Please bring this booklet and your “Personal Journey Checklist” to every Supervised Weight Loss class.

During Supervised Weight Loss you should:

- **Follow the Liver Reduction Diet**
  - Liver Reduction Diet will be determined by your provider

- **Drink at least 64 oz fluids each day**
  - No fruit juice, sweet tea, carbonated beverages, or alcoholic beverages

- **Take the following vitamins**
  1. Complete or Woman’s Formula Multivitamin – 1 per day. No men’s, silver, or 50+ formulas.
  2. 1200 mg Calcium Citrate every day (2 tablets – 2 times a day.) Do not take with multivitamin.
  3. 2000 IU Vitamin D3. One time per day at any time.
  - Sample vitamin schedule: 2 calcium at 10 am, 2 calcium at 3:30 pm, and multivitamin and vitamin D3 at bedtime.

- **Journal what you eat and your activity.** Some may be required by your insurance to keep a food and activity journal.

- **No weight gain or you must reach your weight loss goal before surgery.**
  - Weight loss goal has to be maintained all the way until surgery and if you had no weight loss goal, you can not gain weight even up to day of surgery.
  - Weight gain may result in postponed surgery date.

- **If you have diabetes, be sure to get your A1C and lipid levels checked and the results faxed to us.**
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Cardio 101

Why Cardio?
1. Cardio exercise is one of the best ways to improve your heart and respiratory health. Studies have shown that better cardio health reduces complications in surgery.
2. Cardio exercise helps improve endurance and ability to do daily activities.
3. Cardio exercise boosts energy and gets the blood flowing.
4. Cardio exercise helps to burn excess energy (fat) and promotes faster weight loss.

General Exercise Guidelines
Aim for 45-60 minutes of moderate intensity exercise on most if not ALL days of the week.

- These minutes include cardio, strength, and flexibility—but all activities should be done at a moderate intensity level to challenge your heart. The minutes can be broken down into smaller bouts of exercise (2, 10 minute workouts every day). It is encouraged that you work to increase the duration of your activity exercise (especially if your goal is to build endurance) to 45-60 minutes at a time. Long term, strive for 200-300 minutes total per week.
- Moderate intensity is reached by some indicators
  1. Increased breathing rate and heart rate is up
  2. Breaking a sweat
  3. Achieved 40-75% of heart rate reserve (see Fitness Coach for help)
  4. Reaching a 5-7 range on a scale of 1-10. See scale for example

| 10 | Maximum exertion |
| 9  | Very hard       |
| 8  | Extremely hard  |
| 7  | Hard            |
| 6  | “In the Zone”   |
| 5  | Somewhat hard   |
| 4  | Fairly light    |
| 3  | Light           |
| 2  | Very light      |
| 1  | Rest            |

Pay attention to how hard you feel like you are working to start becoming in-tune with your body. Make sure that if you break up your workouts into smaller segments throughout the day that you are also getting your intensity level up during those workouts.

- Activities should aim to be both weight-bearing and non weight-bearing depending on your physical abilities. Weight-bearing activities have the added benefit of increasing the strength of your bones and preventing osteoporosis, so they should be done if you are able.
- For physical limitations, low impact and non weight-bearing activities are good options. Be creative!
- It is encouraged that you work to build up your physical endurance before trying to increase the intensity of your cardio activities. Focus on working out for longer rather than harder in the beginning—then after your fitness level increases you will be able to pick up the intensity.
Cardio Plan for Beginner Interval Training

Quick Info about Beginner Interval Training
Once you have built a good amount of endurance in a single activity, the next step to challenge yourself is through interval training. It is a great way to burn calories, decrease body fat percentage, and boost your post-workout metabolism. This type of cardio exercise involves alternating short bursts of intense activity with “active recovery” or lower intensity activity. The length of your high intensity vs. low intensity sections are determined by your fitness level and activity. Interval training accomplishes a lot in a short amount of time, mainly by increasing the total caloric expenditure of your workouts—therefore burning more overall fat. Interval training also improves cardiovascular fitness, because working at higher intensity levels trains your heart and lungs to become stronger. But since interval training involves getting your heart rate up near maximum, a beginner must ease into this type of training. As your heart, lungs, and whole body grow stronger—you can feel more comfortable pushing yourself to the next level.

<table>
<thead>
<tr>
<th>Minutes</th>
<th>RPE Intensity Level (1-10)</th>
<th>HR Zone %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warm-up</td>
<td>5 minutes</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>3 minutes</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>2 minutes</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>1 minutes</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>30 seconds</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>3 minutes</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>2 minutes</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>1 minutes</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>30 seconds</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>3 minutes</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>2 minutes</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>1 minutes</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>30 seconds</td>
<td>9</td>
</tr>
<tr>
<td>Cool down</td>
<td>5 minutes</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>30 minutes</td>
<td></td>
</tr>
</tbody>
</table>

NOTE: If you find yourself having a hard time getting back down to level 6 after being at level 9, feel free to stay in level 6 longer than 3 minutes in order to bring your heart rate back down. This recovery time is important and should be reached. As your fitness level improves, so will the ability for your heart to recover within those 3 minutes.
Cardio Plan to Build Endurance

Quick Info about Building Endurance
To improve your endurance it is necessary to increase the amount of time you can withstand a certain activity. Building on endurance helps to produce more stamina in your exercise sessions as well as daily life activities. It is recommended that you improve your endurance with a certain activity before trying to make it more intense. When trying to improve your endurance, it is recommended that you keep a moderate, steady intensity level until optimum endurance is reached. A good number to work towards is 60 minutes in any given activity. After you reach that point comfortably, you can increase the intensity of the activity and build endurance again at that new intensity level.

<table>
<thead>
<tr>
<th></th>
<th>Warm-up</th>
<th>Workout</th>
<th>Cool Down</th>
<th>Total Minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>5 min</td>
<td>5 min</td>
<td>5 min</td>
<td>15 minutes</td>
</tr>
<tr>
<td>Week 2</td>
<td>5 min</td>
<td>8 min</td>
<td>5 min</td>
<td>18 minutes</td>
</tr>
<tr>
<td>Week 3</td>
<td>5 min</td>
<td>11 min</td>
<td>5 min</td>
<td>21 minutes</td>
</tr>
<tr>
<td>Week 4</td>
<td>5 min</td>
<td>15 min</td>
<td>5 min</td>
<td>25 minutes</td>
</tr>
<tr>
<td>Week 5</td>
<td>5 min</td>
<td>18 min</td>
<td>5 min</td>
<td>28 minutes</td>
</tr>
<tr>
<td>Week 6</td>
<td>5 min</td>
<td>21 min</td>
<td>5 min</td>
<td>31 minutes</td>
</tr>
<tr>
<td>Week 7</td>
<td>5 min</td>
<td>24 min</td>
<td>5 min</td>
<td>34 minutes</td>
</tr>
<tr>
<td>Week 8</td>
<td>5 min</td>
<td>27 min</td>
<td>5 min</td>
<td>37 minutes</td>
</tr>
<tr>
<td>Week 9</td>
<td>5 min</td>
<td>30 min</td>
<td>5 min</td>
<td>40 minutes</td>
</tr>
<tr>
<td>Week 10</td>
<td>5 min</td>
<td>33 min</td>
<td>5 min</td>
<td>43 minutes</td>
</tr>
<tr>
<td>Week 11</td>
<td>5 min</td>
<td>36 min</td>
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<td>46 minutes</td>
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<td>Week 12</td>
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<td>5 min</td>
<td>50 minutes</td>
</tr>
<tr>
<td>Week 13</td>
<td>5 min</td>
<td>45 min</td>
<td>5 min</td>
<td>55 minutes</td>
</tr>
<tr>
<td>Week 14</td>
<td>5 min</td>
<td>50 min</td>
<td>5 min</td>
<td>60 minutes</td>
</tr>
</tbody>
</table>

During the Warm-up and Cool-down minutes, you want to keep your heart rate at a low-to-moderate intensity level.

Your low-to-moderate intensity level is between ____________ bpm (5 RPE) and ____________ bpm (6 RPE).

During the Workout minutes, you want to keep your heart rate at a moderate-to-high intensity level.

Your moderate-to-high intensity level is between ____________ bpm (6 RPE) and ____________ bpm (7 RPE).

NOTE: It is best that you perform your cardio activities at least 3 times per week to build your endurance well enough to move on through this plan. If for some reason you miss sessions or skip a week, remain at that same week until you complete at least 3 sessions at that level.
Flexibility 101

What is “Flexibility”? And how do you train for flexibility?
Flexibility refers to the range of movement at a joint or series of joints. You train for flexibility through different movements that we call “stretching”.

Why train for more flexibility?
1. You can increase your range of motion and improve physical abilities.
2. You can decrease risk of injury.
3. You can significantly improve the results you get from exercising.
4. You can decrease soreness from exercise.
5. You can provide your body more “TLC”!

How do you train for more flexibility?
1. The general recommendation is:
   a. 3-7 days per week
   b. Static (or “holding” not bouncing) stretches for all muscle groups.
   c. Hold for 15-30 seconds per stretch; repeat stretch at least once more
   d. Only stretch until you feel muscle tightness; slight discomfort
2. Some other recommendations:
   a. Do not push yourself in stretching unless working with a professional or have personal experience
   b. Best time to stretch is after your exercise, because muscles are warm and joints pliable. However, there are some dynamic (or “moving”) stretches you can do before you exercise too.

What are some ideas for stretching programs?
1. Choose basic stretches from resources related to your physical goals and abilities and do them before you get up, before you go to sleep, while you watch TV, taking a break at work, or any time you feel stiff.
2. Yoga, Tai Chi, or similar program
3. Past physical therapy programs you have done
Warm-up and Cool-down Exercises

1. Head Tilt (side to side)
2. Arms
3. Side Bends
4. Twist
5. Calf Stretch (hold 10 seconds)
6. Quadriceps (hold 10 seconds)
7. Shoulder Shrugs
8. Reach
9. Side Reach (wide stance - reach arm across body)

Reference: http://www.actsa.us/images/warm_ups.gif
Setting Goals and Measuring Progress

**Tips for Setting Goals with Fitness**
- Think about your overall “big picture” goals as a vision, destination, and mission. Think about what inspires you, gives you desire to experience the results of exercise, and connects with you and your efforts on this journey.
- Examine and understand where you are right now.
- Think about the first few steps ONLY!
- Get specific with the next steps you are going to take. Use the SMART system if needed.
- Don’t be afraid to adjust your goals and next steps.
- Set days/times/events for you to reach a goal OR just to measure the progress you’ve made.

**Tips for Measuring Progress**
- My only DON’T: Don’t use weight loss as your only form of measurement!!
- The best indicators of progress physiologically: inches/body composition, abilities, energy
- Be objective: Measure the numbers and your goals. Are you getting closer to your goals?
- Be subjective: Reflect on how you feel. Do you feel like you have accomplished something?
- Try your best to not compare yourself to “normal”

BEST FITNESS TIP: Write it all down.
Your SMART Fitness Goals

Specific – What exactly are you going to do? What do you want to accomplish? How are you going to do it?

Measurable– How will you see when you reach your goal? How will you know you are making progress?

Attainable – Does this goal accurately reflect what I can and willing to do? Does this goal help me bring on feeling of success throughout the process?

Relevant – Does this goal match up with what I truly want for myself? Does this goal challenge me safely? Does this goal work with who I am and not against it?

Timely – Do I have a clear target and timeframe in mind? Do I have a strategy for how this will become a part of my daily life?

GOAL #1

____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

How will you measure? _________________________________________________________________

What is your time-frame? _______________________________________________________________

Is your goal?  ☐ S  ☐ M  ☐ A  ☐ R  ☐ T

GOAL #2

____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

How will you measure? _________________________________________________________________

What is your time-frame? _______________________________________________________________

Is your goal?  ☐ S  ☐ M  ☐ A  ☐ R  ☐ T

GOAL #3

____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

How will you measure? _________________________________________________________________

What is your time-frame? _______________________________________________________________

Is your goal?  ☐ S  ☐ M  ☐ A  ☐ R  ☐ T
Strength Training 101

What is strength training?
Strength training is the use of resistance to cause muscular contraction in order to build the strength, endurance, and size of skeletal muscles. There are many different methods of strength training, the most common being the use of gravity, weights, or elastic forces.

What does “strength training” or “resistance training” do for me?
- Helps you avoid losing muscle mass. Weight loss happens from losing muscle and fat—strength train to keep your body strong and safe.
- Improves your physical abilities.
- Helps you fully utilize the protein you eat.
- Helps your metabolism and energy levels.
- Helps you have more endurance.
- Helps tighten skin as much as possible, improve physique, and decrease inches.

Tips for strength training…
- You will know if you are strength training if you feel challenged in your muscles, if you feel a slow burning effect in your muscles, or if your muscles are sore after an exercise session.
- To produce specific results, a more structured and targeted approach is best.
- There are specific program structures out there designed to produce different results (for example, body building vs. toning).
- Following basic, simple guidelines is the easiest way to get started.
- You can actually gain weight with strength training (especially if you are not conditioned) but remember this is a temporary gain and will not continue to increase if you are doing everything correctly.
Basic Strength Training Program

FREQUENCY 2-3 days per week (non-consecutive days)
INTENSITY Medium intensity (50-75% of your 100% maximum lifting power)
TIME—Sets 1-3 sets
TIME—Reps 8-15 reps
TYPE at least 10-12 exercises targeting all major muscle groups

Choose 1-2 exercises from each muscle group to work on.

To find example exercises for each muscle group, visit www.exrx.net click on Exercise Instruction and then click on Exercise and Muscle Directory.

Also, www.acefitness.org has an Exercise Library in the Get Fit section.

Other Principles:
- Determine the amount of weight you should lift in the very beginning phases through the “Trial and Error” process. Start with the 1 set, 8 repetitions and load enough weight where you experience muscular fatigue by the time you reach 8 repetitions.
- The largest increases in your muscle mass and strength will be in the first 6-10 weeks you begin the program.
- When putting together your exercises, the exercise moves involving the bigger muscle groups should be done first and the smaller muscle groups last.
- As a general rule, continue with your specific program until it is easy to perform—then you can add the next challenge. If you are still feeling challenged with a certain amount of sets, reps, weight—then continue to perform this until you feel ready to move on. Build on intensity by bumping up the weight 5-10% and come back to starting point with sets and reps OR try new exercise moves (or use another FITT principle!)
4-Day Advanced Strength Training Program

<table>
<thead>
<tr>
<th></th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
<th>Sunday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workout</td>
<td>A</td>
<td>B</td>
<td>A</td>
<td>B</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workload</td>
<td>Heavy</td>
<td>Heavy</td>
<td>Light</td>
<td>Light</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rep Range</td>
<td>8-10</td>
<td>8-10</td>
<td><strong>11-15</strong></td>
<td><strong>11-15</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workout Sets</td>
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<td>1</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rest</td>
<td>Longer</td>
<td>Longer</td>
<td>Shorter</td>
<td>Shorter</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Work all major muscle groups.

Choose 1-2 exercises from each muscle group to work on.

Split up exercises to create “Workout A” and “Workout B”

To find example exercises for each muscle group, visit www.exrx.net click on Exercise Instruction and then click on Exercise and Muscle Directory.

Also, www.acefitness.org has an Exercise Library in the Get Fit section.

Other Principles:

- Determine the amount of weight you should lift in the very beginning phases through the “Trial and Error” process. Start with the 1 set, 8 repetitions and load enough weight where you experience muscular fatigue by the time you reach 8 repetitions.
- The largest increases in your muscle mass and strength will be in the first 6-10 weeks you begin the program.
- When putting together your exercises, the exercise moves involving the bigger muscle groups should be done first and the smaller muscle groups last.
- As a general rule, continue with your specific program until it is easy to perform—then you can add the next challenge. If you are still feeling challenged with a certain amount of sets, reps, weight—then continue to perform this until you feel ready to move on. Build on intensity by bumping up the weight 5-10% and come back to starting point with sets and reps OR try new exercise moves (or use another FITT principle!)
Physical Activity in Daily Life

EVERYTHING YOU DO BURNS CALORIES. EVERYTHING!
A calorie is a measurement of energy. Energy is needed for our bodies to function and to be able to do any physical activity. Our bodies convert the food we eat into energy. This is the process of metabolism and it is happening all the time! Your body is constantly taking the calories from proteins, carbohydrates, and fats and combining it with oxygen to produce the energy you need. Your metabolic rate is the rate at which your body burns calories and uses that energy. If you burn more or less calories than your body consumes daily, you will lose or gain weight accordingly.

Why are calories burned?
There are a number of reasons why we burn calories. One of the most significant reasons is that calories are needed just to keep you alive! Your body burns calories to maintain breathing, blood circulation, digestion, and other essential activities. The calories you burn through this type of activity make up your Basal Metabolic Rate (BMR). On average, the BMR constitutes 60 percent of those calories burned daily. The rest of your calories are burned through engaging in activity, such as sports/exercise and daily physical activities. Burning calories through activities makes up approximately 30 percent of total calories burned.

How can I burn more calories?
It is possible to burn more calories and to speed up the burning process in general. By building muscle tissue, your body works harder, thus enabling you to expend more energy or calories. On average, for each additional pound of muscle amassed, about 50 additional calories are used daily. In other words, with a regular weight program, your BMR can experience an increase of 15%. On top of that, you can simply start moving around more and your daily activity level will rise—causing more calories to be burned for energy. This can be done all throughout the day! For example, take a walk with a friend instead of a coffee break, park your car on two streets over instead of one, or move around when you chat on the phone. All these additional movements may seem insignificant, but don’t be tricked – the calories burned by these activities add up. Exercise is also a successful and healthy way to burn calories. By picking up the intensity of your daily activities and exercise sessions, you continue to burn additional calories.
# Calories Add Up!

<table>
<thead>
<tr>
<th>Activity</th>
<th>Calories for Activity</th>
<th>vs.</th>
<th>Activity</th>
<th>Calories for Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walking your dog for 20 minutes</td>
<td>86</td>
<td>vs.</td>
<td>Standing while dog roams the yard</td>
<td>54</td>
</tr>
<tr>
<td>Taking the stairs</td>
<td>100</td>
<td>vs.</td>
<td>Taking the elevator</td>
<td>9</td>
</tr>
<tr>
<td>Play with your kids</td>
<td>360</td>
<td>vs.</td>
<td>Sit and watch kids play</td>
<td>96</td>
</tr>
<tr>
<td>Push mower</td>
<td>396</td>
<td>vs.</td>
<td>Riding mower</td>
<td>192</td>
</tr>
<tr>
<td>Walking break at work</td>
<td>99</td>
<td>vs.</td>
<td>Coffee break at work</td>
<td>24</td>
</tr>
<tr>
<td>Park in the back of lot</td>
<td>34</td>
<td>vs.</td>
<td>Park in the front of the lot</td>
<td>15</td>
</tr>
<tr>
<td>Doing light housework while watching TV</td>
<td>260</td>
<td>vs.</td>
<td>Sitting on the couch while watching TV</td>
<td>96</td>
</tr>
<tr>
<td>Cooking dinner</td>
<td>240</td>
<td>vs.</td>
<td>Driving thru to get dinner</td>
<td>96</td>
</tr>
<tr>
<td>TOTALS!</td>
<td></td>
<td>vs.</td>
<td>TOTALS!</td>
<td></td>
</tr>
<tr>
<td>1, 575 calories per day</td>
<td></td>
<td>vs.</td>
<td>567 calories per day</td>
<td></td>
</tr>
<tr>
<td>11, 025 per week</td>
<td></td>
<td>vs.</td>
<td>3, 969 per week</td>
<td></td>
</tr>
<tr>
<td>47, 250 per month</td>
<td></td>
<td>vs.</td>
<td>17, 010 per month</td>
<td></td>
</tr>
</tbody>
</table>

This was calculated using the tool on www.healthstatus.com for a typical 200lb person doing these various activities for the minutes it would usually take to accomplish them (anywhere between 5-60 minutes). You can use this tool as well to calculate your daily activities!

## Ways to measure your daily physical activity:

1. Track your daily activities and calories burned! (www.livestrong.com or www.sparkpeople.com)
2. Wear a pedometer and track your steps.
3. Buy a fancy tool that tracks what your calories and activities.
   - Body Bugg www.bodybugg.com
   - Fit Bit www.fitbit.com
   - Heart Rate monitor www.polarusa.com
   - GoWear Fit www.bodymedia.com

Information modified from various sources like www.ediets.com & www.healthstatus.com
Exercising with Physical “Limitations”

Tips for Exercising with Physical Obstacles
- Remember that no matter what—there is always an exercise option for you.
- Exercise has been found to actually help most physical limitations.
  - Arthritis/Joint Pain, Diabetes, Fibromyalgia, COPD, and more
- Search and seek options related to exactly what is going on with you. Use the internet and Fitness Coach for help.
- Listen to your body—it will tell you when to stop or keep going! Learn your body's responses to activity and plan your progress based on how you feel.
- If the amount of exercise you want to do doesn’t match up with the amount that you can do safely right now…remember that starting where you are at is the first stepping stone and is only temporary! Create a plan that helps you make steps towards getting better.
- Remember that physical abilities don’t necessarily improve with weight loss alone. It takes doing physical activities to be more physically fit!

Resources to Check out
Arthritis Today (Magazine & Website)
  www.arthritistoday.org/fitness
  Multiple workouts for all kinds of arthritis and joint pain.

Chair Aerobics for Everyone (Videos)
  www.chairaerobics.com
  Multiple videos for seated exercise options.

Flourish Your Life Volume 2 (Video & Website)
  www.flourishyourlife.com
  Full body fitness routine included for people with physical limitations (instructed by the IU Health Fitness Coach and sold at this clinic). Check out the Fitness Blog too!

The National Center on Physical Activity and Disability (NCPAD)
  www.ncpad.org
  1-800-900-8086
  A wealth of resources, articles, videos, and more.

Collage Video (Videos)
  www.collagevideo.com
  Compiles all kinds of exercise videos for specialty situations. Click on “Specialty” to find.

New Mobility (Magazine & Website)
  www.newmobility.com
  A magazine for active wheel chair users.

Other options:
  Water Aerobics
  Exercise Conditioning & Physical Therapy
  Ask the Fitness Coach!
What Studies Show about Exercise and WLS

Every once in awhile researchers publish studies based on the effects of exercise on weight loss surgery outcomes. All too often these studies are published in journals that the majority of the public and weight loss surgery patients don’t regularly get to see. The most recent study I’ve read was published in the *American Journal of Lifestyle Medicine* March/April 2010 issue and was titled “The Role of Physical Activity Participation in Weight Loss Outcomes Following Weight Loss Surgery.” I wanted to share some great quotes from this article that can summarize the importance of physical activity on health status, weight loss, and the ability to reach goal weight.

“Although the incidence of certain comorbidities (eg, diabetes) may influence postoperative weight loss, most factors associated with successful weight loss are related to compliance with specific medical, nutritional, and physical activity recommendations following surgery.”

“Exercise during the period leading up to surgery has the potential to improve weight loss surgery outcomes by improving cardiovascular fitness, reducing cardiovascular disease risk, and reducing surgical complications.”

“[Researchers] observed greater percent excess weight loss and reduction in BMI in those reporting participation in physical activity during post-operative follow-up visits up to 2 years after weight loss surgery.”

“[Researchers] observed greater reductions in fat mass and less fat-free mass (muscle) in the “exerciser” group”

“On the basis of their findings, the [researchers] concluded that patients who did not recover or improve their physical activity after weight loss surgery had a 2.3 times higher risk of not obtaining at least 50% excess weight loss following surgery.”

Just based on these quotes, you can see how important exercise is in the weight loss surgery journey.

These findings were based on the minimum physical activity recommendations of 150 minutes per week of moderate or higher intensity activity. It can sometimes seem overwhelming to accomplish this much activity, but you don’t have to start at the top! Begin with 60 minutes a week and build up from there. If you are facing physical limitations, try to get creative...remember any movement that challenges your body is good for you (whether you are exercising seated, in your bed, or just moving around your house!)
Physical Activity for Bariatric Patients

By Bryan Lowe BS, CSCS, CPT

Physical activity is extremely important to the success of bariatric surgery. Surgeons David Dyer, MD, Hugh Houston, MD, and Douglas Olsen, MD of the Centennial Center for the Treatment of Obesity in Nashville, Tennessee, believe that “surgery is one small portion of the overall equation to successful weight control.” Establishing a physically active lifestyle prior to surgery will benefit the patient in the recovery phase. Implementing good nutrition habits and smoking cessation are also very important. Following bariatric surgery at Centennial, patients participate in a comprehensive Aftercare Program. The Aftercare Program includes nutrition, exercise, and psychological counseling services. According to Dr. Olsen, this program helps develop “the proper habits that allow a patient to utilize the tools that we have now given them to fight that battle of obesity and now win that battle.”

25 Reasons to Exercise
1. Achieve and maintain goal weight
2. Build muscle tissue
3. Increase strength and endurance
4. Increase metabolism, burn fat
5. Improve mobility
6. Improve skin elasticity
7. Enhance mood
8. Improve self-esteem
9. Lower blood pressure
10. Lower blood sugar
11. Reduce stiffness in joints
12. Improve heart and lung function
13. Promote healing
14. Help with smoking cessation
15. Strengthen bones and reduce bone loss
16. Increase energy level
17. Improve lipids (increase HDL/lower LDL)
18. Improve posture
19. Improve mental alertness and memory
20. Promote sleep
21. Decrease stress, depression, and anxiety
22. Improve flexibility
23. Increase capacity for physical work
24. Increase life expectancy
25. Exercise Physiologist said so

4 Steps to a Lifestyle of Physical Activity

Step 1: Set Personal Goals
Set goals based on the “reason to exercise” listed above. Example: “My goal is to achieve and maintain my goal weight.”

Step 2: Determine How to achieve Goals
Choose activities that fit your lifestyle from each of the following categories:
- Cardiovascular – Examples: walking, biking, treadmill, water exercise
- Strength Training – Examples: weight machines, free weights, resistance bands
- Flexibility – Example: stretching before and after exercise

Schedule timing of physical activity (The FIT Principle):
- F – Frequency: number of exercise sessions per week
- I – Intensity: calculate Target Heart Rate (THR)
  220 - age - Resting Heart Rate (RHR) x .60 + Resting Heart Rate = lower limit of THR
  220 - age - Resting Heart Rate (RHR) x .60 + Resting Heart Rate = upper limit of THR
- T – Time: duration of exercise
  Choose location for exercise: Examples: home, mall, park, work, fitness center, church or school
Step 3: Implement Plan
- Make a commitment and start today
- Get started slowly and pace yourself
- Stay consistent
- Fit physical activity into your daily routine

Step 4: Regularly Evaluate Plan
- Discuss with exercise physiologist
- Monitor progress
- Recognize achievement

Exercise Expectations Before and After Bariatric Surgery
- **Pre-op**
  Begin an exercise program prior to surgery. Meet with exercise physiologist to individualized plan.
- **Post-Op Day 1**
  Walk in room 2-3 times and sit in chair with nurse assistance
- **Post-Op Days 2-7**
  Walk 3-5 minutes, 4-6 times a day
- **Post-Op Weeks 1-2**
  Continue walking, increasing the time of the walk to 5-15 minutes, 3 times a day
- **Post-Op Weeks 2-4**
  Continue walking 10-15 minutes, 3 times a day. May begin weight training with doctor approval.
- **Post-Op Months 1-3**
  Continue 30 minutes to one hour of cardiovascular activity at least five says per week. Begin or continue weight training. All wounds must be healed before participating in water exercise.
- **Post-Op Month 3 and On**
  Stay committed to exercise and bariatric aftercare program.

Sample Work-out Routines

**Routine 1**
- Monday – Cardiovascular activity for 30-40 minutes and upper body weights
- Tuesday – Cardiovascular activity for 30-40 minutes and lower body weights
- Wednesday – Cardiovascular activity for 30-40 minutes
- Thursday – Cardiovascular activity for 30-40 minutes and upper body weights
- Friday – Cardiovascular activity for 30-40 minutes and lower body weights

**Routine 2**
- Monday, Wednesday, Friday – Cardiovascular activity 20-40 minutes and upper and lower body weights
- Saturday and Sunday – Walk 15-30 minutes twice a day
Home Exercise Program

1. Begin by performing one set of 10-15 repetitions for each exercise. Gradually increase to 3-5 sets of 10-15 repetitions over a 4-7 week period.
2. The speed of each movement should be 2 seconds up and 4 seconds down.
3. Begin with dumbbell weight that you can easily lift 10-15 times.
4. Wear shoes to prevent falls.

From obesityhelp.com
Liver Reduction Diet

The liver reduction diet is a high protein, low carbohydrate diet that will promote a decrease in liver size prior to surgery along with preventing surgical complications. By following this diet, your body reduces its glycogen stores (glycogen is a form of sugar stored in the liver and muscles for energy). With each ounce of glycogen, the body stores 3–4 ounces of water, so when you follow a diet that is low in starch and sugar, your body loses its glycogen stores and some water resulting in weight loss and a smaller liver.

No weight gain prior to procedure!
- You may even have a specific weight loss goal your surgeon or dietitian has given to you that you must meet prior to having surgery.
- On this diet, there is no restriction on portion sizes. Eat 3 meals per day and stop as soon as you feel full.

The liver reduction diet consists of:
- **Protein/Veal or Lean Meats – No breaded or fried meats**
  - Beef: Round, sirloin, and flank steak; tenderloin, roast (rib, chuck, rump); steak (T-bone, porterhouse, cubed), ground chuck, ground round, ground sirloin; beef jerky
  - Pork: Fresh ham; canned, cured or boiled ham; Canadian bacon; tenderloin, center loin chop.
  - Veal: All cuts okay
  - Poultry: Cornish game hen, chicken, turkey (white meat, without skin)
  - Fish: Fresh or frozen unbreaded fish such as cod, flounder, haddock, halibut, trout, tuna (fresh, pouch, or canned with water), herring, salmon (fresh, pouch or canned with water), catfish, sardines.
  - Shellfish: Crab, lobster, scallops, shrimp, clams, oyster. No deep frying or soaking in butter.
  - Game: Buffalo, elk, deer (venison), rabbit, squirrel
  - Deli meats: Turkey, chicken, ham, roast beef, turkey pastrami. No bologna or salami
  - Soy: Boca burgers, Morning Star products, tofu, tempeh
  - Eggs: Whole eggs, egg whites or Egg beaters
  - Bacon/Sausage: No regular bacon or sausage. Canadian bacon or turkey bacon and lite/light turkey sausage okay.
  - Low fat or fat-free cottage cheese
  - Fat free, reduced fat or 2% cheese: String cheese, Kraft or store brand 2% shredded cheese, sliced cheese or cheese cubes
  - Tofu Shirataki Noodles-find these in Asian markets or at Meijer by the tofu
- **Lean Dairy (limit milk and yogurt to 2 servings per day)**
  - 8 oz (1 cup) of skim or 1% milk
  - 6 oz container of light/No Sugar Added yogurt without chunks of fruit or fruit pieces (i.e. Dannon Light n’ Fit or Yoplait Light and Fat Free)
- **Vegetables**
  - Choose: tomatoes, broccoli, cauliflower, cucumber, lettuce varieties, spinach, cabbage, celery, carrots, garlic, onion, leeks, green beans, mushrooms, squash, zucchini, eggplant, pumpkin, asparagus, bell peppers, artichoke, radishes
  - Avoid: corn, peas, potatoes (white, red and sweet potatoes), lima beans, olives, avocado
Condiments
- Choose reduced fat, fat-free or light condiments (mayo, sour cream, cream cheese).
- Use spray pump margarine and spray salad dressings
- Salsa and mustard are excellent choices for condiments
- Use ketchup and BBQ sauce in moderation as sugar is normally the second ingredient for both of these.

Soups
- Choose broth based soups with a variety of meats and vegetables (no soups with rice or noodles)
- Avoid: pasta, rice, breads, beans (kidney, pinto, navy, etc), rolls, crackers, pancakes/waffles, French toast, cereal (including hot cereal)
  - Can have “Original Fiber One” cereal (not flakes, clusters or bars) or “All Bran Buds.”
  - Limit ½ cup daily.
- Avoid: Snack foods including regular, sugar free and fat free versions such as cakes, pies, cookies, ice cream, candy, pudding, Cool-Whip, potato chips, popcorn, nuts, peanut butter, granola bars/fiber bars, protein bars and protein supplements, meal replacement drinks, etc.
- Avoid all fruit or fruit juice of any type.

Fluids
Your goal is to drink at least 64 ounces of fluids (options listed above) each day. No pop, sweet tea, fruit juice, and alcoholic beverages. The following liquids can be taken in any amount as long as there are 0-10 calories per serving:
- Sugar free beverages such as Crystal Light or store brand of Crystal Light, Sugar free Kool-Aid or Sugar-free Tang, Diet Snapple, Fuze Slender, Fruit20, Propel Zero, Powerade Zero, Vitamin Water Zero, SoBe Life Water 0 calorie, decaffeinated coffee or tea with sugar substitute, water, V8 tomato juice (not Fusion or Splash) or 100% vegetable juice, diet hot cocoa mix made with water.
- Sugar free popsicles and sugar free gelatin
- Broth soups – choose low sodium

Nutrition and Activity Journaling
Begin keeping a daily food and activity journal that includes:
- Everything you eat
- How much you ate
- Why did you eat…were you bored, stressed, watching TV, tired, hungry (if you’re eating for reasons other than hunger, start working on ways to prevent this as you can’t do this after surgery. Find a hobby, read a book, go for a walk, chew gum, call a friend on the phone, write in a journal, etc to prevent eating for non-hunger reasons)
- How much physical activity did you do

Vitamins
- Multivitamin: We require you to take a one daily complete multivitamin supplement before bedtime. Any name brand or generic will work.
- Calcium Citrate: Please start taking calcium citrate + Vitamin D, the name brand is Citracal or store/generic brand. Take 2 tablets 2 times a day (2 in morning, 2 in afternoon). Do not take with your multivitamin.
- Vitamin D-3: Take 2,000 IU/day. Can find this dose at Wal-Mart (Spring Valley brand). You can take this with the multivitamin or calcium.
Liver Reduction Recipes

The following recipes are options for you while following the Liver Reduction Diet. Take this time to try new recipes and incorporate variety into your diet. Websites like www.sparkrecipes.com, www.allrecipes.com, or www.hungrygirl.com. Remember, not all recipes are bariatric friendly. You may need to modify, add or delete ingredients. Be creative and have fun!

Crustless Pizza

1 lb lean ground beef or ground turkey
1 small jar of pizza sauce
8 oz package of 2% mozzarella cheese
Any choice toppings: turkey sausage, green peppers, tomatoes, onions, mushrooms, turkey pepperoni, etc…

Pat ground beef or ground turkey on cookie sheet. Bake for 15-18 minutes at 400 degrees F. Pat with paper towel to remove excessive grease from the meat. Spread pizza sauce over cooked beef or cooked turkey. Sprinkle your favorite toppings and sprinkle mozzarella cheese. Bake again in oven for 15 minutes or until cheese melts and is lightly brown.

Another option is it top a portabella mushroom, green pepper, or zucchini with the toppings.

Mashed Cauliflower

1 head cauliflower
1 Tbsp light butter spread
¼ cup 1% milk, plus a little more
¾ tsp salt and fresh ground pepper

Cut florets off the cauliflower and steam them until they are very soft, about 25-30 minutes. Transfer the cooked cauliflower to a food processor or blender. Add the butter spread and ¼ cup of the milk. Blend until cauliflower becomes the consistency of mashed potatoes, using a little more milk if needed. Season with salt and fresh ground pepper. Serves 4

Mock French Toast

4 egg whites
1 egg
1 tsp vanilla
¼ cup cottage cheese
Dash of cinnamon
1 packet of Splenda
I Can't Believe It's Not Butter spray
Sugar Free maple syrup

Mix all together in a bowl and beat with a fork. Pour into pan like you would as if you were making pancakes. Top with butter spray and syrup and enjoy!
**Bacon Cheeseburger Quiche**

1 lb lean hamburger or ground turkey  
1 small onion, chopped  
4 slices crisp cooked turkey bacon, chopped in bits  
3 eggs  
½ cup lite or olive oil mayonnaise  
½ cup skim milk  
8 oz 2% shredded cheddar or Swiss cheese  
Garlic powder to taste  
Optional white pepper  

Preheat oven to 350. Brown hamburger in skillet with onion. Remove and mix in bowl with bacon pieces, breaking up any larger clumps with a fork or pastry mixer to a fine mix. Drain well. Press into a deep dish pie pan than set aside. Combine remaining ingredients in mixer bowl and whip well. Pour mixture over beef crust and bake 40-45 minutes, or until top is browned and set. Cool 15-20 minutes before slicing. This can be packaged in plastic bags or containers for meals quickly microwaveable over the next 3-5 days. Does not freeze well.

**Chicken Parmesan**

2-4 Chicken Breast  
1 Tb Italian Seasoning  
½ cup Parmesan Cheese  
4 slices Provolone, Swiss, or Mozzarella cheese  
1 jar Pasta Sauce – your Choice Ragu, Prego, etc.  

Combine Parmesan cheese and Italian seasoning. Coat each chicken breast with the cheese seasoning mixture. Sauté in skillet each chicken breast until golden brown. Chicken does not have to be cooked through. Coat the bottom of glass or metal baking pan with the pasta sauce and place a single layer of chicken breast. Place one slice of cheese on top of each chicken breast. Add pasta sauce to pan until each chicken breast is covered. Bake in oven at 350 degrees for 30 minutes.

**Italian Beef**

3-4 lbs boneless beef roast  
1 chopped onion  
1 jar of pepperoncini peppers with juice  
1 can beef bouillon (or 4 cubes and 2c. Water)  
Season with garlic and oregano  

Cook in slow cooker 8-10 hours on low. Shred meat, if needed. Serve with your favorite vegetables.
Liver Reduction Diet Guidelines

Begin practicing the following rules
1. Eat three meals per day and spread the meals 5-6 hours apart.
2. Avoid snacking. Follow the liver reduction diet guidelines if you do snack. Choose sugar free popsicles, sugar free jello, cheese, or vegetables and low fat dip.
3. Slow down when eating. Chew each bite at least 20 times and spend only 30 minutes eating at meal time.
4. No liquids with meals. Stop 30 minutes before meal time, take 30 minutes to eat, and wait 30 minutes after you eat to drink any liquids. Gastric band patients wait 60 minutes after meals to drink any liquids.
5. Drink at least 64 ounces or 2 quarts of fluids each day.
6. Limit your use of condiments – mayonnaise, miracle whip, salad dressings, and butter margarine, unless you are choosing light versions.
7. Avoid the three C’s in liquids. Do not drink any liquids that have carbonation, calories, or caffeine.
8. Increase activity level.

Frequently Asked Questions?

Why do I have to follow the liver reduction diet?
Your liver processes all the nutrients that you eat. When you are overweight your body will store extra energy or calories as a substance called glycogen. The purpose of the liver reduction diet is burn off and not replenishes the glycogen stores. This is accomplished by reducing the amount of carbohydrates that you consume from diet. In addition, the liver reduction will help you adjust to new food choices that will be essential after surgery.

Will I ever be able to eat carbohydrates – pasta, potato, breads, rice, etc?
Reducing the size of liver is critical to prevent complications and give your surgeon more space to work during the laparoscopic surgery. There are two reasons why we want you to eliminate as many carbohydrates before and after surgery. Carbohydrates are not bad. They are energy to your body and keep your liver the size the same if you continue to eat these carbohydrates before surgery. After surgery your pouch will be significantly smaller about the size of ping pong ball or small hot dog. If you fill up on the carbohydrates you will not be able to eat enough protein from diet.

I heard beans, nuts, edamame are a good protein source, are they okay to eat at this time?
Beans, nuts, and edamame are an excellent source of protein but during the liver reduction phase we consider them a carbohydrate. Avoid all beans and nuts at this time except green beans. Nuts are a caloric dense food – ½ cup of almonds contain up to 275 calories and only 10 grams protein (comparison 3 ounces chicken breast – 130 calories and 25 grams protein.)

I thought fruit was good for you, why can’t I have fruit or fruit juices?
Your body uses carbohydrates to restore that stored energy or glycogen, so to reduce the size of your liver requires decreasing carbohydrate intake. Foods with carbohydrates are breads, potato, pasta, rice, cereals, fruits, fruit juice, starchy vegetables – corn, peas, and many snack foods cake, pie, cookie, candy, chocolate, etc. Avoiding these foods will decrease the size of your liver and help you adjust to the food choices that will be essential after surgery.
Why can’t I eat whole grain pasta or rice?

Whole grains are—the whole grain. An unrefined kernel of grain is actually made up of three layers: the germ (innermost layer), the endosperm (central core) and the bran (protective outer layer). Refined or plain (white) grains, on the other hand, have had their bran and germ removed in the refining process. Whole grains are better for you because they contain more dietary fiber, vitamins, and minerals. Both, whole grain and regular pasta contain about the 100 calories per half cup serving. You should avoid both whole grain and plain pasta, rice, breads, etc because we want you to eliminate as much carbohydrates to reduce the size of your liver.

Can I eat sugar free and/or fat free desserts or snack foods?

No. Sugar free and fat free are not necessarily calorie free. Many snack foods and desserts that are sugar free and fat free may contain more calories than the regular item due to changes in ingredients used. After surgery, foods that contain sugar and sugar alcohols will promote dumping syndrome. Finally, desserts and snack foods need to be eliminated for long term weight management.

What am I going to eat for breakfast?

You must think outside of traditional food choices that have been part of your entire life. Good protein sources for breakfast are scrambled egg, fried egg using spray oil or spray margarine, deli ham, Canadian bacon which is ham. Mix and match and add 2% cheese. Use any seasonings, or hot sauces to change up the taste. You can also mix the Fiber One cereal into a light yogurt or Greek yogurt. In addition, who says you can’t eat chicken, pork, beef, or fish at breakfast.

Do you recommend any cookbooks on the liver reduction diet?

There is no special cookbook for liver reduction. There are simple tips that you can follow that will allow you to use any recipe that you currently make at home.

Adjust recipes by:

1. Removing all starch based ingredients that – pasta, potato, rice, bread, peas, corn, etc.
2. Remove all added cooking oils, butter, and margarine in the recipe.
3. Experiment with non salt based herbs, spices, and flavorings, e.g. thyme, rosemary, garlic, ginger, etc.
4. Find a copy of South Beach or Atkins but substitute withlean cuts of meat, fish, and poultry.
6. Take a cooking class and either relearn or learn how to cook.

What condiments can I use?

Reducing or eliminating condiments is an easy way to eliminate unnecessary calories from your diet. Choose condiments that are low fat, reduced fat, light, or fat free and reduce how much you use by half or more. Foods that are fat free, light, reduced or low fat are not calorie free.
Bariatric Support Options

Support Groups are important to your long term success. Studies show long term success is better for those who attend support group. IU Health is dedicated to helping patients achieve long term success by offering a variety of support options. Please see the information below to find out what works in your schedule.

In House Support Groups
In house groups are facilitated by health professionals at IU Health Bariatric and Medical Weight Loss. Groups vary by topic, open discussion or activities. Groups meet monthly at IU Health North Hospital. Check our calendars for specific information. Typically, one group per month is offered online.

Fitness
Finding a setting you are comfortable with to begin an exercise program can be challenging. We realize this is a struggle for patients and can help you add fitness to your daily routine.

Blog
Many patients struggle to attend groups due to hectic schedules. There is more than one way to connect and get support you need. Check out our blog for updates, new recipes, and articles regarding weight and health at iuhealth.org/bariatricsblog.
# IU Health Daily Food Log

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Understanding Carbohydrates

**What are carbohydrates?**
Macronutrient that exists in food and is used for fuel by the body after it's been broken down to glucose.

Exists in the body in 2 main places:
- The blood (glucose)
- Glycogen (liver and muscles)

**What's the difference?**

**Complex Carbohydrates**
- Important source of energy
- Requires your body to work harder to break them down
- Maintain a longer sense of satiety
- Blood sugars remain more stable.
- Ex: certain vegetables, beans, oats, bran

**Simple Carbohydrates**
- Known as simple sugars
- Requires little effort to digest
- Absorb very quickly, causing dumping syndrome in RNY patients after surgery
- Often found in very processed “junk foods”
- As patients, these types of carbs need to be given up forever!

**What foods have carbohydrates:**
- Bread/rolls/biscuits
- Pancakes, waffles, croissants,
- Bagels, cereals
- Candy, candy bars, sugar, cakes, icing, ice cream,
- Pastries
- Pasta and rice
- Beans and lentils
- Fruit
- Milk
- Vegetables: potatoes, sweet potatoes, peas, corn
Important Tip
After surgery, when looking at foods to find the sugar always look at the Ingredient List and follow the three ingredient rule – “If there is a sugar word in the first 3 ingredients, it’s best to stay away. (ie sugar, brown sugar, molasses, high fructose corn syrup, corn syrup, etc)”

Following the LRD…
- your body is removing the stored glycogen thereby getting rid of excess “water weight.”
- your blood glucose is kept at a normal level to encourage fat metabolism and weight loss
- you have gotten off all junk food sources of carbohydrate: refined sugars, processed foods, etc.

What is Fiber?
Fiber is a kind of carbohydrate the body cannot digest or absorb. Most people need 25-30g of fiber per day but on average most Americans get only 5-9g/day.

How fiber works for you?
- Helps move food through the digestive track which removes waste from the colon
- May reduce risk of colon cancer and other types of disease and help relieve constipation
- May lower LDL cholesterol and total cholesterol
- Helps fill you up and keeps you full longer

Fiber intake after surgery…
Primary source of fiber will be vegetables: only cooked initially, eventually fresh
- May need to supplement with fiber supplement
- As you get close to your goal– whole grains and fruits

Types of Fiber
Soluble Fiber
- dissolves in liquids: “bulks things up”
- binds with fatty acids, prolongs stomach emptying time so sugar is released and absorbed more slowly, lower cholesterol
- examples: oats, fruits, and beans

Insoluble Fiber
- doesn’t dissolve in liquids
- promotes regular bowel movements
- examples: fruits, vegetables, whole grains, dark leafy greens
Eating On The Go

Culture of Fast Food
- Fast food is not bad but can be part of a toxic environment when it comes to health
- Can be a stumbling block in your success after surgery if careful planning isn’t involved
- As humans, we weren’t intended to eat “on the go.” Think of how eating has evolved over time

Strategies for Eating on the Go
- Know yourself. If you are addicted to Arby’s curly fries, don’t eat at Arby’s.
  - Do not go looking for temptation.
- Resolve to start taking your lunch (x number of days) instead of going out. You’ll save money and calories. You can make the exact same thing at home for lower number of calories
- Don’t be fooled by dishes named “low carb.” Most of these are very high in fat. Instead, order what you want minus the bun, get veggies instead of fries.
- Order the way you want it. Don’t be afraid to get your salmon without butter or ordering veggies in place of fries or mashed potatoes. YOU are paying for it and they will cook to order.
- Look at the menu online before going so you’ll know what you should get rather than be tempted by the menu or other people’s orders.

Portion sizes are generally much larger than necessary
Typical Portions:
- Burgers: 6-8oz=2-3 servings
- Meat/poultry/fish: 8-12oz=3-4 servings
- Pat of Butter: 2 tsp=2 servings
- Pasta Plate: 2-3 cups=4-6 servings
- Salad dressing ladle: ¼ cup=2 servings
- Bagel=4 servings of bread

The “Extras” YOU Need to Know About
- Extra foods that add extra calories quick are: salad dressing, bread, chips and salsa, sour cream, guacamole, appetizers, cheese, sauces, and sodas.
- Look for foods that are: grilled, baked, poached, stir fry, steamed, or roasted.
- Avoid foods that are: creamy, buttery, fried, breaded, crispy, smothered, au gratin.

Need tips on Portions
1. Get ½ order
2. Share entrees with a friend or family member
3. Order from sides and appetizers
4. Ask for small size
5. Order lunch size portions

Ask Questions/Ask for Substitutions
1. Sauces and dressings on the side
2. Prepare foods with less oil or butter
3. Substitute fries with vegetables, salad, or fruit
Fluids, Carbonation, & Caffeine

Why you need 64oz of fluids/day?

- Prevent dehydration
- 60-75% of body is water
- Water is needed for every process in the body
- Prevents constipation
- Helps to absorb and utilize nutrients
- Reduce the risk of kidney stones
- Helps regulate body temperature

Why NO carbonation?

- When a cold carbonated beverage is consumed; it warms and releases gas.
- This expands the stomach pouch and this stretching can cause undue stress.
- If stretched, the ability to feel full is compromised and overeating is usually the result.

“But I let it go flat….” Sodas never go completely flat. This can be a slippery slope to have that mindset because one day you might start to justify having pop again.

The benefits of giving up sweetened, carbonated and caffeine beverages

- You're saving calories
- You're saving $$$
- You're saving and preserving the size of your stomach
- Your bones are thanking you

Beverages okay to drink prior to and after surgery (following LRD)

- Water
- Crystal light or store brand
- SF-Kool-Aid
- Ocean Spray On the Go
- Fuze Slenderize
- Unsweetened ice tea
- Decaf coffee
- Propel
- Propel Zero
- Vitamin Water 0 cal
- SoBe Life Water 0 cal
- Fruit2O
- Diet Lipton Citrus Green Tea
Beverages to AVOID!
- Fruit Juice
- Caffeinated coffee or tea
- Pop (regular or diet)
- Carbonated waters
- Vitamin Water
- Regular Fuze
- Gatorade, G2, Powerade
- Alcohol: Beer, Wine, Mixed Drinks, Liquor, etc.

The calorie problem
Soda is often high in calories and almost no nutritional value. Sweetened sodas are absorbed quickly into the bloodstream, sometimes causing a rapid rise in blood sugar, elevating insulin levels and increasing hunger.

Did you know?
A vending machine soda can contain 250 calories. If one drinks this everyday and this is over your calorie level; that can contribute to an extra 25 lbs in a year. Lesson to learn… Don’t drink your calories!

The calcium problem
- Dark colas have phosphoric acid
- Calcium and phosphorus must be kept at specific levels in the blood
- If you raise your phosphorous level, your body must raise its blood calcium level
- Where does it get the calcium from… your BONES
- After RNY surgery, your calcium absorption is already altered and you will be on calcium supplements

The caffeine problem...
- Is a diuretic
- Can irritate the lining of the stomach and after surgery may increase one’s risk of ulcers.
- Excessive intake may increase calcium loss from the body.
- Why give up before surgery… you don’t want to deal with caffeine withdrawal headaches after surgery.
Flavor Up Your Food

**Seasonings and Spices**
Seasonings can really add some flavor to any vegetable and meat item. Try some of these favorites
- Blackening Seasoning
- Cayenne Pepper
- Montreal Seasonings
- Mrs. Dash
- Garlic Powder
- Onion Powder
- Smoked Paprika

Herbs can also add a great flavor. Buy some fresh herbs and add them to a marinade rub, salad, or steam them with some vegetables. Basil, rosemary, parsley, thyme are all great on meat and vegetables.

Also try adding some Butter Buds to give a buttery flavor to vegetables.

**Montreal Steak Marinade**
For 2 steaks
- 1 Tbsp olive oil
- 1/4 cup water
- 3 tbsp Montreal Steak Seasoning
- 2 tbsp soy sauce
- 1/2 tbsp minced garlic

Mix ingredients together in bowl. Season steak on both sides with Montreal Steak Seasoning. Put steaks into mixture and coat. Allow to marinate for about an hour.

**Lemon Chicken Marinade**
- 1 1/2 tbsp extra virgin olive oil
- 1/2 cup lemon juice
- 1 tbsp lemon zest
- 1/2 tbsp kosher salt
- 1 tsp ground black pepper
- 4 large cloves of garlic, peeled & roughly chopped

Put all ingredients into a food processor until liquids are fully mixed and garlic is well pureed. Mixture should be opaque and fairly thick. Pour over chicken and marinade for 4-8 hours.
Basil Balsamic Marinade for Grilled Fish
1/2 cup balsamic vinegar
2 tbsp olive oil
1/4 cup water
Few drops hot pepper sauce
1/4 cup minced fresh basil
Freshly ground pepper to taste

Use with a firm fleshed fish (swordfish, mahi mahi, salmon steaks). Whisk together the vinegar, oil, hot pepper sauce. Stir in the basil. Pour over fish and marinate about 45 minutes, turning once, before grilling.

Fish Marinade
1 cup fresh squeezed orange juice
2 cloves of garlic
1 tbsp sesame oil
1/4 cup soy sauce or to taste

Mix all the ingredients. Pour over fish and marinate for an hour.

Rosemary Pork Kabobs
Rosemary Vinegar
2 cups white-wine vinegar
6 (6inch) sprigs fresh rosemary
3 cloves garlic, crushed
Kabobs
2 tbsp olive oil
1 tbsp Dijon mustard
2 tsp chopped fresh rosemary
1/8 tsp black pepper
1 pound pork tenderloin, 1 inch cubes

Rosemary Vinegar: In saucepan, bring vinegar to a boil. Pour into glass bowl; add rosemary and garlic. Cover; let stand at room temperature overnight. Strain.

Kabobs: In bowl, whisk 1/2 cup vinegar, oil, mustard, rosemary and pepper for vinaigrette. In plastic bag, combine 1/2 cup vinaigrette and pork. Chill 30 minutes.

Heat grill or broiler. Thread pork alternating with some of your favorite vegetables, and use the remaining marinade for basting.
Liver Reduction Diet

Why are you on the liver reduction diet?
- To shrink the liver – surgeries have been aborted once started due to the liver being too large.
- Liver is an overlooked organ in the body, performs over 500 functions
- Keeps us from having “last supper syndrome”

Functions of the Liver
- Largest internal organ in the body
- Stores vitamins (A, D, K, iron, and B12), and glucose
- Performs several roles in carbohydrate metabolism
- Controls production and removal of cholesterol
- Produces bile (required for fat digestion)

Mission for the Month
- Keep a nutrition/exercise journal. Take it on a trial run all month and see what it does for you.
- Try 3 new liver reduction diet recipes.
- Try one new vegetable – Use your resources: IU Health for recipes and advice: blog.iuhealth.org

Flavorings and Condiments
- No margarine, butter, or cooking oil
- Salt: used lightly, salt is an effective way to season as it brings out the natural flavor in foods.
  - don’t add salt if you have high blood pressure, CHF, or “salt sensitive”
  - using spices, herbs, or Mrs. Dash as a replacement for those who need to watch their salt intake
- Fresh or dried herbs and spices
- Onions and garlic
  - use when sautéing any vegetables, use in soups, stews, roasts, sauces, etc.
- Mustard: use when making any roll-ups, use as a dip
- Salsa: use in place of dressing or combine with plain or Greek yogurt as a sauce to cook chicken in.

The Power of a Nutrition Journal
- The best tool you have for weight loss right now is inexpensive and right at your fingertips: a pen and paper
- How to do it: “If you bite it, write it!” It’s important not to make yourself feel guilty over “wrong” choices. Write it down and move on with your day. In doing so, you will practice 2 characteristics needed for the rest or your bariatric journey: persistence and forgiveness
- Strategies to making it work: Keep a little notebook with you at all time. When you eat, quickly jot down items eaten.
- Why do it?
  - It’s important to track what we are doing to see changes that need to be made in our lives.
  - Habits are mindless actions. Keeping a journal will help you see what behaviors may have become habits and whether those habits are benefiting you or bringing harm to you.
  - Plateaus: Whenever we have plateaus, it’s important to change something up.
Some Great Ways To Cook On the LRD

1. Steam
   Place food in a colander and suspend above boiling water. Add seasonings to the water to flavor the food. Many grocery stores sell bags of frozen/fresh vegetables that can be steamed in a microwave – quick and easy
   Benefits: Foods retain much of the vitamins and nutrients.
   Good for: broccoli, cauliflower, fish

2. Stir-frying
   Spray a skillet or wok with non-stick cooking spray. Heat skillet on medium high. Add meat or vegetables and cook quickly. You do not need olive or vegetable oil
   Benefits: Quick cooking, typically meat or vegetables will develop a sear on them which is delicious
   Good for: bags of frozen vegetables (no need to thaw) chunks of chicken or slices of sirloin

3. Grilling
   Great during the summer to fix foods on charcoal or gas grill. During the winter time, there are grill pans that are made for the stove-top.
   Benefits: low fat, easy way to cook, most people love the grill flavor, easy for large groups
   Good for: Any and all meats. Try marinating meat in soy sauce, red wine vinegar and garlic before grilling. Grilled vegetables are also great!

4. Roasting
   Similar to baking but done at higher temperatures. Important that food is not touching and is in a single layer when roasting.
   Good for: any vegetables, but especially root or dense vegetables.

5. Braising
   To cook in the oven in a covered dish/pot with a small amount of liquid in the pot.

6. Poaching
   Gently simmering food in water or in a flavorful broth until it is cooked through.
   Good for: foods that are naturally tender such as eggs, chicken, and fish

Helpful Kitchen Equipment
- Blender/food processor
- George Foreman Grill: cooks in half the time because it grills from the top and bottom.
- Dutch oven: great for cooking any stews or soups
- Roasting Pan
- Cookie sheet or baking pan
Love the Liver Reduction Diet!

Healthy Cooking Methods

- **Baking:** to cook by dry heat in an oven or on heated metal or stones
- **Broiling:** to cook by direct heat, as is in an oven under the heat
- **Poaching:** to cook (eggs, fish, etc) in a hot liquid that is kept just below the boiling point
- **Stir-Frying:** to cook food quickly by cutting into small pieces and stirring constantly in a Wok or frying pan over high heat: a common method of Chinese cooker
- **Roasting:** to bake (meat or other food) uncovered, especially in an oven (it is important when roasting vegetables that they be in a single layer, and not be touching)

No Recipe Recipes

- **Roll-Ups:** Take 2 slices of lean deli meat, placed on top of a slice of low-fat cheese (such as Swiss or provolone). Add a pickle in the middle and roll up like a burrito! Dip in mustard if desired!
- **Quick and Easy Stir-Fry:** Sauté chunks of chicken breast (or lean ground beef) in a hot skillet, then add a bag of frozen Asian vegetables. Pour in a splash of soy sauce and enjoy!
- **Bunless Philly Burger:** Sauté onions, green bell peppers, mushrooms, add a sprinkle of salt. Pour over Morning Star Farms vegetarian burger and add a slice of provolone cheese melted over the top. So good you won’t mind eating it with a fork!
- **No Noodle Dinner:** Take Light Tomato Sauce and add cooked ground sirloin. Eat a scoop of the meaty sauce in a cup with low-fat mozzarella on top.
- **No Taco Dinner:** Brown ground beef or turkey. Add a packet of taco seasoning (or ground cumin and ground chili powder). Add chunks of fresh or canned tomatoes. Eat a scoop in a mug topped with non-fat Greek Yogurt (in place of sour cream) and low-fat Mexican cheese.
- **Creamy Dip:** Combine 2 cups of low-fat cottage cheese, a splash of water, and a packet of seasoning (such as ranch, pesto, dill, etc). Blend in a food processor or blend until smooth.
- **Salsa Chicken:** Pour a jar of your favorite salsa over boneless, skinless chicken breasts and bake. Sprinkle a little low-fat Mexican shredded cheese on top.
- **Italian Chicken:** Marinate chicken in light Italian dressing, then sprinkle a little Parmesan cheese on top. Bake until done.
- **No Crust Mini Pizzas:** Take 2 Canadian bacon rounds (they are about 3 inches in diameter) and put in oven under low broil until it is toasted. Remove and spoon a little Marinara sauce over and a sprinkle of low-fat Mozzarella cheese over each. Return to oven until toasty!
Protein After Surgery

What is the purpose of protein?
1. Component of every cell and tissue in the body
2. Hormone
3. Enzyme
4. Cell regeneration and function

How much protein will you need after surgery?
- After surgery you will need 60-80 grams of protein each day.
- Your body can not store protein, so without DAILY protein, it will begin to break down your muscles.
- The more muscle you have, the higher your metabolism.

Good Sources of Protein
1. Meats– beef, chicken, pork; this includes all ground versions, deli cuts, canned versions, etc.
2. Fish– shrimp, lobster, salmon, tuna, cod, flounder, etc.
3. Dairy– milk, cheese, cottage cheese, yogurt
4. Beans– canned or dried
5. Soy based foods– tofu, tempeh, edemame, soynuts, soymilk

Protein shakes
When will protein shakes come into play and how long?
- Depends on persons and the procedure
- No matter what surgery you have, you will work individually with a RD to determine when to stop taking the protein shakes.
- NO protein shakes during supervised weight loss!!!

Your goal is to obtain protein from a dietary source. Use protein shakes to supplement what you can’t get from your diet.

What about protein bars?
- Try to avoid– do not use during supervised weight loss.
- Protein bars only serve a purpose in your life if you are lifting weights consistently or traveling.
- It is best to get your protein through food sources during mealtime, and then supplement with a shake in between.

What if I am lactose intolerant?
Common with gastric bypass patients after surgery since body cannot break down lactose or milk sugar. Symptoms: bloating, cramping, gas, diarrhea after drinking milk or dairy products. Treat with:
- Dairy Ease or Lactaid milk
- Lactaid tablets– sold over the counter

Strategies to Increase Protein
1. Choose lean meats and dairy
2. Center meal around protein
3. After surgery– goal will be to eat 3-4 oz of meat, dairy, or other protein sources at each meal. This will give you 60-80 grams of protein.
Supervised Weight Loss Top Ten Mistakes after Surgery

The National Association for Weight Loss Surgery (NAWLS) helps patients shape new lives. In a November 2005 poll conducted by NAWLS, the following were identified as the top 10 long term mistakes that bariatric patients make:

1st Mistake: Not Taking Vitamins, Supplements, or Minerals
Every weight loss surgery (WLS) patient has specific nutritional needs depending on the type of surgery you have had. Not only is it a good idea to ask your surgeon for guidelines, but also consult with an experienced WLS dietitian. Understand there is not a standard practice that all surgeons and nutritionists follow in guiding WLS patients. So, it is important to do your own research, get your lab tests done regularly, and learn how to read the results.

Some conditions and symptoms that can occur when you are deficient in vitamins, supplements, or minerals include: Osteoporosis; pernicious anemia; muscle spasms; high blood pressure; burning tongue; fatigue; loss of appetite; weakness; constipation and diarrhea; numbness and tingling in the hands and feet; being tired, lethargic, or dizzy; forgetfulness, and lowered immune functioning.

2nd Mistake: Assuming You Have Been Cured of Your Obesity
The honeymoon experience is common following WLS. During the honeymoon experience you will not be hungry, will not want to eat, and foods and beverages may not smell and taste as they did before surgery. You will also be feeling better than you have in years, and the weight is coming off easily, it’s hard to imagine you will ever struggle again. But unfortunately, it is very common for WLS patients to not lose to their goal weight or to regain some of their weight back.

A small weight regain may be normal, but huge gains usually can be avoided with support, education, effort, and careful attention to living a healthy WLS lifestyle. For most WLS patients, if you don’t change what you’ve always done, you’re going to keep getting what you’ve always gotten – even after weight loss surgery.

3rd Mistake: Drinking with Meals
Yes, it’s hard for some people to avoid drinking with meals, but the tool of not drinking with meals is a critical key to long-term success. If you drink while you eat, your food washes out of your stomach much more quickly, you can eat more, you get hungry sooner, and you are at more risk for snacking. Being too hungry is much more likely to lead to poor food choices and/or overeating.

4th Mistake: Not Eating Right
Of course everyone should eat right, but in this society eating right is a challenge. You have to make it as easy on yourself as possible. Eat all your meals—don’t skip. Don’t keep unhealthy food in sight where it will call to you all the time. Try to feed yourself at regular intervals so that you aren’t as tempted to make a poor choice.

And consider having a couple of absolutes: for example, avoid fried foods completely, avoid sugary foods, always use low-fat options, or only eat in a restaurant once a week. Choose your “absolutes” based on your trigger foods and your self knowledge about what foods and/or situations are problematic for you.
5th Mistake: Not Drinking Enough Water
Most WLS patients are at risk for dehydration. Drinking a minimum of 64 oz. of water per day will help you avoid this risk. Adequate water intake will also help you flush out your system as you lose weight and avoid kidney stones. Drinking enough water helps with your weight loss, too.

6th Mistake: Grazing
Many people who have had WLS regret that they ever started grazing, which is nibbling small amounts here and there over the course of the day. Limit to three meals. Work on why you are hungry or work on the mental hunger or mindless eating. Grazing can easily make your weight creep up. Eating enough at meal time will help you resist grazing.

Make a plan for what you will do when you crave food, but are not truly hungry. For example, take up a hobby to keep your hands busy or call on someone in your support group for encouragement.

7th Mistake: Not Exercising Regularly
Exercise is one of the best weapons a WLS patient has to fight weight regain. Not only does exercise boost your spirits, it is a great way to keep your metabolism running strong. When you exercise, you build muscle. The more muscle you have, the more calories your body will burn, even at rest!

8th Mistake: Eating Too Much
Let's face it; just because you have WLS doesn’t mean the mindless eating or craving go away. If you give into those old habits they will return. Ask yourself, “Why am eating so much?” “Why am eating so fast.” Make sure you stop after 30 minutes and no fluids 30-60 minutes before and after meals.

9th Mistake: Going Back to Drinking Soda
Drinking soda is controversial in WLS circles. Some people claim soda stretches your stomach or pouch. The best thing you can do is find other, healthier drinks to fall in love with. This requires trying new beverages and not going back to old bad habit.

10th Mistake: Drinking Alcohol
If you drank alcohol before surgery, you are likely to want to resume drinking alcohol following surgery. It is in your best interest to understand the consequences of drinking alcohol before you do it.

Alcohol is connected with weight regain, because alcohol has 7 calories per gram, while protein and vegetables have 4 calories per gram.

1 ounce Liquor = 5 ounces wine = 12 ounces Beer = 100 – 150 calories.

Also, some people develop an addiction to alcohol after WLS, so be very cautious. Depending on your type of WLS, you may get drunker, quicker after surgery, which can cause health problems and put you in dangerous situations. If you think you have a drinking problem, get help right away.
All About Vitamins

Why are vitamins so important after surgery?
- Decreased food volume
- Malabsorption (with Roux-En-Y)

Vitamin Supplements
- It’s important to take the types we recommend as these recommendations are based on scientific research and recommendations from ASMBS.
- You will be on this regimen for the rest of your life after surgery.

Multivitamin
Why: You need this vitamin due to the decreased food volume and malabsorptive effect after surgery.
- Encouraged to take at bedtime because of the timing of other vitamins.
- Option after surgery: Centrum, store brands of Centrum, Celebrate Vitamins, Generic.

B-Complex
B-Complex is a group of 8 vitamins that are essential in helping the body create energy from foods that are eaten, and for the proper functioning of your nervous system.

Calcium
- Most abundant mineral in the human body.
- Plays a vital role in body structure and is used for nerve transmission and to prevent osteoporosis/osteomalacia.
- All forms of weight loss surgery have been shown to produce increased bone turnover and loss of bone mass. One study found 66% of women had evidence of bone loss 3-5 years after RNY surgery.
- After surgery—1500mg Calcium Citrate/day
- Options: Citracal, Bariatric Advantage, Celebrate Vitamins, Calcet Creamy Bites.
- Do not take more than 500-600mg at one time.
- Ideal time to take calcium is 30 minutes after meals
- Avoid caffeinated beverages because this causes increased calcium loss from the body.
- Taking iron with a calcium can decrease iron absorption by up to 62%.

Thiamine
- Thiamin-part of coenzyme which assists in energy production. Occupies site on membranes of nerve cells.
- Deficiency known as Beriberi
- Known risk factors for deficiency include: poor intake, intestinal loss (primarily through vomiting), alcohol intake, eating disorders, dialysis.
- Risks in WLS in most cases tied to vomiting in the early weeks and months postoperatively.
- Studies show that the body only stores 30mg thiamine therefore depletion can occur rapidly.
- Symptoms of deficiency: mild deficiency – fatigue, weakness, difficulty concentrating.
- Other symptoms: vomiting, loss of appetite, weakness, sleepiness, burning feet, calf and leg pain, abdominal pain, constipation. Burning pain, especially in feet is a hallmark symptom.
Iron
- Iron is an essential mineral that relies on contact with stomach acid for absorption. For this reason, some patients develop iron deficiency.
- Iron helps carry oxygen to every cell in the body; therefore, a deficiency will leave you feeling tired.
- Options: Ferrous Gluconate or Fumarate, Bariatric Advantage Chewable Iron
- If you take a MVI, you will need extra iron if you are a menstruating woman, anemic, or adolescent of either sex.
- Do not take iron with calcium as the 2 compete for absorption.
- Do not take iron with coffee or tea.

Vitamin B12
- Are unable to absorb B12 through digestive tract after bypass and gastric sleeve surgery.
- This vitamin is acting as a replacement, not a supplement
- B12 deficiency can cause severe and irreversible damage, especially to the brain and nervous system.
- Options: Sublingual – purchase over the counter and take one time per week.
- Try to take around same time every week.

What vitamins are needed for each surgery?
Bypass or Sleeve
1. 2 MVI/day
2. 1500mg calcium citrate
3. 1 B-complex/day
4. B12 1x/week
5. 1 iron pill/day if needed

Band
1. 1 MVI/day
2. 1000 mg calcium/day (doesn’t matter which form)
The Principles of Mindful Eating

**Principles of Mindfulness:**
- Mindfulness is deliberately paying attention, non-judgmentally.
- Mindfulness encompasses both internal processes and external environments.
- Mindfulness is being aware of what is present for you mentally, emotionally and physically in each moment.
- With practice, mindfulness cultivates the possibility of freeing yourself of reactive, habitual patterns of thinking, feeling and acting.
- Mindfulness promotes balance, choice, wisdom and acceptance of what is.

**Mindful Eating is:**
- Allowing yourself to become aware of the positive and nurturing opportunities that are available through food preparation and consumption by respecting your own inner wisdom.
- Choosing to eat food that is both pleasing to you and nourishing to your body by using all your senses to explore, savor and taste.
- Acknowledging responses to food (likes, neutral or dislikes) without judgment.
- Learning to be aware of physical hunger and satiety cues to guide your decision to begin eating and to stop eating.

**Someone Who Eats Mindfully:**
- Acknowledges that there is no right or wrong way to eat but varying degrees of awareness surrounding the experience of food.
- Accepts that his/her eating experiences are unique.
- Is an individual who by choice, directs his/her awareness to all aspects of food and eating on a moment-by-moment basis.
- Is an individual who looks at the immediate choices and direct experiences associated with food and eating: not to the distant health outcome of that choice.
- Is aware of and reflects on the effects caused by unmindful eating.
- Experiences insight about how he/she can act to achieve specific health goals as he/she becomes more attuned to the direct experience of eating and feelings of health.
- Becomes aware of the interconnection of earth, living beings, and cultural practices and the impact of his/ her food choices has on those systems.
How to be Self Aware: Q & A

How do you keep track of your progress, lapses, and successes?
Possible answers can include regular weighing, looking in the mirror, comparing clothing sizes now vs. previously, journaling about feedback from others and new things that you can do, comparing number of prescriptions before and after, and food/exercise journaling.

Why do you think that self-monitoring is important?
It breaks through denial that some individuals with obesity have (e.g., some have avoided being in pictures). It helps you see your victories more clearly. It identifies triggers and key areas to work on. Charting/journaling assists your healthcare providers in giving you direction.

Why can’t we just keep track of our progress in our heads?
Every one of us, when it comes to retrospectively reporting healthy habits, tends to be inaccurate. Our informal, retrospective report of our own behavior is distorted by 1.) mood-congruent memory (e.g., when I feel lousy I recall more failures), 2.) forgetting, 3.) consistency bias (i.e., my memory is influenced by what I’ve done most recently), 4.) wishful thinking.

A study published in 2008 gave 1500 overweight and obese adults lifestyle change information. Everyone received the same education. After five months, all participants lost an average of 13 pounds, but those who kept a food diary lost nearly double compared to those who did not (about 18 lbs vs. 9 lbs)!

What are you willing to commit to today, and to whom will you be accountable?

Are you willing to bring in your nutrition journals next time to show others?
If so, the activity would not be a “gotcha” exercise, but rather, a discussion on what journaling revealed to the individual, barriers to completing it, what individuals did to make sure they did it, what eating habits they are working on to improve.

The format of the journal is not so important; it can start by being a blank piece of paper or a sophisticated web application. We encourage patients to enter the time of their eating, and in the case of any unplanned and/or unhealthy eating, writing down the situation/triggers/emotions. Other suggestions: make an entry as soon as you have eaten; it is even more helpful to be attentive to portion sizes when journaling; journal on even on the “bad” days, especially on those days, because what gets measured is more likely to change in the positive direction.
Loose Skin After Surgery

One important issue for patients to think about when considering surgery is the probability of loose skin. Why does loose skin happen? The body loses weight quickly, the skin cannot “bounce back” quickly enough, and so the excess skin remains.

There are a few main factors that can predict how much loose skin there will be after surgery.

- Age: younger people have more elastic skin so they are likely to have less loose skin
- Your initial BMI
- Amount of weight loss and the time involved in losing that weight: slower weight loss allows for the skin to adjust better
- Genetics: your genes determine how much elasticity your skin will have as we age
- Sun exposure: the damage done to your skin by the sun will affect its elasticity
- Smoking: smoke damages the collagen in your skin, thereby affecting the elasticity

Treatment Options
Many people think first about plastic surgery or body contouring as a way of coping with loose skin after surgery. However, there are important facts to know.

Body contouring happens after weight has stabilized after surgery. This is usually twelve to eighteen months after the surgery. Many insurance companies do not pay for cosmetic surgery, unless they consider it medically necessary (e.g., recurrent infections). These procedures can be very expensive.

Other Ways of Managing Loose Skin
- Strength training while losing weight can help retain elasticity. Strength training is important to do while losing weight and not just after.
- Make sure to drink enough water to help the elasticity of your skin
- Eating lean proteins will help develop lean muscle to help firm the skin if you are exercising at the same time.
- Experiment with using shaping undergarments.
- Be sure to explore your thoughts and feelings about loose skin prior to surgery. First, consider the contributing factors and how they apply to you. You should also think about how lifestyle options discussed above apply to you. Should you have questions or concerns, please let us know.

Cost of Plastic Surgery
Average surgeon’s fee in 2012 for a tummy tuck (abdominoplasty): $5,241
(Statistic from www.plasticsurgery.org)

For more information:
http://www.plasticsurgery.org/Media/stats/
Transfer Addiction

Objectives
- Define addiction
- Understand risk of transfer addiction
- Learn how to avoid and manage cravings

Common features of addiction
- Inability to consistently Abstain
- Impairment in Behavioral control
- Craving
- Diminished recognition of significant problems
- A dysfunctional Emotional response

Can Food be Addictive?
- There is no consensus on this, but....
- Research suggests that sugar, fat, and salt have addictive-like properties.
- If food is addictive, and intake of sugar, fat and salt is reduced, can “addiction” transfer to something else?

How things change after gastric bypass
Peak Alcohol Content measured from drinking five ounces of red wine
- Pre-op = .024 (recovery to 0 BAC: 49 min.)
- 6 mo. post-op = .088 (recovery to 0 BAC: 88 min.)
- Therefore, one glass of wine leads to legal intoxication.

Conclusions
3 Relapse Types (ASAM)
- Direct exposure to addictive substance or experience
- Exposure to conditioned cues
- Stress (events, depression, anxiety, low self-esteem)

Strategy
- Acceptance
  - “Turning toward”
  - Mindfulness
- Behavioral
  - “Turning away”
  - OA/abstinence
- Cognitive (traditional)
  - “Turning against” by challenging erroneous thinking
Support Person Agreement

IU Health Bariatric & Medical Weight Loss recognizes the importance of having the full participation, cooperation and commitment of a caregiver to help our patients be successful. The duties/responsibilities for the caregiver role include, but are not limited to, the following:

1. Ensure the patient has reliable transportation and makes all follow-up appointments at our clinic on time (depending somewhat on schedules, 1 or 2 weeks post-op, 4 weeks, 3 months, 6 months, 1 year, 18 months, 2 years, and at least every year thereafter).
2. Ensure patient has transportation to and from the hospital and for necessary errands.
3. Monitor and assist with medications after surgery until the patient is able to be independent with taking medications as prescribed.
4. Attend enough educational meetings to thoroughly understand the risks and benefits of surgery, and the lifestyle changes that are needed. This should include supervised weight loss classes and, most importantly, the 5-hour pre-op class.
5. Remind patient to refer to the pre-op education binder as questions come up post-operatively, as this contains the answers to most questions.
6. Provide emotional support, including staying with the patient and ensuring 24 hour supervision for a few days after surgery.
7. Assist with bariatric-friendly cooking and housework, as needed, during the recovery period.
8. At least once per month, join the patient in attending a bariatric support group, at least for the first year after surgery.
9. Contact your psychologist if the above duties cannot be met.

Please sign this form and include your contact number if you are willing to commit to helping

_____________________________________________________. This form should be returned to the attention of your psychologist.

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<th>Primary Support Person</th>
<th>Signature</th>
<th>Relationship to patient</th>
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<th>Additional Support Person</th>
<th>Signature</th>
<th>Relationship to patient</th>
<th>Phone Number</th>
<th>Date</th>
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Affordability of Following our Program after Surgery

In these difficult economic times, some patients have found it a challenge to fully engage in required treatment and healthy habits after surgery. This note is to help you anticipate some of the costs that you will have after your surgery. Please keep in mind that these are only the routine costs, and other unexpected needs may arise.

- **Gas and dependable transportation for follow-up visits to our Center.** This depends, of course, how far away you live. Take a moment to review your surgeon’s expectations for frequency of aftercare visits.
- **Healthy eating.** Whether healthy eating is more expensive than unhealthy eating depends on how it is measured. Data by the US Department of Agriculture (May, 2012) suggest that unhealthy foods (high in sugar, saturated fats, and salt) are actually more expensive than healthier options such as vegetables, fruits and dairy. Also, many of our patients have told us that they have actually saved money by going to restaurants less often. However, if you find that you are spending more money on recommended foods, please ask our dietitians to help you with ideas on how to make affordable choices. Please note that support groups are often aimed at this topic as well.
- **Supplements and Vitamins.** Our dietitians estimate that purchasing generics will cost you about $30 per month. On the other hand, many patients find it a net gain when subtracting their co-pays for the medications they no longer have to take!
- **Exercise.** You may have special needs that incur out-of-pocket costs. Please see our Fitness Specialist for ideas about how to develop a very low cost workout.
- **Labs.** Laboratory tests are ordered twice per year the first two years after surgery, and annually thereafter. Without insurance, labs carry an out-of-pocket cost of $1000. These tests are an important part of assessing your health.
- **Copays.** Most insurances do not pay the full amount for visits with the surgeon, so you should anticipate that there are copayments involved.
- **Childcare costs.**

I have carefully considered my ability to afford full participation in healthy habits and medical care after bariatric surgery, and, to the best of my knowledge, believe that financial limitations will not be an obstacle to long-term adherence to the IU Health Bariatric & Medical Weight Loss program.

______________________________________
Patient Name (printed)

______________________________________
Patient Signature          Date
Emotional Eating: The Cycle can be Broken!

Stressor

Delayed emotions: Guilt, shame, regret

Immediate emotions: Pleasure, gratification, comfort (or decrease of negative emotions)

Negative Emotion

Emotional Eating
Emotional Eating

Information about Behavioral Medicine Services
- You will have a psychological evaluation prior to surgery. This will include a thorough assessment to help us create a treatment plan to help you be successful with surgery.
- Our other services include:
  - Mentor Program
  - Support Groups
  - Individual Counseling with a psychology student
  - Adolescent Program
- Contact us if you have questions!

Psychological Aspects of Surgery
- Addiction Transfer
- Mindful Eating
- Emotional Eating
- Stress Management/Relaxation
- Importance of Recreation
- Relationships
- Body Image Issues
- Accountability

Problems with Emotional Eating
- Can lead to overeating and nutritional deficiencies
- Provides only short-term relief
- Can lower self-esteem
- Ultimately leads to more distress

Recognizing Emotional Eating

Emotional Hunger:
- Comes on suddenly
- Impulsive
- Rely on one type of food for comfort
- More likely to continue eating even when full
- Can result in feelings of guilt

Treating Emotional Eating
- Address the underlying need
  - Boredom: seek stimulation
  - Depression: seek therapy
  - Frustration: seek space
  - Loneliness: seek contact
  - Distress: seek comfort

Physical Hunger:
- Occurs gradually
- Open to many food options
- More likely to stop eating when full
- Usually does not result in guilt
Obesity Contributes to Depression & vice versa
- Each of the following are independently related to increased risk of depression
  - Heart disease, diabetes, sleep apnea, low health-related quality of life, being subjected to weight-bias, and obesity.
- Depression can include symptoms that lead to weight gain:
  - fatigue, loss of interest, sleep problems, appetite disturbance.
  - Also, some medications used to treat mood disorders can cause weight gain.

Managing Emotional Eating
- Minimize temptation
  - Keep comfort food out of the house, and don’t go grocery shopping when you’re feeling down
- Recognize emotional eating
  - Keep a food log. Record your emotions and rank your physical hunger from 1-10 each time you eat
  - If you’re not physically hungry, why else could you be eating?
- Distract yourself
  - Create a list of other things to do (e.g., take a walk, play a game, pursue a hobby)
  - Use the 10 minute timer
- Get support
  - Call a friend, attend a support group, or seek therapy
- Forgive yourself
  - If you have an episode of emotional eating, start fresh right away
  - Learn from the experience and plan how to prevent it in the future
Getting Your Weight under Control

How Psychologists Help with Weight Management

Many people struggle with weight control. According to the Centers for Disease Control and Prevention, 33 percent of U.S. adults are overweight and an additional 36 percent are obese. Approximately one in six children in the U.S. is obese. People gain weight in a variety of ways, such as while recovering from an injury or health issue or slowly adding pounds while growing older.

When it comes to losing weight, many individuals know to focus on eating less and exercising more. But a major aspect of weight control involves understanding and managing thoughts and behaviors that can interfere with weight loss.

Seeing a Psychologist About Weight Control

Psychologists are experts in helping people make behavioral and lifestyle changes that assist with weight management. They may work with individuals and families independently in their private practice or as part of a health care team, often in a setting where mental health and medical services are integrated. Sometimes a psychologist will work on weight control with a patient who has been referred by a physician, dietitian or other health care professional.

People who seek help from psychologists range in age from children to adults. They include those who simply struggle with managing their weight, as well as individuals whose weight problems are related to chronic illnesses like diabetes and heart disease or other conditions like depression, anxiety or eating disorders.

Developing a Treatment Plan

By the end of a first visit, psychologists usually have a comprehensive picture of a patient. They discuss what patients are already doing well and should continue, and they identify areas of need and difficulty related to weight management. After the initial visit, the psychologist and patient schedule follow-up appointments and start to create a treatment plan.

Treatment plans differ from one individual to another but tend to be brief. The plan often involves teaching self-monitoring behaviors, changing old beliefs, building new coping skills, and making changes to home and work environments to support health goals. Psychologists help individuals address obstacles to weight loss, identify positive ways to change unhealthy habits, and develop new skills and ways of thinking.

Many psychologists concentrate on one health behavior at a time. For example, if evenings are a challenging time to maintain good eating habits, the psychologist may ask the patient to keep a log of food eaten in the evenings and make notes about their environment, how they felt and what they were thinking at that time. These factors provide important information about what is driving eating behaviors and help the psychologist and patient figure out a way to address the behaviors.
What Happens During Visits with a Psychologist
An initial visit with a psychologist usually involves a discussion about your history and concerns. This may include your weight management goals and past efforts to lose weight, medical history, stress levels, current life situation, and your sources of social support like family and friends.

In order to help, psychologists also want to learn about your habits and attitudes about food, eating, weight loss and body image that may not support your health goals. Common unhealthy beliefs that patients express include: having to clean their plate; needing dessert after meals; and feeling like a failure when weight loss stalls. Some typical behaviors include: eating whatever they want after exercise; using food to cope with feelings of boredom or stress; and continuing to eat when they are no longer hungry.

These types of behaviors and beliefs often sabotage weight loss efforts. Psychologists talk to patients about their challenges to making healthy choices and identify the triggers that prompt the patient to make unhealthy choices. A psychologist may also evaluate a patient for anxiety, depression and eating disorders such as binge eating. These conditions can sometimes contribute to weight issues.

Progressing and Improving
After even a few sessions, most patients begin to notice changes. For example, patients may start to challenge old beliefs about food and practice new ones that support their health goals.

Together with the psychologist, a patient can determine how long treatment should last. People with extreme anxiety and depression, eating disorders or chronic physical health conditions may require longer and/or more frequent treatment.

The ultimate goal is to help people develop skills so they can lead healthy lives.

Changing Your Eating Habits
Consider the following steps that can be helpful in changing unhealthy eating behaviors and thoughts:

Monitor your behaviors. Research is clear that people who write down what they eat in a daily log are more successful at losing weight. Record your thoughts, feelings and information about the environment such as where you ate, when and what you were doing. This will help you understand your eating behaviors and identify areas to change.

Track your activity level. This is another important aspect of self-monitoring. It includes not only how much you exercise but also the extent to which you move around during the day rather than remaining seated or inactive. One helpful tactic involves using a pedometer to record the number of steps you take each day.

Eat regular meals. Patients often skip breakfast with the thought they are reducing calories or can “save up” calories for later. But skipping meals can slow your metabolism, make you prone to later eating binges and have a negative effect on your health.

Practice “mindful” eating. Research shows that individuals with eating problems often don’t pay attention to whether they are really hungry when they eat. Psychologists can help you learn mindfulness exercises to heighten your awareness of hunger levels and to make eating more enjoyable.
Understand the things you associate with food. Behaviors are habitual and learned. Sometimes people may associate certain emotions, experiences or daily activities with particular behaviors. For example, if you typically eat while watching TV, your brain has made an association between food and TV. You may not be hungry, but in your mind TV and eating are paired together. So when you watch TV you suddenly feel the urge to eat. You can begin to break this association by not eating while watching TV.

Identify your emotions. It’s important to figure out what is happening emotionally while snacking, overeating or choosing unhealthy foods. Identify the feeling: Is it boredom, stress or sadness? Patients need to determine if they are really hungry or just responding to an emotion. If you aren’t hungry, find another way to meet that need.

Modify your unhealthy thoughts and behaviors. Reinforcing healthy behaviors is important to achieving your weight management goals. Too often, people have negative thoughts and feelings about changing their health behaviors and see the process as punishment. Some people have an “all or nothing” attitude and think about weight loss in terms of being “on” or “off” a diet. Psychologists work with people to address negative feelings and find ways to reward healthy changes to their eating habits.

The American Psychological Association gratefully acknowledges Amy Walters, PhD, director of behavioral health services at St. Luke’s Humphrey Diabetes Center in Boise, Idaho, and Kathleen Ashton, PhD, Bariatric and Metabolic Institute at the Cleveland Clinic in Ohio, for contributing to this fact sheet.
Guidelines for a Good Group

Everybody is unique and has their own set of experiences, feelings and ways of viewing the world. It is important to respect such differences in our group and to promote a sense of teamwork.

Some general guidelines for a good group experience include:
- Attend meetings
- Do not rush to judgment
- Really listen
- Participate – be active
- Share the air
- Be supportive
- Welcome those who are new to the group
- Respect confidentiality – what we talk about here, stays here (see below for the paragraph included on every sign-in sheet).

IMPORTANT: By signing this attendance sheet, I am agreeing to keep information discussed in this group confidential. This means that I will not discuss any identifying information with people outside of the group. I may only process with outsiders what I have personally learned in the group. If I happen to run into another support group attendee in public, I will not share with any companions how I know him/her. I have the option to sign a clean form and hand it personally to the support group facilitator if I do not want others to see my name. By writing my e-mail address on this form, I am agreeing to be added to the support group distribution list.
Stress Management

Psychological Aspects of Surgery

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- Relationships
- Body Image Issues
- Awareness and Accountability

10 Tools for Managing Stress

1. Connect with others
   - Reach out
   - Enroll in a class
   - Join a book club, hiking club, support group, etc.

2. Stay Positive
   - Write about your great future life
   - Search for the silver lining
   - Change unhealthy self-talk

3. Exercise
   - Track your exercise
   - Mark it on your calendar
   - Make it fun
   - Find an exercise buddy
   - Address any barriers
   - Reward yourself

4. Get enough sleep
   - Set a regular bedtime
   - Exercise (but not before bed)
   - Take a hot bath, meditate, envision a soothing scene...
     whatever you need to do to relax before bed

5. Create joy and satisfaction
   - Watch or listen to comedy shows
   - Try to laugh at some of your life hassles
   - Put together sayings or photos that make you smile, and post them somewhere visible
   - Do something you loved as a kid
   - Do something you’ve always wanted to do
   - Pursue a creative interest
   - Share leisure time with people you love
   - Tell others about your positive experiences
6. Deal directly with hard times
   ■ Write about it
   ■ Tackle your problems
   ■ Ask for help

7. Set aside time for relaxation
   ■ Practice deep breathing
   ■ Listen to calming music
   ■ Visualize peaceful scenes
   ■ Repeat calming phrases to yourself

8. Practice time-management
   ■ Set goals
   ■ Make lists
   ■ Prioritize

9. Be flexible
   ■ Accept that change is a normal part of living and is an opportunity to experience life a little differently