# PLANNING

## Purpose And Aim Of Training Programme

My name is Hammad Naveed, I am 15 years old, about five foot tall, and weigh about seven stone. This is why I want to do a training programme for building up my strength endurance. I need it most because of my height and weight. I want to build up my strength because it is basically my weakness. I want to build up my stamina because I need it in long-length sports, like football.

The purpose of a Training Programme is to identify the work to be carried out to achieve agreed objectives. Our objectives could either be, to improve strength, stamina, speed, or suppleness.

Preparation, training, and fitness relate to the training programme in a basic way. You have got to be or have done these three things to get a positive training programme.

If you are not or have not done these three things it will affect your performance in a very negative way.

If you haven't prepared, if you haven't been training, and you're not fit than you will not perform as good as you could have done. This is because your muscles would have been relaxing for a long time period and so when you start the programme your muscles wont be ready to carry out a task which you have not done for a long time. But if you had been training than your body would easily be able to take on this task, then you will perform better than someone who has not trained.

Exercise is very important, if you want to be fit and healthy. Exercise keeps the body in good physical condition, unlike most machines, the body's main motor, the heart, actually works better the more it is worked. Other organs and body systems also work better if they are exercised regularly.

**The minimum amount of exercise recommended is three times a week for approximately twenty minutes. The intensity of the exercise needs to be enough to make you breathless.**

**Short-term effects of exercise are ones that happen during the exercise itself. For example the heart rate increases, which in turn increases the flow and pressure of the blood.**

**Although these will return to normal at the end of the exercise, they will contribute to the long-term effects of exercise.**

**The long term-effects of exercise are lasting changes that take place in response to regular physical activity. All these effects help the body to work more efficiently and deal better with the demands that we place on it when we take part in sport.**

**If you are personally and mentally healthy, it is a very big advantage because it can be used to see success. Many sportsmen see themselves achieving their goals on a regular basis, both performing skills at a high level and seeing the desired performance.**

**This could also motivate you. Before or during training sessions, calling up images of your goals for that session, or of a past or future competition can serve a motivational purpose.**

**Although the words health and fitness are often used together, they are actually two different concepts. To be healthy means to feel well and free from disease. Fitness is one way of developing a healthy lifestyle, but there are also many other ways of getting healthy.**

**In order to keep healthy we have to look after our bodies and minds. Feeling good and looking good will make our lives more enjoyable. There are four main components, which make up a healthy lifestyle; they are exercise, diet, hygiene, and rest.**

**There are five different principles of training and they all help you become fit, safely:**

**First one is called overload. Overload is when you force your body to work harder.**

**Than there's progression. Progression is when you gradually increase the workload as you train.**

**Specificity is when you choose the right training for a specific sport.**

**Reversibility is to understand that fitness cannot be stored for future use and will disappear if you stop training.**

**Finally variance, this is varying the training in order to keep you motivated.**

**There are four different methods of training. They are continuous training, fartlek training, interval training.**

**Endurance training will help you to keep playing longer and at a higher intensity. This is also known as aerobic training, it is called this because it improves the aerobic systems of your body.**

**Activities such as fast walking, jogging running, cycling, swimming and rowing are good examples of aerobic training. Endurance training should involve the whole body.**

**It is continuous which means you do not stop to rest but it is only sub-maximal, meaning that you do not work flat out.**

**Fartlek training is another type of training, which can be used to develop endurance. This is when a runner runs fast and slows, both over hills and on the flat. A typical session will contain of**

steady-paced running, sprints, hill-work, and some slower recovery running.

The purpose of interval training is to develop both the anaerobic and aerobic systems. This type of training is used mostly, since most sports require both types of systems to produce energy. In interval training periods of exercise is followed by short periods of rest. The rest period is very important, since the faster the body can replace oxygen and other fuels, the better it will work. There are four main parts to interval training. They are duration, intensity, recovery, and number of work and recovery periods.

There are four aspects of fitness. They are speed, suppleness, strength, and stamina.

Speed is the quickness of movement of limb, whether it is the legs of a runner or the arm of the shot putter. Speed is an integral part of every sport and can be expressed by a combination of, the following maximum speed, elastic strength (power), and speed endurance.

Speed is influenced by the athlete's mobility, special strength, strength endurance and technique.

For a number of sports acceleration and speed over a short distance is very important, like in Football, Basket Ball, Baseball, Cricket, Hockey, and Rugby.

Flexibility, mobility and suppleness all mean the range of limb movement around joints. Suppleness is the ability to perform a joint action through a range of movement.

The objective of Flexibility training is to improve the range of stretch of the muscles.

Flexibility plays an important part in the preparation of athletes by developing a range of movement to help prevent any injury. Mobility exercises could be part of the warm up programme. It is considered beneficial to conduct mobility exercises as part of the warm down programme but should not include ballistic exercises because there is more chance of injury. Static exercises are recommended as they relax the muscles and increase their range of movement.

The common definition of strength is the ability to exert a force against a resistance.

There are different types of strength. They are Maximum strength, which is the greatest force that is possible in a single maximum contraction. There is Elastic strength, which is the ability to overcome a resistance with a fast contraction. Finally there is Strength endurance, which is the ability to express force many times over.

A muscle will only strengthen when it is worked beyond its normal operation. It is overloaded. Overload can be progressed by increasing the number of repetitions of an exercise, the number of sets of the exercise, and by increasing intensity, whilst reducing recovery time.

The objective of endurance training is to develop the energy production systems to meet the demands of the event. The types of endurance are Aerobic endurance, anaerobic endurance, Speed endurance and Strength endurance.

We know about the five principles of training, which are overload, progression, specificity, regression, and variance. We also know the methods of training, what they are used for and how it will help us. They are continuous, interval, fartlek, and weights training.

My training programme will be based on strength Endurance. This is mainly because strength is what I need the most out of the four aspects but I also would like to build up my stamina. I can benefit from both the strength and stamina whilst playing in tougher sports like rugby.

I am not aiming to get a particular part of my body built up so even though the training principle, specificity, is mainly used in weights training, I will not be focusing only on this training principle, because I am not going to build a specific part of my body up.

As I stated earlier muscles will only strengthen when it is worked beyond its normal operation. It is overloaded. Overload can be progressed by increasing the number of repetitions of an exercise, the number of sets of the exercise, and by increasing intensity, whilst reducing recovery time.

So I will probably go for machines, which focus overload and progression as its training principle. Using progression will also build my stamina.

Even though continuous training is quiet boring, because you don't stop or change speed, I will use it most often because it will work effectively on my endurance.

Some people may choose a specific training principle for a specific part of their body and so, to meet the demands for a specific sport.

The aspect of fitness, which I am focusing on, is strength endurance. I have chosen this because I want to build up my general strength and stamina, this could help me perform better in sports like rugby.

Better performances can be the product of a number of factors. The development of all round strength and stamina is best achieved via circuit training, and this is one of the reasons

**why I chose strength endurance, because we are being made to do circuit training and strength endurance is best improved through this.**

## Safety Aspects

**Injuries decrease the amount of time you can spend on training or doing activities, lower your fitness, downgrade your performance, and can lead to long-term health problems.**

**Although without the same potential of injury that can be received in such sports as soccer, rugby or boxing, sports like athletics nevertheless does present situations from which injury can result. Knowledge of these, and how to avoid them is important.**

**You can be injured for the reason that of aspects about the area you are training in, the way you use equipment, or because of safety/supervision conditions.**

**The area that you are doing your training in should have a sufficient amount of spacing between the equipment. There should be a adequate amount of lighting and ventilation. Lastly about the location, the floor should be even, firm and non-slip, otherwise this could cause a considerable amount of problems.**

**The equipment should be inspected carefully, bar collars should be tightened before any use. Any benches or seating areas should be clean. The floor should be cleared of any equipment not in use, for example weights. Appropriate supportive footwear should be worn as well as appropriate clothing.**

**Maximal lifting of weights should be avoided. There should be firm teacher supervision required at all times. You should know the correct techniques in using the machines, and also you should never train alone.**

Many injuries are caused by weak muscles, which simply are not ready to handle the specific demands of your sport. For example, people who start a running programme for the first time often do well for a few weeks but then, as they add the mileage on, suddenly develop injuries. Their bodies are simply not strong enough to cope with the demands of the increased training load.

Muscle stiffness is thought to be directly related to muscle injury risk and so it is important to reduce muscle stiffness as part of a warm up.

Training can make muscles stronger and make them less vulnerable to damage, especially if the strength building exercises involve movements that are similar to those associated with the sport. Time should be taken to develop your muscles, and strength training, appropriate to the demands of your sport.

Ways in which you can prevent any injury whist training are, to avoid training when you are tired. If you increase your resting time you should also increase your training time. To treat even seemingly minor injuries very carefully, so that it does not become a major problem. If you experience pain when training you should stop your training session immediately. You should never train hard if you are stiff from the previous effort. You should make sure that the area you are training in is clear of any hazards, and also to check that the equipment is safe to use. Finally, the last safety tip is to allow a lot of time in warming up and cooling down.

There is no doubt that if you spend time on warming up and cooling down your performance will improve dramatically.

The warm up will reduce muscle stiffness.

The warm up should consist of some light aerobic training, stretches, and maybe some specific drills. Stretches are more

appropriate to the warm up as they help reduce muscle stiffness. Standing exercises do not reduce muscle stiffness.

The cool down should also consist of some light aerobic training and some static stretches. Static stretches are more appropriate to the cool down as they help muscles to relax and increase their range of movement. The benefit of a cool down is that it reduces the chances of dizziness or fainting.

Most muscle injuries should be treated with RICE; Rest, Ice, Compression, and Elevation.

Ice decreases swelling, preventing many sore spots becoming injuries. Hosing your legs with cold water after a run has the same effect - it can ease significant fatigue; it'll also bring your body temperature down.

Swelling stops blood flow, it can get in the way with healing. You can fight the swelling with ice. Use an hour for two days. Use warmth only after all the swelling has subsided.

Muscle strains at the back of the legs are normally from running too fast. You will need to rest if you get muscle strains.

By cutting out speed work for a few days will qualify as rest. Active rest, putting the muscles through a comfortable range of motion, will bring nutrients to the muscle and encourage repair. You will also maintain fitness.

A major muscle tear will require you to stop running; minor tears, if not hurting when you run, will heal with this active rest. But Run 30 seconds per mile slower than usual; avoid long runs; avoid hills - you tend to go too fast down them. No speed running. Do not over stride.

The combination of easy running and RICE for the acute phase of about two days, then stretching and massage later, and an

anti-inflammatory if appropriate, should help the muscle to recover.

Consider your form when preparing for speed work again.
Wear appropriate shoes.
Ease into the fast running after drills and striders. Do fewer reps for the first couple of sessions back.

## Appropriateness Of The Activities

So that we could see how our fitness has improved from doing the fitness training programme, we preformed the cooper twelve-minute run before we started any form of training, which will than be repeated once again after we complete our training programme.

The Cooper twelve minute run is an endurance test designed to measure basic fitness and stamina; a test on aerobic fitness. The test involves a run of 12 minutes duration, covering as many metres as possible in that time. The result can be assessed using the following grading table.

| AGE | EXCELLENT | ABOVE AVERAGE | AVERAGE | BELOW AVERAGE | POOR |
|---|---|---|---|---|---|
| Male 13-14 | >2700m | 2400-2700m | 2200-2399m | 2100-2199m | <2100m |
| Females 13-14 | >2000m | 1900-2000m | 1600-1899m | 1500-1599m | <1500m |
| Males 15-16 | >2800m | 2500-2800m | 2300-2499m | 2200-2299m | <2200m |
| Females 15-16 | >2100m | 2000-2100m | 1700-1999m | 1600-1699m | <1600m |
| Males 17-20 | >3000m | 2700-3000m | 2500-2699m | 2300-2499m | <2300m |
| Females 17-20 | >2300m | 2100-2300m | 1800-2099m | 1700-1799m | <1700m |

**The test is to be accomplished on a 400m running track; we had done ours in a circle, so when you run once around you are running 250m. There are ten cones separated equally on the circle; every cone was split 25 meters apart. We had to count each cone as we ran past it so that at the end we could calculate the distance we ran.**

**Although the cooper twelve-minute run is a test of endurance and aerobic fitness, I can still use this to check if my strength has increased, as well as my stamina, because if my results do improve this will be because of my increase in strength too.**

**I found the run pretty hard but I didn't find myself knackered or with any stitches in my stomach. I may have got better but I was lacking motivation, mainly because the weather was not great.**

**We ran on a field, not a track. The field was not flat and so we found our selves speeding up at some places but slowing down at others, this could have affected our performance.**

**When we did the first cooper twelve minute run it was late summer, and so almost the perfect conditions in which to run in.**

**I ran past exactly ninety cones, so ninety multiplied by twenty-five equals 2250 meters. Looking at the table above I am average for my age.**

**After completing the cooper twelve-minute run I have made a decision that the training method that I have chosen is definitely strength endurance. Like I explained before, this is because I really want to build up my physical strength but also would like to run for long distances and improve my performance when playing in sports like rugby without tiring and being pushed about, easily.**

Strength endurance is used to develop the athlete's ability to maintain the quality of their muscles'. All athletes need to develop a basic level of strength endurance.

## Identifications

The basic principles of fitness training are summed up in the short form FITT.

*F* – Is for frequency, this means the number of times you train (for example three times a week).

*I* – Is for intensity, which is how hard you work.

*T* – Is for time, which is how long you train for, increasing the duration of exercise increases the overload on your body.

*T* – Is for type, this is the type of activity you are doing; some training is very specific to certain kinds of sport. The problem is that it may be boring, so a lot of people do fartlek training.

Training zones are based on a percentage window (60% to 70%) of your maximum heart rate. Within each training zone slight physiological effects take place to improve your fitness. Training within the recovery zone develops basic endurance and aerobic capacity. All easy recovery running should be completed at a maximum of 70 %. Another advantage to running in this zone is that while you are fat burning you may lose weight and you will be allowing your muscles to re-energise with glycogen, which has been finished during those faster paced work-outs.

Training in the aerobic zone, you will develop your cardiovascular system, which is a system in the body that transports oxygen around the body. The body's ability to transport oxygen to, and carbon dioxide away from, the working muscles can be developed and improved. As you become fitter and stronger from training in this zone it will be possible to run some long runs at up to, so

**getting the benefits of some fat burning and improved aerobic ability.**

**Training in the anaerobic zone will develop your lactic acid system. In this zone your individual anaerobic threshold is found. During these heart rates the amount of fat being utilised as the main source of energy is greatly reduced and glycogen stored in the muscle is mainly used. One of the side effects of burning this glycogen is lactic acid. There is a point at which the body can no longer remove the lactic acid from the working muscles quickly enough. This happens at an individual heart rate for us all and is accompanied by a rapid rise in heart rate and a slowing of your running pace. This is your anaerobic threshold.**

**Through the correct training it is possible to delay the anaerobic threshold by being able to increase your ability to deal with the lactic acid for a longer period of time or by pushing the anaerobic threshold higher.**

**The volume of oxygen you can consume while exercising at your maximum capacity can measure fitness. VO2 max is the maximum amount of oxygen in millilitres, one can use in one minute per kilogram of body weight. Those who are more fit have higher VO2 max values and can exercise more intensely than those who are not as well conditioned.**

**Aerobic conditioning is also known as cardio respiratory endurance or aerobic power refers to continuous rhythmic and/or repetitive activities that put an increased oxygen demand on your heart, lungs, and body systems. The aerobic system uses large muscle groups for activities such as walking, swimming, cycling or jogging. The goal of aerobic conditioning is to train the heart and other muscles to use and/or utilize oxygen more efficiently. This sustained efficiency allows the person to perform exercise for longer periods of time, therefore improving your fitness level.**

The Benefits of aerobic conditioning are that it Improves self concept and self confidence, it Reduces fatigue, it Reduces stress levels, Reduces body fat, Improves ability to perform daily functional activities, it Potentially increases life expectancy, Improves muscle strength and tone, Improves muscular endurance, Improves sleep habits, May reduce cholesterol levels, May improve immune system, and it also Improves the overall quality of life. So there are many benefits from aerobic conditioning.

Anaerobic training is shorter than aerobic training in duration, in which oxygen is not a limiting factor in performance, and requires energy from anaerobic sources. These energy sources involve the utilization of phosphagen and lactic acid by the athlete's body; and enable them to perform brief, near maximal muscular activity. Events, or activity that lasts up to 30 seconds in length, rely almost exclusively on the phosphagen system.

Activity that lasts from 30 seconds to 2 minutes, begin to rely on lactic acid. These energy systems are effectively developed using an interval training system. It is important note that although one energy system may be predominating for a given activity, all systems are in use to some degree during anaerobic, or interval training.

Interval training uses, as named, intervals that can consist of running, swimming, callisthenic exercises, or resistance training. Work intervals, which also include rest intervals, vary depending on the athlete's mode of training, or need. For example work intervals of less than 30 seconds (phosphagen system), are typically performed with rest intervals of approximately three times this duration.

This type of training does not allow for full recovery between bouts of work and is often done during the middle, to later part of the athlete's preseason training period.

As the competition phase approaches, preseason interval training consists of longer rest intervals to accommodate the near - maximal intensity. Exercising involving the lactic acid energy

source generally has an exercise-to-rest ratio of 1:2 (one second of activity, to two seconds of rest).

Full recovery is not achieved, but as athletes perform more of this type of training, they will be better able to tolerate and utilize increased concentrations of lactic acid. Most athletes involved in strength and power activities, such as football, baseball, basketball, volleyball, running events under 800 m, and swimming events under 100 m, utilize both of the anaerobic energy sources to supply the majority of required energy. Interval training should comprise the bulk of their metabolic training. Each stage in an athlete's training requires modification of the various modes and methods of training according to the goals set by the athlete, skill coach, and conditioning specialist. The basic programs design is to meet the critical needs of the athlete. Modification of the program, or some variation in these guidelines may be appropriate for different age groups and fitness levels.

The most important principle of conditioning may be listening to your body. The successful athlete has an optimal blend of training modes and methods. The successful athlete has an optimal blend of training modes and methods. And just as with any other type of fitness, the intensity and duration of training must be increased gradually over time in a logical progression that allows the athlete to peak for the most important competitions.

To understand what an athlete's program will consist of, a needs analysis should be a priority. A needs analysis is when the professional analyses the fitness needs of both the activity and the individual athlete involved in the sport. To develop a needs analysis first analyse the physiological and biomechanical requirements of each sport.

A physiological analysis will allow you to devise a program that addresses the aspects of strength, muscular endurance, flexibility, cardio respiratory endurance, power, and speed required for success in the sport. A biomechanical analysis will allow you to choose training activities that develop the athlete in the manner most specific to the sport and also to determine the areas of critical stress in the sport. Strength and weaknesses in

each athlete need to be assessed by the chosen professional. As stated, different sports require various levels of fitness and all athletes should be tested, or analysed for strength, flexibility, endurance, power and speed. Also needed by a medical professional, is an injury profile on each participating athlete to determine specific needs with regard to injury prevention, or adaptation.

Strength endurance is tested by either doing press-ups or sit-ups. Press-ups and sit-ups are a type of progressive training, Progression is when you gradually increase the workload as you train, and so I will focus on progressive training to improve my strength endurance. Strength is improved by the principle overload and stamina is improved by mainly progressive training. These two principles will be used in my training programme, overload and progression.

It's simple to take your heart rate. For 10 seconds immediately after you stop exercising and multiply it by six to get your heart rate in beats per minute. The problem is that it takes time to find your pulse, and pulse is not always counted accurately. It's not easy to take your pulse when your heart is racing along at 160 to 170 beats per minute.

Also, after exercise is stopped, your heart immediately begins to recover to a resting level; the pulse you find and count won't accurately reflect what your heart rate was during actual exercise.

Heart rate can be determined most accurately by using a heart rate monitor.

A heart rate monitor is a wireless, two-piece device consisting of a transmitter (worn around your chest) and a receiver (generally worn as a wrist watch). Electrodes in the transmitter pick up your heart rate and transmit the signal to the wrist receiver for an ongoing display of heart rate during rest or exercise.

**The heart rate monitor can provide you with ongoing feedback from each exercise session. It allows you to train smarter - not necessarily faster.**

**You first need to determine your maximum heart rate or the maximum number of beats per minute that your heart is capable of beating. Taking 220 and subtracting your age can estimate this. For a 40-year-old, for example, the maximum heart rate would be 180 beats per minute.**

**Remember, this is an estimate and the only way to accurately determine an individual's true maximum heart rate is through scientific testing: running an individual to his maximum limits on a treadmill or track can determine "true" maximum heart rates. These evaluations should be performed under qualified supervision, as they require maximal effort. These "true" maximum heart rates can vary as much as 15 beats per minute from the "estimated" values, and that can make a difference when you try to determine your training heart rate range. Once you've figured your maximum heart rate - true or estimated - you can calculate target heart rate ranges for different levels of exercise.**

**For an individual just starting an exercise program or coming back to one after a long layoff or injury, 50 percent to 60 percent of the maximum heart rate is an appropriate starting intensity. If, for example, your maximum heart rate is 180, 50 percent of your maximum is 90 beats per minute and 60 percent equals 108 beats per minute.**

**During the initial stages of training, to gradually adapt to the new level of activity, you'd want to exercise at a level that allows you to maintain a heart rate between 90 and 108 beats per minute for the duration of the workout.**

**If your heart rate goes above 108, slow down, less than 90, speed up. Your target heart range should be 90 to 108 beats per minute, whether the activity lasts 10 minutes or an hour.**

**By staying within this range, you'll reap the maximum cardiovascular benefit.**

**For distance training, a target heart rate range between 60 percent and 80 percent of your maximum heart rate should be maintained. If your maximum heart rate is 180, your target heart rate range is 108 to 144 beats per minute.**
**So, when you head out the door for a 12-miler on Sunday, you should try to keep your heart rate in this range. That way you'll know you're exercising aerobically, using oxygen as your main energy source and fat as your primary fuel.**

**Interval training requires a different level of intensity. It requires you to focus on increasing your anaerobic threshold so you can run faster for a longer period of time, so it necessitates an increase in training intensity.**

**If your maximum heart rate is 180 beats per minute, your target heart rate range for interval work will range from 80 percent to 90 percent of your maximum heart rate, or 144 to 162 beats per minute. If you exceed 90 percent of your maximum heart rate, you'll produce lactic acid faster than you can diffuse it. If you work out at less than 80 percent of your maximum heart rate, you'll activate your aerobic system.**
**The harder you work without exceeding your target heart rate range, the more efficiently you'll function. Recovery should allow your heart rate to lower to a rate of 80 percent or less of your maximum heart rate - 144 beats per minute in this case - before you start your next hard repeat.**

**For a heart monitor to work, it's important that you pay attention to what it's telling you.**

**The other essential is patience. Staying within your target heart rate range will help you realize maximum improvement - and improvement will translate to faster times on the racecourse.**

By maintaining your heart rate within your target heart rate range, you'll be able to adapt to the increasing demands of your workout sessions, increase your speed and the efficiency of your cardiovascular system. By listening to what your heart rate monitor tells you, you can evaluate the effectiveness of each training session. Training and your target heart rate range can be affected by temperature, altitude, fatigue, hydration or dehydration, illness and nutrition. Each of these factors can affect whether you are training smart to realize maximum benefits, or if you're over training and becoming tired.

A training schedule comprises of a number of training units that can span from 7 to 30 days.

Here is an example of a training schedule for beginners, which I found of the Internet.

| Exercise | S*R | 15RM | 50%15RM | 75%15RM | 90%15RM |
|---|---|---|---|---|---|
| Leg press | 1/2/3*15 | .... | .... | .... | .... |
| Leg extension | 1/2*15 | .... | .... | .... | .... |
| Leg curl | 1/2*15 | .... | .... | .... | .... |
| Bench press | 1/2/3*15 | .... | .... | .... | .... |
| Incline press | 1/2/3*15 | .... | .... | .... | .... |
| Pull over | 1/2*15 | .... | .... | .... | .... |
| Lat. pull down | 1/2/3*15 | .... | .... | .... | .... |
| Military press | 1/2/3*15 | .... | .... | .... | .... |
| Peck deck | 1/2*15 | .... | .... | .... | .... |
| Alt. dumb. Curl | 1/2*15 | .... | .... | .... | .... |
| Tri. Push down | 1/2*15 | .... | .... | .... | .... |
| Back extension | 3*10 | xxxx | xxxx | xxxx | xxxx |
| Abd. Crunches | 3*15 | xxxx | xxxx | xxxx | xxxx |

# PERFORMING

The Actual Performance Of The Exercise/Activity

**This is my training schedule, which I stuck to whilst training in the weights room.**

| Activity | Reps | Time | Distance |
|---|---|---|---|
| Sit-ups | 30-40 | - | - |
| Rowing | - | - | 500m |
| Boxing | - | 1-3mins | - |

**Every time I went into the weights room I did thirty to forty sit-ups or sometimes this was replaced with press-ups. I did this first because it was not to intensive and so will not cause any injuries but will act a bit like a warm-up. I did the sit-ups to work on my stamina.**

**Than I either did five hundred meters on the rowing machine or I spent a minute on the arm-curl. I did these two using overload, when I did that five hundred metres on the rowing machine I used overload throughout. So when I was on the arm-curl or the rowing machine I was working on my strength.**

**Lastly I did some boxing on the boxing bag. Some times I was on it for a minute whilst putting 80% intensity into it, but than sometimes I did it for three minutes, putting a lot of punches into the bag but only giving it 60% intensity.**

**When I was on it for a minute I was working on my strength, using overload. When I was on the bag only putting 60% into it, I was working on my stamina, using the training principle progression.**

**I stayed to this training schedule for the six weeks, that we were in the weights room.**

**These were the results that I got from one of my lessons in the weights room.**

| Activity | Reps | Distance | Time | Weight | Rest |
|---|---|---|---|---|---|
| Sit-ups | 40 | - | - | 3kg | - |
| Arm-curl | - | - | 1min | 3 | - |
| Boxing | - | - | 1min | - | - |
| Aspect Of Fitness | Principle Of Training | Method Of Training | Heart Rate Before | Heart Rate After | Notes |
| Stamina | Progression | Continuous | 90b/m | 126b/m | 3kg ball |
| Strength | Progression | Continuous | 87b/m | 128b/m | - |
| Strength | Overload | Continuous | 89b/m | 139b/m | - |

By looking at my training schedule, you can tell straight away that when I was doing these three activities, I was not performing them at my full potential. You know this because if I was performing the activities at my full potential, my heartbeat after exercising should be closer to 205 beats per minute. Though, it is even hard for athletes to reach their maximum heart rate or the maximum number of beats per minute that your heart is capable of beating. This is because even though my heart may be able to reach 205 beats per minute, it does not mean that the rest of my body will still be working. If you are not fit, your arms and legs will tire well before your heart gets to its maximum heart rate.

### The Attitude And Motivation Of The Performer

When training, motivation is a very important factor that affects your performance. If you are not motivate, not bothered, to train than you will not perform well, but if you are motivated and want to do some training than you will perform much better.

Aspects which can cause a lack of motivation are things like the weather, like if it is raining or windy and you have to do outdoor activities people will not want to do it, and so lower your performance.

**It could just be because you need someone like your teacher to motivate you whilst training, you need someone to push you.**

**Motivation has affected my planning and performance. Motivation is actually the only reason why I did not perform to my standards. This is because half the time we were training, I was fasting and so I was feeling very thirsty and hungry at the time. Therefore I was not bothered to tire myself out, or sometimes I just did not have the energy to train hard.**

**From time to time you could see my results improve much higher than others. This is because in the weights room every now and than we had music playing. The music motivated many of us when we were training and so our results were better. This could also lack us motivation to, though, because if we did not like the music, which was being played, you might see a fall in our performance.**

**I was injured one time, and so whilst we were in the weights room I could not do much training because I just wanted to sit down and rest, and because of this attitude I did not reach the standards expected of me.**

**Weather was the biggest problem. This was because in my training schedule I, at times, change my 500m of rowing to one-minute skipping. Though, occasionally it was either raining, very windy, or snowing and so nobody could be bothered to go out and skip.**

**These were the main aspects, which lacked motivation in me, although they're maybe other aspects, which affect motivation.**

**Goal setting is a simple, yet often misused motivational technique, which can provide some structure for your training**

and competition programme. Goals give a focus, and there is a well-known acronym to guide goal setting.

**S** - goals must be Specific

**M** - training targets should be Measurable

**A** - goals should be Adjustable

**R** - goals must be Realistic

**T** - training targets should be Time based

Goals should indicate precisely what is to be done. Make sure you can quantify your goal, goals should be adjusted if too unrealistic or have been met and you should make sure the goal could be achieved given various constraints. Finally, make sure that the amount of time for goal attainment is specified.

The outcome goal is often labelled as the long-term goal. An example of a long-term goal is winning the state volleyball championship. Long-term goals are necessary for the end result, but focusing on these types of goals before or during competition often lead to increased anxiety and distracting thoughts. Performance and process goals, often known as intermediate and short-term goals, respectively, serve the performers better before or during competition. These goals are necessary for successfully reaching the ultimate long-term goal.

### The Effectiveness Of The Warm-Up/Warm-Down

Most athletes incorporate some form of warm-up and cool-down into their training, especially if they anticipate a strenuous start to a race or beginning a high-intensity interval training session. They do this with the hopes of avoiding stiff muscles, prevent muscle injury and improve performance. These are worthwhile benefits, so it is important to have a basic understanding of the various techniques and physiological processes involved in warm-up and cool-down routines. Theoretically, the following physiological changes, which take place during warm-up, should enhance performance:

**Increased Muscle Temperature. The temperature increases within muscles that are used during a warm-up routine. A warmed muscle both contracts more forcefully and relaxes more quickly. Therefore, both speed and strength should be enhanced and, thus, the likelihood of muscles being forcefully overstretched and causing injury is reduced.**

**Increased Blood Temperature. The temperature of blood increases as it travels through the muscle. As blood temperature rises, the amount of oxygen it can hold becomes reduced. This means a slightly greater volume of oxygen is made available to the working muscles, enhancing endurance and performance.**

**Improved Range of Motion. The range of motion around a joint is increased, especially if flexibility exercises are part of the warm-up.**

**Hormonal Changes. Your body increases its production of various hormones responsible for regulating energy production. During warm-up this balance of hormones makes more carbohydrates and fatty acids available for energy production.**

**There are two basic types of warm-up routines you can choose from. One of them incorporates the specific skills of an event and is referred to as related warm-up. For cyclists this means cycling for a while, with a few short intense bursts to insure that all the muscle fibres are warmed up. Pitcher's in baseball would be better throwing a baseball for related warm-up versus running before entering a game.**

**In the second type of warm-up, the movements performed- i.e., callisthenics or flexibility exercises- are different from the actual skills of the activity. For example, football players usually begin their warm-up with some form of unrelated exercise.**

Which type of exercise is preferred? If immediate participation in the actual activity would likely result in muscle injuries, then related warm-up is preferable. For instance, in a off-road cycling cross country event a good cycling warm-up is needed, especially if the air temperature is cool and the race requires a sprint from the start line, due to the riders entering a single track within a few hundred yards of the start.

Whatever warm-up you choose, it should be intense enough to increase body temperature but not so intense as to cause fatigue. When you begin to sweat, it means your internal temperature has risen to a desired level. Obviously, the intensity and duration of the warm-up must be adjusted the individual athlete. Better performance results when a 15 to 30 minute warm-up unrelated (stretching) and related exercises such as cycling are used with about five minutes of high intensity exercise.

The effects of warming up may last up to 45 minutes. However, the closer a warm-up is to the event, the more beneficial it will be in terms of effective performance. The warm-up should begin to taper off 10 to 15 minutes prior to competition and end five to 10 minutes before the race starts, if possible. This will allow recovery from any slight fatigue without losing the effects of the warm-up and allow for the taking on of last minute fluids for the race.

Research has shown that an adequate warm-up prevents strains, muscle tears and soreness that would probably occur if the athlete went into full performance without it. Muscle elasticity depends on blood flow, so cold muscles, which have low blood saturation, may be more susceptible to damage than warm muscles. In addition, the flexibility of the tendons and ligaments also appears to be affected by a warm-up.

The cool-down is not as widely practiced as the warm-up, but it is no less important. A cool-down involves a period of time

where exercises help your circulatory and metabolic systems return gradually to a resting level. An active cool-down after training or competition is just as important as an adequate warm-up. Also physiological changes take place during a cool-down:

Lactic Acid: Mild exercise enhances the disappearance of lactate from the blood and muscles, which is thought to aid in recovery.

Blood Flow: During exercise, the blood vessels that bring oxygen and nutrients to your working muscles are wide open. The cool-down helps the blood return to the heart by alternately contracting and relaxing the muscles.

Blood Pooling. If you stop exercising quickly, the blood "pools" in these wide-open blood vessels and especially in the legs. Not enough blood returns to the heart, so the heart attempts to beat faster to increase the flow. Dizziness or light-headedness, results when not enough blood reaches the head.

You should continue low intensity cycling, running or walking until your heart rate is below 120 or so beats per minute. After a hard effort, you should continue exercising at a lower intensity to let the legs relax better. At the end of a training session, you should add some stretching which will prevent muscle tightness and increase their flexibility. Pay particular attention to the muscle groups you used in the training session.

The use of warm-up and cool-down activities is advantageous to increasing athletic performance and acts as an insurance policy against injury against injury or muscle soreness. But remember, the amount, intensity and duration of a warm-up and cool-down must be individualized according to your physical capabilities, environmental conditions and scheduling of events.

I did not really have an appropriate warm up and cool down, included in my training programme, instead I used two of my

**exercises to act like a warm-up and cool-down. Because of this I cannot prove or show how effective the warm-up and cool-down was in my training programme apart from the research I did on the warm-up and cool-down (above).**

**Many people did not include an appropriate warm-up and cool-down in their training schedules, as well as perform it in our PE lessons. This was mainly because we did not have enough time to fit it in our lesson, and if we had a short one it would not have been effective and we would not experience the difference between doing a warm-up and not doing one.**

**The exercise, which I used to act as a warm-up, was thirty sit-ups or press-ups. The exercise, which I used to act as a cool-down, was a minute on the boxing bag.**

**I could have changed these two exercises to make an appropriate warm-up and cool-down by just simply adjusting the intensity of which I was working at, or decrease the time I was on the boxing bag. A third decision I could have made was to change the number of REPS, to be suitable for a warm-up/cool-down.**

**A way in which I could have tested to see how effective a warm-up and cool down could be is just to plainly use it one day and record the results you get in that session. And than in another day do my session of training without a warm –up and cool-down, similarly record the results on a table for that session.**

**After this you will just easily compare the two results that were recorded. The results which were gathered, whilst using the warm-up and cool-down, should be better than those which did not use the warm-up and cool-down.**

**MONITORING**

## The Use Of A Table For Recording Results

### FIRST SESSION

| Activity | Reps | Distance | Time | Weight | Intensity |
|---|---|---|---|---|---|
| Sit-ups | 40 | - | - | 3kg | 75% |
| Arm-curl | - | - | 1min | 3 | 85% |
| Boxing | - | - | 1min | - | 85% |
| Aspect Of Fitness | Principle Of Training | Method Of Training | Heart Rate Before | Heart Rate After | Notes |
| Stamina | Progression | Continuous | 90b/m | 146b/m | 3kg ball |
| Strength | Progression | Fartlek | 87b/m | 128b/m | - |
| Strength | Overload | Interval | 89b/m | 139b/m | - |

These were the results, which I gathered from our first session in the weights room. The first activity, which I performed, was forty sit-ups with a 3kg medicine ball. I put 75% into these sit-ups. The aspect of fitness was stamina; the method of training was continuous because it was lengthy, without any stops or change in speed. The principle of training that the sit-ups focused on was progression. After the sit-ups, I was feeling tired but as you can see my after-heart rate was nowhere near its maximum. This shows that I am unfit because my body cannot keep up with my heart.

My next activity was one minute on the arm-curl, using three weights and putting in an intensity of 85%. The aspect of fitness was strength and the principle of training was progression. The method of training was fartlek because I was doing the arm-curls at different intensities. My arms were very weak and so I dropped out way before I reached my maximum heart rate, reaching only 128b/m after one minute on the arm-curl.

The third and final activity and did in this session was one minute on the boxing bag, putting 85% intensity into it. The aspect of fitness is strength because I was putting a high

intensity in it for a little while. If the time was longer and the intensity was lower than it would have been stamina not strength. The principle of training I chose was overload because the activity was going to be focused on my strength. Finally the method of training was interval because I was trying to get quality punches into the bag.

## SECOND SESSION

| Activity | Reps | Distance | Time | Weight | Intensity |
|---|---|---|---|---|---|
| Press-ups | 20 | - | - | - | 70% |
| Arm-curl | 20 | - | - | 5 | 70% |
| Skipping | 100 | - | - | - | 65% |
| Aspect Of Fitness | Principle Of Training | Method Of Training | Heart Rate Before | Heart Rate After | Notes |
| Strength | Progression | Continuous | 98b/m | 128b/m | - |
| Strength | Progression | Fartlek | 89b/m | 130b/m | - |
| Stamina | Progression | Continuous | 97b/m | 131b/m | Gaps |

In this session, to get me going I did 20 press-ups, with about 70% intensity. I did this first because it is not high intensity work and so I will not injure myself so easily. The aspect of fitness is strength not stamina because there is not a lot of REPS and has a high intensity, whereas an activity focusing on stamina would have a lot more REPS with not as high intensity. The principle of training is progression. The method of training is continuous because although the aspect of fitness is strength, the exercise is done at the same intensity and same speed, without any stops or rests.

The arm-curl has the same aspect of fitness, and principle of training, with the same method of training. But this time I have changed it to REPS instead of time, increased the weight and lowered the intensity.

Lastly in this session, I did 100 skips instead of one minute on the boxing-bag. So I did 100 skips with an intensity of 65%.

The aspect of fitness was stamina because it was for a long time. The principle of training was progression and the method of training was continuous. It was continuous because I did not stop for any breaks and did the activity at the same intensity and the same speed.

## THIRD SESSION

| Activity | Reps | Distance | Time | Weight | Intensity |
|---|---|---|---|---|---|
| Sit-ups | 35 | - | - | 3kg | 80% |
| Rowing | - | 500m | - | - | 95% |
| Boxing | - | - | 3min | - | 65% |
| Aspect Of Fitness | Principle Of Training | Method Of Training | Heart Rate Before | Heart Rate After | Notes |
| Stamina | Progression | Continuous | 86b/m | 120b/m | 3kg ball |
| Strength | Overload | Continuous | 87b/m | 161b/m | - |
| Stamina | Progression | Interval | 91b/m | 147b/m | - |

Again I did sit-ups but this time only 35. I still used the 3kg medicine ball but I also increased the intensity to 80%.

For my second activity I did rowing for 500 metres at an intensity of 95%. I wanted to build up my strength for this activity and so I used the overload principle, this means that I put 95% intensity all the way through, without any stops and rests. When you do overload training you are supposed to put you r best into it, throughout the whole activity. On this day I recorded that my motivation was low because I had not done any training for a long time. This affected my results on this day and so even though I think I put a lot of effort into the rowing, my heart rate still did not reach its maximum. This was because I was unfit but I could have got better if I was motivated.

I did boxing again for my final activity in this session. This time I increased the time and lowered the intensity, so the aspect of

fitness had changed to stamina. Also the principle of training had changed from overload to progression.

## FOURTH SESSION

| Activity | Reps | Distance | Time | Weight | Intensity |
|---|---|---|---|---|---|
| Sit-ups | 30 | - | - | 3kg | 85% |
| Rowing | - | 500m | - | - | 95% |
| Boxing | - | - | 1min | - | 85% |
| Aspect Of Fitness | Principle Of Training | Method Of Training | Heart Rate Before | Heart Rate After | Notes |
| Stamina | Progression | Continuous | 90b/m | 147b/m | 3kg ball |
| Strength | Progression | Fartlek | 87b/m | 159b/m | - |
| Strength | Overload | Interval | 89b/m | 141b/m | - |

Our fourth session in the weight room was similar to the third but with a few changes.

## FIFTH SESSION

| Activity | Reps | Distance | Time | Weight | Intensity |
|---|---|---|---|---|---|
| Press-ups | 15 | - | - | - | 80% |
| Arm-curl | 10 | - | - | 6 | 55% |
| Skipping | - | - | 2min | - | 70% |
| Aspect Of Fitness | Principle Of Training | Method Of Training | Heart Rate Before | Heart Rate After | Notes |
| Strength | Progression | Continuous | 90b/m | 133b/m | - |
| Strength | Progression | Fartlek | 87b/m | 141b/m | - |
| Stamina | Progression | Continuous | 89b/m | 157b/m | - |

The fifth session was similar to the second session in the weights room.

This time I did only fifteen press-ups and increased intensity to 80%. The principle and method of training, along with the aspect of fitness did stay the same, though.

This time on the arm-curl I did ten REPS with 6 weights, whilst reducing the intensity to only 55%. Again, the principle, method of training, and aspect of fitness stayed the same because the activity was still building up my strength in basically the same way.

Finally instead of doing 100 REPS of skips I did skipping for about two minutes. This did not affect the aspect of fitness or the principle and method of training. Another change made was the intensity, which was increased.

By looking at the results, which was gathered, my fitness level does not look like it has not changed, increased or reduced.

This is the data, which I collected, from the five sessions I was in the weights room. I recorded how my heart rate rose after doing a certain activity by using my pulse.

I first checked my heart rate by checking how many times my pulse gave a beat after ten seconds and than multiplying it by six. This gave my resting heart rate. Than later I did exactly the same but after doing the exercise. This was repeated for every exercise.

The problem is that it takes time to find your pulse, and pulse is not always counted accurately. It's not easy to take your pulse when your heart is racing along at 160 to 170 beats per minute.

Also, after exercise is stopped, your heart immediately begins to recover to a resting level; the pulse you find and count won't accurately reflect what your heart rate was during actual exercise.

By doing this you can see how fit a person is or you can see if someone was actually putting some effort into his training.

**You can tell if someone was fit by telling him or her to do a test, for example the multistage fitness test, at his or her full potential. You than find out their maximum heart rate and check if they reached this maximum heart rate after doing the test. If they did it means they are fit because their body can exercise and not get tired until the heart reaches it's maximum heart rate. If they do not reach their maximum heart rate it means either that they are not fit or they were not trying there hardest.**

**Another way in which you can see if a person is fit is by looking at their recovery heart rate. This is not as easy as recording your heart rate. For this you will probably need a heart rate monitor. We did not get the chance to use a heart rate monitor, somewhere in our training programme and so we could not record our recovery rate. If we did record our recovery rate it could show us how fit we were. We can see if we are fit because if your recovery rate is quick it means that the person is pretty fit. If your recovery rate is slow than you are unfit.**

**By looking at the results I produced I can see that I was not really bothered whilst doing the training. This is because my heart rate never even gets above 165. This might mean that I am really unfit but I know that I was not bothered when I was doing the training.**

**If I did want to check if I was fit or not I could do a proper test not just one minute skipping or something but maybe a cooper twelve minute run. Another class did get this opportunity to see if they were fit or not because they got to do the multistage fitness test with a heart rate monitor strap on them.**

**We did get to do the cooper twelve minute run before and after the training programme but we never got to use a heart rate monitor to record our results, and we did not get the chance to record our heart rate before and after the cooper run. What I did record though was that in the first cooper twelve-minute run I ran past exactly ninety cones and on the second run, I ran**

**past ninety cones again. This may show that I did not benefit from the training programme but this is not the case. When I was running there were aspects affecting my performance.**

**There are long-term and short-term reasons for what affects your performance.**

**Long-term reasons are like if you don't have a healthy lifestyle. In order to keep healthy we have to look after our bodies and minds feeling good and looking good will make our lives more enjoyable. There are four main components that make up a healthy lifestyle; they are exercise, diet, hygiene, and rest. If you do not have a healthy lifestyle than this could affect your performance for a long time.**

**The short-term reasons for what could affect your performance are like if the weather is not suitable for the type of training we are about to do than we cannot do the activity at our full potential.**

**When we were doing the cooper twelve minute run for the second time, it was mainly the short-term reasons for what affected our performance.**

**It was a bit windier the second time we were running and so it was harder to run, the first time we did the cooper twelve minute run, I thought the weather was perfect for running in.**

**Also when we did the run before the training programme, we did it on the field. The second time we ran, we did it on tarmac. You might think that we had more grip whilst running on the tarmac but when we were on the field there was more bounce. Another advantage on the field was that, although there was a bit of a hill that you had to run up, there was a hill that you could run down and the part where you run down motivated me to run faster.**

Motivation played a big role too. The first run we were all motivated to do good because we had our teacher there the whole time, shouting at us to do better. In the second run he only came out a few times to watch how we were doing. I think that if he was there with us for the second time too, than I would have performed my run a lot better.

The final reason why I found it easier to run in the field was that there were more cones. Even though they were still spread out the same length, the track was bigger and there was more cones, so it felt like you were doing better than if you did it on the smaller track.

I think that if we did the cooper twelve minute run on the field, both times, I would have run past a lot more cones. So if we were in the same conditions, same weather, same place, same track I think I could have done better.

You do not see many high results in my training schedule tests because I was not motivated in a single session of training. I do not think that you will see high results in anyone's training schedule tests unless they made them up because the weights room was not exactly a nice place to train in. it was small and cramped with about twenty, sweating boys in there. A lot of the equipment was damaged or difficult to use and so I did not feel motivated, I was not bothered to train hard and get high results.

# EVALUATING

## Planning The Programme

My aim was to improve my strength endurance. I basically used all the methods of training but focusing mainly on continuous. I used the two principles of training progression and overload.

I am trying to build up two things, my strength and my stamina. I think I did make the right decision in choosing to build up my strength endurance because I am a really small and strength is my weakness. I am told that my stamina is high and I think so too, but I still want to improve on it. I do not think that I made the wrong decision in picking the aspect of fitness.

Building up your strength endurance cannot be done by just using one method of training and a single principle of training because I am trying to build up two things, my strength and my endurance.

I had to use all three methods of training because continuous training is best to improve stamina, interval training is best to improve strength and fartlek training improves both strength and stamina.

I think was logical to use progression as the principle of training when building up stamina and to use overload when improving strength.

A good way of changing the aspect of fitness was to change the intensity and the duration, like I did in many occasions. For example when I wanted to focus on my strength whilst on the boxing bag, I would increase the intensity and decrease the duration. When I wanted to focus on stamina whilst on the boxing bag I would decrease the intensity and increase the duration.

Although I have found out that if On Mornings when your pulse is lower than normal, your training can be more intense - closer

to your aerobic threshold.  At the very end of your endurance training session maybe do sprint or lactate tolerance training.

If On Mornings when your pulse rate is slightly higher than normal - training should not be very intense for long periods and avoid lactate tolerance training, although short sprints with long recovery intervals between can be done at the end of your endurance training session.

Finally if On Mornings when your pulse rate is 5-10 beats higher than normal and a bit erratic - use a recovery ride - a gentle 40 or 50km at low pulse rates is ideal.

With recovery rides the muscles rid themselves of the harmful lactate acid accumulation (Harmful to the endurance system). On Mornings when your pulse rate is more than 15 beats higher than usual – stay in bed.

This is research I found out about how intense you should work for your training, according to your heart rate in the morning.

## Performing The Programme

By looking at my results from my five sessions in the weights room, it does not seem like anything was improving or anything was going wrong. It looked like that my fitness was not improving but not being reduced either.

Another problem was that I did not collect enough data. Without the data I have found it hard to show if my fitness level has increased or decreased. I cannot use any forms of graphs because I have irrelevant information.

This was mainly because I was putting the same amount of effort into the training, which was not a lot. I lacked motivation, and I was not taking the training programme seriously.

I was not motivated at all to go into the weights room and do my best; I did not go into the weights room and try to get useful information, which I really needed.

## Monitoring The Programme

I collected data from our sessions in the weights room. I collected my heart rate after doing the activities in the training schedule; I did this by using my pulse. I checked how many times I felt a beat in ten seconds and multiply it by ten.

I took this data down because I thought it would show me how my fitness is improving after every lesson . It would show me this because if I was getting fitter you will be able to see, by looking at the heart rates, that after every activity my heart beat got closer to my maximum heart rate, which was 205 beats per minute.

Although it sounds like a good piece of data to collect, and it is, there were problems that affected the results.

I did not get any clear readings to show that I was getting fitter or less fit. This was because of only one reason; I was not trying my hardest. It is hard to see if someone is progressing if they are not motivated, because if you are not motivated this will affect your performance. You will only be able to see if someone is progressing, only if that person puts all his effort into the training schedule tests all the time. If you put effort into the training sometimes but not all the time then you might think that the person is getting unfit, even though its just that the person was not trying in that lesson.

So recording heart rate after tests was a good decision but it is not the only way you can check if someone's fitness is improving or not.

Data that would have been useful is if I had recorded my recovering heart rate after the tests. Though finding out your

recovery heart rate is not an easy job. This is why recording recovery heart rate is normally done by using a heart rate monitor.

Recording recovery heart rate is also a useful way in finding out how fit a person really is. The way it shows this is that if someone's recovery rate is high, if there heart rate goes back to normal quickly, than they are more fitter than someone who has a low recovery rate, someone who takes time for their heart rate to go back to normal after exercise.

The difficulty in collecting the data or the heart rate after exercise and recovery heart rate after exercise is that you need the person to try his hardest and keep him motivated otherwise this could effect the results, because his heart rate wont be high if he could not be bothered to exercise.

It would be easier to find accurate heart rates after base line testing than a post training schedule test because people are more motivated and want to get high in tests like the cooper twelve minute run because we felt that it was more important at the time. With the training schedule tests no one was motivated because we did not have anyone there to shout at us and tell us to do our best.

The only problem was that we did not have a heart rate monitor strapped to us while we were doing the cooper twelve minute run and because of this we have no results to plot.

## The Final Summative Appraisal Of The Programme

I do not think that my training programme was a success because there was not an improvement in the base line testing I took, although there were a lot of aspects, which affected my performance.

Factors like the weather and the track conditions. Also motivation was a factor.

**The weather conditions were worse the second time we were running. It was colder, which lowered our motivation to run and it was also a lot more windier, so it was harder to run. The first time we did the cooper twelve minute run the weather conditions were perfect, it was not too cold or too hot and there was no wind blowing.**

**In addition, when we did the run before the training programme, we did it on the field. The second time we ran, we did it on tarmac. When we were on the field there was more bounce in our feet, we could leap further whilst we were running. Another advantage on the field was that, although there was a hill that you had to run up, you could run down the hill and when we ran down it, we were motivated to run faster.**

**Motivation was another factor. The first time we ran we were all motivated to do good because we had our teacher there the whole time, shouting at us to run faster. In the second run he only came out a few times to watch how we were doing and we were not given any motivation. I think that if he was there with us for the second time too, than we would have performed better.**

**The final reason why I found it easier to run in the field was that there were more cones. Even though they were still spread out the same length, the track was bigger and there was more cones, so it felt like you were doing better than if you did it on the smaller track.**

**I might have done better the second time if it was not for these factors but not by much. Which shows that after all the training done in the weights room, my fitness level did not improve by much and so I did not achieve my aim.**

**By doing this training programme and writing it out, I have learned about health related fitness. I did not know about the**

**four main components, which make up a healthy lifestyle, exercise, diet, hygiene, and rest.**

**Exercise is very important, if you want to be fit and healthy. Exercise keeps the body in good physical condition.** Exercise **helps maintain overall health by promoting fitness, relieving stress and facilitating weight management. It contributes to general physical and emotional well being. Excessive exercise, such as extreme activities, which stress the body, should be avoided. Encourage patients to maintain a good fitness level and an active lifestyle, including activities they have previously enjoyed, or perhaps new ones. Some good exercise activities include walking, aerobics, lifting weights and swimming.**

**Promoting healthy eating and an active lifestyle undoubtedly contributes to the prevention of obesity. Healthy eating is defined to be not only the consumption of a healthy diet and the health benefits this offers, including protection against chronic disease.**

**Adequate rest/sleep is important in maintaining general health. Research shows that individuals with lack of sleep or poor quality sleep significantly experience poor performance at work, memory difficulties, concentration problems, and twice as many fatigue-related accidents as compared to good sleepers.**

**I think the training programme has had some effect on me. It may not be a short-term effect because I have not noticed it but it may be a long-term effect. The exercise has done some good in me, I feel as though my endurance has been strengthened but I cannot prove this because I have not collected enough data. I needed more time to prove that I have become more physically fit and need the right equipment, which we did not get to use.**