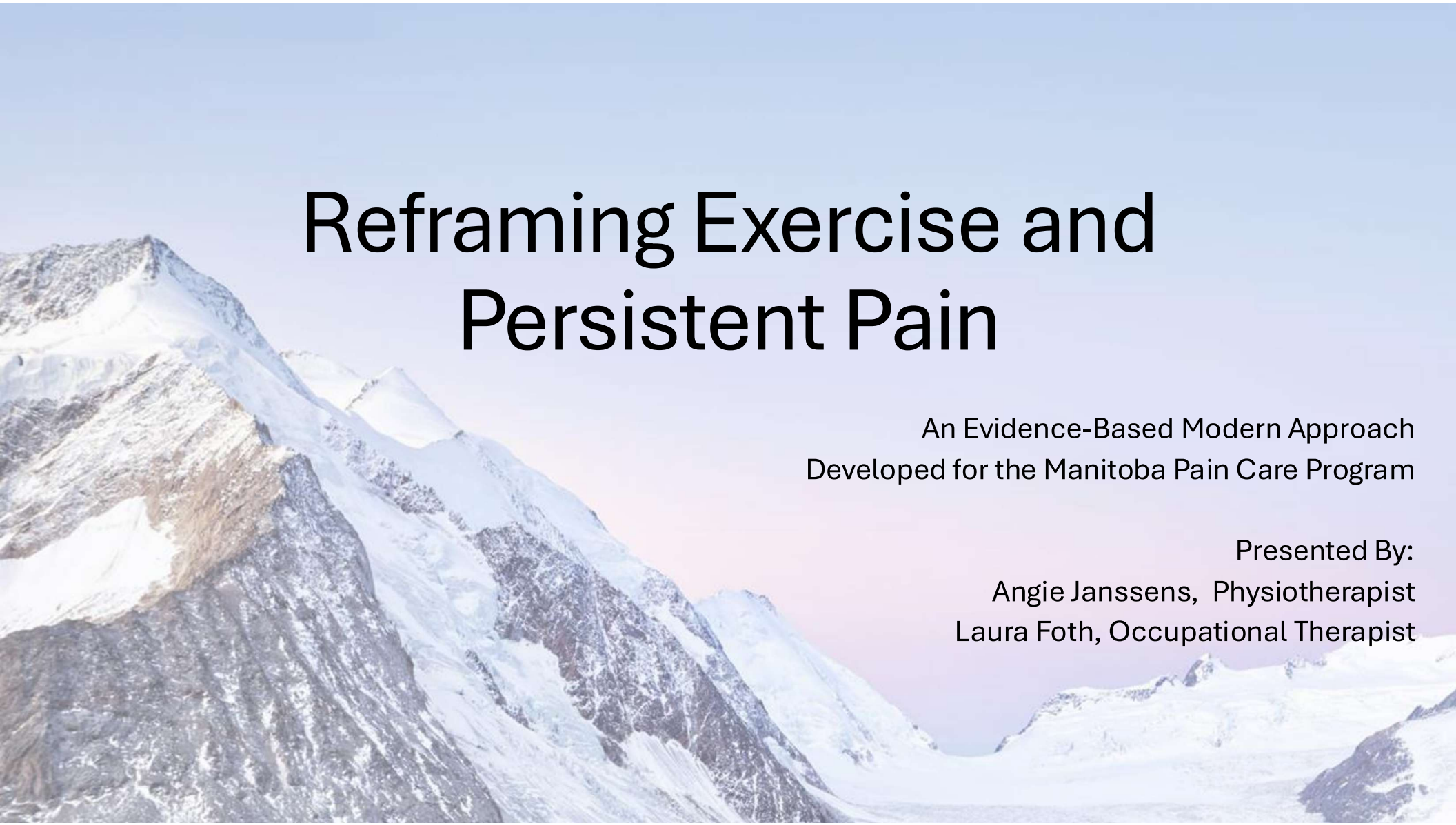


Reframing Exercise and Persistent Pain

An Evidence-Based Modern Approach
Developed for the Manitoba Pain Care Program

Presented By:
Angie Janssens, Physiotherapist
Laura Foth, Occupational Therapist

LAND ACKNOWLEDGEMENT

Health services across Manitoba are provided in facilities located on the original lands of First Nations, Inuit, and on the national homeland of the Red River Métis Nation.

Manitoba's health authorities respect that First Nations treaties were made on these territories, acknowledge harms and mistakes, and we dedicate ourselves to collaborate in partnership with First Nations, Inuit, and Métis peoples in the spirit of reconciliation.

Housekeeping

- Please be respectful and remember confidentiality
- Please silence your cell phones and do not record the presentation
- Make yourselves as comfortable as possible

Housekeeping

- You may print off/download the presentation at:

  panamclinic.org/patient-resources/

- This session provides information and recommended strategies for pain self-management that applies to *most* individuals/ persistent pain conditions . It may not meet the needs of those seeking more specific or detailed information about their unique concerns or pain condition.

Outline & Objectives

Discuss persistent pain and exercise

Compare exercise for fitness vs. exercise for pain

Discuss exercise responses and risks

Discuss how to monitor pain with activity

Resolve common misbeliefs about exercise and pain

Learn how to get started and how to adapt an exercise

What is Pain?

- Pain is an alarm system in our body
  - Alerts us to actual or potential tissue damage

- Survival mechanism
  - Life expectancy of people who cannot feel pain is 25 years

- Pain is an experience directed by our physiology
  - The processes within our body

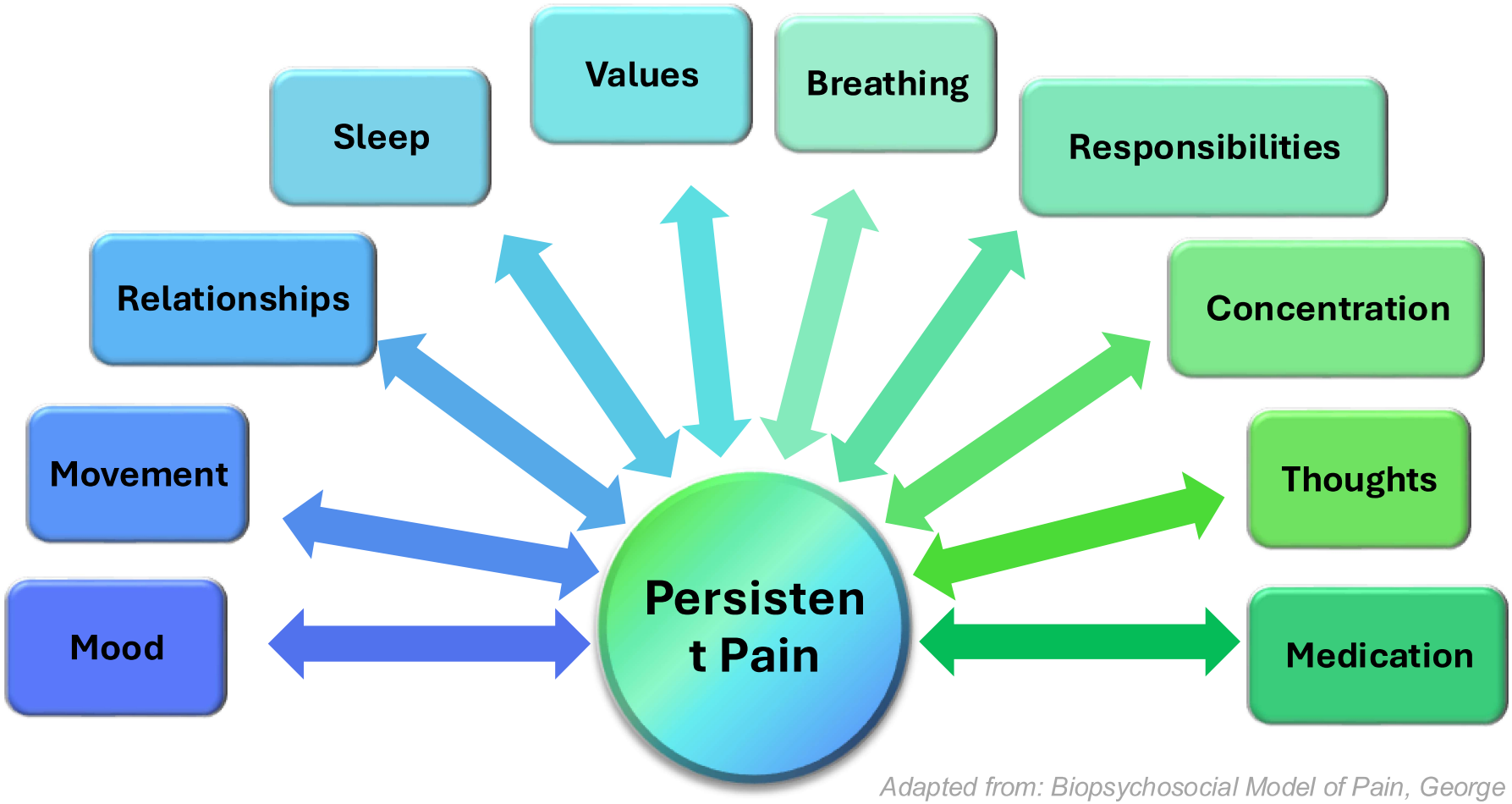
Persistent Pain

- When the alarm system is frequently triggered
- NOT always an accurate measure of tissue health or tolerance

- *Not "rare"*
- 1 in 5 Canadians have persistent pain – 20% of our population

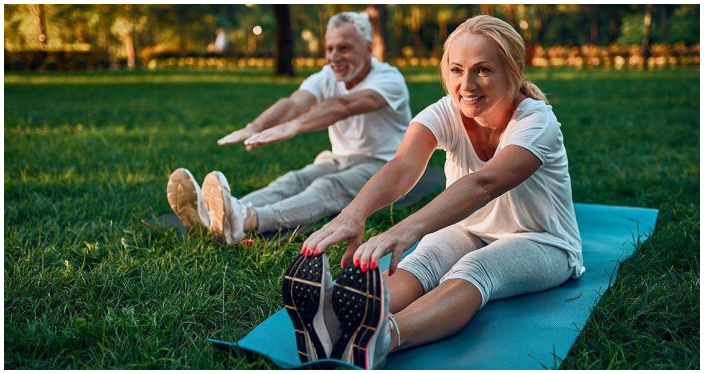
- *Influenced by many things*
  - The longer we have pain, the greater the influence of **overall health**
    - Immune changes, metabolic changes, nervous system changes
    - This is a challenge, because pain can make it harder to engage in healthy behaviours!

Persistent Pain is COMPLEX!



Adapted from: Biopsychosocial Model of Pain, George Engel 1977

What is Exercise?



Why Exercise?

"If exercise were a pill, it would be the most widely prescribed medicine in the world"- Robert Butler

Mood
Sleep
Heart health
Bone health
Metabolism
Energy
Function
Memory

Risk for falls
Risk of injury
Stress
Pain

🚹 How Exercise Helps Reduce Pain

- 🔹 **1. Releases Natural Painkillers**

🧠 *Boosts endorphins & endocannabinoids*
👉 These are your body's own "feel-good" chemicals that **block pain** and improve your mood.

- 🔹 **2. Lowers Inflammation**

🔥 *Reduces swelling and joint pain*
👉 Exercise helps **calm down inflammation**, a major cause of chronic pain.

- 🔹 **3. Reduces Stress Hormones**

😰 *Lowers cortisol and adrenaline*
👉 With regular activity, your body becomes **less sensitive to stress and pain**.

- 🔹 **4. Improves Blood Flow**

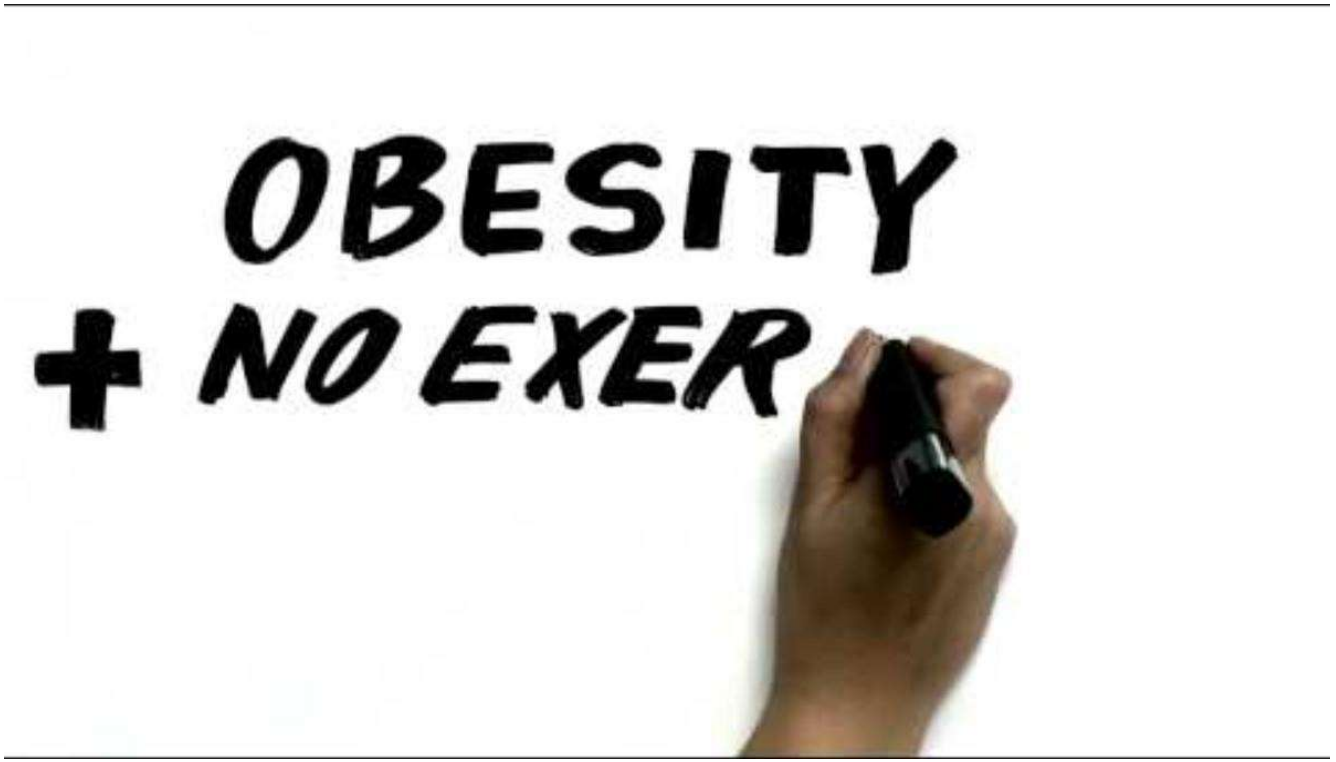
❤️‍🩹 *Better circulation = faster healing*
👉 Exercise increases **oxygen and nutrient delivery** to painful areas.

- 🔹 **5. Retrains the Nervous System**

🧠⚙️ *Less overreaction to pain*
👉 Regular movement helps your **nervous system dial down pain signals**.

Exercise is Medicine

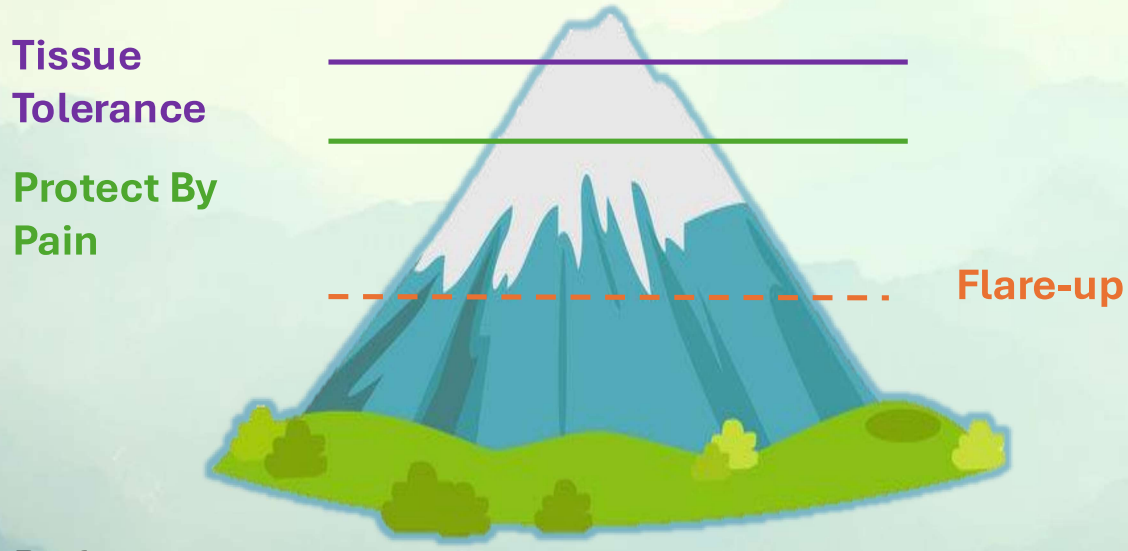
23 ½ Hours: What is the Single Best Thing We Can Do for Our Health?



Movement Snack

Pain Responses

Pain Does Not Always = Injury



Butler & Moseley, Explain Pain

How Pain Progresses

Optimal Movement

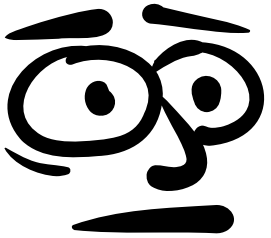
The solution **IS NOT:**

- Complete rest and avoidance of activities

- Ignoring or pushing through pain

The solution **IS**:

- Optimal movement



Fear is not the Answer!

What are our goals when doing exercise for pain?

Fitness Goals

- Improve endurance
- Improve strength
- Improve flexibility
- Improve balance
- Improve performance

Pain Goals

- Improve activity tolerance
- Improve tissue health
- Build confidence
- Create new habits
- Improved function
- General health benefits

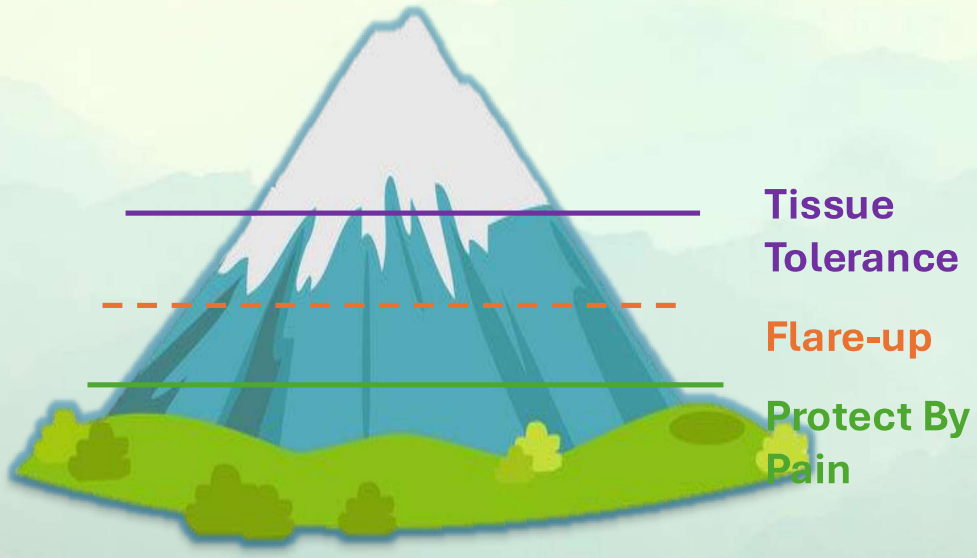
Targets of Rehabilitation

Habituation, Graded Exposure, Confidence

Function, Capacity, General Health Benefits

Strength, Endurance, Flexibility

How Exercise Can Help



After Prolonged Onset

Butler & Moseley, Explain Pain

Direct Benefits to Activity

Normal Responses to Exercise

Fatigue

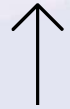
Muscle symptoms:
- Pulling
- Burning
- Pulsing
- Soreness

Increase heart rate

Increase breathing rate

Feeling warm or sweating

Joint clicks, cracks or pops



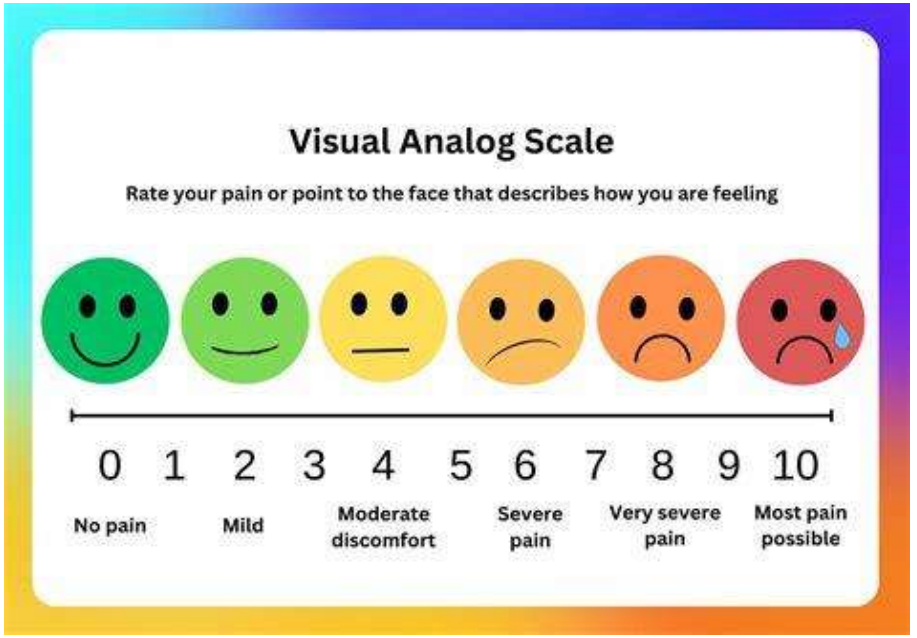
Mild increase in symptoms

Monitoring Pain with Activity

- 2 Point Rule
- Return to Baseline within 24 hours

Remember:

- Pain flare doesn't necessarily mean injury – just too much too soon
- **Goal:** Modify uncomfortable activity until it becomes comfortable (50% of intensity/duration)



Abnormal Responses to Exercise

Rapid heart rate
"Flutters"
Chest pain
Sudden upper back pain

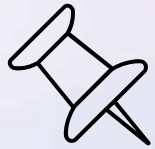
Stop. Rest.
Take nitro spray.
Seek help if needed.

Muscle cramp
"Charley-horse"

NEW onsets

Dizzy
Light-headed

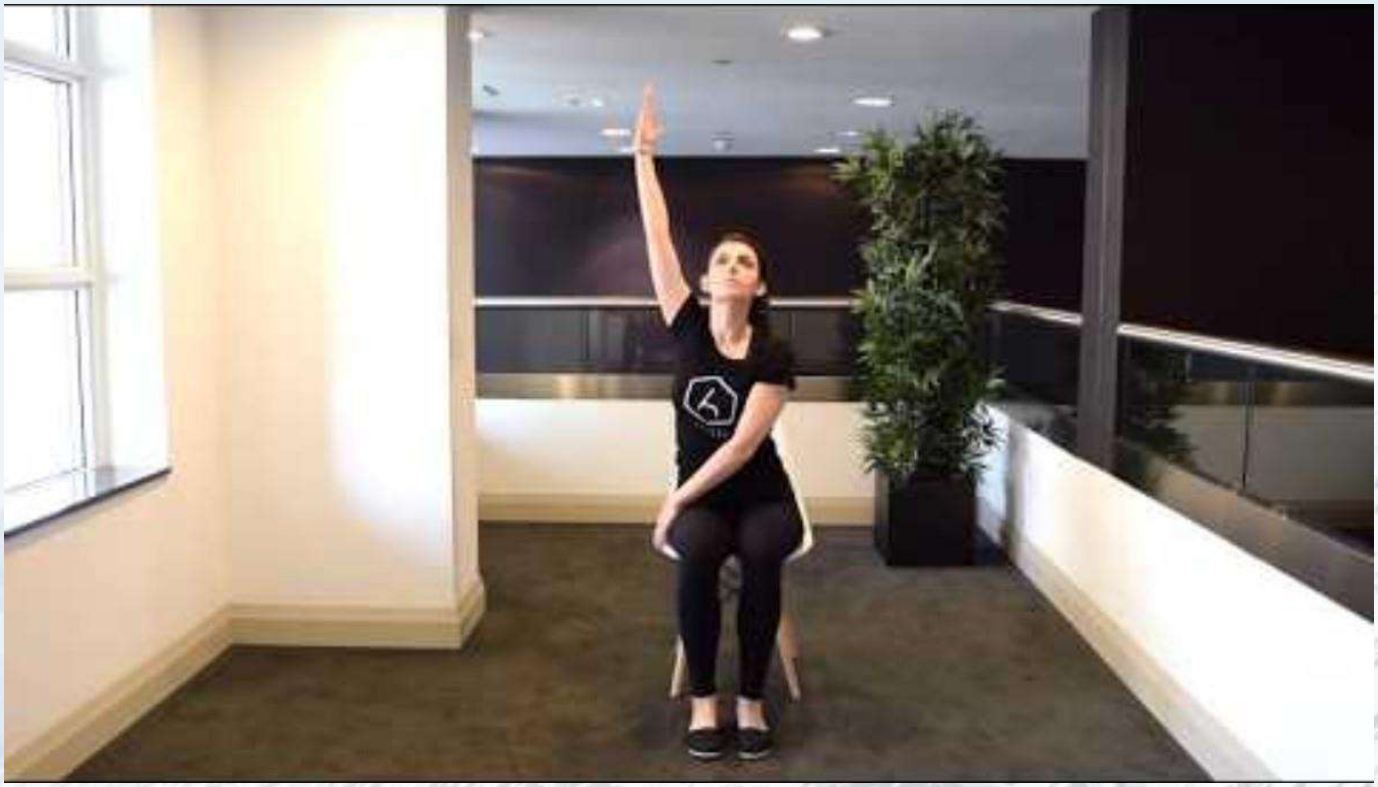
Headache



Numbness
Tingling
Pins & needles

Nausea

Movement Snack



Recovering Movement in Persistent Pain

Move to the edge of increased pain (or choose a slightly challenging activity)

Ask yourself: Is it OK for my body to do this activity? Will I be OK later?

Stay at the edge while you do these 3 things....

1. Keep your breath as calm as you can

2. Keep Your Body and Muscle Tension low

3. Monitor the pain. Do not ignore It,or pay too much attention to it.

Image adapted from lifeisnow.ca

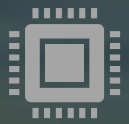
How do I get started?

Consider the G.R.O.W. framework:

Goal

What do you want to achieve?

What do I want to achieve in the long term?
Why is this goal important to me?



Reality

What can you do now?

What is my current situation related to this goal?
What have I already tried, and what were the results?
What resources/support do I have?

Options

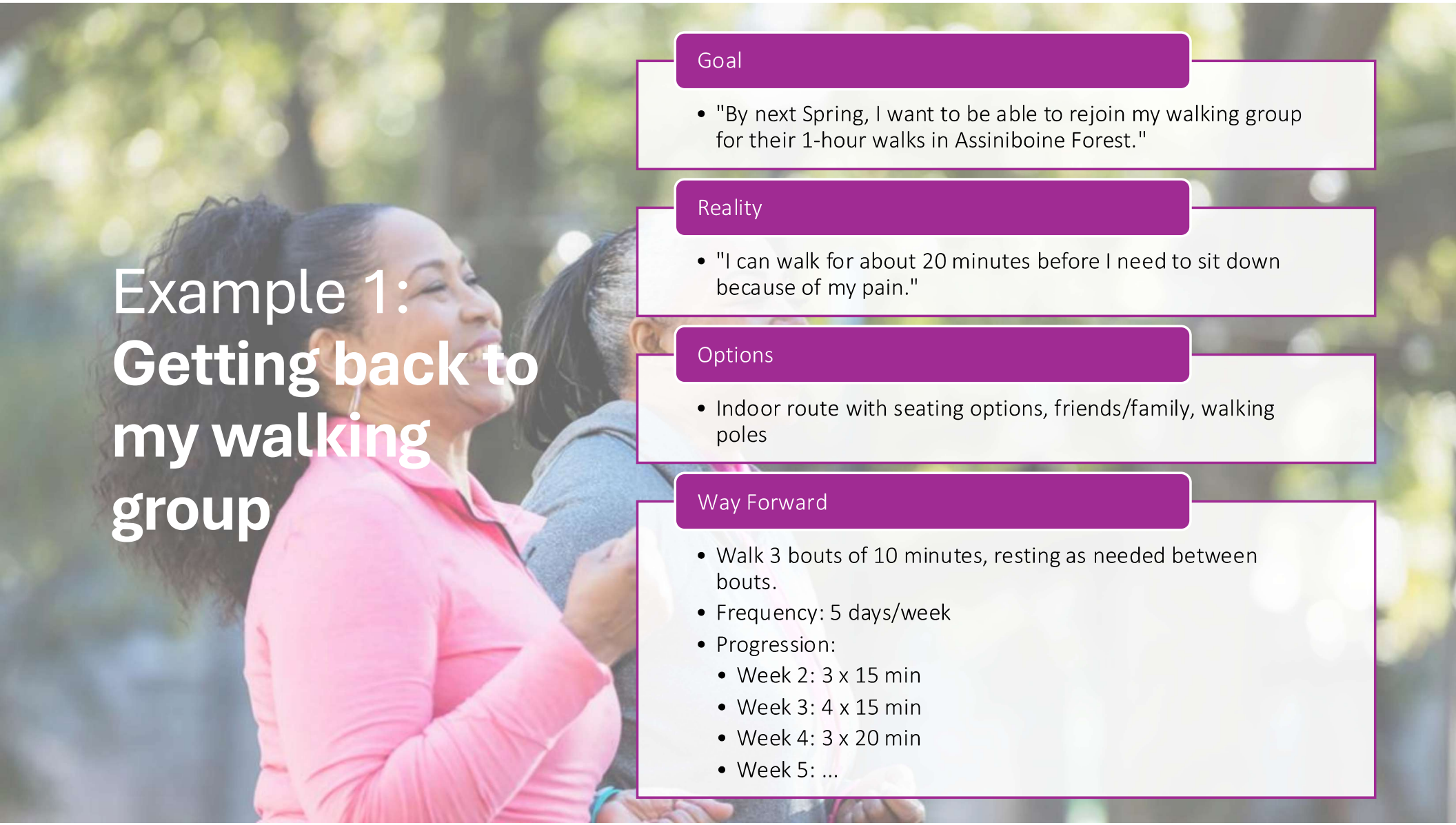
Tools, knowledge, support, equipment, etc.

What are all the possible ways I could achieve this goal?
What option seems most feasible and effective?

Way Forward

Find an entry point and begin moving towards goal.

What specific actions will I take to move towards my goal?
When will I start and what is the timeline?
How will I stay motivated and accountable?



Example 1: **Getting back to my walking group**

Goal

- "By next Spring, I want to be able to rejoin my walking group for their 1-hour walks in Assiniboine Forest."

Reality

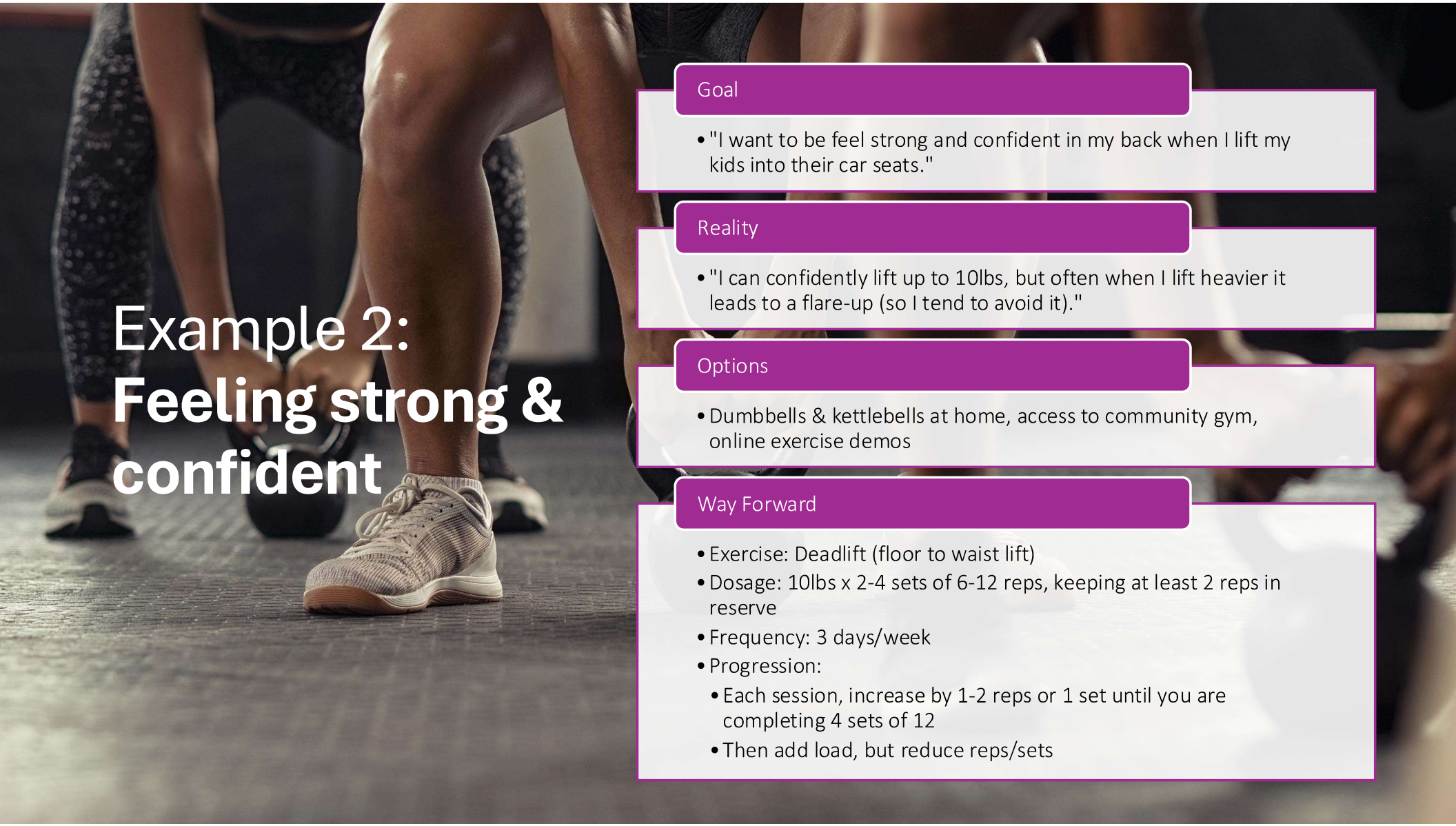
- "I can walk for about 20 minutes before I need to sit down because of my pain."

Options

- Indoor route with seating options, friends/family, walking poles

Way Forward

- Walk 3 bouts of 10 minutes, resting as needed between bouts.
- Frequency: 5 days/week
- Progression:
  - Week 2: 3 x 15 min
  - Week 3: 4 x 15 min
  - Week 4: 3 x 20 min
  - Week 5: …



Example 2: **Feeling strong & confident**

Goal

- "I want to be feel strong and confident in my back when I lift my kids into their car seats."

Reality

- "I can confidently lift up to 10lbs, but often when I lift heavier it leads to a flare-up (so I tend to avoid it)."

Options

- Dumbbells & kettlebells at home, access to community gym, online exercise demos

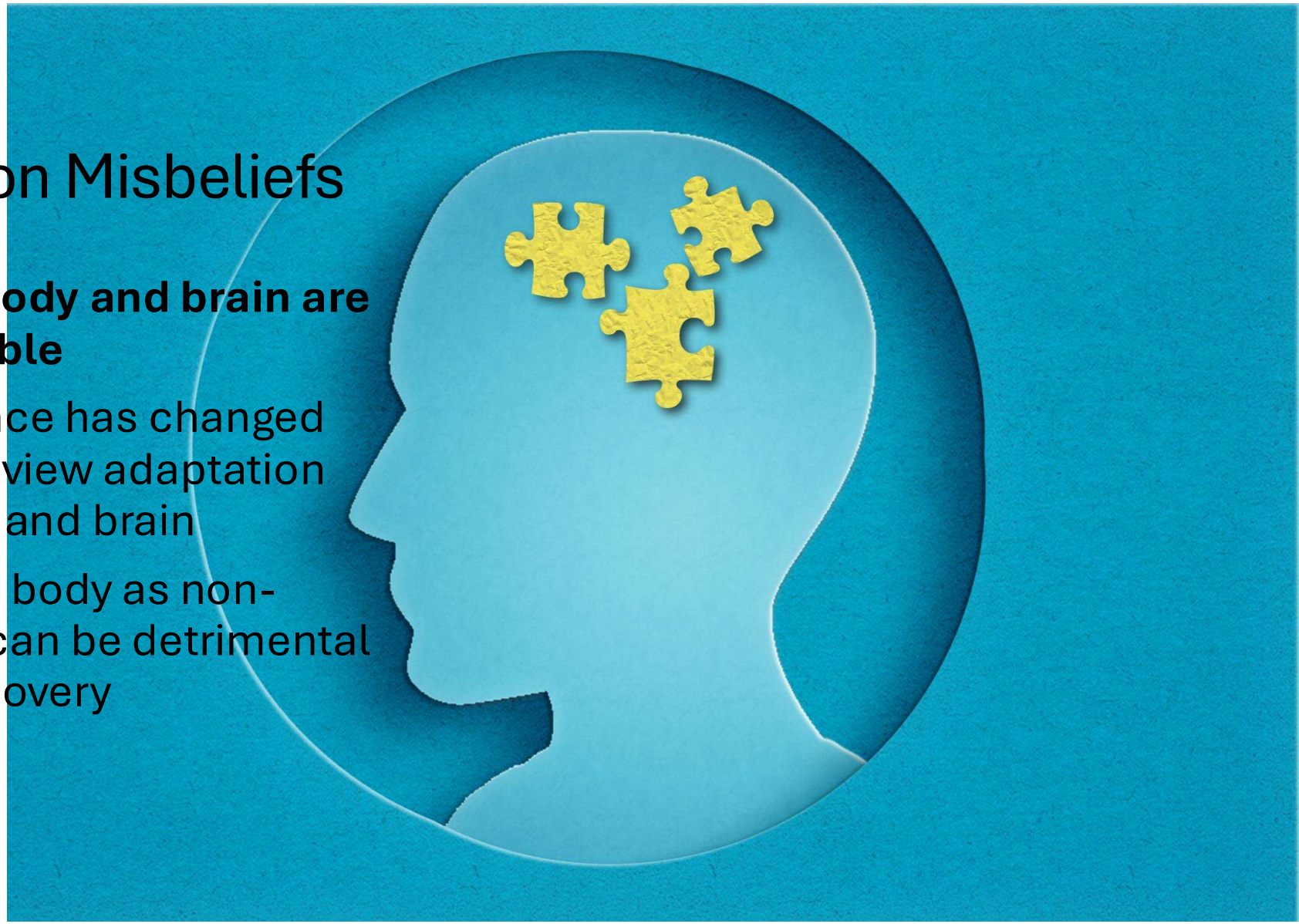
Way Forward

- Exercise: Deadlift (floor to waist lift)
- Dosage: 10lbs x 2-4 sets of 6-12 reps, keeping at least 2 reps in reserve
- Frequency: 3 days/week
- Progression:
  - Each session, increase by 1-2 reps or 1 set until you are completing 4 sets of 12
  - Then add load, but reduce reps/sets

Common Misbeliefs

MYTH: The body and brain are non- adaptable

- New evidence has changed the way we view adaptation of the body and brain
- Viewing the body as non-adaptable can be detrimental to one's recovery



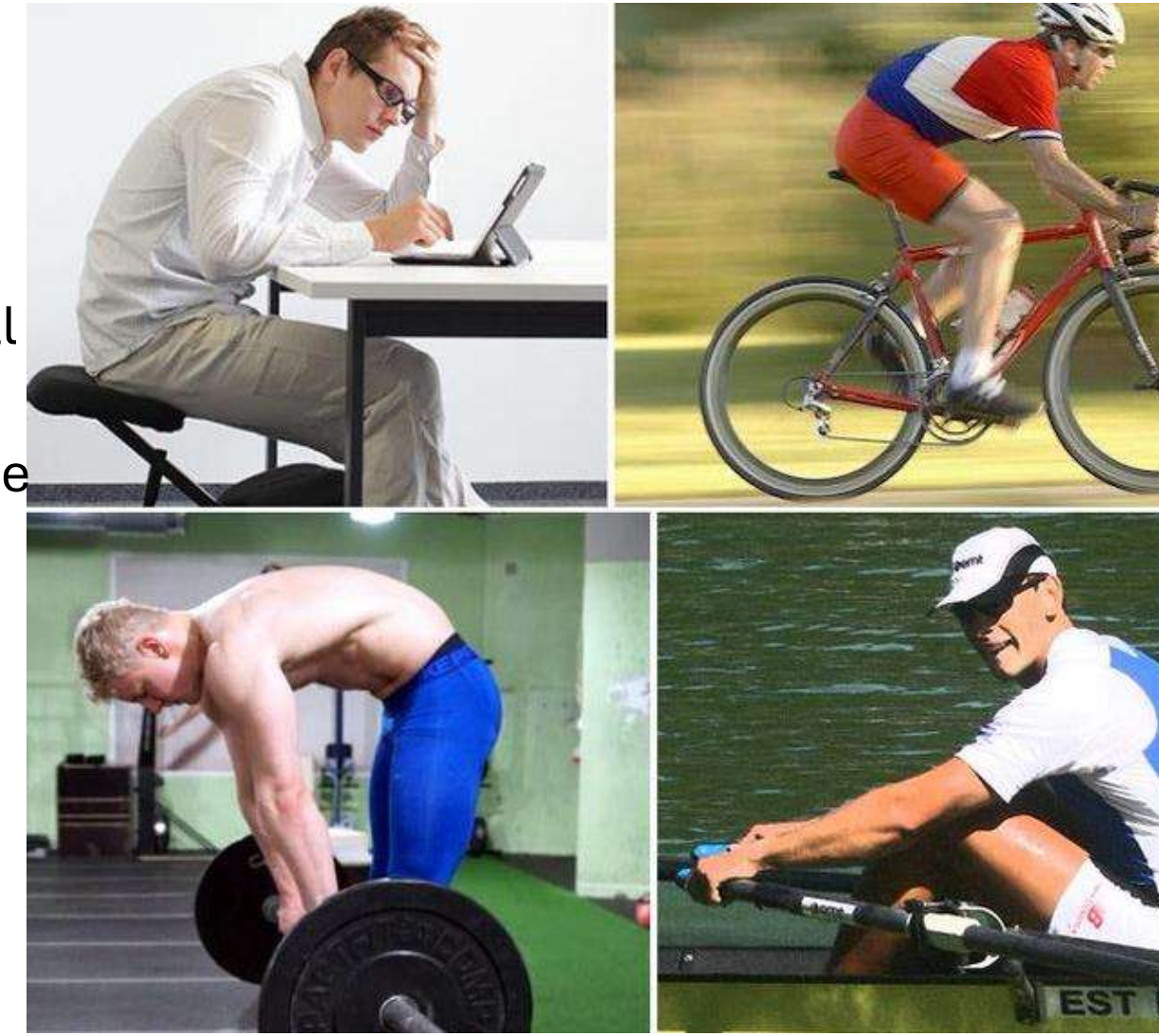
Common Misbeliefs

Things you have been told about your body and/or exercise that:

- prevent you from engaging in exercise
- cause you to exercise in a way that increases your pain

~~“Bad Posture"~~

- ~~Having perfect posture will get rid of my pain~~
- No one has perfect posture all the time
- Sustained postures can become sensitized
- “Your next posture is your best posture”

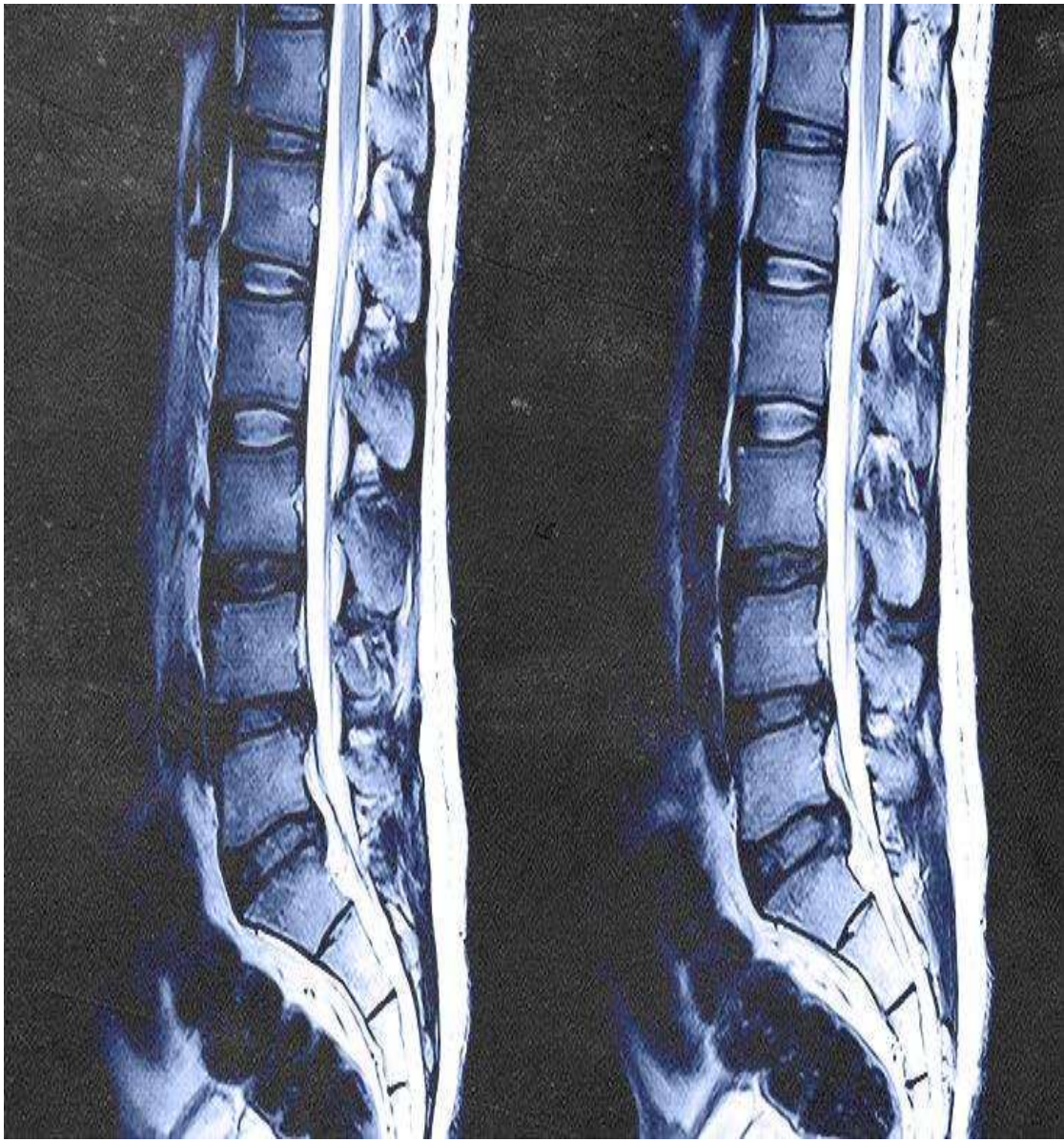


~~“Imbalance"~~

- ~~Muscles must be balanced and symmetrical to function~~ properly
- Many examples of human resiliency and adaptability
- Asymmetry is the norm!

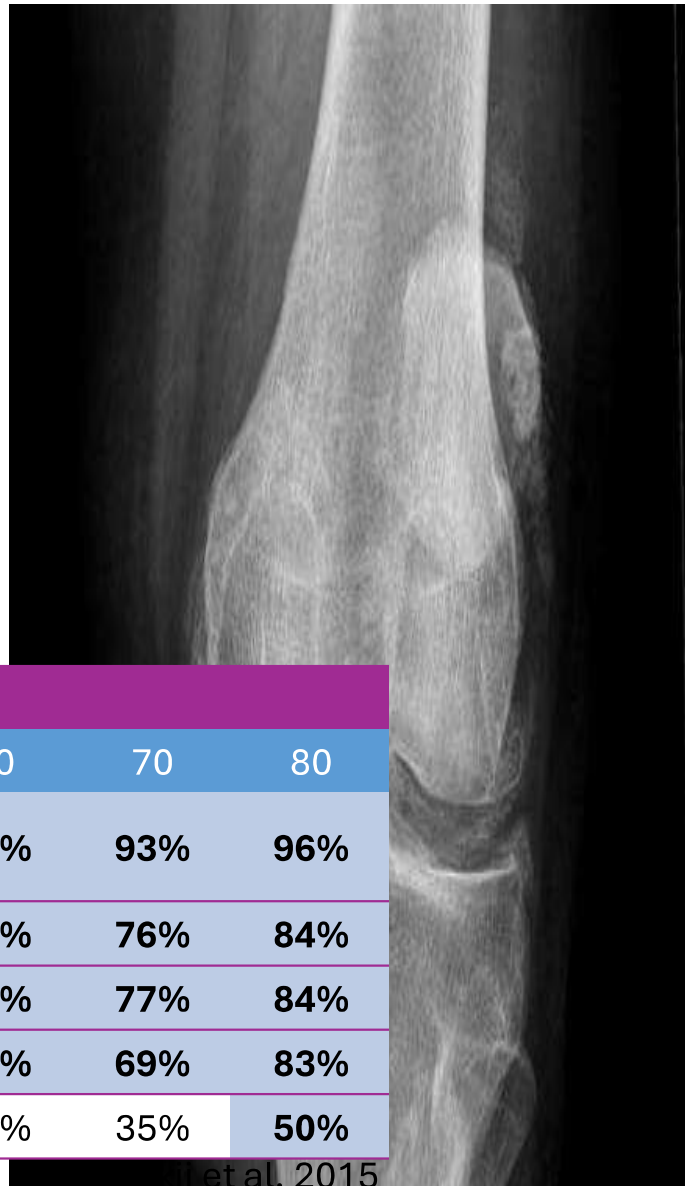
“Unstable Spine”

- ~~You must stabilize your spine to improve pain.~~
- Having a strong "core" is a good thing to have, however it is NOT predictive of back pain
- People with chronic back pain tend to have overactive core muscles



~~"Wear and Tear"~~

- ~~Your pain is from wear and tear and exercise will wear it down more~~.
- *Wear and Repair* - Exercise can help tissues adapt
- *Wrinkles on the inside* - Majority of people have agin



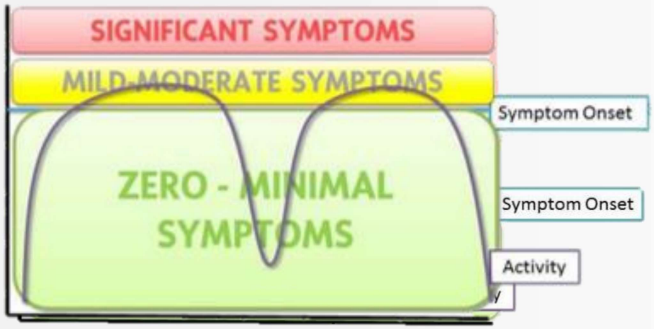
ASYMPTOMATIC

Imaging Finding	Age						
	20	30	40	50	60	70	80
Disc degeneration	37%	**52%**	**68%**	**80%**	**88%**	**93%**	**96%**
Disc height loss	24%	34%	45%	**56%**	**67%**	**76%**	**84%**
Disc bulge	30%	40%	**50%**	**60%**	**69%**	**77%**	**84%**
Facet degeneration	4%	9%	18%	32%	**50%**	**69%**	**83%**
Spondylolisthesis	3%	5%	8%	14%	23%	35%	**50%**

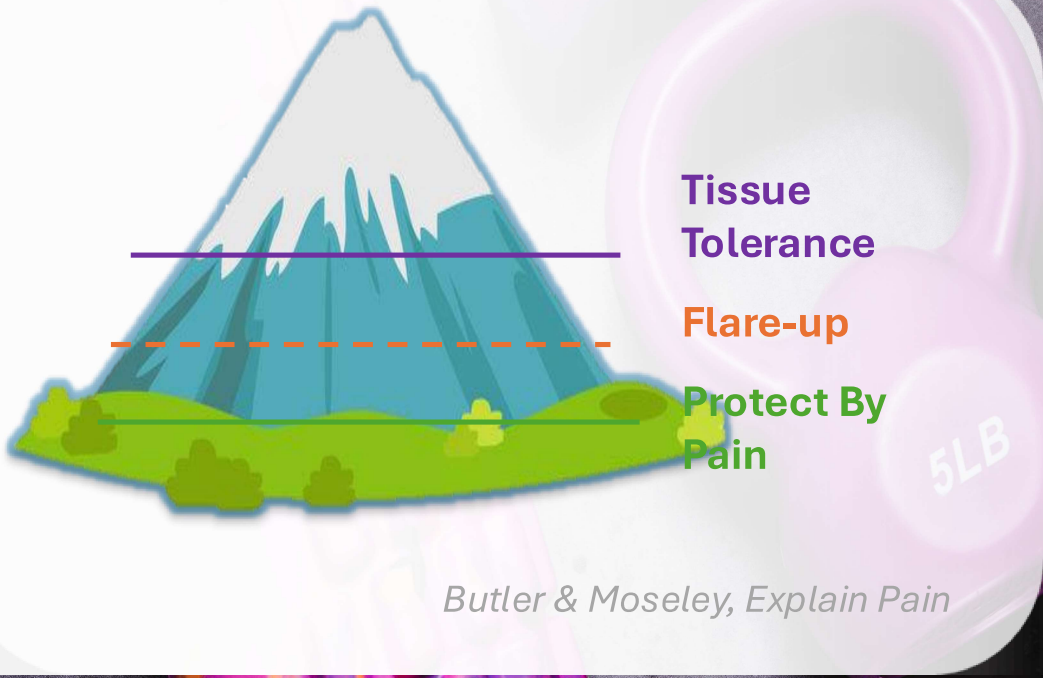
et al. 2015

~~"No Pain, No Gain"~~

- ~~You must feel pain when exercising to make~~ progress
- It can be SAFE to feel pain with activity, but it is not required and NOT the goal
- Exercise below the Flare-Up line



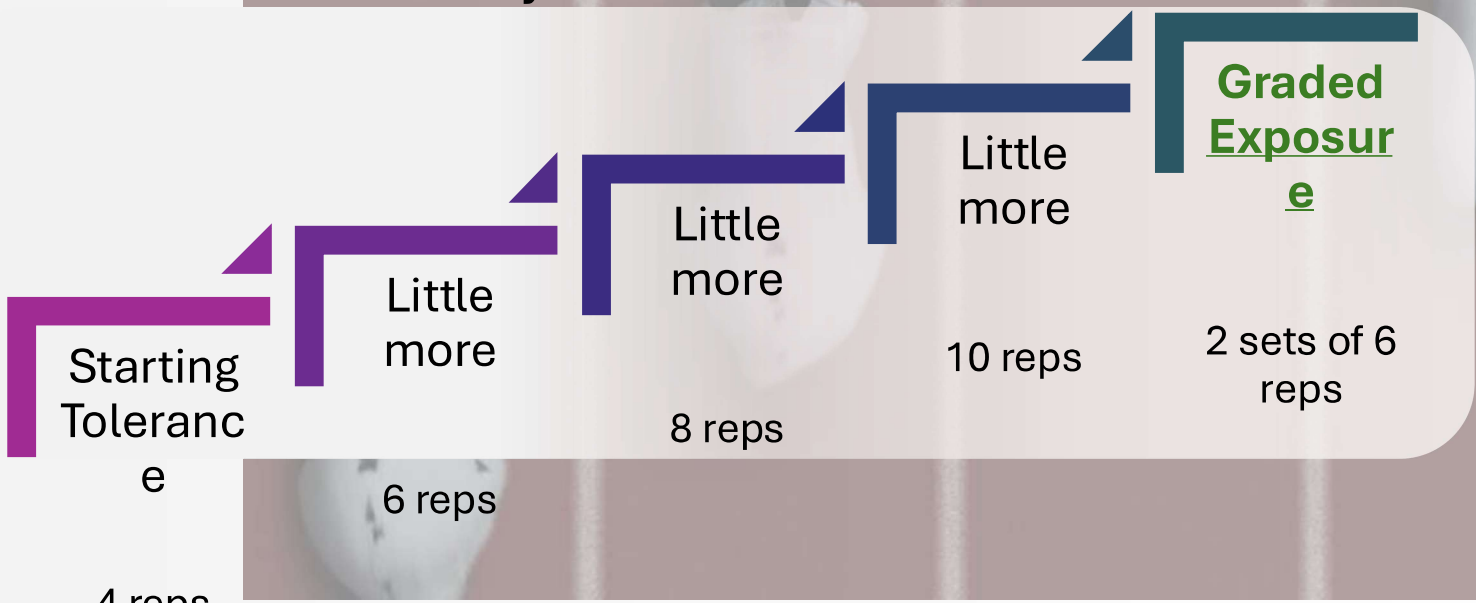
The Parkwood Pacing Points Program 2013



Butler & Moseley, Explain Pain

~~“3 sets of 10 repetitions"~~

- ~~You must exercise a certain amount for it to be beneficial~~
- Can lead to flare ups
- It doesn’t matter how small you start

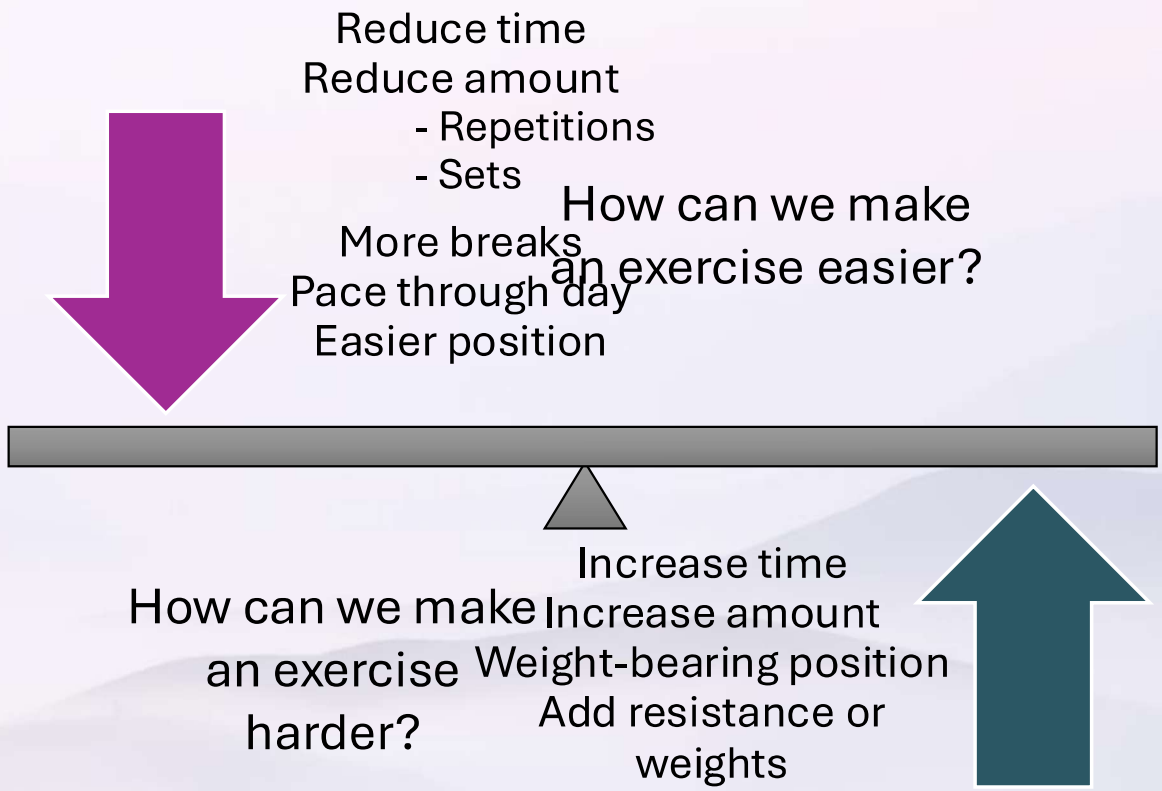


Slow and Steady

- Start low and build up slowly to prevent flare-ups
- Think millimeters instead of kilometers!
- Increase by no more than 10% per week

Week Number	Amount of Activity
1	10 minutes
2	11 minutes
3	12 minutes
4	13.5 minutes
5	14.5 minutes
6	16 minutes
7	18 minutes

Adapting an Exercise

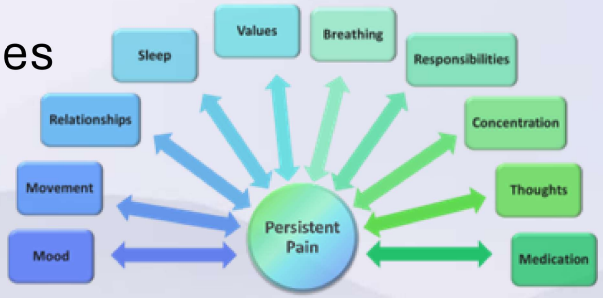


Exercise Take Home Message

- Change positions
- Focus on consistency
- Remember your body is stable, and it’s okay to have age related changes
- Let your symptoms guide your intensity, not a number
- Start small and progress slowly

Combining Strategies

- Consider combining other strategies when exercising
  - Deep breathing
  - Energy conservation strategies
  - Acceptance & Commitment Therapy (ACT) strategies
  - Timing with pain medication



Upcoming Workshops

Introduction to Self-Compassion
Thursday, March 5th from 1:00-2:30 p.m.

Effective Communication and Persistent Pain
Thursday, March 26th from 1:00-2:30 p.m.

Stress You Can: Strategies to Manage and Live with Stress
Thursday, April 9th from 1:00-2:30 p.m.

Low Energy and Persistent Pain
Thursday, April 23rd from 1:00-2:30 p.m.

****If you are unable to attend in person, please check the handout for virtual dates available through HSC Pain Clinic.**

You may access the calendar at www.panamclinic.org/patient-resources/

Next Steps

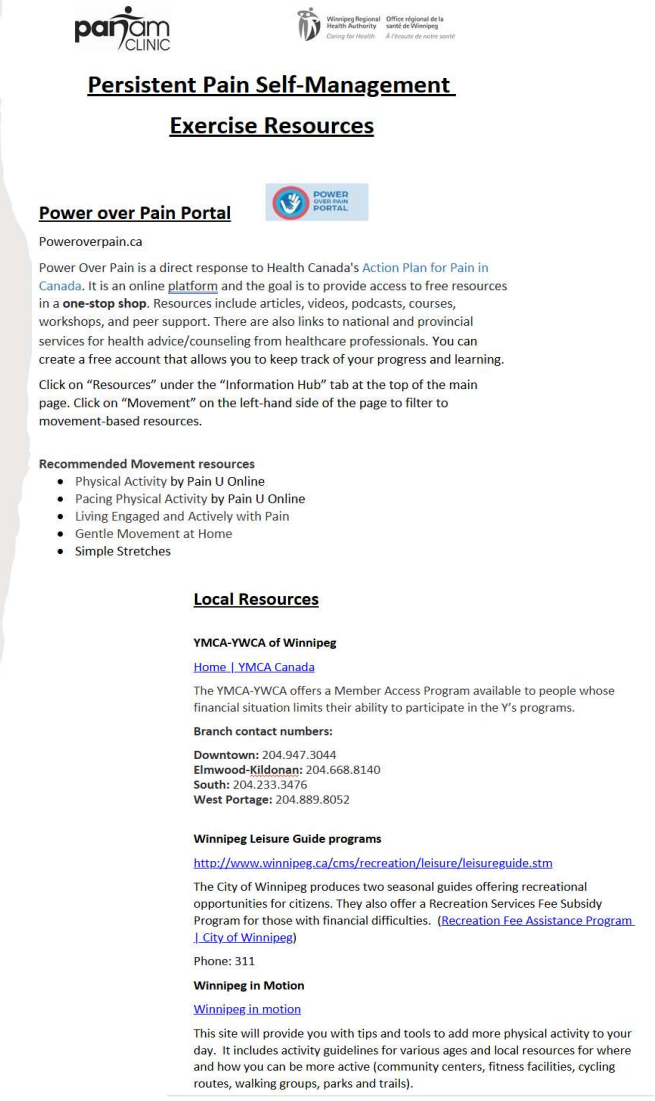
- Practice the Strategies Discussed today

- Access the Resources provided in today's handout (also available on the Pan Am website):

www.panamclinic.or/pateint-resources/

- "Life Lift" Group Exercise Class (referral required)

- If still needing Individual assistance, you may request a referral to physiotherapy (Community based or Pain clinic)



Persistent Pain Self-Management

Exercise Resources

Power over Pain Portal

Poweroverpain.ca

Power Over Pain is a direct response to Health Canada's Action Plan for Pain in Canada. It is an online platform and the goal is to provide access to free resources in a **one-stop shop**. Resources include articles, videos, podcasts, courses, workshops, and peer support. There are also links to national and provincial services for health advice/counseling from healthcare professionals. You can create a free account that allows you to keep track of your progress and learning.

Click on "Resources" under the "Information Hub" tab at the top of the main page. Click on "Movement" on the left-hand side of the page to filter to movement-based resources.

Recommended Movement resources

- Physical Activity by Pain U Online
- Pacing Physical Activity by Pain U Online
- Living Engaged and Actively with Pain
- Gentle Movement at Home
- Simple Stretches

Local Resources

YMCA-YWCA of Winnipeg

Home | YMCA Canada

The YMCA-YWCA offers a Member Access Program available to people whose financial situation limits their ability to participate in the Y's programs.

Branch contact numbers:

Downtown: 204.947.3044
Elmwood-Kildonan: 204.668.8140
South: 204.233.3476
West Portage: 204.889.8052

Winnipeg Leisure Guide programs

http://www.winnipeg.ca/cms/recreation/leisure/leisureguide.stm

The City of Winnipeg produces two seasonal guides offering recreational opportunities for citizens. They also offer a Recreation Services Fee Subsidy Program for those with financial difficulties. (Recreation Fee Assistance Program | City of Winnipeg)

Phone: 311

Winnipeg in Motion

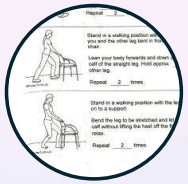
Winnipeg in motion

This site will provide you with tips and tools to add more physical activity to your day. It includes activity guidelines for various ages and local resources for where and how you can be more active (community centers, fitness facilities, cycling routes, walking groups, parks and trails).

Next Steps: Where to Find Exercises

Power Over Pain Portal

Pain Clinic physiotherapy



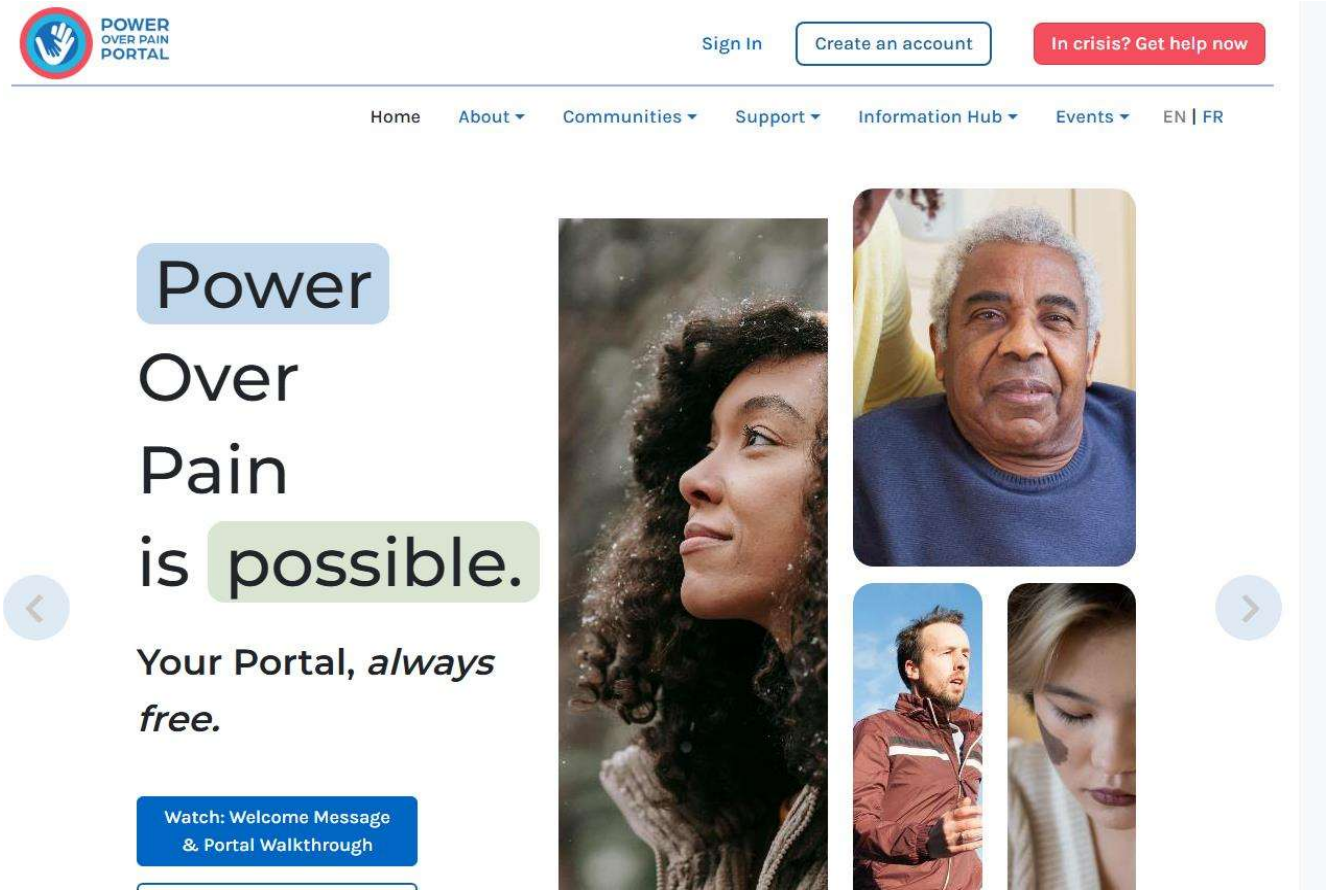
Previous physiotherapy exercises

WRHA or Community group classes

Fitness Center group classes

Next Steps: Power over Pain Portal

Power Over Pain Portal




Questions?

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