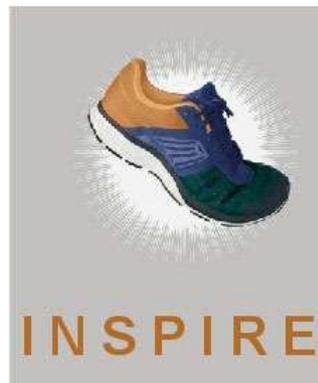
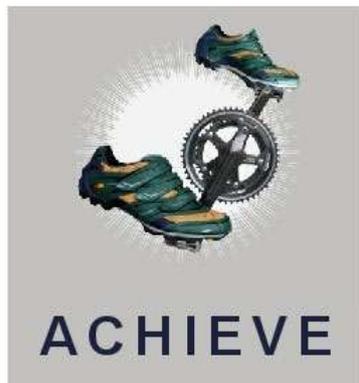
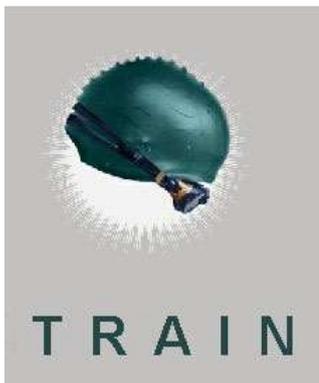


TRAINING TIPS

TOP TIPS TO PREVENT INJURY & HELP YOU GET THE MOST FROM YOUR TRAINING

- 1.** When you're training for a sporting event like a triathlon or duathlon, especially if you're a beginner, there are 4 golden rules to help you prevent injury:
 - ✓ Start gently
 - ✓ Build up gradually
 - ✓ Train regularly
 - ✓ Always get specialist advice if you're unsure about any pain.
- 2.** Each training session you do, whether it's swimming, cycling, running or another type of training session, should be made up of 5 parts:
 - ✓ [Warm up](#)
 - ✓ [Work out](#)
 - ✓ [Cool down](#)
 - ✓ [Stretch](#)
 - ✓ [Refuel and rehydrate](#)



Warm up

Why warm up?

Warming up prepares you for more strenuous activity. A warm-up increases your body's core temperature and also your body's muscle temperature. By increasing muscle temperature you're helping to make your muscles loose, supple and pliable, ready for your main workout.

An effective warm up has the effect of increasing your heart rate and your respiratory rate. Your blood flow will be increased, which in turn increases the delivery of oxygen and nutrients to the working muscles. All this helps to prepare the muscles, tendons and joints for your workout. By slowly raising your heart rate, the warm-up will also help minimise stress on your heart when you start your main training session.

How should you warm up?

A warm up should consist of light physical activity. The type of activity will depend on the training you're about to do. For example, if you're about to do a running training session then the warm up could be 5 to 10 minutes of walking or jogging or a mix of both. If you're a beginner, a minute of walking followed by a minute of easy jogging then another minute of walking and so on, is a useful warm up routine.

If you're about to do a cycling training session then your warm up could comprise 10 minutes of spinning i.e. pedalling fast in an easy gear. (You will probably bounce in your saddle while spinning). Or if you're about to do a swimming training session, your warm up could consist of 5 to 10 minutes of slow, easy swimming.

For the average person, a warm up will take about 5 to 10 minutes and result in a light sweat and increased breathing rate. The key aim of your warm up is to elevate your respiratory rate and your heart rate. This in turn increases blood flow and helps with the transportation of oxygen and nutrients to your working muscles. The warm up also helps to raise your muscle temperature. The intensity and duration of your warm up should be governed by your level of fitness and how you feel.



Sunday 13th
July 2014

Work Out

[Beginner's 11-week triathlon training](#)

Cool down

Why cool down?

The main aim of a cool down is to promote recovery. During a workout, your body goes through a number of stressful processes. For example, muscle fibres suffer micro-tears, and waste products like lactic acid build up in your body. A cool down, performed properly, will assist your body in its repair process.

Your cool down will help relieve some of the effects of delayed-onset muscle soreness - the soreness usually experienced the day after a tough work out.

When you exercise, your heart pumps large amounts of blood to your working muscles. This blood carries both oxygen and nutrients that the working muscles need. When blood reaches your muscles, the oxygen and nutrients are used up then the force of the contracting (exercising) muscles pushes the blood back to the heart where it is re-oxygenated.

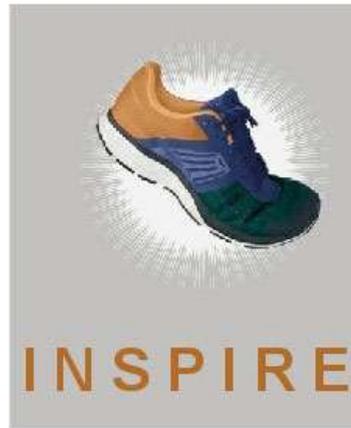
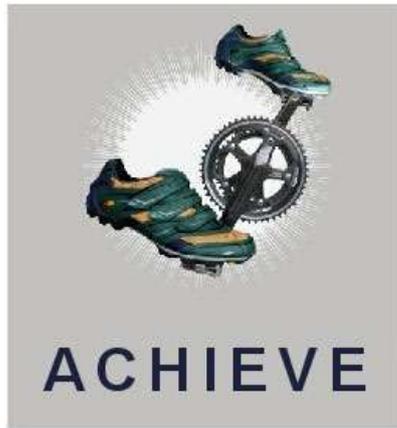
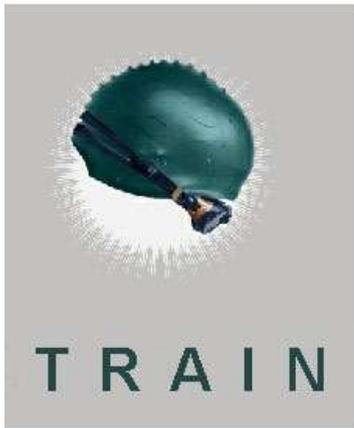
When the exercise stops, however, so does the force that pushes the blood back to the heart. Blood and waste products, like lactic acid, stay in the muscles and can cause swelling and pain. A cool down will help by keeping up the increased rate of circulating blood for longer, which in turn will help remove waste products from the muscles and bring with it the oxygen and nutrients needed by the muscles, tendons and ligaments for repair.

Winding down slowly, via a cool down, allows your heart rate and blood pressure to fall gradually. If you stop training too suddenly it can cause light-headedness.

How should you cool down?

Your cool down should comprise 3 to 5 minutes of easy exercise. The exercise should resemble the type of exercise that was done during your workout, but with less intensity. For example, if your training involved a lot of running, cooling down with easy jogging or walking would be good.

Include some deep breathing as part of your cool down to help oxygenate your system.



Stretch

Why should you stretch at the end of your training session?

Stretching after your training session will help to lengthen those muscles that have been contracting during your workout. Post-workout stretching can help increase your range of motion. A better range of motion makes for increased flexibility, which is what helps you maintain proper position during exercise.

Over time, stretching can decrease your risk of injury. Stretching can also reduce muscle cramping.

When should you stretch?

Immediately after you finish your cool down is the ideal time to stretch because your muscles are warm. NB/ Stretching muscles when you haven't warmed up or exercised is not a good idea.

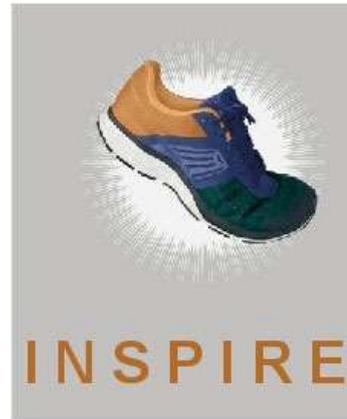
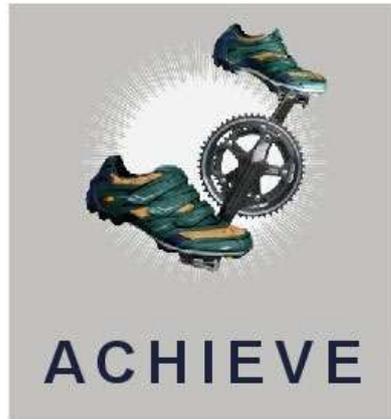
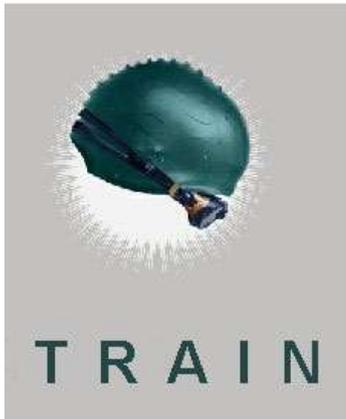
How should you stretch?

Stretches should be "static". In other words, you should get into the correct position to stretch a particular muscle or group of muscles, then you should stay still in that position for around 30 seconds.

[ESSENTIAL STRETCHES FOR RUNNERS](#)

[ESSENTIAL STRETCHES FOR CYCLISTS](#)

[ESSENTIAL STRETCHES FOR SWIMMERS](#)



Refuel and Rehydrate

After training, it is important to rehydrate and refuel.

Some experts recommend drinking 20-40 ounces of fluid per hour during exercise. After exercise, they recommend drinking 16-24 ounces of fluid per pound of body weight lost through sweat. (To help you get an idea of the amount of fluid lost, you can always weigh yourself before and after intense workouts and record the difference).

The American College of Sports Medicine (ACSM) recommends drinking water as fluid when your exercise session lasts less than 60 minutes. If it's longer, they say to use a 4-8% carbohydrate sports drink.

The harder and longer you exercise, the more fluid you will lose through perspiration and exhalation. When it's extremely hot or humid, keeping hydrated is more difficult than staying hydrated in cooler temperatures. Since sweat doesn't evaporate quickly in humid weather, it's very easy to get overheated. When exercising in high heat and humidity, sodium losses can be as much as 10 grams per day. Several hours of exercise in cool temperatures will also deplete sodium levels.

Sports drinks that contain electrolytes (sodium and potassium) as well as whole foods that contain a significant amount of sodium will help replenish the sodium lost during exercise.

During exercise your body uses energy (primarily carbohydrates) stored in the blood, liver and muscle. Replenishing the energy lost in the muscle (stored as glycogen) is essential for muscle recovery. Eating properly post-exercise is important to ensure that your subsequent workouts are productive and enjoyable.

If you participate in high-intensity workouts or exercise that lasts more than 60 minutes, refuelling your body post-exercise is very important for recovery. If you exercise at a

modest intensity for 30-60 minutes three to five times per week, you can maintain adequate carbohydrate stores by eating a balanced diet.

Protein is an important building block for muscle. Most experts recommend eating carbohydrates and protein in a ratio of 3:1 or 4:1 post-exercise. An example would be 3 servings of grains plus 1 serving of turkey/meat. Eating proteins and complex carbohydrates within one hour after exercising can enhance insulin response, which encourages re-synthesis of muscle glycogen.

Osteopathy can help you prevent injuries and get the most from your training

Osteopaths treat all sorts of aches and pains, but did you know that osteopaths can also help prevent injuries? We are trained to assess your structure, balance and alignment. We can look at your skeleton, joints, muscles and other soft tissues, and make adjustments where required. We can advise you on posture and ergonomics and we can give you exercise advice.

Your osteopath can help you stay in peak condition and allow you to get the most from your training.



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