

# HUMAN PERFORMANCE CENTRE

## Improvement Needs Adaptation? We Can Help!

### Adaptation is key

The term adaptation is defined in biological terms as 'any alteration in the structure or function of an organism or any of its parts that results from natural selection and by which the organism becomes better fitted to survive and multiply in its environment'.

Adaptation is key' is a motto that I have been using for some time with my patients and myself to remind me and my patients that they and I have to continue to change in order to be happy and healthy.

As a physiotherapist (PT) I would consider myself a coach on how to adapt. As PTs we use our hands to

facilitate and our voices to educate our patients/clients to overcome their obstacles. From exercises to manual therapy we inhibit or excite the body in order to change for the better; therefore, for this article I will condense a paper that compares high intensity interval training (HIIT) and continuous training on muscle adaptation.

HIIT consists of 'all-out' bouts of physical activity that can range from 30 – 60 seconds with a long rest cycle of 2-4 minutes for less than 10 minutes. This was compared to an average continuous moderate exercise program that lasts 60 minutes. The study demonstrated that HIIT performed 3x per week for a 6-week period demonstrated an adaptation in our muscles

which showed similar results to a continuous exercise program performed 5x per week for 60 minutes.

The example demonstrated that people adapt positively in a 6-week period ranging from a 3x per week exercise program to a 5x per week exercise program. This was only on a small group of healthy young individuals who perform these exercises, but this is not the point. The point is that 6 weeks is the time frame in which we see change, for exercises done regularly.

Take home message:  
Adaptation is a process. Generally we see change in 6 weeks, but you have to do the work in order to be successful.



**Geoff Forgie, PT**  
*Geoff Forgie is a physiotherapist at Human Performance Centre. He can be contacted at 738-8299. Follow him on Twitter or Facebook*



**738-8299**  
**3636 Westfield Road**