

Freedom of movement. Freedom from pain.

## **The Summer Issue**

#### www.freedomphysiotherapy.ca

# Exercising in the Heat

#### Summer is a great time for outdoor exercise and physical activity! But be careful...

Getting outside to rehabilitate nagging injuries, or grinding through a strength and conditioning workout is great, but we need to be mindful of the elements, and how our body responds to them. Typically, an adult's body temperature will read between 36°C and 37°C. This is important to remember, as even an increase of half a degree can be detrimental to the vital systems within our body. Ensure that you are drinking enough water and electrolytes (sodium and potassium) to maintain your body's natural balance; the more we sweat, the more we lose. Be sure to have plenty of water and cool shade nearby. Most importantly, listen to your body! August 2018

Mike, Norah and Bryce at the Heart and Stroke Foundation's Big Bike Event, June 18<sup>44</sup>, 2018

## This Issue:

- Volume, Volume, Volume!
- Experiencing DOMS? Here's What's Really Happening!
- Exercise Spotlight: Loaded Carries
- What's New at Freedom Physiotherapy?
- The Six Stages of Transformation

### Volume, Volume, Volume!

Volume is the total workload placed on the body during a given bout of exercise. It takes into account the number or sets, repetitions, and the actual load (weight) being moved. Volume is key when looking at the progress made during rehabilitation or strength and conditioning. The more load we can safely and effectively place on our body, the greater the response we will get from it. This being said, many beginners can find positive adaptations to exercise with single sets; keep in mind that the body must still be loaded in a way that adequately challenges our neuromuscular system.

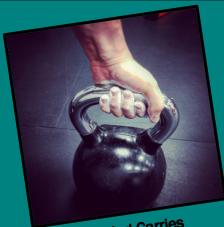
When we begin an exercise program of any sort, whether rehabilitation or strength and conditioning, we can usually assess the difficulty of the volume through a rate of perceived exertion, or RPE. Simply rate the overall difficulty of individual sets, or the entire session on a scale of 1-10 (1 being extremely easy, 10 being extremely difficult). In order to elicit an effective response, we want to be between approximately 6/10 and 8/10 on the RPE scale. This may mean that you need to modify the volume within your workout in order to achieve the optimal benefits!



## Experiencing DOMS? Here's What's Really Happening!

Delayed Onset Muscle Soreness, or DOMS, typically happens 1-3 days after a hard bout of exercise. It can also happen following a hard workout when we have taken an extended period of time away from exercise.

- I. When we exercise, metabolites that cause inflammation, soreness and swelling are released within the body.
- II. Pain receptors lie between muscle cells, and are activated when these metabolites are released.
- III. As much as it is believed, lactic acid does NOT cause DOMS!
  Although it causes acidity and the "burn" sensation, lactic acid levels return to normal within a few hours.
- IV. The best way to minimize your risk of DOMS is to progressively load your body, and gradually increase the volume over time.



Loaded Carries

## Exercise Spotlight: Loaded Carries

Loaded Carries are a great way to challenge the strength of the entire body. With so many variations, your can do them anywhere with practically anything. The ankles, knees, hips, core, back, shoulders, and hands are all incorporated through the entire duration of the exercise! For rehabilitation, loaded carries can help develop stability and control in these crucial areas of the body. For strength and conditioning, it is a phenomenal way to tax your body's energy systems. Pick up something heavy and carry it! Curious? Come and see us! We'd be happy to show you!



## What's New at Freedom Physiotherapy?

We are always working to bring the best in rehabilitation and strength and conditioning research to the great people in our clinic! Furthermore, we strive to provide the best equipment and facilities possible! We have brought in some new pieces of equipment, and completed an exciting renovation to improve the overall experience of our clinic!

1.

New equipment consisting of: trap bar, kettle bells, mini bands, weight plates, incline/decline/flat bench combination, and new blood flow restriction cuffs.

2.

3.

Fully accessible shower room! Our new shower room is wheelchair accessible, and also features a removable chair with backrest for those who require or prefer to

On August 20<sup>th</sup>, Robyn Boudreau will be joining our clinic! Robyn is a Physiotherapy student from UBC, and will be completing her last placement right here in our community!

## The Six Stages of Transformation

- Step 1: Pre-Contemplation
  - The starting point! Most people in this stage are possibly made aware that changes must be made, but do not intend on taking any immediate action.
- Step 2: Contemplation
  - The "pros vs. cons" phase. In the coming months, the individual intends on implementing change(s).
    Awareness of the benefits of change is present, but the willingness to engage in those behaviours is absent.
- Step 3: Preparation
  - For most individuals, action will occur in the coming weeks. This may include research, consultations, or purchasing a membership or new exercise clothing.
- Step 4: Action
  - Individual action has occurred in recent months. Be sure not to fall into past behaviours, though!
- Step 5: Maintenance
  - The changes become more natural, beginning to be a part of your normal routine. This stage can last for years!
- Step 6: Termination
  - The individual is self-sufficient; there is very minimal risk of returning to their old behaviours! This is the most difficult stage to reach, but an excellent one to strive for!

## **CONTACT US!**

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