ml) medicine cup to help determine a safe amount.

**Stop eating before you feel full:** Do not overeat. Listen to your body by eating slowly and mindfully. If you are unable to recognize fullness, eat only the recommended amount and no more at one sitting. Eating and drinking too much will eventually stretch your pouch and prevent you from reaching maximum weight loss. It may also cause nausea and vomiting.

**Maintain hydration** by consuming at least 64 ounces of fluid during the course of the day. Try to consume protein-rich fluid (1% or skim milk, protein drinks, etc.) as half of your fluid intake between meals. Avoid carbonated beverages for the rest of your life. Increase fluid intake until urine is clear.

**Protein:** Protein is needed by the body to build and maintain tissue, promote wound healing and fuel the metabolic engine that burns fat. Over the long term, protein will help preserve muscle tissue so weight can be lost as fat. The body does not store protein; it only absorbs what is needed from the diet. Thus, it is necessary for the patient to take in some protein with every meal to insure adequate supply for the body’s changing needs. Foods like lean red meat, pork, chicken and turkey without skin, fish, eggs, beans, and low fat cottage cheese are high in protein and low in fat.

Eat protein rich foods first at every meal. This is needed to promote healing from your surgery and to help you maintain lean muscle as you lose weight. The recommended intake after surgery is 100 -120 grams of protein each day.

It is normal during the initial Post-Op time to have little or no appetite. At first, it is likely for you to take in far less food than you need, but for this limited time, it doesn't present a big problem. It is important to keep yourself hydrated using low to no calorie liquids and begin using food to teach yourself new habits that will keep you healthy and promote steady weight loss. You should not force yourself to eat.

It is difficult for some patients to get sufficient protein through the diet, at least for the first few months after surgery. It is possible through careful planning to get the needed 100-120 grams of protein through diet. You may need to use protein drinks to supplement your diet. As you try to eat different foods, remember the limitations of your pouch. **Concentrate on eating protein first** as your body's needs must be met from the limited amounts you can eat. Do not eat wasted calories. Every bite counts!

**Sugar:** Avoid foods with added sugar, as they are high in calories and low in nutritional value. Even in small amounts, foods with sugar make weight loss difficult. Foods high in sugar do not provide many vitamins and minerals for the calories. Since food intake is limited after surgery it is important that every food contribute something of nutritional value. Alcohol is also very high in sugar with no nutritional value, so avoid alcohol for at least 12 months after surgery. Remember that small amounts of alcohol can affect you much more after surgery than they did before surgery, so limit to one drink per setting and no carbonation. Weight loss surgery patients have a higher rate of developing alcoholism than the general population. Alcohol intake should be rare.

**Fiber:** Fiber can be found in foods such as bran, popcorn, and raw vegetables. These are bulky foods that take up too much room to be processed in the pouch and can get stuck. Fiber pills and laxatives should be avoided unless advised by a physician. If your physician recommends taking fiber, Benefiber™ is a great source of fiber that can be added to a variety of drinks and soups without danger of blocking your pouch opening.

**Fat:** Too much dietary fat delays emptying of the pouch and may cause reflux; a back-up of stomach acid and food into the esophagus causing heartburn. Fat can also cause diarrhea, nausea or stomach discomfort. Fried foods and fatty meats are to be avoided. We don't recommend cooking with fats, but if you need to, use monounsaturated fats such as olive oil.

## Prescription Medications – After Surgery

If you have any questions about your medications contact your pharmacist, prescribing physician, or our office at (972) 494-3100.

1. In general, you may resume taking all of your Pre-Operative maintenance medications when you are cleared to begin a liquid diet.
2. Medications and pills may irritate your pouch/stomach after surgery. Small pills (smaller than a pencil tip eraser) should be okay to take whole. If a pill is larger than a pencil eraser, you may want to consider chewing, breaking into pieces or crushing it down to a powder and taking it with liquid. **Some medications are enteric coated or time-released and should not be split or crushed.**
3. Hold BLOOD PRESSURE medications and monitor a couple of times daily. If BP raises above your normal pressure or up to 140/90 or you start having headaches, dizziness, blurred vision, pounding in chest, or feel faint, call the office or your PCP with BP reading.
4. Hold Aspirin for one week if you are on baby Aspirin, it should be chewable from now on.
5. Hold Estrogen/Birth Control medications for 2 weeks after surgery. Please use a back-up method for birth control.
6. Hold diuretics for 3-4 days or when taking in plenty of fluids.
7. After surgery your medications may require an adjustment in dosage depending on:
  - a. What type of medication and/or dosage you are on.
  - b. How much weight you lose and/or how fast.
  - c. How much food you eat or how much fluid you are able to drink at one time.
  - d. Remember that dizziness and feeling faint after surgery can mean too much blood pressure medication or dehydration.
8. You should contact the physician who prescribes the medication or manages your condition to adjust the dosages or decide when and how to discontinue taking the medication. **Do NOT discontinue taking your prescribed medication without your physician's approval.**
9. It is important to remember that the anatomy of your stomach is very different Post-Operatively. This change can bring about an increased risk of ulcers. **Therefore, patients SHOULD NOT take aspirin or anti-inflammatory medications or steroids (except as listed above) after surgery unless advised and supervised by a physician.** This list includes (but is not limited to) Ibuprofen, Motrin™, Mobic, Advil™, Aleve™, Excedrin™, Orudis™, Naprosyn™ (Naproxen), and Alka-Seltzer™. Some cold/cough remedies also contain Aspirin or Ibuprofen. Tylenol™ is safe to take after surgery but not in conjunction with the liquid pain medication routinely prescribed. Tylenol #4 contains a full dose of Tylenol along with a narcotic. It is dangerous to take too much Tylenol™ in one day. You may need to educate other doctors or dentists involved in your care regarding your inability to safely use NSAID medications as listed above. Be your own best advocate!

## Post-Operative Appointments

This is to inform you of Post-Operative follow-up appointments and educational sessions. It is important that you return to our office for long-term care. Your commitment to follow-up appointments, educational sessions and support group attendance will serve to ensure optimum health and success during your weight loss journey. The recommended Post-Operative appointment schedule is below. Remember that you are welcome to contact us at any time, from any location, for any reason, for the rest of your life! Should you have any questions, please contact the Nicholson Clinic office at (972) 494-3100.

1-2 Weeks	6 Weeks	4 Month	8 Month	1 Year	Yearly <i>(if at goal)</i>
Follow-Up Appointment	Follow-Up Appointment	Follow-Up Appointment	Follow-Up Appointment	Follow-Up Appointment	Follow-Up Appointment
<i>n/a</i>	Lab Work	Lab Work	Lab Work	Lab Work	Lab Work
<i>n/a</i>	Nutrition Education	Nutrition Education	Nutrition Education	Nutrition Education	Nutrition Education
Support Group Meeting	Support Group Meeting	Support Group Meeting	Support Group Meeting	Support Group Meeting	Support Group Meeting

Patients who do not attend their Post-Op appointments (1-2 weeks, six weeks, four months, 8 months, one year, and annually thereafter) will have a minimum of two efforts to contact the patient including one phone call and one letter. Patient contact attempts will be documented in all patient records. After three consecutive follow-up time periods (i.e., six months, one year, and two-year follow-up) in which the patient remains lost to follow-up, this practice may cease attempts to contact the patient.

Individual appointments with a Psychologist or the Dietitian are available as needed. To schedule an appointment, contact:

### Clinical Psychologists

Dr. Jay Ashmore	(469) 814-4850
PsyMed	(214) 348-5557

### Dietitians

PsyMed	(214) 348-5557
Melanie Wilder, RD/LD (located in Plano)	(972) 599-9600
Amber Odom, RD/LD (located in Plano)	(972) 596-9511

## Support Group Information

### **Baylor Plano Weight Loss Surgery Support Group**

- **Who:** All are invited to attend! Anyone who is interested in having, or has already had Weight Loss Surgery is encouraged to attend and bring a friend or two.
- **When:** 2<sup>nd</sup> Wednesday of every month @ 6:00 pm
- **Where:** Baylor Medical Center at Plano
- **2017 Dates:** January 11th, February 8th, March 8th, April 12th, May 10th, June 14th, July 12th, August 9th, September 13th, October 11th, November 8th, December 13th

Baylor Medical Center at Plano  
4700 Alliance Blvd.  
Plano, Texas 75093

NE Corner of Bush Turnpike & Preston Rd. (1 exit East of Dallas N. Tollway).

Support Group meets on the Garden (lower) Level of the Main Hospital in the Education Center. Water is provided. Free parking garage and valet parking are available.

### **6:00-7:00: Guest Speaker**

Most months, a guest speaker is invited to address helpful topics for those who are Pre or Post-Op Weight Loss Surgery. Speakers are chosen through questions, concerns and suggestions expressed at support group meetings. We look to you to aid us in deciding who our next speaker will be. If you have any suggestions for future topics or speakers, please send us an e-mail!

### **7:00-8:00: Dr. Jay Ashmore**

Dr. Jay Ashmore is the Clinical Director of the Baylor Behavioral Health Center. He uses science-based approaches to present topics relevant to health behavior change during support group meetings. He is available for psychological evaluations and individual treatment for issues such as eating disorders, depression, anxiety and stress.

### **For more information, contact:**

Marsha Emery at (469) 814-2548 or (469) 814-5677. Email: [Marsha.Emery@BSWHealth.org](mailto:Marsha.Emery@BSWHealth.org)

# 1200 Calorie Pre-Op Diet

## Starts 14 days before surgery

### GOAL

1200 calories, 60-80g of protein,  
less than 60g Net Carbohydrates → lose 5% of starting weight

### Purpose

To shrink liver to ensure a safe operation.

### **\*MANDATORY\***

Surgery can be cancelled if the liver is too large to perform surgery safely.

#### Goal Weight Loss

My should expect to lose around \_\_\_\_\_ lbs. by the time of my surgery. (5% of starting weight)

#### Medications

Stop taking all herbal medications and supplements. Stop taking NSAIDs such as aspirin, Excedrin, Aleve, Nuprin, Advil, Motrin and ibuprofen.

**Dizziness/Headache/Light Headedness:** can be due to low blood sugar levels (due to diabetic medication) or low blood pressure (due to blood pressure medications). If Diabetic/Hypertensive Patients: monitor blood sugar levels and blood pressure daily as medication dosage may need to change. A low carbohydrate may lead to a loss of sodium and other electrolytes. Make sure to sip on broth or Powerade zero or Gatorade G2 to replenish electrolytes.

#### High Protein Shakes or Bars

You can have protein shakes or bars for any meal or snack when you are hungry. Choose **4-5 or less** high protein drinks or protein bars per day. Always have a drink or bar for breakfast when you wake up. **Do not skip meals.**

#### Protein Drink Criteria

Look for a drink that is around 200 calories, 20-30g protein and less than 10g Net Carbohydrates {total Carbs- fiber- (sugar alcohol/2) = Net Carbs} per serving.

Some examples of Protein drinks are: Doc Hale Nutrition (mix with liquid of choice), Ascent, Isopure, Premier, Muscle Milk Light (always check the label, some of the different flavors may not fit the criterial above). For patients who have dairy issues, we recommend Now Sports egg protein or Evolve which is plant based.

#### Protein Bar Criteria

Look for a bar that is around 200 calories, 15-20g protein and less then 10g Net Carbohydrates {Total Carbs - Fiber - (Sugar Alcohol/2) = Net Carbs} per bar.

Some examples of Protein Bars are: Bari Life, Quest, Think Thin (High Protein), Power Crunch, Pure Protein, Simply Protein, NuGo Bars (always check the label, some of the different flavors may not fit the criteria above).

Visit [www.DocHaleNutrition.com](http://www.DocHaleNutrition.com) for more information on recommended protein and meal replacement options.



## One Meal Per Day

You are allowed one meal per day of lean meat and veggies, no starches. Be sure to **weigh or measure all foods** eaten and keep a diary. Choose from the following:

Choose **5oz's or less of lean meat**. It can be baked, broiled, or grilled. Do not eat fried or battered meats. It is recommended to consuming mainly poultry and fish during this diet. Meat guidelines include:

\*The calorie amounts below are estimates for your reference, please make sure to always calculate your calories.

<p><b>Poultry- chicken or turkey</b></p> <ul style="list-style-type: none"><li>- White meat with/without skin (~155 cal)</li><li>- Dark meat without skin (~160 cal)</li><li>- Cornish hen without skin</li><li>- Extra lean or lean ground</li></ul> <p><b>Fish</b></p> <ul style="list-style-type: none"><li>- Most fish and shellfish are lean (~130-200 cal)</li></ul> <p><b>Pork- fat trimmed</b></p> <ul style="list-style-type: none"><li>- Tenderloin (~200 cal)</li><li>- Boneless top loin chop and roast (~200 cal)</li><li>- Bone-in center loin chop (~280 cal)</li><li>- Bone-in rib chop (~300 cal)</li><li>- Bone-in sirloin roast (~290 cal)</li></ul> <p><b>Veal-fat trimmed</b></p> <ul style="list-style-type: none"><li>- Cutlet (~260 cal)</li><li>- Blade or arm steak (~160 cal)</li><li>- Rib roast (~170 cal)</li><li>- Rib or loin chop (~165 cal)</li></ul> <p><b>Lamb-fat trimmed</b></p> <ul style="list-style-type: none"><li>- Leg (~175cal)</li><li>- Loin chop (~205cal)</li></ul> <p><b>Beef</b></p> <ul style="list-style-type: none"><li>- Eye round roast and steak (~350 cal)</li><li>- Arm chop Beef – fat trimmed</li></ul>	<p><b>Beef – Less than 5 grams of fat per 3oz.</b></p> <ul style="list-style-type: none"><li>- Sirloin tip side steak (~140 cal)</li><li>- Top round roast and steak (~220 cal)</li><li>- Bottom round roast &amp; steak (~185 cal)</li><li>- Top sirloin steak (~285 cal)</li><li>- Brisket, flat half (~180 cal)</li></ul> <p><b>Beef – Less than 10 grams of fat per 3oz.</b></p> <ul style="list-style-type: none"><li>- 95% lean ground beef (~190 cal)</li><li>- Round tip roast and steak (~175 cal)</li><li>- Round steak (~200 cal)</li><li>- Shank cross cuts (~180 cal)</li><li>- Chuck shoulder pot roast (~190 cal)</li><li>- Sirloin tip center roast and steak (~200 cal)</li><li>- Chuck shoulder steak (~250 cal)</li><li>- Bottom round steak (Western griller) (~220 cal)</li><li>- Top loin steak (Kansas City or New York strip steak) (~290 cal)</li><li>- Shoulder petite tender and medallions (~295 cal)</li><li>- Flank steak (~215 cal)</li><li>- Shoulder center (ranch) steak (~300 cal)</li><li>- Tri-tip roast and steak (~175 cal)</li><li>- Tenderloin roast and steak (Filet Mignon) (~215 cal)</li><li>- T-bone steak (~210 cal)</li></ul> <p><b>Other</b></p> <ul style="list-style-type: none"><li>- Egg whites or substitute (~75 cal)</li><li>- 2% cheese or (~250 cal)</li><li>- Low fat cottage cheese (~215 cal)</li><li>- Processed meat less than 3g fat/oz. (~150 cal)</li></ul>
--	---

Choose **2 cups** of non-starchy veggies every day. They can be cooked or raw. Do not fry or batter. Vegetable guidelines include:

Artichoke (packed in water) (~140 cal)	Mushrooms (~30 cal)
Asparagus (~55 cal)	Okra (~62 cal)
Green, wax, Italian beans (~70 cal)	Onions (~134 cal)
Bean sprouts (~65 cal)	Pea pods (~52 cal)
Beets (~120 cal)	Leeks (~108 cal)
Broccoli (~65 cal)	Peppers (~48 cal)
Brussels sprouts (~76 cal)	Radishes (~38 cal)
Cabbage (~42 cal)	Salad greens (~18 cal)
Carrots (~104 cal)	Sauerkraut (~20 cal)
Cauliflower (~50 cal)	Spinach (~14 cal)
Celery (~32 cal)	Arugula (~ 10 cal)
Cucumber (~32 cal)	Summer squash (~36 cal)
Eggplant (~40 cal)	Tomato (~64 cal)
Green onion (~24 cal)	Turnips (~72 cal)
Kale (~68 cal)	Water chestnuts (~240 cal)
Mix veg (w/o corn, peas, or pasta) (~100 cal)	Watercress (~8 cal)
	Zucchini (~40 cal)

**\*The following veggies are starchy. They are not part of the non-starchy group and should be avoided during this diet. \***

**Corn, Peas, Potatoes, Sweet Potatoes, Winter Squash, Plantains, Dry Beans/Lentils, Hummus**

**\*Also, all high Carbohydrate/sugar foods should be avoided including but not limited to: \*  
Fruit, Rice, Chips, Bread, Oatmeal, Cream of wheat, Dry Cereal, Pasta, Tortillas, Ice Cream, Cake, Cookies, Candy, Chocolate, etc.**

Choose **1 serving of fat**. Fat guidelines include:

1 tsp of olive oil (~40 cal)	2tbs low fat mayonnaise (~30 cal)
2 tbs Avocado (~60 cal)	1 tbs salad dressing (~60 cal)
8-10 olives (~50 cal)	2 tbs low fat salad dressing (~48 cal)
6 almonds, cashews, mixed nuts (~40-50 cal)	1 tbs Miracle Whip® (~50 cal)
10 peanuts (~55 cal)	1 slice bacon (~45 cal)
4 halves pecans or walnuts (~55 cal)	2 tbs half and half (~40 cal)
½ tbs peanut butter (~47 cal)	1 tbs cream cheese (~51 cal)
2 tsp tahini paste (~65 cal)	1 ½ tbs low fat cream cheese (~55 cal)
1 tsp margarine or butter (~25-35 cal)	2 tbs sour cream (~62 cal)
1 tbs low fat margarine or butter (~60 cal)	3 tbs low fat sour cream (~53 cal)
2 tsp mayonnaise (~38 cal)	1 tps Tartar Sauce (~74 cal)

The following items can be used to help flavor foods and should have very low to no calories.

Any spices or mixed spices	Hot pepper sauce
Horseradish	Worcestershire® sauce
Lemon/lime juice	Low Sodium Soy Sauce
Mustard	Salt and pepper
Vinegar	Sugar substitute (like Stevia, Splenda, Sweet'N Low®)
Buffalo sauce	

**\*The following Flavor additives or Sauce should be avoided during this diet. \***  
**Barbeque Sauce, Ketchup, Alfredo Sauce, Honey Mustard, Teriyaki Sauce,  
Sweet Chili Sauce, Pesto, Brown Sauce, Sweet and Sour Sauce, and Spaghetti Sauce**

**An example of a daily meal plan may be:**

- **Breakfast:** A shake or a bar (~200 Calories)
- **Lunch:** A shake or a bar (~200 Calories)
- **Dinner:** A meal of lean meat and vegetables (~500 Calories), 1 serving fat (~50 Calories)
- **Snack:** Shake or bar (~200 Calories)

\*Make sure to sip on water throughout the day to get 64oz

**Totals to ~1150 Calories for the day**

**Drinks & Fluids**

Remember to drink at least **64 oz. of water/fluids** daily. You can use the following items in place of water.

- Crystal Light® (~10 cal)
- Sugar Free Kool Aid® (~10 cal)
- Mio Drops (no caffeine) (~0 cal)
- True Lemon or other flavors (~0 cal)
- Nuun Tablets (no caffeine) (~10 cal)
- Flavored Water, e.g.: Dasani® (~0 cal)
- Unsweetened, Herbal or Decaf tea (~2 cal)
- Decaf Coffee (~2 cal)
- Sugar Free Popsicle (~15 cal)

**\*Drinks containing Calories or Caffeine should be avoided during this diet. \***

**Soda, Diet Soda, Sports Drinks (e.g. Gatorade®) Kool Aid®, Energy Drinks (e.g. Monster®)  
Sweet Tea, Coffee, Fruit Juices, Vegetable Juices (e.g. V8®), and Alcohol**

**Other Things to Avoid: Gum (even if sugar free), smoothies from retail locations, Jello (even if sugar free), and pudding (even if sugar free)**

## Day 14/Day Before Surgery: Liquids Only!

You can only have liquids the day before your procedure. This is for surgical safety and it is extremely important that you only have liquids the day before surgery. Doing so will ensure that there is no solid food in your stomach on surgery day. Examples of liquids include water, sugar free drinks (not carbonated), protein shakes, broth, etc.

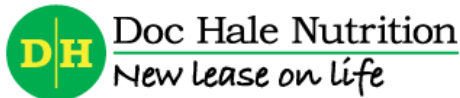
### Vitamins

In addition to this diet, you will also need the following vitamins Pre-Op:

- **High Quality Multivitamin**
  - If your multivitamin does not contain calcium, you may need calcium as well
- **Probiotic**

We've partnered with top of line bariatric supplement companies to identify the highest quality bariatric vitamins and supplements to ensure patient success. We've selected options for patients to choose from to make it easy, affordable and set a standard vitamin / supplement regimen.

Please go to our website, [www.NicholsonClinic.com](http://www.NicholsonClinic.com), and click the "Learn More & Order" button under Supplement & Vitamin Packs, or click [here](#).



# Post-Op Diet

## Sleeve Gastrectomy/Gastric Bypass

### STAGE 1 – Full Liquids

#### DAY 1-21

#### When to Start Stage 1

**You will need to start this diet the day you come home from the hospital.** The first three weeks postoperatively are crucial for minimizing complications and maximizing your recovery. Adherence to the postoperative diet will set you off on the right foot for your weight loss journey to come as well as give you protection against a potential leak along the staple line of your new, smaller stomach. Following a full liquid diet for the first **3 weeks** after surgery will give your body time to heal. This diet will also help you begin to understand how much food you can eat **BEFORE** you feel too full. This is a time of learning new behaviors and developing new lifestyle habits.

#### The main 3 goals during Stage 1 of the diet are to:

- 1) Rest the stomach and allow it time to heal
- 2) Stay hydrated by consuming  $\geq 64$ oz fluid per day
- 3) Consume adequate amounts of protein to aid in the healing process.

\*Do not worry about calorie intake at this time as your body will turn to your stored fat to obtain the energy that it needs to function.

- 1-2 oz. of fluid should be sipped every 10-15 minutes while awake.
- Try and incorporate unflavored protein into all of your liquids so that you can meet your protein needs
- Consume (*sip*) at least 4 oz. of liquids every hour and tally everything you drink for the first week to become familiar with your new normal
- All liquids must be very thin. It must be able to flow through a strainer easily. See examples below:

Protein Shakes - We suggest making your own using unflavored protein powder as this prevents flavor burnout

Broth (chicken, etc.), Bone Broth or the liquid part of chicken noodle soup, miso soup or French onion (preferably with added unflavored protein)

Sugar Free Popsicles

Skim Milk, Sugar Free Almond Milk\*, Sugar Free Coconut Milk\*, Sugar Free Cashew Milk\*, Sugar Free Ripple\*, Carb Master Milk, FairLife Skim Milk

Sugar Free Hot Chocolate

Sugar Free noncarbonated liquids (Vitamin Water Zero, Powerade Zero, Sugar Free Juice - NO TOMATO

Water, Flavored water (e.g. Dasani)

Sugar free drink mixes (add unflavored protein for a protein boost) E.g. Crystal Light, Mio Drops (caffeine free), TrueLemon

Electrolyte tablets (e.g. Nuun - caffeine free)

Decaf tea/coffee: Limit to 16 oz. per day (may use nonfat, sugar free dairy creamer) - Add a scoop of unflavored protein and a few squirts of sugar free Equal Café Creamers Caramel Macchiato to decaf coffee for a refreshing coffee drink

- **Lactose intolerance:** If you can't tolerate milk, you may use Sugar Free, Dairy free\* alternatives found in the dairy section of your grocery store.
- You may use a sugar substitute in your coffee or tea. E.g. Stevia, Splenda, Sweet'N low, Equal, Triva
- **It is normal during the initial Post-Op time to have little or no appetite.** At this time, it is likely for you to take in far less food than you need, but for this limited time, it doesn't present a big problem. It is important to keep yourself hydrated using low to no calorie liquids and begin using food to teach yourself new habits that will keep you healthy and promote steady weight loss. You should not force yourself to eat.
- **Drink 64 oz. of liquid per day.** Try to drink 1-2 oz. of liquids every 10-15 min throughout the day to stay hydrated. Include your protein supplement drinks, which meet both your liquid requirements AND your protein needs.
- **Above all else, find a protein drink that you enjoy.** The protein is needed for the healing process as you go through the initial stages of recovery. You should aim to get 60g or more of protein per day. Protein shakes should have at least 20-30 grams of protein, be less than 10g Net carbohydrates and low in fat. To help our patients ensure adequate protein intake, we are proud to offer premium unflavored protein powder as we find that most patients get tired of drinking the same protein drink for 21 days. The unflavored protein powder is designed to be mixed in a variety of liquids and allows patients to significantly increase the variety of liquids that they can consume on this diet phase. Avoid commercial meal replacement shakes such as Atkins, Slim Fast, Boost, Pedialyte or Ensure.
- **Do NOT drink through straws or chew gum.** Drinking through straws or chewing gum can cause air to enter the pouch which can cause pain, bloating and gas.
- **No Alcohol.** It is recommended not to consume alcohol for the first 6 months after surgery.
- **Digestive issues:** Nausea and constipation are common digestive symptoms the first couple of weeks.

#### **Nausea**

- Make sure you are sipping slowly and not gulping your beverages.
- Have a hot cup of water with lemon to reduce mucus build up or drainage.
- Don't lay down too quickly after drinking.
- Make sure you take your vitamins with a protein shake and not on an empty stomach.
- Sip on broth or electrolytes
- Drink ginger or peppermint tea

#### **Constipation**

- Make sure you walk 20 steps every hour that you are awake and make sure you are moving.
- Try to get in 64 ounces of liquid per day.
- Take probiotic supplements (Bariatric Advantage)
- Can take milk of magnesia, stool softeners or miralax.

#### ***Why do I have to be on liquids only for three weeks?***

Due to swelling, anything thicker than water can easily become stuck, creating a "dam" effect and causing any intake after that to back up and push on the stomach walls. This can stress your new staple line and may result in a leak. A leak from your stomach is a serious complication resulting in sepsis and a long stay in the ICU.

***I have read online that other bariatric surgeons only require two weeks of liquids. If it is okay for their patients, why not for me?***

Congratulations! You have come to the *best* bariatric surgery clinic in the nation, one who boasts complication rates far lower than the national average. The reason for this is because we noticed when leaks tend to happen, under what circumstances and realized by having an extra week of liquids we could eliminate this potentially life-threatening issue. Compliance with your postop diet mitigates much of the risk of a leak.

***What about Jell-O? Pudding? Or ice cream?***

While these things do melt eventually, as they go through your body they remain thick enough to cause issues (this includes Sugar Free varieties). Also, this time is intended to detox your body from any lingering sugar addiction. Ice cream, smoothies, sugary full fat lattes and the like are not appropriate foods postoperatively at any stage.

***Can I drink soda or other carbonated beverages?***

**No!** Drinks that fizz are one-part liquid, four parts gas. The expansion of that gas in your new 4-6 oz. stomach will lead to stretching of your sleeve (or pouch for bypass patients), allowing you to consume more, thus ruining your odds of good weight loss results. Avoid carbonation for the rest of your life (even if it has gone flat) in order to keep your new tool functioning, healthy and helping you for life.



***The bottom line: If you aren't sure you can have it, put it in a strainer. Only that which runs freely and easily through the strainer is part of this phase of the diet! If it doesn't go through, it is not for you!***

***Below are 2 days of sample menus for the liquid diet. Use as is, or as a template, to help you better understand what your diet will look like during this phase. These menus provide 64oz of fluid and 60+ grams of protein. Please make sure and sip the liquids at a rate of 1-2 ounces every 15 minutes.***



### Day 1 Full Liquid Diet Sample Meal Plan

See below recipes on DocHaleNutrition.com under Post-Op Guidelines, Phase 1.

<b>Time</b>	<b>What to have</b>
7-8am	4oz High Protein Caramel Macchiato Decaf Coffee- add ice to chill as desired
8-9am	4oz High Protein Caramel Macchiato Decaf Coffee- add ice to chill as desired
9-10am	4oz Water
10-11am	4oz High Protein Crystal Light
11am-12pm	4oz High Protein Crystal Light
12-1pm	4oz High Protein Miso Soup. Will need to be strained through the Metal Strainer before consuming.
1-2pm	4oz High Protein Miso Soup. Will need to be strained through the Metal Strainer before consuming.
2-3pm	4oz High Protein Crystal Light
3-4pm	4oz High Protein Crystal Light
4-5pm	4oz High Protein Crystal Light
5-6pm	4oz High Protein Broth or High Protein Chicken Noodle Soup (no noodles)
6-7pm	4oz High Protein Broth or High Protein Chicken Noodle Soup (no noodles).
7-8pm	1 Sugar Free Popsicle
8-9pm	4oz Easy Banana or Vanilla Protein Shake
9-10pm	4oz Easy Banana or Vanilla Protein Shake

### Day 2 Full Liquid Diet Meal Plan

See below recipes on DocHaleNutrition.com under Post-Op Guidelines, Phase 1.

<b>Time</b>	<b>What to have</b>
7-8am	4oz High Protein Milk
8-9am	4oz High Protein Hot Chocolate
9-10am	4oz High Protein Hot Chocolate
10-11am	4oz High Protein Crystal Light
11am-12pm	4oz High Protein Crystal Light
12-1pm	4oz High Protein Cream of Mushroom soup. Will need to thin with extra 4oz of skim milk and strain before consuming.
1-2pm	4oz High Protein Cream of Mushroom soup. Will need to thin with extra 4oz of skim milk and strain before consuming.
2-3pm	4oz High Protein Crystal Light
3-4pm	4oz High Protein Crystal Light
4-5pm	4oz High Protein Crystal Light
5-6pm	4oz High Protein Broth or High Protein Chicken Noodle Soup (no noodles)
6-7pm	4oz High Protein Broth or High Protein Chicken Noodle Soup (no noodles)
7-8pm	1 Sugar Free Popsicle
8-9pm	4oz High Protein Peppermint Tea
9-10pm	4oz High Protein Peppermint Tea

## Vitamins

In addition to protein, you will also need the following vitamins Post-Op:

- **High Quality Chewable Multivitamin** – Take two daily
- **B12** - 2500mcg Sublingual – Take one per week
  - Dissolve 1 tablet or drop (if using liquid product) under tongue daily, or a prescription for Nascobal (a once a week B12 nasal spray) can be called in for you.
- **Vitamin D3** – 5000IU daily
- **Vitamin B1** (Thiamine) – 50mg daily

Based on your lab results the nurse will inform you if you need to take:

- **Calcium Citrate Chewable** - 500mg – 1 three times daily for total of 1500mg daily.

### AND/OR

- **Iron Chewable** – 18mg (men and postmenopausal women) and 27-45mg daily if premenopausal female. Note: All gastric bypass patients will need to consume at least 36 mg of iron daily.
- **Vitamin C Chewable** – 500mg daily – Will need to take this if taking Iron, to help with absorption.

**Note: We recommend taking a multivitamin twice daily for the rest of your life. These are general guidelines. Please consult your doctor and/or dietitian for recommendations tailored to you.**

## Recommended Packs

We have partnered with Doc Hale Nutrition, Bariatric Advantage® and Bari Life® to provide recommended packages of vitamins and supplements for each step in your weight loss journey.

Please go to [www.NicholsonClinic.com](http://www.NicholsonClinic.com), and click the “Learn More & Order” button under Supplement & Vitamin Packs, or click [here](#).

# Post-Op Diet

## Sleeve Gastrectomy/Gastric Bypass

### STAGE 2 – Soft Solid Foods

3-4 oz. per meal

### DAY 22-42

#### When to Start Stage 2

Start this diet at Post-Op **Day 22** and continue for **3 weeks**. This is still time learning about your new body. Let your pouch be your guide on portion sizes. Stop eating **BEFORE** you feel full. Remember to **use a food scale** to weigh your food. Overeating and not chewing your food thoroughly can lead to nausea, vomiting, and stretching out your stomach.

**\*Start with softer foods like yogurt then transition into soft solid foods like ground turkey.** It is recommended to introduce new foods at dinner time.

**Stage 2 Menu:** Includes foods listed on the full liquid diet **plus**:

- Lean ground chicken and ground turkey (90% lean) baked or broiled
- Fish or salmon, baked or broiled eggs
- Lean canned chicken or tuna (in water); deli meat, thinly sliced
- Tofu (do not fry)
- Creamy peanut butter (limit to 1 tablespoon per day)
- Low fat or fat free cottage cheese and ricotta cheese
- 2% or fat free string cheese, cheese slices, or laughing cow cheeses
- Soft cooked or canned non-starchy vegetables (if eating green beans make sure to remove strings)
- Low fat Plain Greek Yogurt (use sugar substitute to sweeten)

#### Foods to Avoid:

- All raw fruit
- All raw veggies, including lettuce and tomato
- Cooked or raw asparagus, celery, corn, or peas
- Cooked or raw Potatoes, Sweet Potatoes, Winter Squash, Plantains, Dry Beans/Lentils, Hummus
- All nuts
- All high Carbohydrate/Sugary foods like bread, pasta, rice, crackers, tortillas, chips, dry cereal, cake, cookies, ice cream, etc.

#### Sample Meals

- 1 oz. of meat provides you with 7 grams of protein.
- Try to consume 60g of protein daily from food and protein supplements.
- Drink 64oz of low calorie liquid or water daily
- CHEW, CHEW, CHEW
- **Make sure to choose:**
  1. Protein food **FIRST**
  2. Vegetable **SECOND**
  3. Fruit **THIRD**
  4. Starch/grain **LAST if at all**

Servings listed below are only estimates. You may be able to eat more or less.

Breakfast ½ cup total (4 oz.)	Lunch ½ Cup Total (4 oz.)	Dinner ½ Cup Total (4 oz.)
3oz Egg or Egg whites scrambled with 1 oz. low fat cheese and spinach	3oz Low fat deli turkey breast ½ deviled egg made with low fat mayo	3oz. Baked fish 1oz. Cooked green beans
1oz cooked zucchini 3 oz. Salmon	3oz Canned tuna in water mixed with low fat mayo and/or mustard	3oz Lean ground chicken/turkey patty* (use caution) 1oz Low fat cottage cheese

## Vitamins

In addition to protein, you will also need the following vitamins for maintenance:

- **High Quality Multivitamin, with or without Iron**
  - If your multivitamin does not contain calcium, you may need calcium as well
- **Probiotic**

**Note: We recommend taking a multivitamin twice daily for the rest of your life. These are general guidelines. Please consult your doctor and/or dietitian for recommendations tailored to you.**

## Recommended Packs

We have partnered with ReLaunch™, Bariatric Advantage® and Bari Life® to provide recommended packages of vitamins and supplements for each step in your weight loss journey.

Please go to [www.NicholsonClinic.com](http://www.NicholsonClinic.com), and click the “Learn More & Order” button under Supplement & Vitamin Packs, or click [here](#).

## Resources

There are many resources in books and online that can help you as you develop a healthy, successful lifestyle. Some that patients have found helpful are:

- Bariatriceating.com: Good recipes and tips
- Eatright.org: Nutrition information
- FoodFit.com: Recipe Ideas
- FoodPicker.org: List of brand names for groceries and restaurant foods
- NCEs.com/catalog: Plate marked with portions
- Obesityhelp.com: Good blog
- Quickandhealthy.net: Meal Ideas
- Skinnytaste.com: Recipe ideas

References: Frank, Laura, 2012. Nutritional Management of Bariatric Surgery Patients. Wolfe Rinke Associates, Inc.

# Post-Op Diet – Gastric Band

## STAGE 1 – Full Liquids

### DAY 1-21

#### When to Start Stage 1

**You will need to start this diet the day you come home from the hospital.** Following a full liquid diet for the first **3 weeks** after surgery will give your body time to heal. This diet will also help you begin to understand how much food you can eat **BEFORE** you feel too full. This is a time of learning new behaviors and developing new lifestyle habits.

- 1-2 oz. of fluid should be sipped every 10-15 minutes while awake.
- Try to consume at least 4 oz. of liquids every hour.
- It is important to record your intake of fluid to make sure you are consuming at least 60 oz. of fluid daily.

**Menu:** All foods should **NOT** be thicker than applesauce consistency.

<p style="text-align: center;">Beef, chicken, vegetable broth</p> <p style="text-align: center;">Pureed cream of chicken or mushroom soup (<i>low fat</i>)</p> <p style="text-align: center;">Sugar free gelatin</p> <p style="text-align: center;">Sugar free pudding</p> <p style="text-align: center;">Light yogurt-not berry flavors (<i>CarbMasters™ - Kroger Brand</i>)</p> <p style="text-align: center;">Protein supplements</p>	<p style="text-align: center;">Pureed fruit, veg, or meat (<i>stage 1 baby food</i>)</p> <p style="text-align: center;">Skim milk with no sugar added instant breakfast</p> <p style="text-align: center;">Sugar free drink mixes, water</p> <p style="text-align: center;">Sugar free popsicles</p> <p style="text-align: center;">Limit decaf tea/coffee to 16 oz. per day</p> <p style="text-align: center;">Low fat, small curd cottage cheese, pureed</p>
--	--

#### Sample Meals

- Always look for protein in ALL products; consume products with more protein first.
- Sip/eat slowly until you are full

**Servings listed below are only estimates. You may be able to eat more or less.**

Breakfast ½ cup total (4 oz.)	Lunch ½ Cup Total (4 oz.)	Dinner ½ Cup Total (4 oz.)
Light Yogurt Natural Applesauce	Low fat Cream of Chicken soup (pureed) <b>Pureed</b> green beans	Sugar free pudding <b>Pureed</b> pears
Low fat, sugar free yogurt	Low fat, small curd cottage cheese (pureed) with <b>pureed</b> peaches	Pureed roasted chicken (use broth to moisten) Cooked, pureed green beans
<b>After breakfast:</b> Sip on your protein drink with the vitamin crystals.	<b>After lunch:</b> Sip on your protein drink with the vitamin crystals.	<b>After dinner:</b> Sip on your protein drink with the vitamin crystals.

# Post-Op Diet – Gastric Band

## STAGE 2 – Soft Solid Foods

### DAY 22-42

#### When to Start Stage 2

This is still time learning about your new body. Let your pouch be your guide on portion sizes. Stop eating **BEFORE** you feel full. Remember overeating can lead to nausea, vomiting, and stretching out your stomach.

**Stage 2 Menu:** Includes foods listed on the full liquid diet **plus**:

- Lean ground beef, ground chicken and ground turkey (90% lean) baked or broiled
- Fish or salmon, baked or broiled eggs
- Lean canned chicken or tuna (in water); deli meat, thinly sliced
- Creamy peanut butter (limit to 1 tablespoon per day)
- Low fat or fat free cottage cheese and ricotta cheese
- 2% or fat free string cheese, cheese slices, or laughing cow cheeses
- Canned fruit (fruit cocktail - no grapes or cherries) in its own juice, light, or no sugar added
- Soft Bananas (remove strings) no more than 2-3 per week
- Soft cooked or canned vegetables
- Light yogurt all flavors (Low fat Greek Yogurt)

**Foods to Avoid until after 6 weeks:**

- All raw fruit
- All raw veggies, including lettuce and tomato
- Cooked or raw asparagus, celery, corn, or peas
- All nuts

#### Sample Meals

- 1 oz. of meat provides you with 7 grams of protein.
- Your goal is to consume 60g of protein daily from food and protein supplements.
- **Make sure to choose:**
  1. Protein food **FIRST**
  2. Fruit or vegetable **SECOND**.
  3. Starch/grain **LAST** if you still have room

**Servings listed below are only estimates. You may be able to eat more or less.**

Breakfast ½ cup total (4 oz.)	Lunch ½ Cup Total (4 oz.)	Dinner ½ Cup Total (4 oz.)
Eggs Sugar free, low fat yogurt	Low fat deli turkey breast Green beans	Baked fish Cooked carrots Green beans
2% string cheese Natural applesauce	Tuna with low-fat mayo and mustard Canned peach half without added sugar	Lean ground beef/turkey patty Sugar-free pudding

Band patients can have trouble with white meat chicken, bread, dry meats, salad, or eating first thing in the morning.

# Balloon Medications

## Pre- Op Medications

**Prilosec or other PPI** (antacid) – Begin taking PPI 2 days before procedure. **Continue daily as long as balloon is in place** as this protects the balloon from stomach acid. Examples include Prilosec (omeprazole), Protonix (pantoprazole), Nexium (esomeprazole), etc.

**Scopolamine transdermal patch** (anti-nausea) – Place 1 patch behind ear the night before surgery. Remove after 72 hours or sooner if dizziness develops.

**Emend** (anti-nausea, if available) – Take 1 tablet 2-3 hours prior to surgery.

**Stop any blood-thinning medication one week prior to surgery.** This includes prescription blood thinners and NSAID pain medications such as aspirin (325mg), ibuprofen (Advil), naproxen (Aleve), Celebrex, Mobic, etc. You may need to discuss this with your prescribing physician to safely do this. **You will need to avoid these medications as long as the balloon is in place to reduce the risk of bleeding.** You may continue taking baby aspirin (81mg) or use Tylenol (acetaminophen).

## Post-Op Medications

**Zofran** (ondansetron, anti-nausea) – Take every 6 hours for the first 48 hours even if asymptomatic, and then take as needed for nausea. **Most patients will have some nausea and vomiting for several days after the procedure as they adjust to having the balloon in the stomach.**

**Levsin** (hyoscyamine, anti-spasmodic) – Take every 6 hours for the first 48 hours even if asymptomatic, and then take as needed for abdominal spasms or cramping.

**Phenergan** (anti-nausea) – This is another option to take as needed for nausea.

**Tylenol #3** (pain medication) – Take as needed for abdominal pain.

**Ativan** (lorazepam, anti-anxiety) – Take as needed if you are feeling anxious or having trouble taking a deep breath.

# Balloon Pre-Op Instructions

## Pre-Op Diet

**48 hours prior to your procedure:** Thin liquids only, sugar-free. Consume a minimum of 64 oz. of fluids daily. All intake must fit through a thin wire strainer easily. Do not consume carbonated beverages. Examples include:

- Protein shakes (High protein, low carbohydrates, low calories)
- Broth
- Sugar-free Jell-O; sugar free popsicles V8 juice
- G2 or PowerAde Zero

**12 hours prior to your procedure:** **NOTHING BY MOUTH** except necessary medications with sip of water.

## Pre-Op Appointments

- You will meet with your **surgeon** before placement to discuss the procedure in detail.
- You should meet with the **dietitian** before placement to review the diet.

## Balloon Placement Procedure

The gastric balloon will be placed in a surgery center under light sedation. The endoscopic procedure will take about 10-15 minutes. You should be able to go home within 1 hour after the procedure. You may not drive on the day of the procedure and must have someone to drive you home.



# Balloon Post-Op Instructions

## Post-Op Diet

### Week 1 (Day 1 – 7): Liquid Diet

- Consume **clear liquids for first 2-3 days** (e.g. water, broth, crystal light, G2, PowerAde Zero) or until nausea, vomiting or cramping resolves, then advance to full liquids including protein shakes, cream soups, etc. All liquids must easily pass through a fine wire strainer.
- Avoid carbonation, caffeine or alcohol while the balloon is in place.
- Sip slowly with a goal of 64 oz. of fluid daily. **It is very important to drink plenty of fluids to avoid dehydration.**

### Week 2 (Day 8 – 14): Pureed, Semi-Liquid or Blended Foods

- Examples include blended soups, applesauce, nonfat Greek yogurt, cottage cheese, scrambled egg, low fat refried beans, etc.

### Week 3 (Day 15 – 21): Soft Diet

- Examples include baked or grilled fish, low fat tuna or chicken salad, lentil or vegetable soup, bananas, cooked vegetables, baked apple (no sugar added, no skin), yogurt with soft berries, baked sweet potato, quinoa, cream of wheat, grits, avocado, meatloaf, ripe melon.

### Week 4 (Day 22 – 28): Regular Diet

- Continue to avoid carbonation and minimize alcohol.
- Aim for a minimum of 70 grams of protein daily. Keep carbohydrates less than 65 grams and fat less than 20 grams.
- Stay well hydrated.

## Post-Op Activity

- Sleep with head elevated for 2-3 days to reduce acid reflux.
- Avoid strenuous exercise for first week after which you may exercise as tolerated. We recommend starting a regular exercise program.
- At least 2-3 days off work are recommended.
- Do not drive on the day of the procedure.
- Avoid pregnancy while the balloon is in place.

## Post-Op Appointments

**Reminder:** Call Nicholson Clinic 972-494-3100 and schedule your following follow up appointments:

1-2 weeks Post-Op.

4-6 weeks Post-Op.

3 months Post-Op.

5-6 months Post-Op to discuss and schedule balloon removal

## Balloon Removal Instructions

One week prior to your procedure hold all blood thinning medications, including NSAIDs and prescription blood thinners. You may need to talk to your prescribing physician to safely do this. This includes prescription blood thinners, aspirin, ibuprofen (Advil), naproxen sodium (Aleve), Celebrex, Mobic, etc.

1. **48 hours before procedure** – Begin a strict **liquid diet** including low-calorie drinks and protein shakes.

**(DO NOT CONSUME ANY FOOD DURING THESE 72 HOURS OR EXTRACTION WILL NOT BE COMPLETED)**

2. **12 hours before procedure** – **Nothing by mouth** except necessary medications with sip of water.
3. The gastric balloon will be removed in a surgery center under light sedation. The endoscopic procedure will take about 10-15 minutes. You should be able to go home within 1 hour after the procedure.
4. You may not drive on the day of the removal and must have someone to drive you home.

## After Balloon Removal

You should consume a full liquid diet until any nausea or cramping have resolved. You may then resume a regular diet. You may continue to meet or speak with a member of the care team at monthly intervals for 6 months after balloon removal. This is included in the price of the balloon. You are encouraged to continue a regular exercise program in order to help maintain weight loss.

## Contact Our Office (972-494-3100)

1. If you have persistent vomiting or abdominal pain beyond 7 days.
2. If you notice any green or blue discoloration to your urine which could indicate balloon rupture.
3. If you develop bad breath which could indicate food sticking to the balloon.
4. If you have severe acid reflux.
5. If you have difficulty breathing.

# About Calcium & Calcium Deficiency

## What does calcium do?

Calcium is very important for the health of your teeth and bones. 99% of the calcium in your body is stored in your teeth and bones. Calcium also helps the heart, brain, nerves, and muscles, and helps blood clot among other things.

## What happens if my calcium is low/if I don't get enough calcium?

Most people are not aware of how they feel when they don't have enough calcium. Calcium is so important for keeping your heart beating and your brain going that when we don't have enough in our diets, the body takes it from our bones. This is just like taking money out of the ATM without checking your account balance – you may not know until it is gone. For this reason, sometimes the very first symptom of calcium deficiency is an unexpected fracture or loss of a tooth.

If calcium deficiency is very severe or acute there can be muscle spasm or cramping, tingling, or burning sensation around the mouth and fingers, facial spasms and tics, seizures, and tremors.

The loss of calcium from bone is called osteopenia when it is mild and osteoporosis when it is severe. If calcium deficiency continues over a long time you can have permanent loss of bone that can result in fragility, broken bones, loss of mobility and more.

## What are other symptoms?

Some other symptoms of calcium deficiency include:

- Faintness
- Difficulty swallowing
- Anxiety, irritability
- Low blood pressure
- Hip pain
- Spinal pain
- Compression fracture
- Loss of height
- Brittle nails and hair

## Where can I get calcium?

The very best sources of calcium in food are dairy products such as milk, yogurt and cheese. There is also calcium in fortified soy and rice drinks, fortified juice, and fish where you eat the bones (like sardines). While some vegetables like leafy greens have calcium in them, this form of calcium is not well absorbed by people. Calcium is also found in dietary supplements as liquids, powders, tablets, capsules, and soft chews. If you do not get enough calcium in your diet or your calcium is low, your doctor will probably ask you to take calcium supplements as well as to watch calcium in your diet. If you have had weight loss surgery, you may be asked to take a specific form of calcium like calcium citrate which is better absorbed.

## Other important things

Because you can't usually feel calcium deficiency, many people do not know when they are not getting enough. Your doctor may ask you to have a bone density test to look at how much calcium you have in bone, or ask specific questions about your diet to learn how much calcium you typically eat. If you have low calcium or loss of bone, it is important that you follow up with your doctor for lab tests and other recommended care.

# About Folate & Folate Deficiency

## What does folate do?

Folate (folic acid, B9) is one of the B-complex vitamins. It is important for the brain, including maintaining mental health. Folate is part of the manufacture of our DNA and RNA, so it is needed for making new cells – because of this it is very important for pregnancy, infancy, adolescence, and any time you need to grow new tissue (such as after an injury or surgery). Folate also works with B12 to make red blood cells, and plays a role in maintaining the health of the cardiovascular system, nervous system, and digestive system.

## What happens if my folate is low/if I don't get enough folate?

If you do not have enough B12 you may notice that you become fatigued easily and feel tired and weak. You may experience dizziness, heart palpitations (rapid heartbeats), and feel short of breath. Other common symptoms are poor appetite, sore/swollen tongue, and diarrhea.

If folate deficiency is allowed to progress, complications can develop including severe nerve damage, memory loss, heart disease and possibly some forms of cancer. If you are a woman with folate deficiency and you become pregnant, you risk having a miscarriage or having a baby with serious birth defects. Folate deficiency is also associated with a form of anemia that causes large blood cells.

## What are other symptoms?

Some other symptoms of folate deficiency include:

- Memory loss/changes
- Gum disease, mouth sores
- Burning sensation around mouth
- Irritability and depression
- Psychosis
- Muscle weakness, difficulty walking
- Ankle swelling
- Changes in vision

## Where can I get folate?

The major source of folate in the American diet is in fortified foods such as cereal, enriched bread, pasta and waffles. Natural sources of folate include oranges/orange juice, green vegetables, peanuts, peas, sprouts, liver and soybeans. Folate is also found in dietary supplements such as multivitamins, B-complex vitamins and alone in tablets or capsules. If you have a folate deficiency, your doctor will probably ask you to take supplemental folate and watch your dietary intake.

## Other important things

If you have had weight loss surgery, chances are that you are not eating many of the foods that are fortified with folate. For this reason, it is very important that you have another source such as a multivitamin with folate in it. If you are a woman, it is recommended to have a healthy folate level for a full year before becoming pregnant. If you are considering pregnancy, you should discuss testing with you doctor. If you have a folate deficiency, it is important that you follow up with your doctor for lab tests and other recommended care.

# About Iron & Iron Deficiency

## What does iron do?

Iron is a mineral in your body that is very important for building blood cells, carrying oxygen, enzyme functions, immune system function, detoxification, growth and development.

## What happens if my iron is low/if I don't get enough iron?

When you do not have enough iron you may notice that you are tired and weak. People may tell you that you look pale or grayish, and the whites of your eyes can become blue-tinted. You may also have shortness of breath, feel dizzy or lightheaded, (especially when you stand up), have coldness, headache, brittle nails and hair loss. When iron becomes too low your doctor may tell you that you have iron deficiency anemia – this happens because there is not enough iron to make blood cells normally and they become very small and pale.

If iron deficiency continues for a long time you can develop problems with infections, serious heart problems, or problems with pregnancy if you are a woman. If you have a serious injury or require surgery, it is also more dangerous if you have iron deficiency.

## What are other symptoms?

Some other symptoms of iron deficiency include:

- Swollen tongue
- Loss of appetite
- Depression
- Difficulty thinking/slow thinking
- Leg cramps/Restless Leg Syndrome
- Ice eating and/or Pica (cravings for non-food items like dirt, starch, paper, etc.)

## Where can I get iron?

Iron can be found in both foods and dietary supplements. The best food sources are beef, lamb, fish/shellfish, poultry, and egg yolk. There are non-animal sources of iron including dried fruits, kidney beans, lentils, cashews, blackstrap molasses, and cashews – but it is very important to know that the iron in animal protein is MUCH better absorbed than the other sources. There are also supplements that provide iron in liquids and pills. If you have iron deficiency, your doctor will probably ask you to take supplemental iron and watch your dietary intake.

## Other important things

If you have iron deficiency, it is important that you follow up with your doctor for lab tests and other recommended care. If you are taking iron, it is also generally recommended that you do not take it at the same time as calcium or calcium containing foods. It is beneficial to take iron supplements with a meal that contains an iron-rich food such as meat.

# About Thiamine (B1) & Thiamine Deficiency

## What does thiamine do?

Thiamine (vitamin B1) is an important nutrient for taking energy from food and turning it into energy for your brain, nerves and heart. It is needed by the body to process carbohydrates, fats, and proteins – but it is most important for how we process carbohydrates (sugars and starches).

What happens if my thiamine is low/if I don't get enough thiamine?

Your body stores very little thiamine, so deficiency can happen very quickly – especially if you are not eating much or if you are vomiting for any reason.

Thiamine deficiency may be called Beriberi or Wernicke's encephalopathy depending on how it presents. When you don't get enough thiamine, you may first have nausea, vomiting, loss of appetite, fatigue and difficulty concentrating. You may also have weakness, sleepiness, changes in personality and memory, leg and foot cramping, burning feet, headache, constipation, and cramping.

If thiamine deficiency is severe, serious problems can result including loss of hearing, permanent nerve damage, coma, permanent brain damage, heart damage, liver damage, and death.

## What are other symptoms?

Other symptoms of thiamine deficiency include:

- Blurred or double vision
- Difficulty taking/swallowing
- Facial weakness
- Amnesia, memory loss, dementia
- Rapid heartbeat
- Faintness on standing up
- Leg swelling
- Difficulty urinating
- Numb/painful hands/feet
- Foot drop, leg weakness
- Clumsiness, loss of balance, falling
- Loss of muscle

## Where can I get thiamine?

Thiamine is found throughout the diet, but fortified cereals, beans/peas, nuts and pork are very good sources. Other sources are also milk, cheese, fresh and dried fruit, and eggs. Some foods can also inhibit thiamine absorption – the most important ones are coffee, black tea and alcohol. Thiamine is also found in dietary supplements. Almost all multivitamins have thiamine. It is also found in B-complex and alone in tablets or capsules. Thiamine has a sulfuric smell that many people find unpleasant, but it is normal. If you have thiamine deficiency, your doctor will probably ask you to take supplemental thiamin and watch your dietary intake.

# About Vitamin A & Vitamin A Deficiency

## What does Vitamin A do?

Vitamin A is a fat-soluble vitamin that is important for the health of your eyes, your immune system, skin, lungs, digestive and urinary systems. It is also important in wound healing and cell reproduction.

## What happens if my vitamin A is low/if I don't get enough vitamin A?

Changes in vision are often the first noticeable sign of vitamin A deficiency. You may notice that you cannot see as well as night (for example it may be harder to drive at night, you may not be able to easily find your way to the bathroom, or you may notice that you need to turn on lights earlier in the evening), you may also find that your eyes are dry and irritate easily. Sometimes in early vitamin A deficiency people also get dry hair, dry mouth, dry/itchy/bumpy skin, broken nails, and more frequent infections.

If vitamin A deficiency is severe or is allowed to progress, serious problems can develop. The most serious problem is permanent blindness.

## What are other symptoms?

Some other symptoms of vitamin A deficiency include:

- Sores in the eyes
- Loss of tears
- Fatigue
- Dry cracked lips, mouth sores
- Diarrhea
- Bladder infections
- Vaginal infections
- Upper/lower respiratory infections
- Poor and delayed wound healing

## Where can I get vitamin A?

There are two kinds of vitamin A: the kind in plants which is beta-carotene and the kind in animals which is retinol or "pre-formed" vitamin A. Retinol is found in foods that come from animals such as whole eggs, milk, and liver. It is also found in fortified cereals and margarine. Beta-carotene is found in red, orange and green vegetables and some fruits such as carrots, cantaloupes, apricots, mangoes, sweet potatoes, red peppers, tomatoes, peas and spinach. Vitamin A is also found as a dietary supplement in multivitamins and in capsules or tablets. As a supplement, you can find both beta-carotene and retinol. If you have vitamin A deficiency, your doctor will probably ask you to take supplemental vitamin A and watch your dietary intake.

# About Vitamin B12 & Vitamin B12 Deficiency

## What does Vitamin B12 do?

Vitamin B12 is one of the B-complex vitamins. It is important for the function of your nerves and for the production of the DNA and RNA in your cells. It also works together with folic acid to make red blood cells and other compounds that are important for your cardiovascular and immune systems.

## What happens if my B12 is low/if I don't get enough B12?

If you do not have enough B12 you may notice that you become fatigued easily and feel tired and weak. You may experience dizziness, heart palpitations (rapid heartbeats), and feel short of breath. Other common symptoms are poor appetite, sore/swollen tongue, and numbness and tingling of the hands and feet.

It is common for people with low B12 to develop anemia because they can't make blood cells normally. With this anemia, cells become large and the nucleus of the cell is not formed properly. If B12 deficiency is allowed to continue for a long time, serious problems can develop such as permanent damage to the nerves, memory loss and dementia.

## What are other symptoms?

- Diarrhea
- Yellowish skin and eyes
- Irritability and depression
- Psychosis
- Muscle weakness, difficulty walking
- Changes in vision
- Burning sensation around mouth

## Where can I get B12?

B12 is only found in foods of animal origins. Plants do not make B12 – so fruits, vegetables, beans and grains will not supply this vitamin. Good dietary sources of vitamin B12 include fish, dairy products, organ meats (particularly liver and kidney), eggs, beef, and pork. You can also get B12 in dietary supplements. It is found in most multivitamins, in B-complex, and alone in tablets, capsules, liquids, and sublingual (pills that dissolve under the tongue). It is also available as a prescription as injections or as a nasal spray. If you have B12 deficiency, your doctor will probably ask you to take supplemental or prescription B12 and watch your dietary intake.

## Other important things

If you have weight loss surgery such as gastric bypass, it is harder for the body to absorb B12 from food and from some types of supplements. For this reason, your doctor may ask you to use a sublingual product, or to get regular injections to prevent problems. If you have B12 deficiency, it is important that you follow up with your doctor for lab tests and other recommended care.



# About Vitamin D & Vitamin D Deficiency

## What does Vitamin D do?

Vitamin D is a fat-soluble vitamin that is found in food and can also be made in your skin after exposure to the sun. Vitamin D sends signals that tell the body to absorb calcium from the digestive system and put it places like your bones. It is also important for immunity, growth and development, and communication between some types of cells.

## What happens if my vitamin D is low/if I don't get enough vitamin D?

If you do not have enough vitamin D, you can develop a condition called osteomalacia. Many times, this is a “silent condition” which means that you have no obvious symptoms that you feel. When you have osteomalacia your bones become soft and weak. You may get weak muscles, or bone pain (especially in your hips and back).

If vitamin D deficiency becomes severe or continues over a long period of time, there can be permanent disability due to bone loss. Serious problems may also develop with the nervous system and immune system.

## What are other symptoms?

- Muscle tics, twitches or spasms (especially facial)
- Unexplained fracture
- Seizure
- Depression, Seasonal Affective Disorder
- Loss of balance, increased falling
- Arrhythmia, hypertension
- Breast, prostate, colon cancers

## Where can I get Vitamin D?

Humans make vitamin D in our skin in response to sun exposure. So one way to get vitamin D is to get adequate sunlight without or with very minimal SPF (sun screen protection above SPF 8 blocks almost 100% of vitamin D production). Fatty fish, dairy products, fortified soy products, eggs and liver are good dietary sources of vitamin D. If you have a vitamin D deficiency, your doctor may recommend supplemental vitamin D in addition to diet and sunlight. If you are supplementing vitamin D, it is also important to make sure that you have adequate calcium.

## Other important things

As a fat-soluble vitamin, vitamin D can have side effects and toxicity if taken at doses that are too high or if taken for too long. For this reason, it is not a good idea to take high dose vitamin D on your own, unless instructed to do so by your doctor. Also, if your doctor has placed you on a high dose of vitamin D, it is very important to take it as directed and to follow instructions for follow-up laboratory evaluations.

# About Zinc & Zinc Deficiency

## What does Zinc do?

Zinc is a mineral in your body that is involved in hundreds of chemical reactions in the human body. Zinc is important for immune function, acid-base balance, digestion, growth and development, skin and hair health, genetic transcription, antioxidant activity and much more.

## What happens if my zinc is low/if I don't get enough zinc?

Because zinc affects so many systems in the body, there is no single distinct symptom of zinc deficiency. Some of the more common symptoms include loss of or diminished smell and taste, poor wound healing, hair loss, roughening of skin/rashes, low libido (men), canker sores, lethargy, and deformed nails.

If symptoms progress, there can be serious immune problems, severe diarrhea, severe hair loss (even total), loss of night vision, and significant rash around the mouth and genitals.

## What are other symptoms?

Other Symptoms of zinc deficiency include:

- Infections – especially skin, respiratory, GI and urinary
- Metallic taste in mouth
- Lip fissures, cracked/peeling lips
- Anorexia, loss of appetite
- Prostate problems (men)
- Irregular menses (women)

## Where can I get zinc?

Zinc is found in a wide variety of foods. Some of the best sources include shellfish, other seafood, meat, dairy products, legumes (beans, peas, and lentils), nuts and seeds. Zinc is also found in most multivitamins and in a wide variety of dietary supplements. Zinc may be better absorbed if you take it with a protein-rich meal. If you know you have a significant problem with fat mal-absorption, it may be better to take zinc on an empty stomach. If you are taking a separate zinc supplement for zinc deficiency, it is best to take it separately for calcium and iron supplements.

## Other important things

Zinc can have toxicity and side effects when taken in high doses for a long period of time. Zinc can deplete copper in the body, so if you are taking supplemental zinc, you need to make sure you have adequate copper. High doses of zinc can also cause digestive and renal problems, so it is best to take high doses only when instructed to do so by your doctor and only for the recommended length of time. Be sure to ask your doctor about follow-up lab work.