

What is FHIT?

FHIT stands for Functional High Intensity Training.

It is the concept of using functional movements at a high intensity to train players.

Functional Movements and Exercises

Functional movements are activities, which transfer over to our everyday lives, sports that we play, and games that we compete in. For example, lifting an object from the ground is something that most people are familiar with. This involves using the arms and legs, in addition to many other body parts, in a coordinated fashion. So if we wanted to lift heavier and heavier objects from the ground, would we train the arms and legs in isolation to achieve a heavier lift? Or would we be better to train the legs and arms, and other body parts together, in movements similar to the lifting movement. If we recall the ancient Greek story about an Olympic hero named Milo, it is a great illustration of modern principles of athletic conditioning and functional preparation. Milo wanted to demonstrate to the world that he was the worlds strongest man. Unlike today's athletes, Milo did not use weights as resistance, nor did he use a specific exercise apparatus. Every day, Milo lifted a small calf into his arms and carried the calf a certain distance. As the Calf grew, so too did Milo's strength and power. Eventually on the opening day of the Olympics, Milo walked to full length of the Olympic arena carrying a fully-grown bull. Milo had trained in a functional manner.

When we talk about functional exercises for Gaelic Games, what do we mean? We mean exercises that will allow the player to jump higher time and time again, sprint faster time after time, Tackle and hit harder more often, Stop and turn more quickly, and react even when tiredness has set in.

In most "gyms" nowadays, there is a huge array of machines. In fact there is a machine that will allow you to train every single part of you body by itself. Quads, Hip and Glute, Biceps, chest, etc etc..... The list goes on. This allows the development of bigger arms and legs, huge chest, nicely developed deltoids and much much more. In fact, after several weeks of these exercises you will really look bigger and better, feel stronger, and people will say " your in some shape". But will you be able to jump higher, sprint faster,



hit harder....etc etc? The answer to this would be more than likely yes. BUT, would you be jumping as high, hitting as hard, sprinting as fast...as if you had trained functionally like Milo, the answer is NO.

What is Intensity and why is it important

If you were to ask Greg Galsman of Crossfit, he would explain intensity as Power Output, the more power you are producing the more intense you are working. In Gaelic Games we call this "Work-Rate", that is how hard are you working.

 $Power = \frac{Work}{Time}$

Work = Force * Distance

Power = <u>Force(Weight Lifted) * Distance(How much you move the weight)</u> Time(How quickly it happens)

So what we can conclude is that to increase power we can:

Increase the weight lifted, or Increase the distance it is lifted over, or Reduce the time it takes to lift the same weight over the same distance

Intensity is important for the simple reason that the higher the intensity, the higher our work-rate. This will allow our teams to be more effective on the pitch. It also means that when we work intensely we can get much more work done in a lot less time. This is very important for GAA people, as with today's hectic lifestyles, we cannot afford to spend hours upon hours in the gym, we need to get more Bang for our Buck.



The problem with Isolation exercise and machines

- They don't allow us to train as intensely.
- Neural pathways for movement are not developed and our nerves don't learn how to use the body as a complete unit.
- The stabilizing muscles are kept weak as the main muscle is strengthened. This can result in injuries on the pitch injuries, as the stabilizing muscles aren't able to control and direct the force generated by larger muscles.
- Isolation machines only work one muscle at a time. This is time intensive.
- Isolation exercise do not allow for the same power output, as big loads cannot be lifted, this is something that is vital for athletic development.

What type of exercises are functional for Gaelic Games

Squat, Dead-lift, Overhead Press, Thrusters, Pull ups, Clean and jerk, Press-ups., etc. All the "big" movements, where by large amount of work is done using the whole body.

FHIT training uses these big exercises mixed in with more common training such as sprints, jumps, plyometrics, and throws, to produce athletes who are functionally strong and have developed metabolic pathways used to working at high intensities required for matches

Manipulating time to increase Intensity

High intensity is relative to the individual being trained. By manipulating time, you can increase or decrease the intensity.

1. You can prescribe a set amount of work to be completed in as short a time as possible.

Or

2. You can set a certain time, and see how much work can be done in this time

Training in this type of format has the benefit of motivating the player in that any improvement is easily noted and training produces factual levels of performance. Rather than simply "good training boys well done tonight". It also allows players to train on their own, or can be used very effectively in a group environment. When you put players in this competitive environment they will literally kill themselves to be first.



Sample FHIT Workouts

An example of a training routine would be:

15 * 30kg squats, 10 * 15kg overhead presses, 5 pull ups, 60meter sprint.

Count the number of times you can do this routine in 15 minutes, you rest as you need to.

OR

21 * 30 kg Squat 21 * Push – ups 18 * 30kg Squat 18 * Push-ups 3* 30kg Squat 3* Push up

See how long it takes you to complete this workout.

Equipment



The one difficulty in this type of training is it requires the use of Olympic bars with special bumper plates made from rubber, so that they can be dropped should the athlete not be able to complete a lift. Secondly this type of equipment doesn't take kindly to being used out doors in the native Irish climate also know as rain.

GaelicPerformance has recently developed the FHITbag, to allow individuals and teams to train in a FHIT fashion

The bags come in various weights from 5kg to 50 kg, and are ideal for using both indoors and outdoors. The bags consist of a tough waterproof pvc outer, with a soft foam inner. The bag also has multiple handles that allow for various exercises to be performed. The other great thing about FHIT bags is that they are a great way to introduce children to resistance exercises, and the bags can be customised with club names and logos.



What do users of GaelicPerformance FHITbags say:

"GaelicPerformance FHITbag[™] are ideal for developing strength And power in young players without going to the gym" Jim Mc Conville, Crossmaglen and Armagh development squad coach

Every club should invest in a set of GaelicPeformance FHITbagTM. There is no better tool for developing functional strength, and at the same time Reducing the chances injury,. Better than any gym at a fraction of the price" **Stephen Brannigan, Newry Clinic, former Birmingham city**, **and current Down Physio.**

"Since we've starting using the GaelicPerformance FHITbag[™], the team has become stronger, quicker, more powerful and more confident. The bags are essential for both Rugby and GAA training " Colin O Hare, IRFU Development Officer

For more complete range of exercises and workouts or to purchase FHITbag's for your club:

www.gaelicperformance.com or Tel: +353 42 97 49856

