

How to safely increase physical activity levels



Today's Agenda

Canadian Physics

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Introductions

A bit about us:)

Canadian Physical Guidelines

What do the experts recommend?

How to safely meet the recommended guidelines

What is right for ME?

Questions

What else do you want to know?



Who are we?



Jess Manuel MSc.PT, PT Resident

Born and raised in Guelph!

BSc.Kin and MSc.PT from McMaster University

Sport Physiotherapy Fellow → Lead therapist Gryphon WSOC, WREST, MVB, WVB

Running, hot yoga, HIIT, hiking



Who are we?



Josh Grawbarger MSc.PT, PT Resident Originally from Sault Ste. Marie

B.Sc. Kin from the University of Waterloo

M.Sc. Physiotherapy from McMaster University

Sport Physiotherapy Fellow → Lead therapist Gryphon MSOC, WHock Also work with T&F and MHock

Running, Cycling, Multi-sport,



Game time!



You have to go to the gym to be physically active



You have to go to the gym to be physically active

Myth!



25% of adults achieve the recommended daily amount of physical activity.



25% of adults achieve the recommended daily amount of physical activity.

Fact



Exercise or physical activity will take up a lot of my time



Exercise or physical activity will take up a lot of my time

Myth!







Benefits of an Active Lifestyle



Maintain a healthy





Lower risk of heart disease



Improved quality of life



Improved brain health



Improved bone health



Improved Sleep



Improved physical function



Improved Energy



Ok I'm in! What do I need to do?





How much exercise do I need?

A healthy 24 hours includes:

Physical Activity:

150 minutes/week of moderate to vigorous aerobic activities

Muscle strengthening activities at least twice a week

Physical activities that challenge balance

Sleep:

7 to 8 hours of good-quality sleep

Consistent sleep and wake times

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Reduced sedentary time:

Limit sedentary time to 8 hours or less

Less than 3 hours of recreational screen time

Taking movement breaks during long periods of sitting



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How do I get started?





SMART Goals

S

Pick something specific and meaningful to you!



How will you know you are making progress?



Where will you start and how will you progress?



Is this realistic for me and my schedule?



When will I be able to reach my goal?



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Aerobic Exercise





Aerobic Exercise

How much?

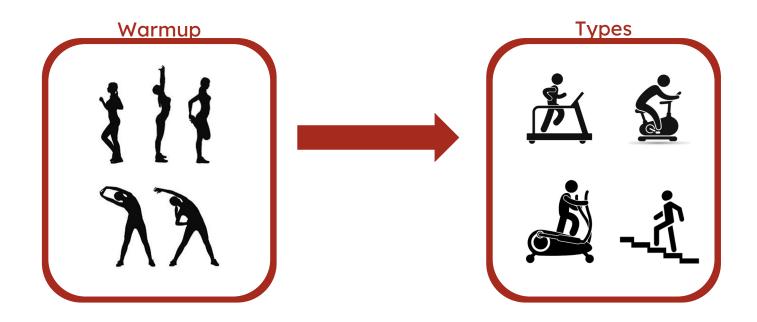
- 150 minutes/week
 - Approximately 30 minutes per day

How intense?

- Moderate: brisk walk, cycling
- Vigorous: jogging, cross country skiing



Aerobic Exercise





Elliptical Training



- 1. Warm up: 5 minutes. Resistance that is easy to push.
- 2. Working load: Increase the resistance to the point where holding a conversation is challenging. Push with your arms and your legs.
- 3. Cool down: 5 minutes comfortable resistance.

Considerations:

Use both arms and legs
Low impact option
Improved coordination
Activates quadriceps, hamstrings,
hip flexors, glutes, and calves.
Access to equipment



Treadmill Training



- 1. Warm up: 5 minutes comfortable walking pace, no incline
- 2. Working load: Increase the speed of the treadmill to a brisk walk, jog or run. Optional: increase the incline!
- 3. Cool down: 5 minutes comfortable walking pace, no incline

Considerations:

Safe environment
Control over speed and incline
The belt assists movement
Access to equipment



Stationary Biking



- 1. Set up: Seat height around hip level. At the bottom of the pedal stroke knee should have a slight bend.
- 2. Warm up: 5 minutes. Light or no resistance.
- Working load: Increase the resistance to the point where holding a conversation is challenging.
- 4. Cool down: 5 minutes comfortable resistance.

Considerations:

Low impact option
Activates quadriceps, hamstrings,
glutes calves
Access to equipment



Progressing Aerobic Exercise

- 10% Rule
 - Progress by a maximum of 10% each week for the following:
 - Intensity → Scale of 1-10, speed, etc.
 - Volume → Time or distance
 - Frequency → Number of times per week



Example!



You're currently going on moderate intensity walks down the Speed River, 2 times/week. Each time you go for a walk, you're out for 30 mins of moderate intensity physical activity. You'd like to increase your physical activity to meet the guidelines of 150 mins/week by the summer months to spend more time with your family being active outside.



Example!



To Progress: Use the 10% rule!

Next week: Increase volume with same number of days OR add one more day of walking and decrease the duration of the walks across the three days.

Example:

2 days of 30-33 mins of moderate intensity walking \rightarrow 60-66 mins/wk

3 days of 20-22 mins of moderate intensity walking \rightarrow 60-66 mins/wk



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Resistance Exercise





Resistance Exercise

Principles:

Increases muscular strength and endurance

2x/week

Target all major muscle groups



Equipment



Dumbbells
Allows for unilateral loading



Body weight

Best starting point!

Functional movements



Machines
Easy set up
Instructions provided



Barbell
Bilateral movements



Major Muscle Groups



Core

Improves balance and stability Ex: deadbugs, planks



Arms

Biceps, triceps, shoulders Ex: bicep curl, tricep kick back, shoulder press



Legs

Quads, hamstrings, glutes Ex: squats, glute bridges



Back

Enhances posture Ex: rows



Pec muscles Ex: bench press



General Guidelines:

- 1. Begin with **10-minute warmup** (jogging, skipping, jump rope, cycling, etc.)
- 2. Volume: Complete **5-12 repetitions.** Rest for 1 minute. Repeat this exercise **2-3 times**. If you are easily able to perform more than 12+ repetitions, you need more weight!
- 3. Control the movement. Select a weight that you can **lift and lower with control**.
- 4. Maintain proper form. Avoid swinging and using momentum. **Do not sacrifice form** for more reps or heavier weight!
- 5. Use your breath. Exhale as you lift the weight, inhale as you return the weight to the start position. **DO NOT hold your breath**.
- 6. Perform **compound exercises first, and isolation exercises last.** Compound exercises have multiple joints moving at once (squat). An isolation exercises only requires one joint to move (bicep curl).



Progressing Resistance Exercises

When to Progress

- 2x2 rule: Being able to perform 2 extra reps on the last set of an exercise of 2 workouts in a row.

How much to progress

- It depends!
- Maximum: 10% rule





Example!

You've recently started doing resistance exercises twice a week and have began noticing that the weights you have used for your squat have been challenging for the last couple of sessions, but you are able to complete three sets of ten reps. You're looking to know how to progress your weights, and how much of an increase is safe.



Example!

To Progress: Use the 2x2 and 10% rule!

Next week: If you have achieved 2 extra reps on your target rep range, for your past two workouts with an exercise with the same weight, you can progress the weight by up to 10%

Example:

- Back squat is 50lbs
- You typically do all of your workouts with 3 sets of 10 repetitions. You've been able to do 12 reps on the last set requiring 10 reps for your last 2 sessions at the gym
- 2x2 rule is satisfied 12 reps on the last, set for the last 2 sessions
- An increase up to 10% can happen (55lbs)



Flexibility





Yoga

Many benefits!

- Improved flexibility
- Increases strength
- Stress management
- Improved balance









Am I doing too much?





What to Expect:

Muscle soreness

- often occurs during exercise when muscles become fatigued
- Ex. doing calf raises and calves get sore on the 11th rep

Delayed onset muscle soreness (DOMS)

- Begins 12-24 hours after exercise, pain can last 24-72 hours
- A side effect of the repair process that develops in response to microscopic muscle damage
- May result in: swelling of the affected limbs; stiffness of the joint; Tenderness; Temporary reduction in strength of the affected muscles



When to see a health care provider

- Severe pain
- Pain is worsening or not going away
- If limbs experience heavy swelling
- Urine becomes dark in colour





Is it safe to start?

2020 PAR-Q+

The Physical Activity Readiness Questionnaire for Everyone

The health benefits of regular physical activity are clear; more people should engage in physical activity every day of the week. Participating in physical activity is very safe for MOST people. This questionnaire will tell you whether it is necessary for you to seek further advice from your doctor OR a qualified exercise professional before becoming more physically active.

GENERAL HEALTH QUESTIONS

Please read the 7 questions below carefully and answer each one honestly: check YES or NO.	YES	NO
1) Has your doctor ever said that you have a heart condition OR high blood pressure ?		
2) Do you feel pain in your chest at rest, during your daily activities of living, OR when you do physical activity?		0
3) Do you lose balance because of dizziness OR have you lost consciousness in the last 12 months? Please answer NO if your dizziness was associated with over-breathing (including during vigorous exercise).		
4) Have you ever been diagnosed with another chronic medical condition (other than heart disease or high blood pressure)? PLEASE LIST CONDITION(S) HERE:	0	0
5) Are you currently taking prescribed medications for a chronic medical condition? PLEASE LIST CONDITION(S) AND MEDICATIONS HERE:		0
6) Do you currently have (or have had within the past 12 months) a bone, joint, or soft tissue (muscle, ligament, or tendon) problem that could be made worse by becoming more physically active? Please answer NO if you had a problem in the past, but it does not limit your current ability to be physically active. PLEASE LIST CONDITION(S) HERE:		0
7) Has your doctor ever said that you should only do medically supervised physical activity?		



THANK YOU!

Any questions?



