

The HPL PAGES

P atient A ctivity G uide for E xercise and S uccess

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Table of Contents

Use the links to progress to the bookmarked page you are looking for!	
Welcome to the Human Performance Lab	4
Chapter 1: Am I ready?	
Expectations Activity	5
Past Experiences Activity	6
Stages of Change Activity	7
Behavior Modifications:	
Precontemplation-Contemplation	8
<u>Contemplation-Preparation</u>	9
<u>Preparation -Action</u>	10
<u>Action - Maintenance</u>	11
<u>Barriers</u>	12
<u>Barrier Activity</u>	13
Social Influences on Exercise	14
Solutions to Barriers	15
<u>Tackle your Barriers Activity</u>	16
<u>Setting SMART Goals</u>	17
<u>SMART Goals Activity</u>	18
<u>Self Efficacy Quiz</u>	19
<u>Goal Tracking Log</u>	20
Part 2: <u>Elements of Exercise</u>	21
<u>Types of Exercise</u>	22
<u>How exercise can supplement your weight loss</u>	23
<u>Exercise Intensity</u>	24
How to Measure Intensity	25
<u>RPE, Heart Rate</u>	26
How much should I do at each intensity?	27
Benefits of Moderate vs. Vigorous Intensity	28
What to expect with exercise	29
Signs and Symptoms to discontinue exercise	30
Part 3: Let's get moving!	31
What is your current movement prescription?	31
How do you measure your movement?	32

Reviewed by: _____

<u>Weekly Movement Log</u>	33
<u>Take Action: Movement Goal Activity</u>	
Part 4: Considerations before exercising	
<u>Pre-Exercise Screening</u>	
<u>Current Medications</u>	37
How Medications Affect Exercise	
<u>Resources</u> (where are you going to be exercising)	40
Part 5: Joining the HPL	
Testing Offered and Pricing	41
<u>Fitness Assessment</u>	. 43
<u>Fitness Assessment Activity</u>	44
Exercise Plan	. 51
Part 5: Joining a Fitness Facility	
What you need	45
<u>Exercise plan (can get from HPL or write your own!)</u>	
Part 5: <u>Exercising at Home</u>	
<u>At-home modifications</u>	. 46
Resistance Band Exercises	
Part 6: Making a plan, easy as PIE	
<u>Components of an exercise prescription (ExRx)</u>	. 51
<u>Write your own RT plan</u>	
<u><i>P</i>ick your muscle group</u>	
<u>Intensity</u>	
<u>Exercises</u>	
<u>Activity: Write your plan!</u>	
<u>Exercise Volume</u>	
<u>Volume Calculation Activity</u>	
<u>Volume Change Activity</u>	
Part 7: Progressing over Plateaus	

<u>Progressing over Plateaus</u>	67
<u>Plateau Activity</u>	58
<u>Rebounding from Relapse</u>	69
Reviewed by:	

Welcome to the Human Performance Lab!

Wahoo!

Welcome to the WVU Human Performance Lab! We are so happy to welcome you into the family as you begin your journey to becoming physically active! Our Exercise Physiology students and staff are committed to educating and supporting you while you become familiar with exercise!.

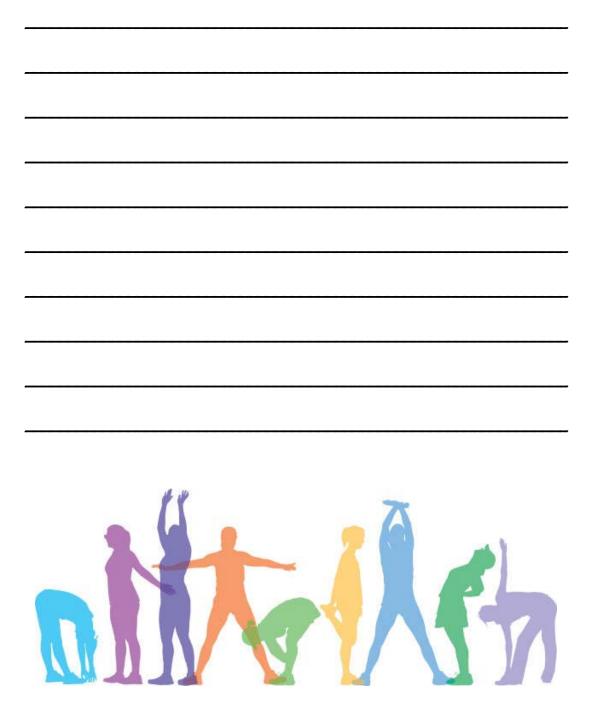
Through your participation in WVU Medicine's Medical Weight Management clinic, you have focused on 4 pillars to transform your lifestyle: Food, Movement, Behavior Modification, and Medication. Here at the Human Performance Lab, we will be your support system for the Movement pillar of your treatment plan!

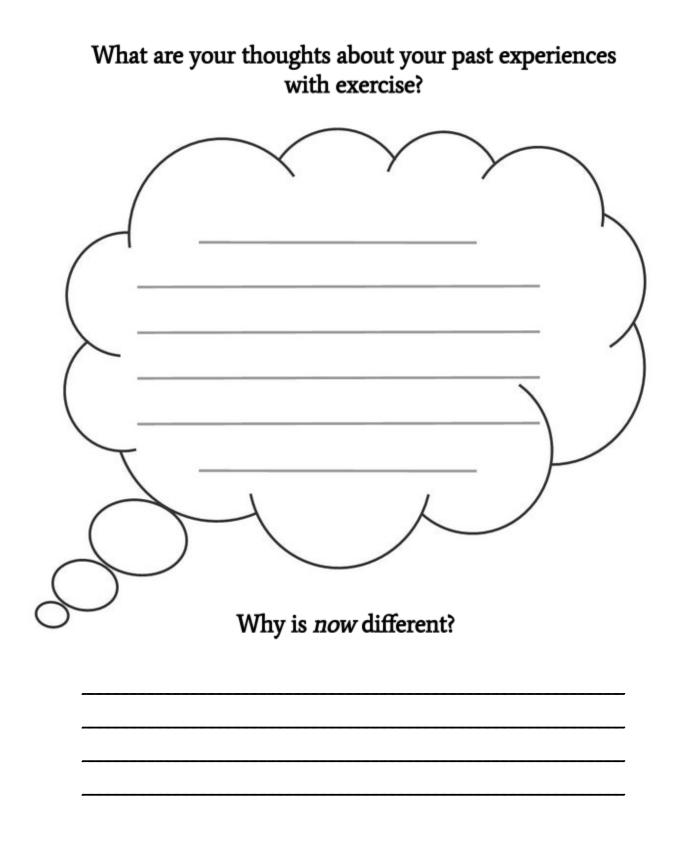
As you progress through the activities in this workbook, you will find the tools to set goals, write an exercise plan, overcome your physical activity barriers, and so much more! This is a new beginning for you, and you have all the tools that you need to be successful.

You've got this!



Before we start, what are some of YOUR expectations and outcomes you have for beginning your exercise plan?





Part 1: Am I ready?



Which of the following best describes your current relationship with exercise?

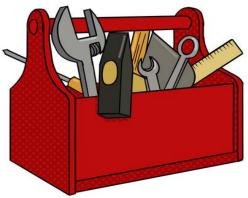
- _____ I currently do not exercise and do not plan to start
- _____ I currently do not exercise but plan to start soon
- _____ I exercise sometimes, but not regularly (less than 3 days/week)
- _____ I exercise regularly (3-5 days/week), but have only begun in the last 6 months
 - _____ I exercise regularly (3-5 days/week), and have done so longer than 6 months

Based on your response, you are in:



Precontemplation(proceed to page 8)Contemplation(proceed to page 9)Preparation(proceed to page 10)Action(proceed to page 11)Maintenance(proceed to page 69)





Use these to change your stage of readiness for physical activity!



"I can't" to "I might"

Look into how exercise can benefit your weight loss!

Identify your barriers and the solutions you can use to overcome them!

Visualize yourself as an exerciser!

How does your inactivity affect those around you?





Use these to change your stage of readiness for physical activity!

Contemplation Preparation "I might" to "I will"

Identify solutions to your barriers! You can do this one at a time if you need to!

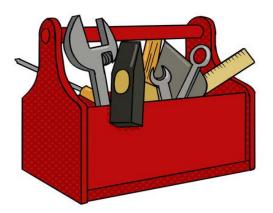
How confident are you in your ability to starts and continue an exercise program?

Take the quiz on page ***!

Look into the small steps that you can take to achieve your goal!

Take a look at the SMART Goals activity!





Use these to change your stage of readiness for physical activity!



"I will" to "I am"

Make a plan! Be specific, but realistic!

- What are your goals?
- When are you going to exercise?
- What are you going to do?

Find ways that are easy for you to monitor your progress, and reward yourself!

Create an environment that encourages you to be active!

- Find ways to decrease sitting time
- Put your gym bag in your car to remind you after work
- Designate an area of your house for activity!





Use these to change your stage of readiness for physical activity!



Incorporate variety to avoid getting bored with your routine!

Find a workout buddy or join an exercise group!

Explore new ways to reward yourself for making and meeting your goals!



OVERCOMING BARRIERS



Barriers are essentially the roadblocks in life that may keep us from doing something we want, or need, to do. This includes physical activity! Barriers affect EVERYONE, and you are not alone!

Some of the most common barriers include lack of time, energy, resources, and support. Whether or not you experience one or multiple of these barriers, there are strategies that you can use to overcome them to be successful in your journey to better health!

Use this next activity to identify your barriers to physical activity, and find feasible solutions that will help you overcome them! Remember, this is YOUR journey, so you can start by tackling one or as many barriers as you see fit!



Directions: Listed are some reasons that people may give to describe why they do not get as much physical activity as they think they should. Please read each statement and **put a check in the box for how likely you would be to say each of the following statements.**

How likely are you to say:	Very Likely	Likely	Unlikely	Very Unlikely
I am too busy to exercise.				
I am too tired to exercise.				
I am worried I will get hurt if I exercise.				
I cannot afford to exercise.				
I am embarrassed to exercise because I don't know what to do or where to start.				
If I start exercising, I find it hard to continue after a few days/ weeks.				
Exercising is too hard to do, especially for me.				
	•			

Social Influences on Exercise

Not having a social support system is also a barrier!

A **positive support system** is crucial for someone beginning a journey to better health! Supportive networks including friends, family, your providers, and us at the HPL can help you start, maintain, and continue an exercise program!

List those in your support system? Are they a positive or negative influence?	
	•

If you are experiencing a lack of social support, here are some strategies:

- Explain your interest in physical activity to friends and family. Ask them to support your efforts.
- Invite friends and family members to exercise with you. Plan social activities involving exercise.
- Develop new friendships with physically active people.



Now that you have identified your barriers, let's talk about some ways to overcome them!

Time:

- Monitor your daily activities for 1 week and identify 30 minute time slots that you could use for physical activity
- Make exercise part of your daily routine
- Choose activities that require minimal time!

Energy:

• Choose to exercise during times in the day or week where you feel the most energetic!

Motivation:

- Invite a friend or family member to increase accountability
- Join a facility or exercise group!

Resources:

• Identify inexpensive ways to exercise at home or in the community! Public parks, trails, or resistance bands at home are a quick option!

Fear of injury:

• Learning proper form, warm-up, and cool-down techniques decreases your chance for injury

Lack of skill:

- Join a group to learn new skills
- Choose activities that require minimal skill



TACKLE your barriers!

What barrier would you like to tackle?

 What strategies can you use to overcome this barrier?

 Do you have any goals associated with this barrier?

Setting SMART Goals



In the MWM clinic, you work with your provider to set and achieve specific goals for your weight loss between appointments, this is no different! Setting goals can be intimidating, and while you may have long term goals in mind such as weight-loss or a healthier lifestyle, setting small, SMART goals will make it easier to progress along the way!

By setting short-term goals that are <u>Specific</u>, <u>M</u>easurable, <u>A</u>ction oriented, <u>R</u>ealistic, and <u>T</u>imely, you are creating an environment to witness your progression on a day-to-day, weekly, or month scale.

Look at it this way, your short-term goals are the pieces used to build the puzzle of a larger goal, and **you build your short-term goals by using the SMART principle**! Let's practice! Use the SMART Principle to set a small goal to assist you in your journey to a healthier you!



What is your goal? _____



Assessing Self-Efficacy

Place a v with the answer that best describes yourself!



How likely are you to exercise if :

	Very Unlikely	Unlikely	Likely	Very Likely
The weather was bothering you (too hot, rainy, icy,				
etc.)				
You become bored with your exercise plan				
You felt pain or discomfort while exercising				
You did not enjoy your last experience				
You are busy with other activities				
You felt tired				
You felt stressed				
You were excited about life events				
You felt depressed				



Stay on track!

Whatever goals you have have set for yourself, track them to stay on course!

What are your goals this week?

Nutrition:

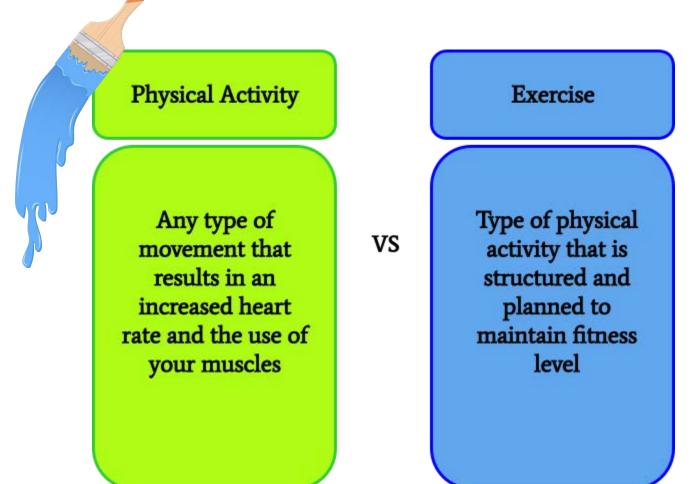
Physical Activity:

Other:

Did you meet your:	Sun	Μ	Т	W	Th	Fr	Sat
Nutrition Goal?							
Activity Goal?							
Did you track your activity?							

mmm

Part 2: Elements of Exercise



In our daily lives, we do a lot of physical activity! We carry out groceries, do the laundry, walk, and much more!

Now, we want to implement exercise <u>in addition</u> to your normal physical activity to enhance weight loss and overall health!



Types of Exercise

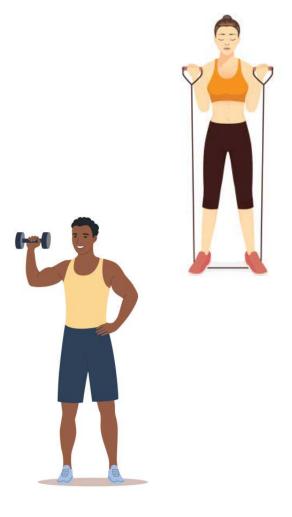
Aerobic Exercise – "Cardio"

Utilizes your large muscle groups and stimulates your heart and lungs to do most of the work!

Walking, cycling, jogging

Promotes heart health and decreases the risk for the development of cardiovascular and other diseases!





Resistance Training

Form of training that causes the muscles to contract against resistance to build muscular strength

Free weights, machines, resistance bands, etc.

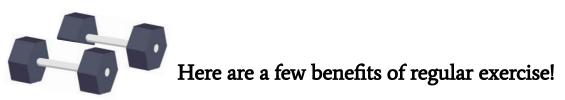
Increases lean body mass to improve your metabolism! The <u>more muscle mass, the more</u> <u>calories your burn at rest</u>!

How can exercise supplement your weight loss?

Losing weight is a challenge, and maintaining that weight loss is another feat on its own. This is where exercise becomes your friend! Research supports that when compared to dieting alone, dieting with regular exercise results in more weight loss and prevents weight gain!

By combining your nutrition advice from your providers at Medical Weight Management with regular exercise, you will gain energy, muscle mass, and most importantly, confidence, to further enhance your weight loss journey!





- Decreased risk for diabetes, heat disease, cancers, and many other deadly diseases!
- Improved mood
- Increased energy to do your activities of daily living!
- Reduce joint and back pain
- Increased muscle mass allows your body to burn more calories at rest!
- Lower blood pressure, cholesterol, and HbA1C





How hard should I work?

Well, that depends! How hard do you want to work?



How hard you work is known as, exercise intensity

Light Intensity

Best for warm-ups and cool downs

Moderate Intensity

You are working hard, but still feel like you can challenge yourself more

Vigorous Intensity

You are working very hard, and are very close to your maximum effort

Measuring Your Intensity

Rating of Perceived Exertion, or **<u>RPE</u>**, is how to measure how "hard" you are working!

RPE SCALE		
10	MAX EFFORT ACTIVITY Feels almost impossible to keep going. Completely out of breath, unable to talk. Cannot maintain for more than a very short time.	V
9	VERY HARD ACTIVITY Very difficult to maintain exercise intensity. Can barely breathe and speak only a few words.	
7-8	VIGOROUS ACTIVITY Borderline uncomfortable. Short of breath, can speak a sentence.	N
4-6	MODERATE ACTIVITY Breathing heavily, can hold a short conversation. Still somewhat comfortable, but becoming noticeably more challenging.	
2-3	LIGHT ACTIVITY Feels like you can maintain for hours. Easy to breathe and carry a conversation.	
1	VERY LIGHT ACTIVITY Hardly any exertion, but more than sleeping, slow walk, etc.	



Vigorous Intensity



Moderate Intensity



Light Intensity



Measuring Your Intensity

You can also measure intensity based on HR response!

Measuring heart rate:

- If you don't have a smart watch, calculating your HR manually can be very easy!
- You can use your carotid pulse in your neck, or your radial pulse in your wrist, whichever you prefer!
- Use your index finger to locate your pulse, seen in the images to the left.
- Once you feel the pulse, count the "beats" for 10 seconds, and multiply that by a factor of 6!

Calculating your HR range:

- Intensity is based of a fraction of your age-predicted maximum heart rate
 - <u>Maximum HR = 220 age</u>
- Light Intensity = 40-64% of your age predicted max HR
- Moderate Intensity = 65-74% of your age predicted max HR
- Vigorous Intensity = 75-95% of your age predicted max HR

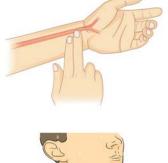
Example:

You are *35 years old.* Your *maximum HR* = 220 - 35 = 185 beats per minute

Moderate intensity exercise would be 65-74% 185 (0.65) = 120 beats per minute 185 (0.74) = 137 beats per minute

Your HR range for Moderate intensity = 120-137 bpm









How much should I do at each intensity?

To burn more calories and improve your cardiorespiratory fitness, the goal should be to spend **as much time as you can exercising at moderate or vigorous intensity**

• The **goal is to do 30-60 minutes** of cardio at this intensity **each day**

This may take weeks or even months to work to, THAT IS OKAY!

- Set **small, daily goals** to help you reach your larger goal!
- **Mix it up!** Break your cardio up into 5-10 minute bouts of either moderate or vigorous intensity



Benefits of Moderate vs Vigorous Intensity

You may be inclined to use the "fat burn" workout on a treadmill, elliptical, or other aerobic exercise equipment.

While there is nothing wrong with this intensity, this is a light to moderate intensity exercise.

Yes, at lower intensities you are burning more "fat" but you are not burning more calories, which correlates with weight loss!

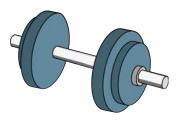
The harder you work, you will experience:

- More calories burned = increased weight loss
- Increased heart health
- Better sleep
- Improved mood
- Lowered risk for health conditions including heart disease, stroke, diabetes, and dementia!

Moderate intensity exercise is great!! Remember, anything is better than nothing, and it is **EXPECTED** that you begin out at lower intensities.

Rule of thumb, as you progress and become more able to work at higher intensities, you should!

Plus, 75 minutes of vigorous intensity is equivalent to 150 minutes of moderate intensity.... decreasing the time you have to spend working out!





What to expect when you begin exercising:



Normal response during exercise:

- Increased heart rate!
 - You will feel that you are working harder by your increase in heart rate!
- Increased blood pressure!
 - This is **not** bad! It is completely normal, and is good for your heart!
- Increased respiration rate!
 - You may feel "short of breath", but you are breathing harder, because you are working harder, you are getting plenty of oxygen!

Normal response after exercise:

- Muscle soreness!
 - *Especially* after your first few sessions! There is a difference between being sore from working hard and being in pain.
- Fatigue
 - You worked hard! It is *completely normal* to be tired after your first few sessions!

Signs and Symptoms to Stop!



Chest pain

 Sharp pain in the center of your chest, shoulder blades, or radiating down the L arm that seemed to be triggered by activity

Unexplained shortness of breath

 Breathlessness that seems different that the usual increase in breathing that you experience with exercise, often quick and shallow

Severe pain in the lower legs

- Not the traditional "burn" you feel when you exert yourself, but squeezing or cramping that is worsening on exertion
- Feeling faint, confused, or dizzy
 - More than just feeling fatigued from exertion
- Injury or pain





What is your current movement prescription?

What movement are you currently implementing into your day?

This can be:

- Doing laundry
- Walking your dog
- Cleaning the house
- Dancing
- Taking the stairs
- Standing at work
- Walking to work or school (if possible)

.....And so much more!

Remember, movement and exercise are not the same!

That's why it is important to **include movement in addition to exercise** daily!





How do you measure your movement?

Using a **smart watch, app on your phone, pedometer, or even a piece of paper** to record what type of movement you are doing throughout the day is crucial!

You can also use these to measure your exercise!

Not only will this help you **progress through plateaus**, but it will help you **progress through your exercise plan**!

Try out the **"Fitness App"** or **"Steps App"**, for FREE on iPhone and Android!

Many phones also have a built-in component to help track your steps or calories!





What method are you, or do you want to try to use?

Weekly Movement Log

Use this to **track your movement for 1 week**. You can **choose how you track your movement**, **and what you choose to track**! The goal is to not only track the movement you are doing outside of planned exercise, but to compare your movements on different days of the week!

You can use paper, a smart watch, an app on your phone, or a pedometer!

You can choose to track your *daily step count, calories burned, minutes moving, etc.* It must be quantifiable, a number you can compare!



What will you be logging?

How will you be tracking it? _____

發	<u>جې</u>						
B	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
**							
Are	-	here you noti	r movement? ce that you get	more movem	ient?	۲ <u>۸</u> ,۲	

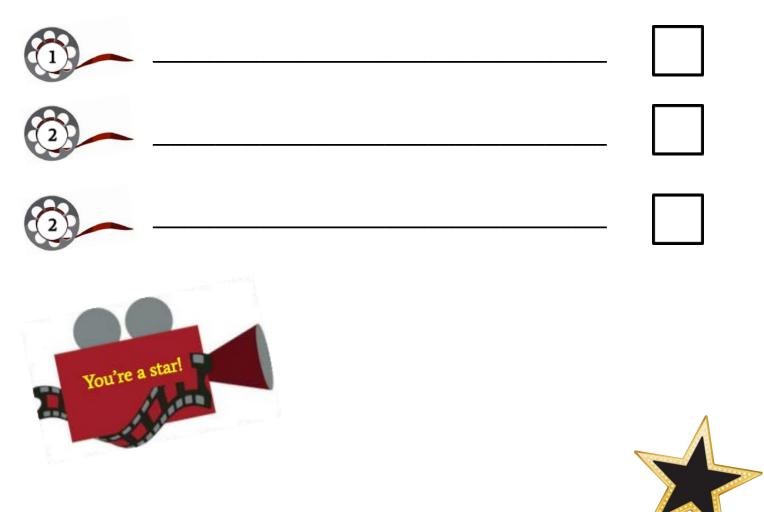


How are you going to add movement into your daily routine this week?

Choose 3 ways, and use this to track your progress!

This week I am going to:

Complete?



Part 4: Considerations Before Exercise

Before you begin exercising, it is important to evaluate your current activity levels and overall health to ensure that exercise can be safe for you! Please fill out this short questionnaire, and one of our staff members will review it with you!

Step 1: Signs and Symptoms

Do you currently experience:

- Chest discomfort with exertion
- Unreasonable breathlessness
- Dizziness, fainting, blackouts
- Ankle swelling
- Unpleasant awareness of a forceful, rapid, or irregular heart rate
- Burning or cramping on your lower legs when walking
- Known heart murmur

If you marked yes to any of these, please reach out to your HPL staff before continuing to exercise.

Step 2: Current Activity

Do you currently participate in structured, planned, exercise for at least 30 minutes per day at moderate intensity at least 3 days a week, for the past 3 or more months?

- Yes
- No

Continue to step 3.

Step 3: Medical Conditions

Do you currently have or have had:

- A heart attack
- Heart surgery, heart catheterization, or angioplasty
- Pacemaker or implantable cardiac defibrillator
- Heart valve disease
- Heart failure
- Heart transplant
- Congenital heart disease
- Diabetes
- Renal disease?

Reviewed by: _____

Exercise is individualized, and your plan is unique for you!

For the safest, and most effective exercise plan it is important to look at your health history!

Do you have any health concerns that may affect your exercise plan? Note them if present, and provide detail as to when it occurred and if you are medicated for it.

	High Blood Pressure?
	Heart Disease/Surgery?
	Diabetes?
	Orthopedic injuries or concerns?
	Kidney disease?
	Lung Disease?
\square	History of Stroke?
\square	Other health concerns not mentioned?

Current Medications and Supplements

Medications can change how you respond and/or prepare for exercise!

To be safe, list your medications, dose (if known) and when you take it so one of our staff members can review them with you in case they will affect your exercise routine!



Common Medications that May Affect Exercise

MWM Medications

- Injectables:
 - Ozempic/Wegovy (semaglutide), Saxenda, Mounjaro 0
 - Possibility for nausea, vomiting, or the low chance of low blood sugar during exercise. Make sure you eat and plan accordingly!
 - Signs to watch for low blood sugar: dizziness, clammy hands, shaky, increased HR 0
- Adipex (Phentermine)
 - Can increase your HR, possibility for dizziness 0
 - 0 Palpitations
- Topamax
 - Tingling in fingers or toes 0
 - Brain fog Ο
- Contrave (Naltrexone/bupropion)
 - Nausea, vomiting, possible dizziness 0
- Metformin
 - Very small chance for low blood sugar 0

Other Medications:

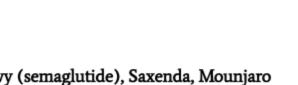
- Blood Pressure Medications:
 - May decrease your blood pressure response to exercise 0
 - Beta Blockers (Metoprolol, Atenolol, Carvedilol, etc) 0
 - HR increase to exercise is blunted, cannot use HR to measure exercise intensity!

Diabetes Medications:

- Insulin, Sulfonylureas, and others may increase your risk for 0 low blood sugar during exercise
- Nitroglycerine
 - If used, could lower blood pressure during exercise 0

If your medications are not listed here, our staff will review them with you!

Reviewed by:







The last thing to do before writing your exercise plan is to review where you will be exercising!

There is no wrong answer, this is so we can individualize your program specifically to you!

Check where you will be exercising, you can select more than one!



Independent Gym (Planet Fitness, Anytime Fitness, etc) <u>Proceed to pg 45</u>



At-home

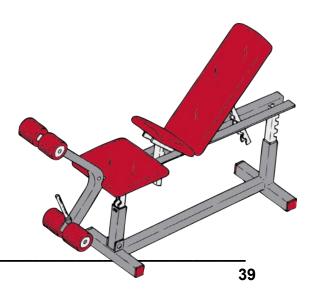
Please list your materials you have or plan to get: _____

Proceed to pg 46



Human Performance Lab

Proceed to pg 40



Reviewed by: _____



Joining the Human Performance Lab (HPL)

Enrollment Checklist:

 \Box HPL PAGES

\Box Health History and ECG	
Fitness Assessment	
□ GXT	
□ Grip Strength	
□ Other:	
\Box Connect with Staff member: _	
Exercise Plan	Staff member print name



Testing Offered Here

BOD POD Body Composition Analysis:

- Computerized, egg-shaped device that measures your body weight and volume displacement in order to
 calculate your amount of fat and lean body mass.
- Test time: 5-10 min
- What you need:
 - Fasting and no exercise 2-4 hours prior to test
 - No stimulants, including nicotine and caffeine
 - Tight fitting clothing (bathing suit, sports bra/compression shorts, undergarments)

Why is this useful?

- Lean Body Mass:
 - it is important to conserve and even increase the amount of lean body mass you have.
 - The more lean body mass you have, the more calories you burn !
- Resting metabolic rate:
 - The BOD POD can *estimate* your caloric expenditure at rest, based on your body composition.

Resting Metabolic Rate Analysis (RMR):

- A computer measures how much oxygen you consume as you breathe through a face mask. This
 allows for a more accurate estimation of how many calories you expend at rest.
- Test time: 30-45 min

What you need:

- 8-10 hour fast with no exercise prior to testing, overnight preferred
- No stimulants, including nicotine and caffeine

Why is this useful?

 This analysis provides a more accurate measure of how many calories your body needs to survive. Your providers at MWM can use it for your nutrition counseling!

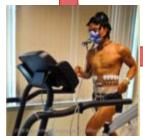
Reviewed by: _



Testing Offered Here

Graded Exercise Text (GXT)

- A treadmill or bike test that estimates your cardiorespiratory fitness levels, and gives
 insight to your overall exercise capacity.
- Test time: 30 40 minutes, including set up and explanation
- What you need:
 - Show up fueled and hydrated, in exercise attire
- Why is this useful?
 - Not only will we use this information to assess your cardiac fitness, but we can
 determine how safe it is for you to exercise! The same mask from the RMR test is
 used to measure gas values, and an ECG is monitored to identify if there are any
 cardiac issues present while you exercise!



* you do not have to be shirtless.

Pricing

When joining the HPL, a BODPOD is included as a part of our routine Fitness Assessment. If you are not joining, or are interested in any of the other assessments, they are offered to you at a discounted rate, simply by being a part of the MWM family!

HPL Service	Regular Price	MWM Price
BOD POD	\$25	\$10
(body composition analysis)		
RMR Test	\$50	\$25
(resting metabolic rate)		
Bod Pod & RMR Package	\$60	\$30
Fitness Membership	\$50 enrollment fee	Enrollment fee waived
(includes personalized	\$10/month	First month free
workout plan)		\$10/month



Our Fitness Assessment

What we assess:

Resting Blood Pressure and Heart Rate:

 Resting blood pressure readings provide an indication of your heart health and risk for events including stroke.

Body composition (BODPOD):

• This will be utilized to assess your lean body mass and estimate your resting metabolic rate, read more about this on page 41.

Waist to Hip Ratio:

• Determines distribution of your fat. Abdominal fat can be more dangerous for your health compared to fat in your extremities.

VO₂ max:

A test to measure your cardiac fitness. Read more about this on page 42

Muscular Strength and Endurance (individualized):

- Grip strength
 - Good indicator of overall strength
- 1-RM or 10-RM
 - The most weight you can lift in 1 or 10 repetitions
- Push-ups and/or curl-ups
 - Measures muscular endurance and strength





Work with a staff member in the HPL to complete and review your fitness assessment.

Once you have completed it, make a plan for how you want to proceed. You can use SMART goals, the Tracking sheets, etc., to help you determine your next steps to improve your physical fitness!

Fitness Assessment Results:

BODPOD:	Total body weight (lbs):			
	% lean:			
	Lean body mass (lbs): _			
	Estimated RMR (cal): _			
Muscular Strength:	Method:			
U	Results: _			
Resting Vitals:	Heart Rate (HR): _			
	Blood Pressure: _			

GXT:

VO2 max: _____

Great! Now that you have had your fitness assessment, your next steps include **meeting with a staff member to review your results and make a plan to improve** whatever aspect of physical fitness that your would like!

Continue to page 51 to learn about writing your exercise prescription!

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Exercising at an Independent Gym

You do not have to join the Human Performance Lab to be successful in your fitness journey, *we are still here to help you*! We understand location, time constraints, and personal preference that you may have when making your fitness facility choice!

Here are a few things that will help you succeed when joining the gym!

What you will need:

Goals!

Check out the SMART Goals activity and goal tracking log in chapter 1 to keep you on track with your goals!

Schedule

Write it down! Making a plan that you can see daily is key for success!

Exercise Plan (start at page 51 for this!)

You can create your on with the resources in this booklet, or reach out to the staff at the Human Performance Lab for a personalized plan to meet your needs!

8

Resources

Anything in this booklet is fair game! Ue this to your advantage! You can even reach out to the staff in the Human Performance Lab for assistance and accountability! We are here for you!



Confidence!

You got this! Joining a gym and beginning exercise can be intimidating, but everyone in the fitness facility has the same goal - health!



Exercising at Home

The good think about exercise is that it can be done anywhere, including home!

You can exercise at home, regardless of if you already exercise at a fitness facility. This can also be a great tool for exercising on vacation, or during a time in which you cannot make it out to your facility!

At Home Modifications:

- Resistance bands are a cheap, easy way to exercise at home! You can modify almost any exercise into a resistance band exercise!
- Cans, water jugs, milk jugs, bags of flour or sugar can all act as an at-home dumbbell!
- You can use your own body weight! Squats, wall push ups, and sit to stands, are all great resistance exercises that do not require equipment!
- Walking/jogging outdoors, briskly walking laps on your stairs, or using a
 public trail/track will allow you to perform aerobic exercise without the need
 for a treadmill!
- A yoga mat or blanket can be used to perform core exercises at home!



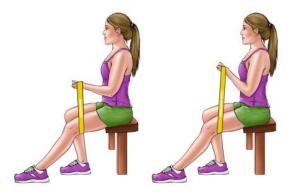


Resistance Band Exercises

If you have lighter bands, you can do 3-4 sets of 10-15 repetitions. For heavier bands, lower the repetition to 8-10. Reach out to the staff at the Human Performance Lab if you have any questions!

An easy way to divide this up, is to do an upper body focused day, and a lower body focused day!

Upper Body

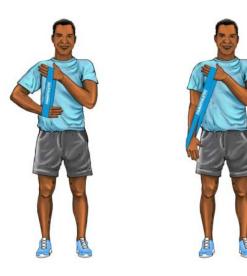


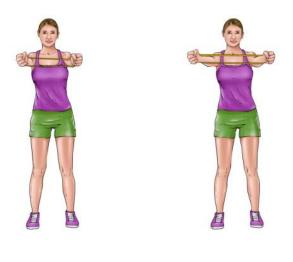
Bicep Curl

- Place the band just above the knee on your left leg and slightly extend it out. You can also place it under your feet to perform sitting or standing!
- Take the band in your left arm and curl it upward until your hand is close to your chin.
- Move the arm back toward the knee until there is only slight tension left. Repeat on the other side.

Tricep Press

- Place the band around your left hand and place this hand across the right side of your chest. Place your right hand on the other end of the band.
- Stretch your right arm down until it is about at the level of your hip. Slowly return to the starting position until there is only slight tension in the band. Repeat on the other side.

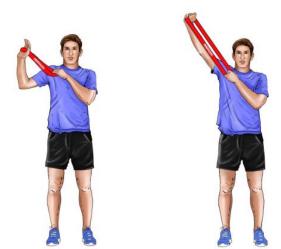




Horizontal Abduction

- Place the band around your wrists holding both arms straight out in front of you at shoulder height.
- Slowly spread your arms until the band reaches almost double its length. Move arms back to the starting position.

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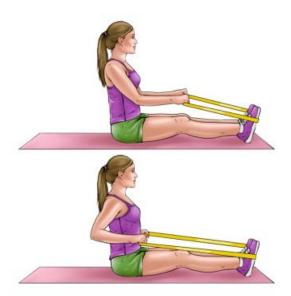


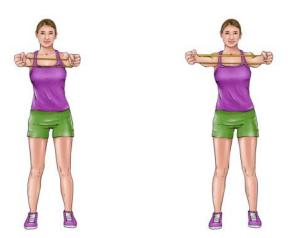
Overhead Press

- Hold the band in your left hand and place it by your right shoulder. Grab the other end of the band with your right hand.
- Slowly raise your right hand straight above your head. Return to the starting position. Alternate arms.

Seated Row

- Sit on the ground with your legs stretched out in front of you. Place the band around both feet while holding the other end with both hands shoulder width apart. Arms should be slightly bent to start.
- Pull the band toward you, bending your elbows alongside your body. Pinch your shoulder blades in as you pull backwards. Slowly return to the starting position and repeat.

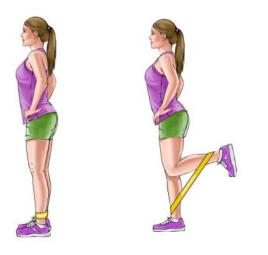




Chest Fly

- In the same position as your horizontal abduction, wrap the resistance band around your shoulder blades
- Begin with your arms straight out to the side, in a "T" position. Slowly pull your straightened arms together into the center of your chest until the band reaches almost double its length. Move arms back to the starting position.

Lower Body

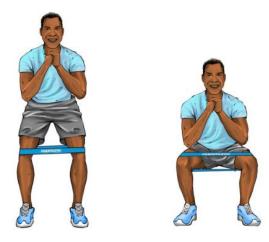


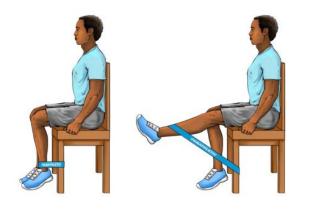
Leg Curl

- 1. Place the band around your ankles while in the standing position.
- Curl your leg backwards and upward making sure the thigh of the exercising leg remains parallel to the leg on which you stand.
- Slowly lower your legs back down, just touching the ground, and repeat.

Squat

- Place the band around your thighs just above the knees. Position your feet so that they are about shoulder width apart and there is tension in the band.
- Slowly squat down until your thighs are parallel with the ground. Make sure your knees do not extend past your toes.



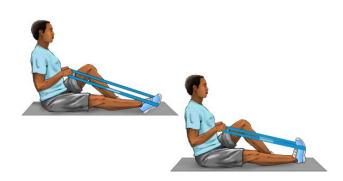


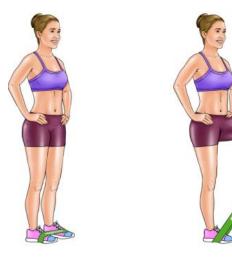
Knee Extensions

- Place the band around your ankle and secure the end of the band on the leg of the chair.
- Slowly extend the leg out in front of you. Be sure not to lock the knee out at the end of full range of motion.
- 3. Slowly return to the starting position

Plantar Flexion

- Sit on the ground with one leg bent with your foot flat on the floor and the other stretched out straight.
- Place the band under your toes while holding the other end of the band close to your stomach.
- Slowly point the toes away from your body and return to the starting position.





High Knees

- Position your feet hip-width apart with the band around the arch of each foot.
- Bend your knee up toward your chest. Your thigh should come up high enough so that it is parallel to the ground.
- Be sure to maintain a straight back throughout the exercise. Slowly lower the leg and repeat sides.

Writing an Exercise Plan

This is a quick guide on how to compose an exercise plan for when you are at home, a fitness facility, or for your enjoyment! Remember, you can always set up a meeting with someone in the HPL for help making your individualized plan, or for them to provide one to you!

Aerobic Exercise

Selecting aerobic activity is one of the easiest parts of writing an exercise plan. Revisit the "Measuring Intensity" education at the beginning of this workbook for a refresher if needed!

The goal is to reach 30 minutes of moderate intensity aerobic exercise 3-5 days per week, for additional weight loss, this can increase up to 60 minutes each day. It is important to start in 10 minute bouts to work your way up to this time frame!

Types of aerobic exercise:

- Walking, jogging, running
 - This is a good option because it can be done at home, on vacation, or in a fitness facility!
- Water aerobics
 - Great for decreasing bode loading in those with joint pain or arthritis!
- Cycling
 - Stationary bicycle, recumbent bicycle, or traditional bicycle! Great for decreasing pressure on knees while getting a good aerobic workout in!

• Elliptical machine, stair climber, rowing machine

- Also great, non-weight bearing, options!
- H.I.I.T- high intensity interval training
 - Great way to get small bursts of high intensity exercise in. Further explanation later in the work book!



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Writing an Exercise Plan

This is a quick guide on how to compose an exercise plan for when you are at home, a fitness facility, or for your enjoyment! Remember, you can always set up a meeting with someone in the HPL for help making your individualized plan, or for them to provide one to you!

Resistance Training

Resistance Training is a key component of exercise, especially for building lean body mass to aid in weight loss.

Setting up a resistance training plan can be intimidating because there are so many components, but this just means that there are a lot of options to make it fun!

Planning Resistance Training,

It's easy as PIE !

P: *P*ick your muscle group, *p*oint out your areas of emphasis, and *p*rioritize your areas of injury

I: Select your Intensity

E: Choose your Exercises





Writing an Exercise Plan Easy as PIE!

P: *Pick* your muscle group, *point out your areas of emphasis, and prioritize your areas of injury*

Picking your muscle group:

You can choose to split your workout into either:

- Upper body day, lower body day
- Back and Biceps, Chest and Triceps, and Shoulders and Legs days with core at the end of each workout

Prioritize your areas of injury:

Do you have any joints, areas or movements that bother you?

- It is important to avoid aggravating injured joints or muscles.
- For example, if your knees hurt when you squat down, you still exercise your lower legs and knees, but it may be beneficial to decrease the loading of this joint with heavy weights, and should opt for a lighter option!

Pointing your your areas of emphasis:

In which areas of your body do you you want to increase strength? It is okay to say all of them! There is no wrong answer!



Writing an Exercise Plan Easy as PIE!

I: Selecting your Intensity



Intensity when you are resistance training is a little different than the RPE used during aerobic exercise!

Intensity is the amount of weight that you lift!

You want the weight you are lifting to be challenging, yet but not impossible!

Before you start, here are some resistance training basics to know!

- "Reps" or repetitions
 - The number of times you perform a movement before taking a break
- Sets
 - Groups of repetitions

So in your plan, if you see 3 sets x 8 reps, you are doing an exercise for 8 repetitions, 3 times, with small breaks in between!



- Volume
 - Total exercise performed, can be calculated per session, day, week, month, etc!
 - A great way to track your resistance training!

Volume = sets x reps x weight lifted

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Writing an Exercise Plan

To begin,

- 1. Choose your muscle group
- 2. Choose **8-10 exercises**
- Choose a weight that is comfortable, equating it to an *RPE of* 6-7
- 4. Complete *2-4 sets of 8-12 repetitions* of this exercise!
 - a. General rule of thumb! If you can comfortably complete 12 repetitions of an exercise, increase the weight!
- In 2-3 weeks, begin increasing your volume, because you are getting stronger!
 - a. Visit page 64 to learn more about progressing your workout by volume!

Example: Biceps and Back

Exercise	Weight	Sets	Reps
Bicep Curl	8 lb	3	8
Hammer Curl	8 lb	3	8
Reverse Curl	5 lb	3	8
Lat Pulldown	25 lb	3	8
Single Arm Row	8 lb	3	8
Seated Row	20 lb	3	8
Band Pull Apart	10 lb band	3	8
Side Bend	8 lb	3	8

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Picking your Exercises: Examples!

Muscle Group	Exercise Name	Description		
Biceps	Bicep Curl -Dumbbell (DB) or resistance band	 Stand up straight with dumbbells in each hand at arm's length. Raise the dumbbells until the weight and your palm faces your shoulder. You should be bending at the elbow. Lower to original position and repeat with opposite arm. 		
	DB Hammer Curl	 Hold the dumbbells with a neutral grip (thumbs facing the ceiling; the weight should be vertical). Move the elbow joint as if you were performing a bicep curl in this position 		
	DB Reverse Curl	 Grab the dumbbells with overhand grip (you should be able to see the backs of your hands). Flex at the elbows until your biceps touch your forearms, also similar movement to the bicep curl 		
	Kneeling Single Arm Row	 Place one hand and one knee on a bench, and straighten your back. Pull the dumbbell, drive your elbow toward the ceiling. Make sure to avoid any jerking or rotating. Slowly and controlled, lower the weight to the starting position, and repeat the movement. 		
Back	Band Row	 Stand on your band with both feet. Hinge forward at the hips while keeping a flat back. Let your arms hang freely, then pull your elbows straight back towards the ceiling. 		
	Lat Pulldown	 Grasp the bar with a wide grip with an overhand, knuckles-up grip. 		
Review		<u>5</u> 6		

	(machine)	 Pull the bar down until it's approximately level with the chin. Squeeze the shoulder blades together while maintaining square shoulders.
	Bent Over Row -DB or band	 Grab a set of dumbbells, bend your torso forward and keep your knees slightly bent. Pull the dumbbells toward your waistline, while squeezing your shoulder blades.
	Band Pull Apart	 Place the band around your wrists holding both arms straight out in front of you at shoulder height. Slowly spread your arms until the band reaches almost double its length. Move arms back to the starting position.
	Single Arm DB Row	 Brace one band without a weight onto something stable such as a bench. Stagger your stance so your leg on the side of the working arm is back. Try to get your torso to parallel with the ground, keeping back straight. Let your arm hang freely with the DB and then pull your elbow back.
Chest	Closed grip Chest Press	 Start by lying flat on a bench with a dumbbell in each hand. Hold the dumbbells at chest level with your palms facing each other, much like a Hammer Curl. Engage your core and press the dumbbells upward until your arms are fully extended.
	Chest Fly	 Lie down on the mat with a dumbbell in each hand, your arms up, and the palms of your hands facing each other. With your elbows slightly bent, lower your arms out to sides until you feel a stretch in your chest muscles. Return to the starting position and repeat the movement.

	DB Chest/Bench Press	 Start by lying flat on a bench with a dumbbell in each hand. Hold the dumbbells at chest level with your palms facing forward. Engage your core and press the dumbbells upward until your arms are fully extended.
	Wall/knee/or traditional Push -up	 Place your hands slightly wider than your shoulders on the wall (or ground) Lower your body until your face nearly touches the wall (or floor) Pause, then push yourself back up
Tricep	Tricep kick-back	 Grab a set of dumbbells, bring your torso forward and bend your knees slightly. Bring your elbows up, so that your upper arms are parallel to the floor, and kick back until your arms are fully extended. Slowly lower the weights to the starting position.
	Tricep Push-down -Band or machine	 Tuck your elbows in at your sides and position your feet slightly apart. Push down until your elbows are fully extended but not yet in the straight, locked position Return to the starting point using a controlled movement.
*	Overhead DB Extension	 Hold a pair of DB and stand with your feet shoulder-width apart. Raise the DB over your head. Keep your upper arms in place and bend at your elbows, lifting the dumbbell overhead through a full range of motion.

Picking your Exercises: Examples!

Muscle Group	Exercise Name	Description
Shoulders	Overhead Shoulder press -DB or band	 Stand with your feet shoulder-width apart and hold a dumbbell in each hand. With your palms facing forward and your elbows under your wrists, position the dumbbells at your shoulders. Push the dumbbells up and fully extend your arms.
	Front Raise	 Grab a set of dumbbells and stand straight. With your palms facing down, lift one dumbbell until your arm is slightly above parallel to the floor. Pause and then slowly lower the arm back to the starting position.
	Lateral Raise	 Grab a set of dumbbells and stand straight. With your palms facing down, lift the dumbbells and raise your arms out to the sides. Once your elbows are at shoulder height, pause, and then slowly lower the arms back to the initial position.
	Upright Row	 Stand upright with your feet shoulder width apart Grasp dumbbells, a barbell or resistance band with your palms facing downward and your hands closer than shoulder width apart, let your arms hang straight against your body Raise the weight upward, keeping it close to your body. Pull toward your chin

	Shrugs -DB, band, barbell	 Hold the DB to your side with one in each hand Shrug your shoulders upward, keeping your elbows straight, repeat
	Reverse Fly	 Grab a DB in each hand and bend over at the waist, letting your arms hang and the DB touching in the middle Keeping your arms straight, lift the DB out to the side of your body, pinching your shoulder blades together
Lower Body	Front Lunges	 Stand with your feet shoulder width apart Take a big step forward, shifting your weight forward so the heel hits the floor first Lower your body until your thigh is parallel with the floor and your shin is vertical
	Squat/Sit-to-stand	 Standing shoulder width apart, you can place your hands on the back of your head or crossed on your chest Lower your body until your thighs are parallel or you reach the chair (sit to stand)- put your weight on your heels! Push your weight upward into the standing position
	Side Lunges	 Take a wide step to the left or right. Bend your knees as you tep outward, with your back straight You can add a dumbbell or do this without
He Her	Leg Extensions -weight machine -ankle weights -resistance band	 In a seated position, extend your leg so that your knee is straightened You can add ankle weights!
	Leg Curl	 Standing with ankle weight or band, lift your foot toward your butt You can also do this laying on your stomach

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	Calf Raise Glute Bridge	 Standing, shift your weight onto your tip toes You can do this on a step or ledge, lifting your weight into your toes You can add DB or band to add resistance! Lie on your back, knees bent, and hands by your side Lift your hips off the mat while keeping your back straight, hold for 1 second, repeat
	Clam Shells -can add a band around your thighs to increase resistance!	 Lie on your side with your knees slightly bent and with one leg on top of the other. Keep your feet together and lift your top knee until it's parallel with your hip. Lower your knee back to the initial position, repeat, and then switch sides.
	Banded Lateral Step -can remove or add a band!	 In a squat position, take step sideways, remaining in this squat-like position. Step to put your legs together, and repeat
	Straight Leg Raise	 Sitting in a chair, raise your leg keeping your knee straight, Raise your leg until it it parallel with the ground
Core	Farmer's Carry	 With heavier than usual DB, keep your arms to the side and walk Pick a lap or a distance, make sure to engage your core and keep your back straight
	Planks	 Start in a position on your hands and knee, lower your body onto your forearms beneath your shoulder Place your feet so that your body make a straight line Engage your core so that your back is straight, hold for as long as you can

	Overhead March	 Standing straight, hold a DB or kettle bell in one arm above your head. Engage your core and march in place, lifting your knees as high as possible.
	Flutter Kicks	 Laying flat on the ground, raise your legs 4-5 inches off the ground "Flutter" kick your legs with your knees straight for as long as you can or for a time of your choice.
	Dead Bug	 Laying flat, lift your R arm and L leg, raise them to meet in the middle, repeat and switch to opposite sides!
	Bird Dog	 On all fours, raise your R arm and L leg, hold and engage the core Repeat and switch limbs
	Side Bends	 Standing straight, with a DB or kettlebell in one arm, bend to the side with the weight, keeping the back straight Raise, repeat
	Around the World	 Standing straight, use a kettlebell or DB and exchange the weight from R hand to L and in a clock wise position around your torso
An	Ankle Taps	 Laying flat, with your knees bent upward, sweep your R arm to tap your R ankle, and then L arm to L ankle.

Try it out! Write your own Resistance Training plan!

You can use the examples above, the internet, or our staff at the HPL! We will review this plan with you as well to ensure you are choosing appropriate equipment, weight, and show you proper form!

Muscle Group:



Exercise	Weight	Set	Reps

Progressing Your Resistance Training Volume

Remember:

Volume = sets x reps x weight lifted

Exercise	Weight		Sets		Reps		
Bicep Curl	8 lb	x	3	x	8	=	192
Hammer Curl	8 lb	x	3	x	8	=	192
Reverse Curl	5 lb	x	3	x	8	=	120
Lat Pulldown	25 lb	x	3	x	8	=	600
Single Arm Row	8 lb	x	3	x	8	=	192
Seated Row	20 lb	x	3	x	8	=	480
Band Pull Apart	10 lb band	x	3	x	8	=	240
Side Bend	8 lb	x	3	x	8	=	+ 192

Session Volume = 2, 208

Ways to increase your volume:

- Frequency
 - Exercising an extra day each week is the best way to increase your volume
- Sets and Reps
 - Adding an additional set or reps of each exercise
- Weight
 - Increasing weight can increase your volume, just not as much as frequency or sets

Calculate the Volume of your Resistance Training Plan! Choose any of your RT and practice calculating your volume!

Exercise	Weight	Set	Reps

Volume = _____



Activity: Volume Changes

How would your activity volume change if:

Current volume:

You added 1 extra day per week of your plan?

You added an additional set of each exercise ?

You added 2 repetitions of each exercise to your plan?

You increased your intensity by 2 pounds on each of your exercises?

Progressing over Plateaus

Plateaus are a part of life! This is completely normal!

Whether you are plateauing because you are bored with your routine, or feel like you are doing everything you can but are not seeing results, it is okay!

Things to try:

- Add a new healthy habit
 - Increase your daily steps, drink more water, work with your provider to adjust your nutrition or medication

• Increase your exercise volume!

 Adding additional days or increasing exercise intensity may be what you need!

• Shake things up with your routine!

 Add new exercises in, try something new like yoga, cycling, zumba, or more! There are tons of resources online!

• Log your nutrition and activity!

You may find areas where you can adjust for more success!

• Resistance training!

 Remember the more lean mass, the more calories you burn at rest. Add this into your routine if you are not already, or modify your current plan!

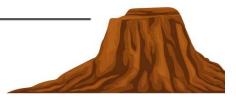
Activity: Progressing over Plateaus



Remember, plateaus are completely normal! Try small changes, one or two at a time, to overcome your plateau and come closer to meeting your goals!

It may not happen overnight, but with dedication and persistence, you will **progress over** your plateau!

What are you planning to do to overcome your plateau?



Complete in 2-3 weeks.

Did this work? Why or why not?

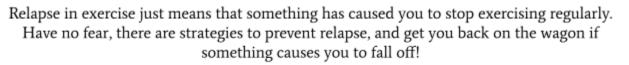
What else can you try?

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Rebounding from Relapse

Strategies for preventing relapse, and what to do if you experience it!

"Relapse" sounds like a scary word, but reassured it is not and everyone will experience it at one point or another during their journey.



Defense from Exercise Relapse:

- Identify "high risk" situations
 - Vacations, holidays, commitments, appointments, schedule conflicts, negative emotional situations, etc
- Know your "triggers" for relapse

 Bad weather, busy schedule, social pressures, etc.
- Establish "protection" from these situations



Solutions for Situations That May Cause Relapse

- Pack exercise clothes and/or equipment (e.g. resistance bands) when going on vacation
- Identify time slots in a busy schedule where you can fit in exercise
 - remember, 10 minute bouts or a walk at lunch is better than nothing!
- Plan, plan, plan!
 - If you know you have a situation on the horizon that you know will decrease your interest in exercising, plan ahead and around this situation!
- Incorporate variety to avoid boredom
 - Join a class, implement new exercises into your routine, or try something new like swimming, zumba, etc!
- **Invite a friend** to keep you on track during a difficult time, increase motivation, or to just hold you accountable when you don't feel like exercising!