

# Resistance Winter 2017

As the days become shorter and colder, outdoor activities often become less appealing. Don't let this mean that your physical activity levels decline. Here at MedStrength it's the same temperature all year round so if you pass on a morning walk in single digit temperatures, you can always come and get your daily cardio in with the help of one of the trainers in the gym. Winter can also be a great time to physically prepare for the summer. Whether your goal is to be able to enjoy a bush walk without pain, to improve your tennis, or simply to look good at the beach, the ideal time to start working towards these goals is now. Many people like to set goals as summer begins but soon realise that they didn't give themselves enough time. Feel free to have a chat with one of the trainers at MedStrength to help you work towards these goals. If you would like personal help with meeting those goals even faster, consider our Personal Training options which have helped many of our members!

## FOCUS: Balance and Coordination



Whether you are a keen golfer or simply like to go for long walks, balance plays a major part in keeping you stabilised. We also need good balance to allow us to perform our everyday activities at home and work, so much so that loss of balance and coordination in the elderly is one of the major causes of falls and their resulting injuries.

Balance is a complex mechanism involving multiple components;

our brain understands whether our body is at rest or engaged in activity by the information sent from the inner ear, eyes, skin, muscles, and joint receptors (proprioceptors) These all work together to send pieces of information to the central nervous system regarding motion, space, ground contact, and which body parts are involved in movement.

Deterioration of any of these parts of the body can lead to a decline in balance and coordination. Strength training plays a vital role in fighting sarcopenia (loss of muscle strength) and helping you to maintain the muscular component of balance. Adding in a few gym exercises that challenge your balance and coordination will help you stimulate both the visual and middle ear components of balance by challenging the equilibrium of our body. Exercises could be as simple as standing on one leg for a length of time to standing on a BOSU ball and throwing a medicine ball onto the rebounder. Our trainers are happy to show you around the balance and coordination area of the gym and highlight some suitable exercises.

## When did I lose my balance?

Our balance often declines gradually without our realising it. For many people, this is quickly realised when we attempt an unstable activity such as skateboarding or skiing after a long period of time. We subconsciously make up for poor balance with our eyesight, reacting to things we see to keep ourselves stable. Once our eyesight inevitably starts to decline, we start to rely on muscular strength and coordination for balance. Unfortunately by this stage, these attributes have often declined unknowingly and we are left with very poor balance. This makes us more susceptible to falls and unable to do simple tasks such as putting a sock on without having to sit down. Fortunately with training we can regain our ability to balance, and restore function that may have been lost.

## How long should I be able to balance on one leg?

One of the best studies of this was published in *Journal of Geriatric Physical therapy* by Barbara Spriger PT, PhD entitled Normative Values for the Unipedal Stance Test with Eyes Open and Closed.

A strong relationship was found between advancing age and declining balance. Eyes open balance stays in the 40sec range until age 50 then begins to drop by about 10 seconds for each decade after 60. Eyes closed balance is a third of eyes open balance and drops by about 4 seconds each decade after age 50. Test yourself and compare with the averages in the table. The simplest way to improve your single leg balance is to practice standing on one leg. Practicing while you brush your teeth each day is a good way to start.

### Test Yourself

- Stand barefoot and cross arms over the chest
- Focus on a spot on the wall in front of you at eye level for eyes open testing
- Raise one leg so that the raised foot is near but not touching the ankle of the stance limb, ensure that shoulders are level, start timer
- Stop the timer when you uncross the arms/ move the raised foot away from the standing limb or touch the ground/move the weight-bearing foot to maintain balance
- Repeat the test the same way with eyes closed. Also stop the timer if you open your eyes.
- Record the best of three trials

Age Group	Average eyes open (secs)	Average eyes closed (secs)
18-39	43	8.5
40-49	40	7.4
50-59	37	4.7
60-69	26.5	2.8
70-79	14.5	2
80-89	6.5	1.4



## World Masters Games

We congratulate all the gym members who participated in the World Masters Games. Our members competed in athletics, cycling, bowling and golf and had all been on workout programs specific to their sport, which contributed to the good results seen across the board.

Hi Vijay, special thanks to you and your Golf Performance program I finished 7th in my section, 65-74, at the recent World Masters Games - Golf. When I started with you over a year ago, I could not play golf two days in a row. The back pain after a round meant I could not play for at least another 2 days. I'm pleased to say that I played 4 rounds over 5 days and I was not tired or sore at all. My golf improved each day because I felt fit and my shotmaking improved because I was not fatigued. I can recommend your program to other golfers who need to improve their fitness and golfing flexibility. The rewards from better fitness and improved golf far exceed the investment in your program.

- James Peoples (Remuera Golf Club)

## Staff News

We farewell Lloyd Brooks, one of our longest-serving trainers. Lloyd has been with us for the past 3 years and we know he will be missed.

Welcome to our new trainers, Gareth Carter and Darryn Collins. Gareth, pictured right, has a degree in Sport & Recreation from AUT, majoring in Sport & Exercise Science.

Gareth has represented New Zealand in Judo on the world stage, while also competing locally in Jiu Jitsu, boxing and mixed martial arts.

Gareth is enthusiastic about the strength and conditioning aspects of sport and exercise training and is happy to have the opportunity to work in an organisation focusing on rehabilitation.



Gareth



## Opening Hours:

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