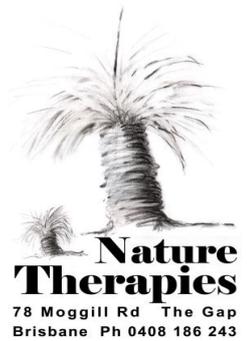


# The Most Neglected Yet Most Beneficial Form of Exercise



If you are like me, you often look at children playing and wonder "Where do they get all the energy?" The lucky ones, who aren't playing a computer game, are out there running, jumping, climbing and chasing each other around. It's only after we "grow up" that we formalise a lot of this play into sport, and it is generally after we leave school and begin to get responsible that even sport starts to take a back seat.

After a while, again the lucky ones realise, that they can't really get by without physical activity and often return to having a walk or jog, going to the gym or picking a healthy sport. But quite often the majority of our exercise programs miss out on one vital form of exercise that can produce enormous benefits to our bodies as we age.



The missing key is often the **intensity** of our exercise and "going flat out" is a term that we reserve generally for work, or busy timetables, but it is this intensity itself that produces many of the benefits that we are looking for in exercise- and not just in small amounts!

To get a good understanding of how intense exercise can produce these benefits we have to understand that our muscles have three sorts of fibres, slow twitch, fast twitch and super fast twitch. What has come to light is that to naturally increase our body's production of HGH (human growth hormone) which builds muscles, assists longevity and a myriad of other beneficial processes, we have to activate our superfast twitch muscle fibres. It is high-intensity burst cardio that actually engages the super fast twitch fibres most effectively.

This form of exercise also stimulates the production of new brain cells through the process of neurogenesis, causing our adult brain stem cells to divide into new stem cells. More new brain cells can lead to improved thinking and processing of information. A recent study published in Cell journal revealed that a build-up of a substance known as BMP (bone morphogenetic protein) decreased production of new brain cells and that BMP was markedly reduced and kept under control by intense exercise and HGH release. Increased BMP has links to Alzheimer's.

So now exercise is not just about losing fat, bulking up or looking good – it can also help your brain function, and that's surely something we all want to hold onto!

### What is this magic form of exercise?

The trick is to exercise in short bursts of high-intensity followed by periods of recovery. This gives the body the best chance for optimum health gains, the production of repair and growth hormones and the burning of excess body fat. This exercise session should be done once or twice a week and should raise your heart rate up to its anaerobic threshold for 20 to 30 seconds, followed by a 90 second recovery period. This is repeated up to 8 times as your fitness builds and when performed properly you need to get very close to your maximum heart rate by the last couple of intervals. Your maximum heart rate is generally calculated as 220 minus your age. The whole session only takes 25 minutes but the benefits continue for hours.

Please note that anyone who has been unfit for a substantial period or is carrying excess weight, or has any heart or medical condition would need to be cleared by their doctor to even begin building up to these sorts of intense sessions.

### Here is how it works

Intense exercise can be performed by sprinting up an incline (only if you your body is used to it, otherwise injuries are common), the elliptical arm and leg cross trainer at the gym, a rowing machine, swimming flat out with flippers, a stationary or recumbent bike, or Burpee's, where you squat down and place your hands on the ground, shoot your feet out into the prone position, bring them back in underneath you and then jump as high as you can towards the ceiling. All these exercises provide the opportunity for superfast twitch intensity.

1. Warm up for at least three minutes.
2. Go "flat out" as hard as you feel capable, for 30 seconds.
3. Recover for 90 seconds by backing off to around a 20% of the intensity.
4. Repeat another seven intervals making a total of eight intervals performed over 16 minutes.
5. Cool down for 3 to 5 minutes



Remember to let your body adapt gently to the increase of intensity and don't worry if you only get through 4 to 6 intervals the first few times. There is no point in overstressing the body, just providing an increasing stress each session will eventually see you capable of

completing the eight intervals strongly in 4 to 6 weeks. But keep in mind that as you progress, no matter which exercise you choose, you must continue to push yourself a little harder to keep challenging the body as you get stronger and fitter.

### **A complete exercise program**

Intense exercise can form the foundation of a more complete exercise program that should include:

- Aerobic exercise like walking, running or swimming
- Strength training
- Core stability exercises
- Stretching (preferably Ant-Ag stretching) *see editorial article.*

If you have been thinking about starting an exercise program, there is no time like the present. Both you and I know that it will make a major difference in your energy levels, self-esteem and of course health and longevity. Our bodies are designed to move and be exercised regularly and science is finally proving what ancient cultures have known for thousands of years.

If you need any further clarification please do not hesitate to call Terry on 0408 186 243.