

Key Information:

Fat Burn HR

Fat Calories

Total Cals

LT HR

Fat Calories

Total Cals

RQ1 HR

Fat Calories

Total Cals

HR max*

VO₂ max*

No. Hours

Interval Training:

HR interval

HR recovery

Personal Details:

Male

Female

Age

Protocol

Contents:

Fat Burning	1
Interval Training	2
Training Program	2
Nutrition	3
Weight Loss	3
Your Fitness Level	4
Smart Zones	5

Smart Zones®

Fat Burning

Often referred to as Aerobic Base Training or LSD (Long, Slow Distance) training.

Most people aspire to have the lean look that comes from having low percentage body fat. If your goal is to reduce your body fat then you must train your body to be as efficient as possible at burning body fat.

The “principle of specificity” underpins all exercise and training. Put simply, through adaptation and progression, your body gets better at what it does. To train your body to be better at burning body fat, it’s best to exercise at the point where it is the most efficient at burning body fat! We call this point your “Fat Bump”. Your Fat Bump is between 115 - 120 bpm and you burn 600 Kcal/hour directly from fat! This is your optimum fat burning zone. Training time spent here will increase your efficiency at burning body fat, deepening your aerobic base and increasing the amount of fat you burn!

However, unless you have a developed aerobic base, this zone is likely to be at low heart rates. The plus side is that it is easy to train here and is a great intensity for beginners. The downside is if you are already used to exercise, this intensity may feel far too easy! In this case, we advise training in your “Acceptable” fat burning range, which for you is between 115 - 140 bpm. This allows you to exercise at a

higher intensity, burning more total calories and still burning a reasonable amount of calories from fat.

At first glance, this doesn’t make sense! Surely you want to exercise as hard as you can to burn the most calories! It would be great if this were true! At most heart rates, you burn a mixture of fat & sugar as fuel for your body. However, after your Fat Bump, the harder you exercise and the higher your heart rate, the less body fat you burn! This continues until you don’t burn any body fat at all and you are burning 100% sugar (glycogen). We call this point RQ1, and is known as Anaerobic Glycolysis and for you, this occurs at 160 bpm and higher. The good thing about working at these high intensities is that you burn lots of calories. The bad news is that too much of this training conditions your body to be

Your Fat Burning Graph

very efficient at burning sugar and not very efficient at burning body fat as well as running the risk of injury.

Sugar or glycogen, is stored in the muscles. At high exercise intensities, these stores are depleted. When you eat after training, these stores are then topped-up. Often, your body fat reserves are hardly touched! Many health & fitness club members train 4 or 5 times a week at high intensities and do not see any visible change in their body shape. We call this the “City Syndrome” where people often equate hard work with getting the best results.

Unfortunately, your body just doesn’t work this way. Pain does not always equal gain!

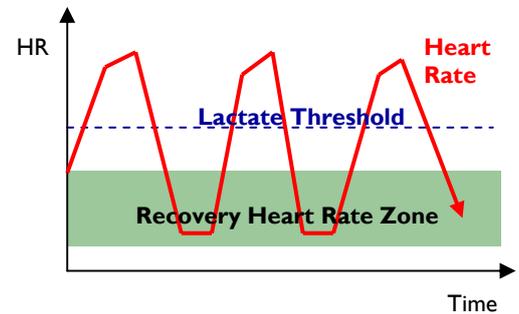


Anaerobic Intervals are hard work!

High Intensity Anaerobic Interval Training

High intensity interval training is designed to:

- Raise Lactate Threshold
- Drag Fat Bump higher
- Increase calorific deficit
- Improve lactate tolerance
- Improve CV fitness



Anaerobic intervals are hard! You must have an appropriate level of fitness before you begin. If you are in any doubt, consult your Trainsmart instructor or trainer. You

must make a mental shift when you think about doing intervals. The secret of interval training is not just how **high** you take your heart rate during the interval.

Interval training is also about how **low** you bring your heart rate during the recovery period! Your recovery heart rate zone is 135 - 142 bpm.

“Interval training is not about how high you take your heart rate, it is how low you bring it during recovery”

How to do Intervals and Why do them?

Intervals are initially done as “one touch” intervals, using a 1:4 work:recovery ratio. Take your heart rate up to 80-90% of heart rate max during the interval. When you have touched your Interval Max HR, then slow down and allow your HR to drop back through your LT to reach your Recovery HR of 135 - 142 bpm. If your work interval lasted 30 seconds, then allow yourself up to 2 minutes (4x30s) to recover. When you reach your Recovery HR, you

can then start your next interval. Initially, you will find that your HR takes a long time to drop into your recovery zone. As you get fitter, these recovery times will improve!

As your fitness improves, you can progress to do harder lactate tolerance intervals. Hold your Interval Max HR for 30 - 90s, rather than recover as soon as you have touched this HR. Your interval

Max HR is 185 bpm and your Recovery HR zone is 125 - 135 bpm.

Interval training is great for burning lots of calories and achieving fitness gains. Try adding an interval session to the end of one of your fat burning sessions to spice it up!

High intensity intervals should only be done if you have a solid, base level of fitness and are not for beginners!



Weight training does not have to make you look bulky

The Best Training Programme

First of all, train with a heart rate monitor! This enables you to stay in your Smart Zones to reach your goals and achieve the best results in the quickest possible time.

Your programme should incorporate Cardio Vascular and weight training. Your CV training should be split between aerobic base building/fat burning and high intensity interval training. You should also try and do at least 2 or 3

weight training sessions each week. These need only take 20 - 30 min!

Unless you monitor what you eat, any changes you make to your training will have little effect. Try and make small changes in your diet. Instead on having chocolate or sweets every day, make it every other day. Try and slightly reduce your portion size and drink more water.

These are only general guidelines. If you are just beginning an exercise programme it is advisable that you begin slowly and build your training up as your fitness improves.

If you already exercise or compete in a particular sport, then your training must be more specific. Find out how we can help you with Smart Zones Intelligent Training at the back of this report.

Nutrition

Nutrition is a huge area and we can only cover the most basic points here. We advise seeing a qualified nutritionist for a detailed nutritional analysis.

Research has shown that most people underestimate the amount of food that they eat and overestimate the amount of exercise they do! Unless you manage your diet as well as your training, you will struggle to see results.

Before you begin to diet and reduce the amount of food you eat, take a look at the balance of foods you are eating right now. Low carb diets are fashionable at the moment, as they promote rapid weight loss. Whilst this is true, they are not sustainable in the long run for most people. Most of this weight loss comes from water and losing lean tissue (muscle) as there are 3 water molecules bound to every carbohydrate molecule. So for every 4lbs you lose, 3lbs will come from water and only 1lb comes from real weight loss. This is why you gain weight so quickly when you begin to eat carbohydrates normally again.

Trainsmart advocate a starting blend of 65% carbs, 20% protein and 15% fat in your diet. The more exercise you do, the more carbs you may need to eat to fuel your activity. After exercise, you should feel full of energy, not listless and lethargic! This could happen if you do not eat enough carbohydrates! Try keeping a food diary for a week and see what the blend and percentage split of foods is that you currently eat. You may not need to diet after all, just cut out the excess fat!

We all need some fat in our diet and these are called essential fats. However, an excessive amount of fat is not good for us. Other than the health risks, fat is rich in calories and contains more than twice as many calories than either carbs or protein!

Trainsmart are sponsoring ground-breaking research in metabolic phenotypes and food typing. You will recall the term Respiratory Quotient (RQ) from your assessment. An $RQ \leq 0.70$ indicates you burn 100% body fat whilst an $RQ \geq 1.00$ indicates you are burning 100% sugar. An RQ of 0.85 is approx. 50/50 fat/carbs.

If you have a low RQ at rest i.e. a fat burner, you will be more successful on a lighter carb diet. High RQ people at rest (carb burners) will be more successful using a higher carbohydrate diet. You can fine tune your diet to match what your body burns as fuel and so eat the food groups to help you manage your weight more successfully.

Eating raises your metabolic rate through thermogenesis. Your metabolism is fired up every time you eat. It is better to eat 5-6 small meals a day rather than 1 or 2 large ones. This will keep your metabolic rate as high as possible.

However, starving shuts down your metabolism which is exactly what you don't want to do! Remember, eating more frequently does not mean eating more! Don't exceed your total daily calorific target.

We recommend a 500 Kcal/day deficit which equates to 1lb/week weight loss. This is a responsible and sustainable strategy! It takes time to gain weight and unfortunately, it takes time to lose it too!



A healthy, balanced diet is best

“If you burn more calories than you consume, you will lose weight”

Weight Loss vs. Fat Loss

As your heart rate increases during exercise, the more calories you burn. Great! However, after your “fat bump”, the amount of calories you burn from fat declines. you do not burn any fat at RQ1 heart rate and higher.

Successful training combines moderate and high intensity exercise. At moderate exercise intensities, you burn fewer total calories but a high % of these come from fat.

At higher intensities you burn more total calories, with less coming from fat. The more you can exercise, the quicker

exercise. You will see how this affects the time it takes to reach your target weight.

	HR	Weeks to lose 1 stone of:
		Fat Weight
Fat Burn		
LT		
RQ1		

you will reach your goals. Click [here](#) to change the hours per week you can

Use the chart above to see how long it will take you to lose one stone.



Smart goals for Smart results



Getting fitter is about training smart

“VO₂ max is the Gold Standard measure of fitness used by athletes all over the world”

Your level of Cardio Vascular Fitness

VO₂ sounds complicated and scary, but it isn't. “V” stands for ‘volume’ and “O₂” stands for ‘oxygen’. VO₂ means the volume or amount of oxygen your body consumes. The fitter you are, the more oxygen your body burns and the higher your score.

The world record VO₂ is held by a Norwegian cross-country skier, with a VO₂ of 94. The normal level of fitness for an adult male is a VO₂ score between 40 and 45. Women generally have a VO₂ score 15 - 30 % lower than men, as they are smaller and carry less muscle mass. Your VO₂ score is 52.5. mL/kg/min.

Training + Rest = Fitness

Many people ignore the “rest” element of their training and do not give their body enough time to recover. As a general rule, rest one day for every 3 days of training and don't train hard on 2 consecutive days.

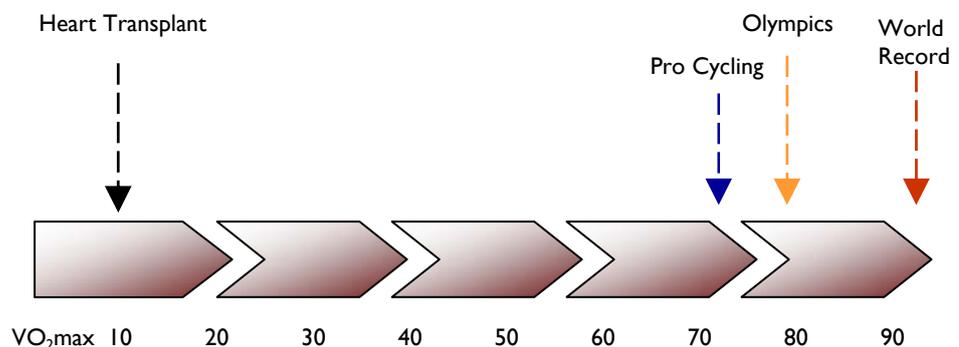
The horizontal red bar on the graph above represents the predicted level of fitness for someone of your age, height, weight & gender. Your actual level of fitness is shown by the red dots, your VO₂.

If the red dots on your test went through and above the predicted red bar, you have above average fitness. The higher the red dots go through the bar, the fitter you are!



Stay fit & healthy to maintain your quality of life

How Fit Are You?



Your score above gives you an indication of your level of fitness. There is an inherent 10% variance in VO₂ max from one day to the next and

this must be taken into account when comparing results from one test to another.

If you did a sub-max test, we have extrapolated your results to obtain a predicted VO₂ max score for your chart .

TRAINSMART®

Heathfield
Potters Heath Road
Welwyn
Herts
AL6 9TA

Phone: 01438 814969
Fax: 01438 815742
Email: info@trainsmart.com

Trainsmart was created to dispel the myths and half-truths surrounding cardiovascular training and deliver factual, effective advice to our clients. We do not adopt a “one size fits all” approach. We consider each person as a unique individual and provide you with personalised information to achieve your goals in the fastest possible time.

In today’s modern lifestyle, time is our most precious commodity. We are becoming increasingly demanding and sophisticated and expect to see results quicker. Trainsmart gives you the fast-track route to achieving your goals, by targeting your training zones and maximizing your results.

There is no substitute for increasing the level of activity in your life. Success does not happen overnight and it will take time. However, if you are disciplined and stick to your programme, you will see visible results in as little as 12 weeks. For performance athletes, this is the way the professionals train. The results from your metabolic test in conjunction with our Smart Zones Intelligent Training system can deliver the performance gains you seek.

Smart Zones® Intelligent Training



James Cracknell

Double Olympic Gold Medalist

“Smart Zones is a fantastic new product that’s been developed by Trainsmart. You can be remote-trained for competition, special events or general fitness. One of the great things about it, is its price. It provides all the benefits of one-to-one coaching, which normally costs a fortune, for a fraction of the price.”

James Cracknell OBE

The Smart Zones Intelligent Training system is a fantastic new product which uses the results from your metabolic exercise test, to create an individual training program for you. It is tailored to meet your specific goals and needs and is designed for to get the best results in the quickest possible time.

In order to start the program, you will need a downloadable heart rate monitor. We recommend the Polar ‘S’ series range and you can buy one direct from Trainsmart and take advantage of our generous discount.

Smart Zones is an evidence-based training program. Your heart rate monitor records your training on a daily basis. Your results are transferred to the system by the click of a button, where we analyse your data to

ensure you are exercising at the correct level.

Smart Zones is flexible and responds to changes in your life. If you are busy at work or have family commitments and can’t train, are injured or suffering from illness, we can adjust your program immediately to reflect this. We provide regular motivation and feedback to make sure you stay on track.

Working with world-leading sport scientists, we do all the program design and planning for you. In today’s modern world time is your most precious resource. Don’t waste valuable time researching and planning your program.

Use Smart Zones to take the hassle out of your training. Use our brains to improve your performance.