

# Resistance

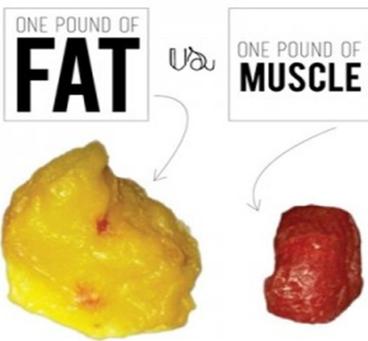
June 2015

The year is just flying past and we hope you have all enjoyed the changes that have happened recently at MedStrength, with the addition of the treadmill, squat rack and improved workout cards.

Now that winter is well and truly here, don't break those good habits you already have; remember it is always dry in here and working out is a great way to stay warm!

Winter is a great time to focus on the strength training side of your fitness, simply because it's usually too cold and wet outside! If you are finding it difficult to get your daily dose of cardio in, don't forget MedStrength has a selection of cardio equipment that can keep your heart pumping! Ask a trainer to see what machine is right for you!

## Fact or Fiction? Muscle weighs more than fat:



**Fiction**, but read on. A pound of fat weighs the same as a pound of muscle. However, and this is the crux, muscle tissue is denser than fat. Five pounds of fat has significantly more mass than five pounds of muscle. A person who weighs 70kg and has 15% body fat looks much smaller than a person of the same weight with 30% body fat.

If you feel you are struggling to lose weight, despite eating well and strength training, it could be that you are measuring your loss in the wrong way. The number on the scales does not tell you what your body consists of, nor that you are losing body fat and building muscle. You should be noticing that your clothes are looser, that your body looks more toned and that you are gaining strength and stamina. After all, our aim at MedStrength is to improve your ability to complete everyday tasks and to improve your function and quality of life! Don't base your results purely on those pesky scales!

### LOST AND FOUND

Please take care to take all your belongings home with you each day. Our lost property box is overflowing with found items! Please see a staff member if you have left something behind.

### When was the last time you had a MedStrength Reassessment?

Want some new exercises and to see how you have progressed in your time at MedStrength? We recommend members have a reassessment with a physio every 8-12 weeks. At this time, your training goals will be analysed and any medical changes, muscle imbalances or musculoskeletal issues identified at your initial assessment will be re-evaluated. This is a chance to measure your progress and to appreciate the health benefits you have gained from training at MedStrength. It provides an opportunity to change your programme, if required, to help you achieve your goals faster or to set new goals to aim for. A reassessment costs \$60. Talk to Brooke at reception to book in a time.

### We love feedback.

We love to know when we are doing something well or if there is something we can improve on. Please let us know by talking with a trainer or making use of the feedback forms in the bathrooms!

## Machine of the month: MedX Leg Extension

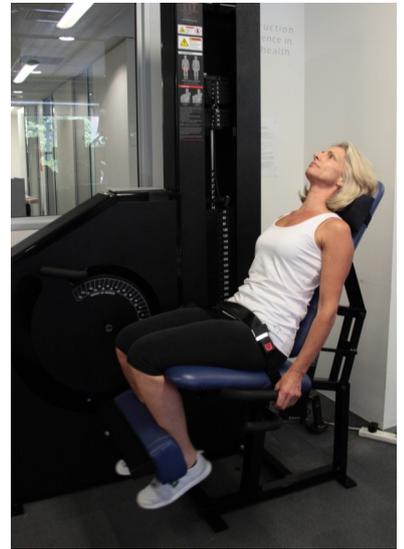
The Leg Extension focuses on strengthening the quadriceps (quads), which are the muscles at the front of your thighs. They determine how high you jump, how fast you run and stabilise the knee joints. Because many leg exercises recruit help from other muscle groups, such as the hamstrings, gluts, lower back and calves and because the quadriceps are stronger than the hamstrings, it is important to exhaust the quads at the start of your leg routine. The smartest machine to achieve this "pre-exhaustion" is the MedX Leg Extension.

The Leg Extension is a fantastic device for age-proofing your knees. Studies show that one of the leading causes of disability among elderly is knee osteoarthritis (OA). They have found that decreased quadriceps strength is associated with greater knee pain, joint deterioration and impaired function. Stronger quads have been shown to protect against cartilage loss in the outer part of the knee joint, which is the site of frequent cartilage loss, pain and disability in patients with OA. It showed that those with the greatest quadriceps strength had less knee pain and better physical function than those with the least strength.

The Leg Extension can also be used to great effect after ACL surgery, as often the goal of restoring knee function to pre-injury levels is not met due to weak quads. Strong quadriceps are critical to dynamic joint stability and a weakness of this muscle group is related to poor functional outcomes.

Having strong quads provides other benefits, such as:

- Extra stamina - many sports and activities require constant side-to-side movement, which works the quads from the outside of the muscle to the inside. Having strong quads will help keep them from tiring and will work to help prevent injury.
- Explosive take offs - the quads' main job is to extend your knee, ie straighten your legs. Training the quads can make it easier to do that job with more force, giving you more power whenever you use your legs to push yourself forward or up.



### What's Going On?

Don't forget to take advantage of our **FREE Pilates mat and stretch classes** & add great variety to your routine. Check out the timetable and book one for yourself today!

**Swing Strength, MedStrength's golf performance programme** is up and running, ask Vjaj if it's right for you!

The **Circuit Challenge Board** regularly has new activities; challenge a trainer and see if you can beat their time!

Need a push to achieve your goals? Our **Personal Trainers** can help. Ask a trainer on the floor for more information.

### Cardio exercises vs strength training:

A study in 2014 by Homaee et al. found that both endurance training and HIIT (high intensity interval training) coupled with a healthy diet resulted in higher fat burning post exercise. Researchers such as Homaee et al (2014) have shown that HIIT is a more time efficient alternative to endurance training, although both of them yield positive physiological benefits. They also concluded that HIIT decreased body fat percentage more than endurance training.

If you are trying to drop a few kilos, it is important to focus on both diet and exercise. Please feel free to check in with our trainers here at MedStrength and make sure that your programme is working for you and your goals. Also don't forget we also have our dietician, Christine Everest, on site as well to help maximise your health gains.

Authors of study: Hasan Matin Homaee, Lida Moradi, Mohammad Ali Azarbayjani, Maghsoud Peeri.  
Published in: International Journal of Biosciences (2014), Vol. 4, No. 9, pages 190-196



### Opening Hours:

Mon - Fri	6am - 8pm
Sat	8am - 4pm
Sun	10am - 3pm