

An intro to

# The Health & Fitness Triad

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# Introduction

It would be fairly safe to say that everyone wants to be fit and healthy. But what does it really mean to be fit, to be healthy? Why do most of us spend so much time pursuing health & fitness? And, perhaps more interestingly: why do so many people neglect their health & fitness so completely?

## Definitions

Defining either health or fitness can prove difficult. Often the dictionary definitions don't cut it. Here's what we found when searching <u>www.dictionary.com</u>:

health (hĕlth) n.

- 1. The overall condition of an organism at a given time.
- 2. Soundness, especially of body or mind; freedom from disease or abnormality.
- 3. A condition of optimal well-being: concerned about the ecological health of the area.

fit•ness (fĭt'nĭs) n.

- 1. The state or condition of being fit; suitability or appropriateness.
- 2. Good health or physical condition, especially as the result of exercise and proper nutrition.
- 3. <u>*Biology.*</u> The extent to which an organism is adapted to or able to produce offspring in a particular environment.

The definition of health seems to be fairly complete however it is somewhat negative. We are forever defining health in terms of what we don't have rather than what we do. If we only go so far as to define health as the absence of disease, injury and abnormality, we fail to grasp the entirety of what it is to be healthy. Can health be considered in degrees or can one only be healthy or unhealthy? A definition of health should also encompass more than the negatives. The World Federation for Mental Health have defined health as follows: "a state of complete physical, social and mental well-being, and not merely the absence of disease or infirmity."<sup>1</sup> Now, that reads better.

The above definition of fitness leaves a lot of room for interpretation. What is 'good physical condition'? How is it quantified? Is a cyclist fitter than a runner? The best definition for fitness we've come across was found in a document by Greg Glassman of CrossFit<sup>2</sup> titled '*What is Fitness*'. The basic premise is that to be fit one must be proficient in each of the ten recognised physical skills (cardiovascular/respiratory

<sup>&</sup>lt;sup>1</sup> www.wfmh.org/wmhday/sec3 pt3 4 glossary.html

<sup>&</sup>lt;sup>2</sup> www.crossfit.com

endurance, stamina, strength, flexibility, power, speed, coordination, agility, balance, and accuracy) and be able to perform well in various physical activities and challenges. Further, the individual must be capable of exercising in each of the three energy pathways (the phosphagen pathway, the glycolytic pathway, and the oxidative pathway) indicating fitness in power exercise as well as endurance activities.

Why bother to define health & fitness? Simple, if you don't know what you are aiming for, how do you know if you've achieved it? More importantly, how do you know what to do if you don't know what you're aiming for?

Now that we have taken the time to consider what health and fitness are, we can move on to forming a plan to achieve health and fitness.

## Health & fitness needs

In order to define a path to health & fitness, we have designed a pyramid to outline a hierarchy of elements that when correctly approached constitutes complete health & fitness. The pyramid borrows much from Abraham Maslow<sup>3</sup>, the man behind the Hierarchy of Needs. In much the same way, we have developed what may be termed: the Hierarchy of Health & Fitness Needs (or The Health & Fitness Triad).

We can argue all day about the requirement of air, water and food. For our purposes, let us assume that we have access to clean air, clean water and fresh food (perhaps clean *enough* is more accurate these days). Beyond these basic requirements of human existence lies the hierarchy of health & fitness. This hierarchy is not concerned with the more basic requirements of life it is concerned with how to achieve elite levels of health & fitness.

**Please note:** we make the assumption that you are not making any lifestyle choices that are detrimental to your health before you consider this hierarchy. For example: if you are a smoker or a heavy drinker, these are areas you may wish to address before considering the points put forth in the hierarchy.

<sup>&</sup>lt;sup>3</sup> <u>www.maslow.com</u>

The levels of the hierarchy are as follows (from the bottom up):

- 1. sleep
- 2. nutrition
- 3. exercise

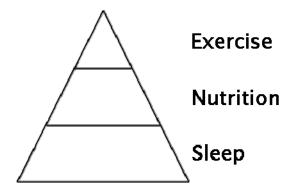


Figure 1 - The hierarchy pyramid

### Level 1 – Sleep

At the base level of our health & fitness pyramid is sleep. It is the foundation of everyone's health & fitness. Make no mistake, sleep is more important than any other factor when considering how to control and/or improve your health and fitness. Without an adequate amount of sleep, any efforts to eat correctly, train hard, sit and meditate and so forth will be for naught.

Sleep is important for many, varied reasons. In fact as research continues into this area further benefits of sleep are discovered. The value of a good night's sleep cannot be underestimated.

One of the major benefits of sleep is rest and recovery. After a period of activity – no matter what kind – the body (and the mind) require time to rest and recover from the stresses of the day. Everyday that we live we are subjected to endless stimuli, stressors and challenges. Each of these takes some toll on the body. Without sufficient time to recuperate the body becomes run down and is not be able to continue to function to its full capacity. In simple terms this means: disease, illness, unnecessary stress, tiredness, lethargy and any number of adverse health conditions. Imagine if you were to run your car for 24 hours a day; how long do you think it would last before it ran out of gas or worse, it suffered a mechanical malfunction? The human body is no different, it requires time off.

If you participate in heavy manual labour or vigorous exercise, your need for sleep is even greater than that of the average person. The muscles, joints and bones all require time to regenerate, to adapt (that is, get stronger) and to repair if any injuries have occurred. Failure to get an adequate amount of sleep coupled with excessive exercise is a recipe for disaster.

Modern science has been interested in the meaning of dreams for many, many years. Although there is – as yet – no definitive explanation of why we dream some scientists believe that we dream so that the brain may process the happenings of the day. It is like a debriefing session for the brain. Whether this is proven to be true or not only time will tell however it is well known that the brain requires an adequate amount of sleep or there are dire consequences. A number of studies have been undertaken to determine the effects of sleep deprivation. Alarmingly, sleep deprivation was found to cause symptoms such as hallucinations, poor learning capabilities and even death.<sup>4</sup>

What is an adequate amount of sleep? The amount of sleep required differs from person to person however it is generally agreed that a period of 8 hours per night is required by most people. Further sleep may be required by those engaged in strenuous physical activity (as mentioned earlier).

Another factor to consider regarding sleep is routine. Our bodies crave routine. This is especially true when it comes to sleep. In order to obtain a good night's sleep it is recommended that you retire and rise at the same times everyday. This creates a routine for your body. After a while the body will adapt to the routine and will benefit from the standard sleeping hours.

Think back to the times before artificial light. During those times people retired to bed when the sun set and rose when the sun rose. That way they had a perfect routine and they always got an adequate amount of sleep (more than 8 hours in some seasons). Obviously, living in that manner would be very difficult in this day and age but we can still aim for a routine. Retiring at 10pm each night and rising at 6am is a recommended routine. Try it for yourself.

<sup>&</sup>lt;sup>4</sup> <u>http://serendip.brynmawr.edu/bb/neuro/neuro01/web3/Ledoux.html</u>

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#### Level 2 – Nutrition

After ensuring that the body is properly rested and recovered via a good night's sleep, it is paramount that we fuel the body correctly. Humans obtain their fuel from the food they eat. When you break it down food is fuel. All things related to food get overly complicated by food processing and the multitude of food options available to today's consumers.

There are now innumerable publications covering the latest and greatest way to lose weight or to obtain health from your diet. These often add to the confusion. In fact, many of these titles are hardly worth the paper they are printed on. That's not to say that all titles are bad. Unfortunately, it is often very difficult to tell the good from the bad. The application of the recommendations in most titles is ridiculously tedious. In many cases, the dietary plans put forth cannot be modified to everyone and only a select few genetically predisposed people will see positive results.

One other thing to consider when thinking about your diet is to not focus on weight *loss*. It's too negative. Instead focus on *managing* your weight or taking *control* of your lifestyle. These have a much more positive essence. It may seem trivial but this minor point has been proven successful on many occasions.

Here's the most important thing to understand: **diets are not the answer**. In fact, more often than not fad dieters end up weighing more upon 'finishing' the diet than they carried prior to commencing it. Why? Fad diets are not realistic, they are restrictive in the extreme and promote feelings of guilt and inadequacy. A far more sensible approach is to learn about correct nutritional practices and then apply them to your lifestyle. The way to achieve lasting control over your weight is to make changes to the way you eat and continue to follow a sensible nutritional plan throughout your life. By taking this approach your body will reach its own natural, healthy weight.

When you start developing a healthy and nutritious diet – not a fad diet, an ongoing nutritional routine – there are three keys points to consider:

- 1. the proportions of carbohydrate, protein and fat in your meals
- 2. the amount of food you consume, and
- 3. the number of meals you eat each day and their frequency

The correct ratio of carbohydrate, protein and fat is approximately 40:30:30. This promotes correct levels of hormonal activity in the body and maintains the correct functioning of the body without an oversupply of any particular nutrient. Many diets proclaim that you require 70% of your dietary intake to be from carbohydrates and as little as 10-20% from each of protein and fat. It doesn't take a trained eye to see that this is not balanced. An intake of approximately 40% carbohydrate will allow you all the energy you need during the day without promoting storage of excess energy as body fat.

Be aware that eating dietary fat does not actually make you fat. Excess carbohydrates are to blame for the current epidemic of obesity and diabetes not fat. That said, don't go out and gorge yourself on saturated fats. You still have to be sensible about which fats you eat. The best fats are the monounsaturated variety.

In order to determine how much you actually need to eat, you first have to determine how much protein that you need. Everything else is based upon this figure. You should aim to consume approximately 0.7 and 1.0 grams of protein per pound of lean body mass. This depends upon how active you are. If you participate in moderate daily workouts then use the 0.7 figure, if you are a hardcore athlete then the 1.0 figure is for you. Your lean body mass is your weight minus the weight of your body fat. There are plenty of lean body mass calculators online; search Google and you are sure to find one. Once you know how much protein you require you can work out how much fat and carbohydrate is needed. It is recommended that you refer to one of Dr Barry Sears books on how to construct your meals correctly and simply. "Enter the Zone" is one such book. You may also wish to visit <u>www.drsears.com</u>.

The last point to consider when preparing meals is: where is your protein coming from? All too often people do not consume enough protein and by default replace those calories with more carbohydrate than is required. So, each time that you begin preparing a meal, ask yourself: "where's my protein?" It is important to eat regularly throughout the day. A meal every 3-4 hours will ensure that you do not have peaks and troughs in your energy levels and will remove the desire to eat too much at your next meal because you are *so* hungry. Generally, five to six meals a day is suitable for most people. This is usually broken down into three main meals and two to three snacks. Again, get into a routine, eat at the same times each day and you will notice the benefits.

#### Level 3 – Exercise

To be as effective as possible exercise must be focussed and intense. Movements such as gentle walking and casually paddling a boat whilst providing some metabolic benefit are best described as consequential exercise. To develop a high or elite level of fitness one must aim to stretch their capabilities, to push themselves to the edge, to learn new things and to encourage adaptation in their bodies.

Our bodies develop in direct relation to the work that they must perform. You will notice this by comparing the office worker who also leads a sedentary life with the labourer or the marathon runner with the boxer. The bodies of these people have adapted to the training – or lack thereof – that they have been subjected to.

The most beneficial movements to be incorporated into an exercise program are those that mimic everyday movements. These provide a direct benefit by strengthening the body in a manner that is applicable to your everyday life whilst also providing a metabolic and hormonal benefit. Examples of these movements are the deadlift (picking something up from the ground), the squat (standing up from a seated position), and the pull-up (climbing a fence of a tree).

Each of the previously mentioned movements and a number of others are classed as compound movements. That is, they utilise multiple muscle groups to complete a movement. This is different from isolation movements as they focus on specific muscle groups. An example is the bicep curl. Performing compound movements has the added benefit of promoting a response in the hormonal and neuroendocrine systems of the body. This response increases testosterone, insulin-like growth factor and human growth factor. In turn, muscle mass and bone density – among other physical aspects – are also increased.

Variety is another key to obtaining elite fitness. The goal is to challenge the body's capabilities by trying new sports or activities on a regular basis. It is essential that you do not limit yourself to one or very few activities. The following are recommended activities that may be incorporated into a greater training routine: cycling, running, swimming, lifting (Olympic style), throwing, jumping, handstands, cartwheels, push-ups, pull-ups, and rowing. There should be no limit to the number of combinations that can be found. Combining various activities in a somewhat random nature provides continually changing stimuli to the body and therefore promotes adaptation rather than specialisation. The side benefit of incorporating so many varied modalities is that you should never get bored.

Earlier, focus and intensity were mentioned. The importance of these two concepts cannot be understated. To truly benefit physically from any movement, you mind must be focussed on the task at hand. The connection between mind and body will promote better results than simply plodding through a mind-numbing circuit of movements. Intensity is the factor that takes exercise to the next level. By simply increasing the intensity of exercise sessions, improvements will present themselves. One way to increase the intensity of any sessions is to set it against the clock. Go through your workout as fast – and safely – as possible. Next time you attempt the same routine, try to beat your last time.

# Beyond the triad

If you've taken care of everything at every level of the hierarchy then your health & fitness should be better than 95% of the population. This next level is beyond the pyramid and is concerned with the little extras that may provide you with some further benefit.

Why have we called them extras? Well, they only really help you out if you've already sorted out the previous steps. For example, dietary supplements are highly unlikely to be of any benefit if you eat hamburgers and fries all day.

Beyond the pyramid you may wish to consider the benefits of the following:

- Regular massage, osteopathic and chiropractic treatments
- Dietary supplements such as protein shakes, vitamins and minerals
- Meditation
- Yoga and Tai Chi
- Martial arts training

## **Summary**

Achieving elite fitness does not have to be a daunting or difficult task. It is something that each of us has the power and ability to achieve if we simply decide to do so. Obviously, it takes some effort. Remember that everything in life that is worthwhile requires effort.

To achieve results you must make positive changes to your lifestyle – as presented in this document – and then make them habit. Once you are in the habit of living a healthy life you will wonder why you never did so before.

By combining adequate sleep, correct nutritional practices and intense, focussed exercise you will be well on the way to achieving lasting health and fitness.

Good luck.

# A bit about CrossFit Victoria

CrossFit Victoria offers a fitness model that has been proven by elite athletes, armed forces personnel and thousands of everyday people like you. We prescribe purely functional exercise that will improve your ability to function from day-to-day. If you are prepared to put in the effort, CrossFit can make you fitter than you ever thought possible.

#### What is Crossfit?

CrossFit is a core strength and conditioning program. We have designed our program to elicit as broad an adaptational response as possible. CrossFit is not a specialised fitness program but a deliberate attempt to optimise physical competence in each of ten recognised fitness domains. They are Cardiovascular and Respiratory endurance, Stamina, Strength, Flexibility, Power, Speed, Coordination, Agility, Balance, and Accuracy.

CrossFit is the principal strength and conditioning program for many police academies and tactical operations teams, military special operations units, champion martial artists, and hundreds of other elite and professional athletes worldwide.

Our program delivers a fitness that is, by design, broad, general, and inclusive. Our specialty is not specialising. Combat, survival, many sports, and life reward this kind of fitness and, on average, punish the specialist.

#### What can it do for me?

The needs of Olympic athletes and our grandparents differ by degree not kind. Skiers, mountain bike riders and housewives have found their best fitness from the same regimen.

Imagine having the energy to go through the day without feeling tired.

Imagine developing the strength, endurance and power that will see you perform most physical tasks with ease.

Imagine dropping excess weight and building muscle to achieve the body you've always wanted.

#### Want to try it for yourself?

If you want to take a free trial session of a CrossFit Victoria group session, please call 1300 13 41 10 or email <u>info@crossfitvictoria.com</u>. We will ensure that you learn exactly what CrossFit training is all about in a safe, encouraging environment.