CHRISTINA WEISS

- 1. Daughter to two ageing parents
- 2. Sibling
- 3. Mother to three boys 10, 12 and 14 years
- 4. Wife
- 5. Friend
- 6. Employee
- 7. Supervisor
- 8. Kinesiologist
- 9. Former athlete in Rugby, Triathlons, and Running



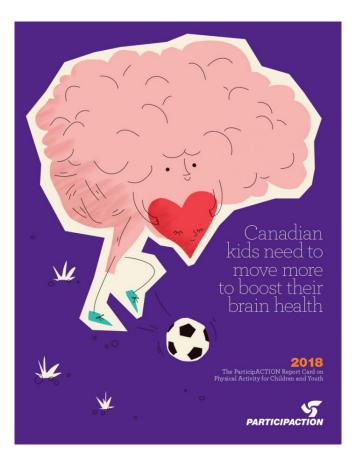
WHO NEEDS HELP WITH EXERCISE?

- People who stopped being active and want to start
- People who have chronic conditions
- Athletes including our varsity athletes
- Isolated seniors
- People wanting to maintain a healthy lifestyle
- People with disabilities who need assistance with training
- Intern students who are putting theory into practice





WHY EXERCISE?



- Less than 50% of people diagnosed with anxiety and depression do not do enough exercise to gain health benefits (Brendon Stubbs)
- Exercise is a great stress reliever.

Mark Tremblay, healthyactivekids.org

EXERCISE IMPROVES MENTAL HEALTH

Action	Benefits
Increases oxygen in the brain	Improves our brain health and memory, slows ageing
Makes our heart beat faster	Improves blood circulation
Improves our mental toughness	Improves ability to cope with stress
Decreases inflammation	Reduces pain and helps people move better
Contracts our muscles	Improves our muscle and bone health
Releases mood enhancing hormones	Provides feelings of wellness, reduces stress
Increases skills	Increases our confidence
Keeps our waist lines from expanding	Helps us manage and prevent certain diseases such as cardiovascular disease, high blood pressure, diabetes, and cancer

K. Mikkelsen et al. Exercise and Mental Health. Review article. Maturitas 106 (2017) 48-56

BJORN T. TAM, JOSÉ A. MORAIS, SYLVIA SANTOSA OBESITY INCREASES AGEING



- Obesity associated with shortened telomere length 8.8 yrs of premature aging
- Excess adiposity also associated with 10 year older brain.
- Every unit increase in BMI increases Alzheimer Disease onset by 6.7 months
- 1 kg weight reduction decreases BP by 1.05 systolic/ 0.92 diastolic pressure
- 10% weight loss can reduce risk of all cancers by 10%

Obesity and ageing: Two sides of the same coin. Obes Rev. 2020 Apr;21(4):e12991. doi: 10.1111/obr.12991. Epub 2020 Feb 5.

A HEALTHY 24 HOURS INCLUDES:



SWEAT **

Moderate to Vigorous Physical Activity

30 min/day of tummy time for infants, 60 min/day for toddlers and children 5-17 years, and 150 min/week of aerobic exercise and muscle and bone building exercises for adults and older adults.

CITT	21
	70

STEP

Light physical activity

Several hours of light unstructured and structured physical activity for children and youth.



SLEEP

SIT

Up to 17 hours for 0-4 years, up to 11 for 5-17 years, and 7 hrs for adults.



Sedentary behaviour

2 hours per day of recreational screen time; Limited sitting for extended periods.

Csepguidelines.ca

Rating of Perceived Exertion Borg RPE Scale

6 7 8 9 10 11	Very, very light Very light Fairly light	How you feel when lying in bed or sitting in a chair relaxed. Little or no effort.
12 13 14 15 16	Somewhat hard Hard	Target range: How you should feel with exercise or activity.
17 18 19 20	Very hard Very, very hard Maximum exertion	How you felt with the hardest work you have ever done. Don't work this hard!

CARDIO – AEROBIC EXERCISES

•Start with a warm up and end with a cool down

- •Use large muscles of body (chest, back, thighs, buttocks and abdomen)
- •To reduce muscle soreness, start with a short time and build up over time.
- •Track your progress with tools: Fitness tracker/ step counters aim for 10,000 steps





MUSCLE AND BONE BUILDING • HBALANCE

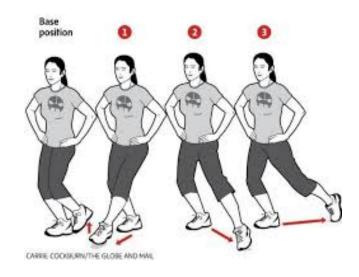
Frequency: 2 x week

1-4 sets - 8 to12 Reps - somewhat hard

Time: 5 min +

Intensity:

Type: Large muscle groups / multi-joint



SINGLE LEG STANCE WITH TOE TAP

EXERCISE SNACKING IS A HIIT (20 - 90 SEC)



Martin Gibala



Jason Steffener

Three 20 sec bursts with 1-4 hrs rest increased fitness by 6% in 22 year old sedentary females. People 19-79 yrs who climbed a flight of stairs/day had brains that were 6 months younger than people their own age.

J.P. Little et al. Sprint exercise snacks: a novel approach to increase aerobic fitness. European Journal of Applied Physiology (2019) 119:1203–1212 https://doi.org/10.1007/s00421-019-04110-z; Steffener J, Habeck C, O'Shea D, Razlighi Q, Bherer L, Stern Y. Differences between chronological and brain age are related to education and self-reported physical activity. *Neurobiol Aging*. 2016;40:138-144.

HAVE AN EXERCISE SNACK



- •10 min power yoga session using apps like Down Dog
- •Dance to your favourite song (including some jumps)
- •Perform 20 sec. of sit to stand exercises
- •Walk up a flight of stairs
- •Take a power walk
- •Sprint for 20 sec.

•Toilet paper workout <u>https://www.youtube.com/watch?v=aaa_zb7GwWc</u>

•Defi Santé <u>https://defisante.ca/bouger-plus/renforcement-</u> <u>et-souplesse</u>

KIDS 7 MINUTE HIIT WORK OUT FOR SELF-REGULATION

Set an interval timer and complete each animal movement for 45 seconds, with 15 seconds of rest in between. Do as many as you can!

FROG JUMPS

EXERCISE

CHILDREN

FOR

Hop, hop, back and forth like a frog

BEAR WALK

Hands & feet on the floor, hips high - walk left and right

GORILLA SHUFFLE

Sink into a low sumo squat, with hands on the floor, shuffle around the room.

STARFISH JUMPS

Jumping jacks as fast as you can, with arms and legs spread wide.

CHEETAH RUN

Run in place, as FAST as you can! Just like the fastest animal in the Sahara.

CRAB CRAWL

Sit and place your palms flat on the floor behind you near your hips. Lift up off the ground and crawl.

ELEPHANT STOMPS

March in place lifting your knees as high as you can and stomping the ground as hard as you can!

EXERCISE FOR TWEENS AND TEENS



HIIT VS. CONTINUOUS EXERCISE

- •Higher intensity bouts of exercise shown to better for a number of conditions
- •Bouts of intensity 20 seconds to 90 seconds
- •More fun
- Shorter workout
- •More variety
- More efficient
- Can increase risk of injury



Dun Y et al., <u>High-Intensity Interval Training in Cardiac Rehabilitation: Impact on Fat Mass in Patients With Myocardial</u> <u>Infarction.</u> Mayo Clin Proc. 2019 Sep;94(9):1718-1730. doi: 10.1016/j.mayocp.2019.04.033.

HIIT CIRCUIT FOR PHYSICALLY ACTIVE 20 SEC ON 20 SEC OFF



JUMPING JACKS



MOUNTAIN CLIMBER



SLIP

EXPLOSIVE PUSHUP

SIDE PLANK - HOLD

Pt

SUPERMAN

HOME WORKOUT - INCLUDED WITH WEBINAR











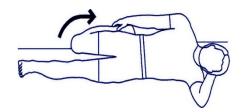








STRETCHING

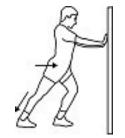












CHRISTINA'S TIPS AND TRICKS — THANK YOU! Choose a time that works for you and make a routine Choose a place and prepare that space

Get your family, friends, and coworkers involved

Add some friendly competition

Even small amounts help

Be flexible

Change it up with increased intensity

Take more breaks

Play music

Use apps and videos or Work with a trainer