# Serving the local community since 2001

# Back in Shape Physiotherapy & Pilates

## Helen's Pilates

#### Term dates: 2016 Term 4

Start: Monday 3 October End: Monday 12 December

#### Alphington Bowls Club Parkview Rd, Alphington

All ages and abilities classes

Mon: 12-1pm Wed: 5.30-6.30pm & 6.30-7.30pm Fri: 9.15-10.15am & 10.30-11.30am

<u>Cost:</u> 10-week term: \$200 OR \$25/class casual

### Fairfield Community Room Station St, Fairfield

Over 50s class

Mon: 9.30-10.15am

Limited mobility class

Mon: 10.30-11.15am

<u>Cost:</u> 10-wk term: \$100 OR \$10/class casual

#### **PUBLIC HOLIDAY ALERT:**

There will be no classes on Monday 31 October (Melbourne Cup Eve)

# Physio & Pilates Appointments

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# Living life in the fast lane

My regular Pilates attendees will not have failed to notice that this last term I have begun incorporating four 30-second bursts of 'fast exercise' at various points throughout my classes. "What exactly are we doing?" and "What are the benefits?" are questions many of you have been asking. Allow me to explain.

You might have heard of 'High Intensity Training (HIT)', 'High Intensity Interval Training (HIIT)', 'Fast Training', or simply 'Fast Movement'. The exercises in the classes are examples of this, but you can pretty much adapt any movement/exercise to work in the same way. For additional reference, I'd recommend that you check out Dr. Michael Mosley's book '*Fast Exercise*' or look up the Catalyst documentary broadcast on 17 May 2016, entitled '*Fit in six minutes a week*'.

Fast Movement—as I call it—involves moving as quickly as you can for 30 seconds, resting for five minutes and then repeating the cycle another three times. If you do this program the recommended three times a week you will have racked up an impressive total of six minutes of exercise!

It is worth noting here that the <u>quality</u> of the exercise is more important than the <u>quantity</u>. The theory behind this revolutionary way of exercising is based on scientific research which indicates that moving our bodies as fast as we can for 30-second 'sprints' engages our fight/ flight response and floods our body with powerful hormones such as adrenaline and noradrenaline. These make our muscles, heart, blood vessels and lungs go into overdrive and fires up the mitochondria in every cell in our bodies.

Mitochondria are the parts of the cells that consume the oxygen we breath and convert it into energy in the form of ATP. When you consider that Mitochondria make up ten per cent of our body mass, you'll understand why it is beneficial to get these working harder, especially as recent research indicates that mitochondria are crucial to our health, fitness and our sense of wellbeing.

Interestingly, while oxygen is essential for proper body function, in excess it can also act as a harmful agent—destroying enzymes, protein and DNA in much the same way as oxygen molecules cause steel to oxidise to rust. Proper functioning mitochondria help ensure all the backets are utilized.

body's oxygen is utilised for energy, thereby minimising the formation of detrimental oxidants. Not only does Fast Exercise help ensure all the oxygen is used in this way, but it also causes older, less-efficient





mitochondria to be replaced with newer, more-efficient mitochondria.

Research further indicates that when we exercise, a specific protein is released by our muscles which improves the mitochondria function of our skin, reducing skin ageing by thinning the top layer (the

epidermis), which naturally thickens as we get older, while thickening the deeper layer (the dermis) by increasing the density of collagen fibres.

The VO2 Max test—commonly used as a measure of our aerobic fitness also quantifies how much oxygen our mitochondria can consume. As such, it is a good indicator of the metabolic health of our muscles. While the numbers themselves are a little meaningless to most people, the relative values are interesting. For example, an athlete will have a VO2 Max over 70, while a couch potato will have a VO2 Max of less than 30. In general, a low VO2 Max result provides a fairly accurate indicator of our predisposition to cardiovascular diseases, cancer and diabetes.

Studies show that by improving mitochondria function, Fast Exercise lowers our risk of developing chronic diseases such as Alzheimer's, obesity, Type-2 diabetes, cardiovascular diseases and ageing. It also helps reduce visceral fat and promotes weight loss. So no complaining in the next class when I tell you to drop and give me 50!

## **Traffic Light Exercises**

Fed up of wasting time waiting for the traffic lights to change? Frustrated that there aren't enough hours in the day to fit in all those important Pilates exercises you've promised yourself (and me) that you'd do? Well here we have the latest in our series of exercises designed to be done in the car while waiting at the lights. You can also do these wherever you find yourself sitting with a few spare minutes on your hands.

#### Pelvic Floor Elevator Exercise

For this exercise, it is helpful to imagine your pelvic floor is like an elevator, with stops at the ground, first, second and third floors.

- Take a breath in
- As you breath out, lift your pelvic floor in three equal increments—the first, second and third floors
- As you breath in, relax your pelvic floor back to the ground floor, but be careful not to bear down and end up in the basement!
- Repeat four times
- Do this at every set of red traffic lights and you will end up with excellent pelvic floor control
- Once you can perform this exercise easily, try to return to the ground floor in three equal increments on the breath in
- Note that you might need to rest for a couple of breaths between each repetition of the exercise



## **Real Time Ultrasound**

## High-tech way to check the effectiveness of your Pilates exercises

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When doing Pilates, do you ever find yourself wondering if you are correctly engaging your pelvic floor and deeptummy *transverse abdominal* (*TA*) muscles?

Wouldn't it be great to be able to see these muscles contracting and relaxing in real time to check that what you think you are doing is what you are actually doing? Well now you can!

Real Time Ultrasound provides a video picture of your muscles working, allowing you to ensure you are targeting the correct muscle. As the *TA* lies beneath the *internal* and *external oblique* muscles, it can be hard to determine if it is switching on or not; you might only be contracting the more superficial muscles.

Because the *TA* is the only abdominal that stabilises the spine, it is imperative that you learn to properly control this important muscle.

Real Time Ultrasound makes use of a hand-held ultrasound probe that is placed on your tummy; it is the same technology that allows parents-to-be to see an unborn baby. It is painless and non invasive.

If you would like to book in for an appointment, please call me on 0421 526433.

The cost of a consultation is \$80, which is rebate-able if you have private health insurance. To ensure good visibility of your pelvic floor muscles, it helps to have a moderately full bladder at the time of the session.