People train to get in shape for races and vacations, so why not surgery? We believe every patient should train, physically and mentally, before an operation. The Michigan Surgical and Health Optimization Program’s (MSSHOP) goal is to help you help you adopt healthier habits so you can be as healthy and strong as you can be before and after surgery. This may:

- shorten your hospital stay
- lower your chances of problems after surgery
- speed up your recovery time

This document contains information and tools to help you get started. This program also offers an opportunity for you to share your progress with us as you are working to make healthy changes.

**Move**

Research has shown that people who are stronger before surgery do better. Even simply walking can increase strength and endurance.

✓ **Track your physical activity and share your progress with us.**

- Record your number of minutes of physical activity.
- Or, record your daily steps if you have a smartphone, pedometer, or wearable device.
- Share your progress with us. **Report your activity now through 2 weeks after your surgery.** See *Reporting My Activity* for details on selecting your preferred reporting method.

- An *Activity Log* is provided to help you keep track of your activity.
How much activity should I do?

- Check with your healthcare provider before beginning an exercise program.
  
  **Follow any exercise restrictions given by your healthcare provider.**
  
  - If you are new to exercise, start slow with 5 - 10 minutes at a time.
  - Listen to your body! If you become short of breath, slow down or stop. You should be able to carry on a conversation while walking.
  - Work up to a minimum of 30 minutes per day, most days of the week. This can be divided up into shorter sessions at different times during the day.
  - **After surgery, follow all activity and lifting restrictions provided by your healthcare team.** Move often for short periods of time. Begin slowly, working up to, or beyond, the level of activity you were at before surgery.

What does a good physical activity program include?

A good program includes activities you enjoy and activities that work with your schedule. Joining in a group activity can be very motivating. You are more likely to exercise if you know others are relying on you to join them. Your community may provide free or low-cost programs.

- **Warm up:** Walk, or perform your activity slowly for the first few minutes. This will help your heart, lungs, muscles and joints get ready for exercise.

- **Peak Activity:** Move a little more quickly. If you feel pain, shortness of breath, dizziness or nausea, slow down or take a break. Listen to your body and plan your route so you can get home easily if you become tired. As you build your ability to exercise, aim to include more moderate-intensity activity. These activities increase your heart rate and breathing rate. The "talk test" is a simple way to measure intensity. In general, if you're doing moderate-intensity activity, you can talk but not sing during the activity.

- **Cool down:** Slow down again for a few minutes, until your breathing returns to normal. Your body needs this time to cool down so you do not become stiff and sore.
Prepare Your Lungs

Deep breathing and incentive spirometer use can improve your lung function and may reduce your risk of breathing problems after surgery, including pneumonia.

✓ Track your deep breathing exercises and share your progress with us.
  - Start your breathing exercises today if you smoke or have been asked to do so by your doctor. If not, begin 2 weeks before your surgery.
  - Take 30 breaths per day. Repeat 10 breaths 3 times each day to reach this goal.
  - If you have an Incentive Spirometer, you can use this to complete breathing exercises. Follow the instructions on the next page.
  - Share your progress with us. Report the number of times you completed this exercise each day. See Reporting My Activity for details on selecting your preferred reporting method.
    - An Activity Log is provided to help you keep track of your activity.

How do I do the deep breathing exercise?

1. Sit up straight, or lay down.
2. Breathe in through your nose as deeply as possible. Feel your chest rise and stomach go out as you inhale.
3. Hold your breath for five seconds.
4. Let your breath out through your mouth, slowly and completely. As you exhale, purse your lips (like blowing out a candle) and feel your stomach going in. Exhale twice as long as you inhaled.
5. Rest and repeat. If you feel lightheaded or dizzy, stop and breathe normally.
How do I use an Incentive Spirometer?

1. Sit up straight.
2. Breathe in slowly and deeply through your mouth. Focus on keeping the top of the yellow valve on the left side of the device in the “best” or “better” range.
3. Once your lungs are full, remove the mouthpiece from your mouth, hold your breath for 3 seconds, then breathe out normally.
4. Rest for a few seconds and then repeat. If you feel lightheaded or dizzy using the spirometer, stop and breathe normally for a few minutes.
5. An instructional video is available at: http://michmed.org/Zb9K

How does smoking or tobacco use affect my ability to heal?

Smoking and tobacco use increases your risk of problems such as wound infections, pneumonia or heart attack. When you smoke, less oxygen is in your blood. Oxygen is one of the most important things that you need to heal well. You will not be able to smoke during your hospital stay. If you're ready to quit, now is the perfect time.

- Ask MSHOP for a referral to the free MHealthy Tobacco Cessation program.
- Talk with your regular doctor about prescribing medicine or a nicotine replacement to help you handle the physical urge to smoke.
- Reach out to your health insurance plan to learn about smoking cessation covered benefits or quit programs.
- Try a mobile app that can help you quit.
- Most importantly, never quit quitting.

Free Tobacco Cessation Resources:

- http://mhealthy.umich.edu/tobacco or call (734) 998-6222
- https://michigan.quitlogix.org/ or call 1-800-QUIT-NOW (784-8669)
- http://www.cdc.gov/tobacco/quit_smoking/
- http://www.becomeanex.org
Choose Healthy Foods
Eating a healthy diet before and after your surgery will help your body handle the stress of surgery, fight infection and heal quickly. Below are general guidelines, however, follow all dietary guidelines or restriction your doctor has given you. If you can’t tolerate or digest certain foods, you should not include them.

✓ Boost your immune system with good nutrition.
  • Eat at least 5 servings of fruits and vegetables every day. Strive to include a fruit or vegetable at every snack and fill half of your plate with fruits and vegetables at every meal.
  • Eat at least 1 serving of high-protein foods at every meal or snack, starting 1 – 2 weeks before surgery.
  • After surgery, eat a protein-rich meal or snack every 3-4 hours.

How do fruits, vegetables, and lean protein foods help me be strong before surgery and heal well after?
  • Fruits and veggies are full of vitamins, minerals and antioxidants that help boost your immune system, lower inflammation, and also promote tissue and bone growth.
  • Making sure you have enough protein in your body before surgery can help maintain muscle and help with recovery. Your body needs more protein during times of stress, such as surgery.
  • It is common to lose your appetite after surgery. If this happens, be sure to eat high protein foods first to help you with the healing process.
What foods are high in protein?

<table>
<thead>
<tr>
<th>Meat (Always choose low-fat versions.)</th>
<th>Dairy Foods (Always choose low-fat versions.)</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Lean beef (more than 90% lean)</td>
<td>• Skim or low fat milk</td>
<td>• Beans and lentils</td>
</tr>
<tr>
<td>• Lean pork</td>
<td>• Greek yogurt</td>
<td>• Tofu and tempeh</td>
</tr>
<tr>
<td>• Chicken</td>
<td>• Cheese</td>
<td>• Eggs/egg whites</td>
</tr>
<tr>
<td>• Turkey</td>
<td>• Cottage Cheese</td>
<td>• Peanut butter, nuts, seeds</td>
</tr>
<tr>
<td>• Any fish or shellfish</td>
<td></td>
<td>• Oatmeal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Quinoa</td>
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<tr>
<td></td>
<td></td>
<td>• Edamame</td>
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<tr>
<td></td>
<td></td>
<td>• Unsweetened soymilk or almond milk</td>
</tr>
</tbody>
</table>

- Try to increase your protein mostly through food. You can drink low sugar protein shakes if necessary.

What does one serving of protein look like?

- Watch a short video on how healthy eating can help you be strong for surgery at http://michmed.org/v15gk
- View the handout “Increasing Protein in Your Diet” to learn more: http://www.med.umich.edu/1libr/Nutrition/IncreasingProtein.pdf
- Discover hundreds of delicious recipes at http://mhealthy.umich.edu/recipes
Create a Positive Mindset

It is normal to feel anxious, nervous and hesitant about your upcoming surgery. Managing the stress of preparing for surgery can be challenging. However, there are things that you can do to help.

We encourage you to start by keeping a gratitude journal. Gratitude not only reduces stress, but helps increase your mental strength, and has been shown to improve your health. It can lower blood pressure, improve immune function, decrease pain and help you sleep better. A simple and well-known approach is called “Three Good Things.”

✓ Keep a gratitude journal
  - Every evening, write down 3 things that went well for you. These can be things you are grateful for or events that brightened your day. For example:
    
    I am grateful for...
    ~ a restful sleep last night,
    ~ being able to help my neighbor today, and
    ~ the support group I found in my community.
  
  - Share your progress with us. Report whether you’ve incorporated gratitude journaling into your day. See Reporting My Activity for details on selecting your preferred reporting method.
    - An Activity Log is provided to help you keep track of your activity.

What additional strategies can help reduce stress, anxiety, and pain?

- Mindful breathing - Practicing mindfulness can help you focus on the present, rather than worry about the future or regret the past. You can practice mindfulness sitting in a quiet space, while going for a walk or doing activities like yoga or tai chi. To begin, focus on your breath. When your mind gets distracted, or you experience anxious thoughts, simply recognize the thought briefly without making judgment. Then refocus on your breath.
• **Guided Imagery** - Start by taking a few deep breaths to help you relax. Then, imagine yourself in a calm, peaceful setting. This could be a beach, mountain setting, meadow, etc. Add details to your scene. When you are deep into your scene and feeling relaxed, take a few minutes to breathe slowly and feel the calm.

• **Create a support system** – Make time to see friends and family. Ask them to support you in your new healthy habits.

• **Sleep** – Aim for 7-9 hours a night to help your body and immune system work at its best.

• **Laugh** – Laughter releases tension and brings about positive physical changes in your body.

• **Doodle, draw or color** – The repetitive and rhythmic motions can help you relax, quiet your mind or serve as a form of meditation. Create your own work, or use a mandalas coloring book. Mandalas are designs that are usually circular geometric patterns. These books, or coloring pages, are easily found in stores and online.

• **Get active** – Walking can help you feel less stressed, improve your mood and help you sleep.

• **Listen to music** – Music can help lower your threshold for pain, improve your mood, and relieve stress and anxiety.

• **Think positively** – Positive self-talk can help shift your perspective. When you have a negative thought, take a moment to consider whether the thought is reasonable. Try to reframe it into something more positive. For example, “It will take me months to recover from this surgery,” might be replaced with, “I am doing everything I can to make my surgery go well. Joining MSHOP will help me take control of my recovery.”
Safe and Effective Pain Management

Your surgical team’s goal is to control your pain after surgery so you can do the things you need to do to heal: walk, eat, breathe deeply, and sleep.

✔ Discuss your pain management plan with your healthcare provider.

They may suggest using a combination of strategies to control pain, such as:

- **Over-the-counter medications** - Pain can be well controlled with a schedule of over-the-counter medications such as acetaminophen (Tylenol) or ibuprofen (Motrin or Advil).

- **Opioid medications** - Your doctor may prescribe an opioid medication if you are still in a lot of pain after taking over-the-counter pain medicine. Feeling some pain after surgery is normal.

- **Mindfulness activities** - The suggested activities in the “Creating Positive Mindset” section can be helpful and may provide better pain relief than medication alone.

What are opioids?

Opioids are strong prescription pain medications. Common opioids include:

<table>
<thead>
<tr>
<th>Generic Name</th>
<th>Brand Name</th>
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<tbody>
<tr>
<td>Codeine</td>
<td>Tylenol® #3* or #4*</td>
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<tr>
<td>Fentanyl</td>
<td>Duragesic®</td>
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<tr>
<td>Hydrocodone</td>
<td>Vicodin**, Norco**</td>
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<tr>
<td>Hydromorphone</td>
<td>Dilaudid®</td>
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<tr>
<td>Methadone</td>
<td>Methadose®</td>
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<tr>
<td>Morphine</td>
<td>MS Contin®, Kadian</td>
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<tr>
<td>Oxycodone</td>
<td>Percocet**, OxyContin®</td>
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<td>Oxymorphone</td>
<td>Opana®</td>
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<tr>
<td>Tramadol</td>
<td>Ultram®, Ultracet**</td>
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</tbody>
</table>

* Contains acetaminophen (Tylenol). Talk with your doctor if you’re also taking acetaminophen separately.
What do I need to know about using opioids safely?

- Tell your doctor about all medications you currently take.
- As your pain gets better wait longer between taking opioids. Work with your healthcare team to determine the best plan for you.
- Only use the opioids for your surgical pain. Do not take opioids for other reasons.
- Opioids can be addictive and may cause overdose if used incorrectly or abused.
- Talk with your doctor if you are having trouble managing your pain.

How do I store opioids safely?

- Store any medication safely in a locked cabinet, out of sight and out of reach of children.
- Keep a count of how many pills you have left.

How do I dispose of opioids safely?

- Dispose of any unused pills at an approved collector. Use a permanent medication drop box or take them to an authorized “Take-Back” program in your area.
- Use your household trash as a last resort. Mix it with something unappealing, like coffee grounds or kitty litter. Do not flush opioids down the toilet.
- Learn more about medication disposal at: [http://michmed.org/MmA6N](http://michmed.org/MmA6N)
**Reporting My Activity**

Record and report your daily activity starting now through 2 weeks after your surgery. Let MSHOP know what works best for you:

- **Daily text message** – Receive a daily text from (734) 436-3589 asking you to record your activity from the day before. Your responses are saved in your MyUofMHealth patient portal.

- **MyUofMHealth patient portal entry** - Enter your activity data directly into the MyUofMHealth patient portal using a computer or smartphone. Update your information at least once a week. See “How to Report My Activity in the Patient Portal” for instructions.

- **Sync your smartphone or Fitbit** – Sync your Apple Health app, the Google Fit app, or Fitbit with the MyUofMHealth patient portal. Once synced, your step data will automatically be updated into your patient portal. See “How to Report My Activity in the Patient Portal” for instructions.

- **Phone** - Call us at (734) 232-1304 weekly. Leave a message with your name, date of birth, and daily activity totals.
MSHOP Daily Activity Log

Use this page to keep track of your daily activity. If you are reporting your activity by phone, call **734-232-1304 weekly** to share your progress.

<table>
<thead>
<tr>
<th>Date</th>
<th>Steps</th>
<th>Minutes of Exercise</th>
<th>Number of Deep Breaths (Goal = 30)</th>
<th>Gratitude Journal (Yes/No)</th>
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**My Gratitude Journal**

Use this page to get started, then continue by creating your own journal. Write down 3 things that went well for you today. These can be things you are grateful for or events that brightened your day.

<table>
<thead>
<tr>
<th>Date</th>
<th><strong>Three Good Things Exercise</strong> – I am grateful for…</th>
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<tbody>
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</table>
How to Report My Activity in the Patient Portal?

How do I report my activity using a computer?

- Go to the Menu dropdown at the top of the page. Within the "My Record" section, select Track My Health.
- Within the “Active Flowsheets” section, select Patient Reported MSHOP.
- Select Add New Data, then enter the date, select a time and enter your information. You can record up to three dates by selecting Add Another Reading.
- After entering your information, select Continue.
- Review your entries and select Submit.
- To record additional dates, repeat the above process.

How do I report my activity using a smartphone?

- Log in to the MyUofMHealth app. If you are a new app user, download the app in your App Store or Google Play store.
- Select Menu, then in the "My Record" section, select Track My Health.
- Select Patient Reported MSHOP.
- Select Add Readings.
- Enter the correct date, record your activity data and select Save.
- To add additional dates, select Add Readings again

How do I sync my smartphone step-counting app with the MyUofMHealth app?

iPhone users can sync the “Health” app. This app comes built in on an iPhone. Android users can sync the “Google Fit app. This app can be downloaded from the Google Play store. Both of these apps track your steps via your phone’s movement.
- Set up these apps before starting the syncing process, then:
• Log in to your MyUofMHealth app
• Select Menu, then in the "My Record" section, select Track My Health.
• Select Connect to Health/Google Fit located at the bottom of your screen and follow the instructions provided.
• Your step data is now synced with your MyUofMHealth portal.

**How do I sync my Fitbit to the MyUofMHealth patient portal?**
You must sync your Fitbit through the MyUofMHealth website, not through the app.
• Log in to MyUofMHealth.org.
• Go to the Menu dropdown at the top of the page. Within the "My Record" section, select Track My Health.
• Select Connect My Account.
• Select Connect Account next to the Fitbit icon.
• A window will pop up that will direct you to FitBit's website. Select Continue to Fitbit, Inc. Then log in to your FitBit account.
• Once logged in, it will ask you if you would like Michigan Medicine to be able to access your Fitbit data. Check the box for Activity and Exercise, then select Allow.
• In the next pop-up window verify that there is a check mark by Pedometer Steps, then select Start Syncing.
• Your step data is now synced with your MyUofMHealth portal.