

Weight Loss

Before Transplant

Potential transplant recipients may be asked to lose weight before becoming active on the kidney transplant list. Depending on the amount of weight and how it is distributed, excess body weight can make the surgery more complicated and delay healing. Your transplant team will determine if you are required to lose weight. Sometimes recipients are able to be transplanted at their current weight, but gaining weight would make surgery difficult. They may be told that they cannot gain weight and can be placed on hold if they do gain weight.

Recipients who are at a healthy weight at the time of the surgery have the following benefits:

- Decreased complications from surgery
- Improved healing, decreased infection risk
- Decreased ICU (intensive care unit) and LOS (hospital length of stay)
- Improved function of your new kidney
- Decreased risk of developing diabetes after transplant
- Better transplant survival rate
- Less weight gains after transplant

Weight Loss Options

- Individual counseling with dietitian
 - Stress lifestyle changes to incorporate physical activity, healthy fat intake, portion control, and increased consumption of vegetables and fruit
 - Dietitian is available at transplant center, dialysis unit, and local health system
 - Requires multiple visits
 - Fad/restrictive diets do not work long term
- Bariatric surgery
 - Performed at a bariatric center (Michigan Medicine or variety of healthcare institutions)
 - Beneficial for patients with BMI greater than 35 to 40. Transplant risks may outweigh benefit of kidney transplant surgery
 - Gastric sleeve is least invasive
 - Requires lifestyle changes for long-term success

- Group classes
 - Weight Watchers
 - Local health centers
 - Mindful eating
- Very low-calorie diets
 - Liquid nutrition supplements
 - Monitored by physician

Eating right and regular exercise are the keys to achieving and maintaining a healthy weight and nutrition status for transplant and beyond.

Successful Weight Management Tips

Set Healthy Realistic Goals

You are more likely to succeed in reaching realistic goals when you make changes step-by-step.

- Start with one or two specific, small changes at a time.
- Track progress by keeping a food and activity log ('myfitnesspal' app or other calorie count apps for your phone, can be very helpful). Record keeping is to determine what is working!
- Start with small weight loss goals to help you gain confidence, maybe 10% of weight loss at a time to encourage success. A fifty-pound weight loss goal can be too overwhelming.
- Lifestyle changes are more successful than diets.

Develop Weight Loss Goals with These SMART Guidelines

Specific: Write down the details of exactly what you would like to accomplish. Where? When? Why? How? Set a basis for tracking your progress.

Measurable: Think in both the long and short term. Set weekly and monthly goals to keep yourself on track.

Attainable: Consider your expectations and personal situation. It's great to aim high, but don't set yourself up for failure.

Relevant: Is this change important to you right now?

Timing: Choose a definite start and finish date to hold yourself accountable.

Exercise More

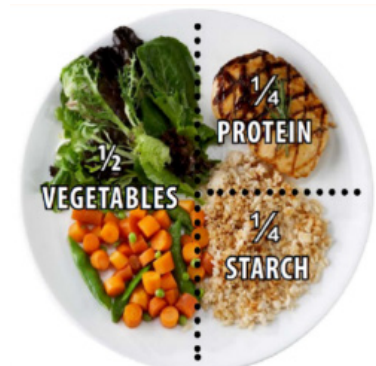
- Start slow and increase length and intensity as you can. Aim for 30 minutes to an hour each day.
- Every bit of movement adds up. Two or three 10-15 minute bursts of activity can help you fit exercise into your day.
- Take the stairs. It may be tough at first, but your body will adjust quickly.
- Join a team or choose an activity you enjoy. Exercise doesn't have to be a chore. Sports can be a fun way to get your heart rate up and body moving.
- Walk. Spend time with your family and/or pets with a walk after dinner each night.
- Enjoy your favorite TV show while using a treadmill or elliptical.

Physical Activity

- Maintains functional status and muscle strength
- Goal is 150 minutes weekly and can be broken into 10-minute sessions throughout the day
- Helps with weight loss
- Regular physical activity is important for overall health and fitness
 - Helps control body weight
 - Promotes a feeling of well-being
 - Reduces the risk of additional chronic diseases
 - Research demonstrates decreased mortality and hospitalizations when kidney patients are physically active

Eat a Balanced Plate with a Variety of Foods

- Half your plate should be filled with low potassium fruits and vegetables, about one fourth with lean meat, poultry or fish, and one fourth with grains.
- Key in Diabetes management
- Improves cardiovascular health
- Assists in managing weight



Benefits of Eating Four to Five Servings of Vegetables and Fruit

- Has fiber and takes time to chew, giving your brain a chance to realize you are full.
- Great source of important nutrients and assists your body in fighting inflammation.
- Promotes good bowel health and helps get rid of extra fluid, potassium, and phosphorous.
- Naturally low in phosphorous.
- Sucking on frozen fruit can help control thirst.
- Helps control blood pressure.

Self-monitoring – Observe and record what you eat and when you exercise. It helps you to become more aware of your behaviors and how they keep you on track for weight loss success.

Setbacks will happen – Don't let an overindulgence force you off track. Instead:

- Use it as a learning opportunity. What can you do to prevent this from happening again?
- Keep a positive attitude. Making lifestyle changes is not easy, give yourself some credit!
- Focus on the progress and changes you have made and continue to find strategies that work best for you.

Peritoneal Dialysis and Weight Loss

Peritoneal solution adds calories and may cause weight gain.

- The dialysis solution adds 300-800 calories per day, depending on dialysis prescription.
 - Red bag 4.25% dextrose (CAPD 87-102 kcal/l) (CCPD 58-73kcal/L) X ____L= ____ Calories absorbed
 - Green bag 2.5% dextrose (CAPD 51-60 kcal/L) (CCPD 34-43 kcal/L) X ____L= ____ Calories absorbed
 - Yellow bag 1.5% dextrose (CAPD 31-36kcal/L) (CCPD 20-26 kcal/L) X ____L= ____ Calories absorbed
- Limiting sodium to 2,000 milligrams can help prevent excess fluid gains resulting in ability to remove fluid with lower dextrose gradient.
- Exercise and healthy eating can help patients achieve and maintain healthy weight for transplant.

Small Steps to a Healthier Lifestyle

Successful weight loss requires a healthy diet, regular exercise, and behavior change. While this may sound overwhelming, it doesn't have to be. The key is making small changes that become a lifestyle.

Bariatric Surgery

Bariatric surgery (also called weight loss surgery) has been effective in treating patients who struggle with their weight and have a Body Mass Index (BMI) greater than 35. A successful surgery and long-term sustained weight loss starts by learning more about obesity, understanding the risks and benefits of surgery, and committing to life-long nutrition and behavior habits to improve your health.

Surgery Types

The University of Michigan offers two types of bariatric surgeries: **gastric bypass** (Roux-n-Y) and **sleeve gastrectomy**. These two surgeries are the most common procedures performed in the world and provide the best balance between weight loss and safety. Surgery is performed through small incisions (laparoscopic) in the stomach, which allows for a safer and quicker recovery.

- **Gastric bypass** involves surgical division of the stomach to create a gastric pouch (about the size of an egg). Next, the small intestine is surgically connected to this gastric pouch. In doing this, food then bypasses the stomach and first portion of the small intestine, which limits the amount of food eaten and calories absorbed. It is important to know that NSAIDs (non-steroidal anti-inflammatory drugs) are not allowed after this procedure. NSAID medications include aspirin, ibuprofen, Motrin® or Advil®.
- **Sleeve gastrectomy** involves surgical removal of about 80% of the stomach. This surgery is considered irreversible, as you cannot put the stomach back in your body once it is removed.

Recovery

For both surgeries, the hospital stay is one to two nights, and most people are up and walking the day of surgery. Most patients return to work two to four weeks after surgery.

Who is a Candidate?

The following criteria must be met in order to be considered a candidate for bariatric surgery:

- At least 18 years of age (there is no maximum age)
- BMI >40 without weight-related illnesses
- BMI 35-40 with weight-related illnesses
 - Weight-related illnesses include: diabetes, high blood pressure, high cholesterol, sleep apnea, asthma, heart disease, arthritis, acid reflux
- Due to higher complication rates, BMI must be less than 65 to be considered for surgery
- Be willing to make life-long dietary and behavior changes in order to maintain weight loss
- Be willing to take vitamin and mineral supplements every day, for the rest of your life
- Be willing to fit in daily exercise, such as walking, for at least 45-60 minutes every day

Importance of Nutrition

Bariatric surgery does not work on its own. It is a tool for weight loss, and not a quick-fix. It is very important to stick to a high-protein, low-carb, and low-fat diet for the rest of your life after surgery. Weight regain after surgery is common, however it can be avoided through proper diet and exercise. Working closely with a dietitian will help keep you on track and help you with healthy food/nutrition suggestions. After surgery, you are also at a higher risk of a vitamin/mineral deficiency, which means daily vitamin/mineral supplements are required (often several doses throughout the day).

Weight Loss Resources

Websites

- www.choosemyplate.gov
- www.cdc.gov/healthyweight/losing_weight
- www.eatright.org
- www.win.niddk.nih.gov

Apps

- **MyFitnessPal by MyFitnessPal.com** (free): This has a large food database and makes it easy to keep track of your intake of different nutrients. It helps you set goals for both calories and exercise, and holds you accountable for checking in and meeting your goals.
- **SparkPeople Diet & Food Tracker by SparkPeople.com** (free): This app has a database of over 3,000,000 foods to keep track of what you are eating each day. It also provides exercise demos and makes recording your activity easy.
- **Fitbit by Fitbit, Inc.** (free): Use this app to track basic activity and calories to get a complete picture of your daily stats – including steps, distance, calories burned, sleep, weight, and more. This can be paired with the Fitbit tracker bracelet for information on calories burned, activity, and sleep.

