

Exercise and Weight Loss Surgery

Northwest Hospital & Medical Center

You have already made the biggest step toward a healthier and happier life - you have decided you need to make a change now, congratulations!

Exercise, in combination with surgery, diet and behavior change will help you lose weight, reduce your risk of developing many chronic diseases, and allow you to live your life the way you want to. You have probably heard the phrase "surgery is a tool to help you lose weight." This is true- your weight loss surgery will make it easier for your body to burn calories provided that you ask your body to be more physically active.

Before Surgery

Many people have started exercise programs, only to end up not sticking with it a short time later. The same scenario may occur repeatedly and this discourages many people from starting up again for fear of failing again. The good news is this cycle can be stopped with a little determination and the right knowledge.

You and your doctor have decided that bariatric surgery is the right option for you, and now it is time to get to work. It is very important that you begin to develop your exercise routine now so that you are in better physical condition for surgery and so that you can fall right back into your exercise routine after surgery. You will also be asked to lose a percentage of your pre-surgery weight, which will require some focused exercise.

There are a few key ingredients to starting a successful exercise routine:

1. Find an activity you can do, and won't mind doing (maybe you will even enjoy it!). A common question among beginning exercisers is "What exercise is the best?" The answer is the type of exercise you will actually do. This means walking for most people. It's cheap (just the cost of a good pair of walking shoes). It can be done anywhere (around the block, at a local school track, in a mall, on a treadmill at a gym or at home). You already know how to do it!
2. Start off easy. A common reason for failing to stick with an exercise routine is exercising too hard initially. Not many people truly enjoy vigorous exercise, so it is highly likely you will not want to stick with an exercise program that involves high-intensity work. Make it easy on yourself and start off easy...you will be much more successful in the long run. You may also put yourself at risk for injury if you exercise too vigorously to begin with, meaning it will be difficult for you to be active while you heal. If you have not exercised recently it may be enough to simply walk around the house several times a day, and slowly work up to walking for longer periods of time.

Before Surgery (continued)

3. Dedicate time EVERY DAY for exercise. Too often exercise is not made a priority, and it is therefore easy to not do it at all. Exercise is an essential part of your weight loss program and an essential component in bettering your health in general. Ultimately you will be working up to engaging in 60 minutes of cardiovascular exercise every day (or a MINIMUM of 5 days per week).

Keep in mind that you eat every day; therefore you must exercise every day to keep your calorie consumption/expenditure in the proper balance. Individuals who have successfully maintained weight loss burn an average of 300 calories per day. There are 3500 calories per pound of fat, so you can see why it is so important to expend extra calories through exercise every day.

Ask for advice from a professional. Getting advice about exercise from a professional in the exercise field may make exercise much less of a mystery for you, dispelling many myths, answering questions for you and ultimately making it more likely you will successfully stick with a good exercise routine. When seeking help regarding exercise it is important that you speak with someone with the proper credentials.

An Exercise Specialist or Physiologist is someone who has a Bachelors or Masters degree in Exercise Science or closely related field and should be able to answer (or find the answer) for any exercise-related question you have. Physical Therapists are also good resources for exercise advice, and are usually particularly helpful for individuals with orthopedic issues. Be aware that many people claim to be exercise experts but may lack the education and experience in working with overweight/obese individuals and therefore cannot provide appropriate, specific advice for your needs.

If you are interested in contacting an Exercise Physiologist, The Northwest Hospital Wellness Center has staff that can meet this need. There are a variety of options for you, from a brief consultation to work on a plan for exercise, to an in depth exercise evaluation and facilities for exercising.

Components of an Exercise Program

I. Range of Motion (ROM) Exercises

These are exercises that get your joints and muscles ready for exercise and should be done before your cardiovascular workout. When doing ROM exercises you take each joint through its full range of motion, thinking head to toe to get all of the major joints. ROM exercises should be done in a slow and controlled manner. If you have not exercised recently, these may be all you want to start off with, completing a set of these several times a day, working toward doing cardiovascular exercise.

II. Cardiovascular Exercise

This will be the main portion of your exercise routine. Cardiovascular exercise is the most effective way to burn calories, and therefore help you control your weight. This is also the kind of exercise that will yield benefits for your heart and lungs. In order to be considered cardiovascular in nature the exercise must use large muscle groups (the arms or legs), be rhythmical in nature (doing the same or similar motions repeatedly), and must be able to be sustained for extended periods of time.

If you have time for only one type of exercise this is what you should focus on. At the start of your cardiovascular workout it is important that you complete a minimum 3-minute warm-up, as this is the amount of time it takes for the body to adjust to a new level of activity. At the end of your workout it is equally important that you complete a minimum 3-minute cool down, to prevent blood pooling in the legs that could result in a feeling of being dizzy or faint. Both the warm-up and the cool down should mimic your actual workout but be at a lower intensity. If you have not exercised recently you may find that your workout consists just of the warm-up and cool down, which is a perfectly good place to start.

Over time your goal is to complete 60 minutes of cardiovascular exercise (but the warm-up and cool down don't count) on a daily basis. It is fine to break these 60 minutes into two 30-minute workouts or four 15-minute workouts, whatever you can do to get those 60 minutes in. It is best to exercise at a *Moderate to Somewhat Hard* level (3-4/10) on a **Rating of Perceived Exertion Scale** (see figure 1).

Figure 1 **Rating of Perceived Exertion Scale**

“HOW HARD ARE YOU WORKING”

- 0 Nothing at all
 - 0.5 Very, very weak
 - 1 Very weak
 - 2 Weak
 - 3 Moderate ----- TARGET FOR EXERTION
 - 4 Somewhat strong -----TARGET FOR EXERTION
 - 5 Strong
 - 6
 - 7 Very strong
 - 8
 - 9
 - 10 Very, very strong
- Maximal

Components of an exercise program (continued)

Examples of cardiovascular exercise include:

Walking

Cycling (regular or recumbent)

Aerobic dance/step

Water aerobics

(any exercise with continuous, repetitive movements involving large groups)

Examples of exercise that can burn plenty of calories but are not considered cardiovascular include:

Tennis

Basketball

Volleyball

(any exercise in which you are stopping and starting regularly)

III. Strength Training

Typically individuals with excessive weight are quite strong and have a significant amount of muscle mass from carrying that excessive weight. However, calorie restriction is likely to result in the loss of muscle tissue and it is therefore important to limit this loss of muscle tissue with exercise. A combination of cardiovascular and strength exercises will help preserve as much muscle as possible during your weight loss process.

Strength training, unlike cardiovascular exercise should be done every other day, as muscles require a day of rest to repair following this type of activity. Strength training itself does not burn many calories, though muscle mass will improve with regular strength training, and the more muscle you have the more calories you will burn at rest. Strength training is also very important for maintaining bone density.

Ways to strength train:

Hand-held weights

Weight machines

Resistive bands

Body weight

Tips for Successful Strength Training:

-Start easy. If you try lifting too much you are likely to injure yourself, which will set you back in your exercise routine. It is best to start off with light weight to ensure you have proper form. The last few repetitions of each exercise should start to feel tough.

Tips for successful strength training (continued)

-Work all of the major muscle groups. Complete 2-3 sets of 10-15 repetitions of each exercise. If you are limited by time, do just one set of 10-15 repetitions working all of the major muscle groups. Do this every other day.

-Go slow. Strength exercises are most effective when done slowly as more muscle fibers have a chance to be recruited. You will also be less likely to injure yourself. Try doing each movement to a count of 2.

-Breathe! People have a tendency to hold their breath when doing strength exercises, employing a technique called the Valsava Maneuver, which can increase blood pressure. The best way to breathe during strength training is *out* during the hard part, *in* during the easy part. If that seems too complicated, it is best to just breathe normally.

-Don't lock your joints. Whether you are doing strength exercises or stretching it is important that you extend your limbs fully, but without over-extending or locking your joints, as this can cause damage to your joints over time.

Stretching

It was once thought static stretches (in which you hold a stretch for several seconds) should be done prior to a cardiovascular workout to prevent injury. It has since been found that doing static stretches before a warm-up may actually cause injury itself. It is therefore best to save these stretches for after a workout when your muscles and connective tissues are more pliable. You can feel free to stretch after every cardiovascular workout.

You may find that stretching becomes easier as you lose weight. Initially your flexibility may be inhibited by excess tissue surrounding your joints, a problem that will become less of an issue following surgery.

Tips for Safe Stretching:

-Think head to toe. As with ROM exercises you will hit all the major muscles and joints if you think head to toe for doing stretches.

-Don't over-stretch. Stretch the point of slight discomfort, but never pain.

-Don't bounce. Bouncing while stretching (ballistic stretching) can cause injury, you should hold the stretch steady for 15 - 30 seconds.

-Relax. Stretching allows for a great time to focus on breathing and relaxing. This gives you something to look forward to at the end of your workout as well. Take deep breaths, take note of the muscles you have just exercised and allow them to relax.

Exercise Hints and Tips

Scheduled exercise sessions will be a focus in your weight loss, and ultimately weight maintenance program. This means you need to make time every day for structured exercise (i.e. walking), keeping in mind that you do not need to do all of it at once. It is not a matter of "if I can find time" but rather "I will make the time."

Many people note that time is a major barrier to sticking with an exercise program, which is understandable given all the other time demands we have in our fast-paced culture. It is essential however, that you find some way to make it a priority in your life. Think of that hour each day you should be dedicating to exercise as a gift of time - your time to focus on you. It is your time to become healthier, happier, and more energetic.

Exercise results in a release of mood elevating endorphins, leaving you with a feeling of satisfaction and happiness as well as a sense of accomplishment knowing you are taking charge of your own health.

Tips for Creating Good Exercise Habits:

-Set realistic, achievable goals. Often people have far too high expectations of what they can achieve in short amount of time with exercise. An example of an achievable goal is "I will walk 15 minutes in the morning and 15 minutes in the evening 4 days this week." This is a realistic and achievable goal for many. Keep in mind if you have not exercised recently a goal of less time is very appropriate. As you become more comfortable with exercise you can set a new goal that will ultimately get you walking 60 minutes per day.

-Keep an exercise log. Write down your accomplishments so that you can see what you've done.

-Think of exercise as an appointment with yourself. You probably don't cancel an appointment with your dentist because you would rather watch your favorite TV show, so don't cancel an exercise appointment with yourself for that reason either. This is a time that is all for you, because you deserve it.

-Find a workout buddy. You may be much more likely to stick with your workout routine if you are responsible to someone else to show up. Be sure this person is motivated to exercise as well, and not likely to cancel on you. Exercising with someone else can make the exercise feel easier, more enjoyable and make the time feel like it is going by faster.

-Break up your exercise sessions. Don't feel like you need to do all of your exercise at once. Do some in the morning before work.

Tips for making good exercise habits (continued)

Many people enjoy knowing they already did part or all of their exercise in the morning and don't have to worry about it for the rest of the day. If possible take 15 minutes from a break or lunch and walk, that's 15 minutes you won't have to do when you get home!

-Avoid barriers to exercise. If you know that couch and your favorite TV show will entice you as soon as you come home from work don't turn on the TV until you've finished your exercise. Or, better yet walk on a treadmill or exercise on a stationary bicycle while watching that TV show.

-Don't hide home exercise equipment. It may not look the best, but put it front and center - you are more likely to use it if you can see it. Don't cover it up with clothes either, that is more effort you will have to put forth before you can use it.

-If you miss one day, all is not lost. If you go a day without exercise, don't beat yourself up. This just means that you will definitely exercise the next day. One day doesn't mean you have to develop a pattern of missing exercise.

Remember that you have worked hard to begin these life-altering changes and you owe it to yourself to keep up the good work. Don't allow yourself to slip back into the old habits that got you to where you were before - you deserve to be happy and healthy!

Keeping up an exercise routine is not going to be easy necessarily but with a bit of effort on your part it will hopefully just become a part of your daily health routine. In all likelihood you will also come to appreciate and enjoy your daily exercise sessions.

In addition to your structured exercise routine you should also focus on increasing your physical activity on a daily basis. These are things you can do every day to get your body moving so that you burn more calories.

Examples of ways to increase daily physical activity:

- Take the stairs instead of the elevator or escalator – it is usually faster anyway.
- Park far out in the parking lot – it's good for your health and your car is less likely to get dinged.
- Do house-cleaning activities regularly (sweeping, vacuuming, laundry, etc.).
- When putting laundry away make several trips.
- Use a push mower when possible.
- Get up to change the TV channel rather than using the remote.
- Do ROM exercises during commercial breaks.
- Wash your car by hand.

Exercise Immediately Following Surgery

Exercise plays an important role for everyone following surgery. The primary goal at this stage is to reduce the risk of complications that accompany surgery, which can include:

- Anesthesia side effects
- Pain
- Use of pain medicines
- Decreased mobility

These complications can result in other medical problems, including:

- Decreased lung expansion
- Pneumonia
- Blood clot formation
- Muscle deconditioning
- Decreased balance and stamina

All of these issues result in a decreased ability to function and care for yourself. Simple exercise can help you recover more quickly from the surgery and limit the effect of the conditions mentioned above. Walking will be the primary form of exercise for you while in the hospital.

You will be asked to begin moving the day of your surgery (out of the bed, dangling your legs, standing and then walking in the hallway). The goals are functional movement on a regular schedule while you are in the hospital, advancing your walking distance and working toward mobility independence. These hospital exercise sessions will ease the transition from hospital to home.

Make sure you ask the nurses if you are unsure about your specific movement limitations related to your surgery (e.g. 10# lifting restriction for open procedures, or, no restrictions for laparoscopic procedures). You will find a steady increase in your tolerance to walking, and a decrease in the amount of work it takes to walk as time goes by.

You will also be asked to use a breathing device called an incentive spirometer, which helps you exercise your lungs as well as gauge your capability to breathe in and expand your lungs.

With all activity in the hospital, try to keep your exertion level below 3/10 or “*Moderate*” on the Rating of Perceived Exertion Scale. Again the primary goal is to get you on your feet and begin basic mobility in preparation for going home. For the first week after your surgery you should perform “normal” activities such as walking, sitting, self-care etc. Do not begin any specific abdominal exercises until cleared by your physician.

Exercise Following Discharge Home and Surgical Recovery

Northwest Hospital & Medical Center's Fitness Center

This exercise and education program is available to Dr. White's patients before and after weight loss surgery. It is located in the McMurray Building on the Northwest Hospital & Medical Center main campus. These medically supervised classes take place for 1 hour, three times per week, and are staffed by caring and compassionate registered nurses and exercise physiologists. Small class sizes allow for individualized attention in a fun and emotionally supportive group setting.

The facility provides appropriate exercise equipment for weight loss surgery patients. A referral from Dr. White is required prior to entrance into the program.

Northwest Hospital & Medical Center's Fitness Center Services and Cost

Exercise Physiologist (EP) Consult - \$50

The exercise physiologist consultation is a 60-minute interview style appointment with a Master's level Exercise Physiologist, who will review past exercise history with you and make recommendations for current/future exercise. You will have the opportunity to ask exercise questions, etc. Doctor referral is required.

Exercise Program Intake - \$50

This hour-long appointment is similar to the Exercise Physiologist Consult but geared specifically towards entrance into the Cardiac Fitness Center (Intro to exercise routine/equipment with measurement of baseline information including heart rate, blood pressure, rating of perceived exertion, etc.). Doctor referral is required.

Exercise Program - \$115/month

Hour-long exercise classes, meet 3 times per week (extra 20 minutes on one day/week for education class). Classes include cardiovascular exercise, strength, flexibility and balance training. Participation in the program can last up to 3 months. Regular attendance required for participant benefit and due to limited class availability. Doctor referral required.

For more information regarding the program, please call: **(206) 368-6550**.

Northwest Hospital & Medical Center's

Fitness Center

1536 North 115th Street, Suite 210

Seattle, WA 98133