



Dr Kate Hutchings, MBCHB, MSc (SEM), FFSEM, MRCGP, DCH, DRCOG Consultant in Sport & Exercise Medicine
Consulting at: CircleReading
[Contact Tel No: 07764 246479](tel:07764246479) | [Email: katie.rossiter@allsportsmedicine.co.uk](mailto:katie.rossiter@allsportsmedicine.co.uk)

Dr Mike Rossiter, MB BSc, FFSEM (UK), MRCGP, DRCOG Consultant in Sport & Exercise Medicine
Consulting at The Candover Clinic, Basingstoke and Sarum Road Hospital, Winchester
[Contact Tel No: 07894 843750](tel:07894843750) | [Email: amy.rossiter@allsportsmedicine.co.uk](mailto:amy.rossiter@allsportsmedicine.co.uk)

Dr Mark Wotherspoon MBBS Dip, SEM, FFSEM (UK) Consultant in Sport & Exercise Medicine
Consulting at The Candover Clinic, Basingstoke and Wessex Nuffield, Southampton
[Contact Tel No: 07889 400362](tel:07889400362) | [Email: sally.ghafoor@allsportsmedicine.co.uk](mailto:sally.ghafoor@allsportsmedicine.co.uk)

New Sports Therapy Services

Services provided by Circle Health.

Lactate profiling:

Lactate profiling is commonly used to effectively assess an athlete's performance.

Lactate is continuously produced by the body as a waste product during metabolism. During light exercise, any lactic acid formed is rapidly oxidised, meaning lactic acid levels remain stable. Lactic acid will rise when exercise intensifies and energy demands are being partially met by anaerobic glycolysis. Essentially the fitter you are, the more effective your energy systems are, and therefore can keep oxidising lactic acid. The point at which you can no longer oxidise lactate your lactic acid levels begin to increase, causing fatigue.

The lactate profile involves approximately 6 to 8, 3 minute stages. Using a bike, treadmill, or rower at each stage the load will be increased and blood samples taken to measure lactate concentrations. This test is not done to exhaustion but will seem quite a high intensity by the final stage.

The Lactate Profile will give you data on the following:

- ⇒ Blood Lactate Concentrations
- ⇒ Blood Lactate Determined Training Zones
- ⇒ Heart Rate Ranges for each Training Zone
- ⇒ Oxygen Uptake Profile
- ⇒ Fuel Utilisation

Vo2 MAX:

VO2 max is a measure of the maximum volume of oxygen that an athlete can use. It is measured in millilitres per kilogramme of body weight per minute (ml/kg/min).

VO2 Max is determined during an incremental exercise test to volitional exhaustion.

According to the American College of Sports Medicine (ACSM), cardiorespiratory fitness is the ability to perform dynamic, moderate- to high-intensity exercise involving large-muscle groups for prolonged periods of time (aka running, rowing, cycling, swimming, etc).

VO2Max testing is the most scientific way to measure your fitness *right now*. You can also compare yourself to a population of people in your age range. With the results we can estimate running times, set goals, and it is also a great objective measure to monitor performance if you want to improve.

Body composition:

Body composition calculation is a more precise way of tracking progression with weight management. It enables us to calculate your fat % and muscle mass. So as you begin a programme your weight might stay the same or even increase, which can reduce motivation if “weight loss” is your goal. However, at the same time you could be decreasing fat % and increasing muscle mass which will go toward a “leaner” you.

It is also important for optimising sports performance through many ways such as power to weight ratio and heat dissipation.

Nutrition for weight management and sports performance:

There is so much information out there about what you should be eating, not eating, and definitely not eating. It's hard to know what is right. Wouldn't it be great for someone to explain all of this to allow you to make educated decisions yourself? Having a consultation specific to your lifestyle, needs and goals is the best way in finding out what's right for you. Education is fundamental in making informed decisions about what to eat. How many sessions you have or need is up to you. The initial consultation will be gathering information about you to help tailor make the right plan for you to help you achieve your goals.

Strength and conditioning for sport:

- Sports specific Strength
- Muscular Endurance
- Plyometric training
- Core Stability
- Flexibility
- Speed & Agility Training
- Programme Design & Periodisation

We also provide SOZA health screening at Circle. For more information please follow the link below.

<http://www.sozahealth.com/our-service.html>