



Nutrition

Eating and Drinking for Sport

Why is Nutrition Important?

1

What we eat and drink affects both health and performance in sport

2

During childhood and adolescence growth and development is rapid

3

High energy and nutritional demands on a young athlete's body

4

It's not just what you eat and drink, but how much and when you eat it

Balanced Diet



A balanced diet is not a crash diet. It is a way of eating all of the right nutrients that your body needs in order to be healthy



Everyone's bodies are different and individuals often require a different amount of nutrients

Listen to your body!



Try to fuel yourself with quality unprocessed foods that are nutrient dense

Eat three meals a day and limit snacks to healthy ones



Balance

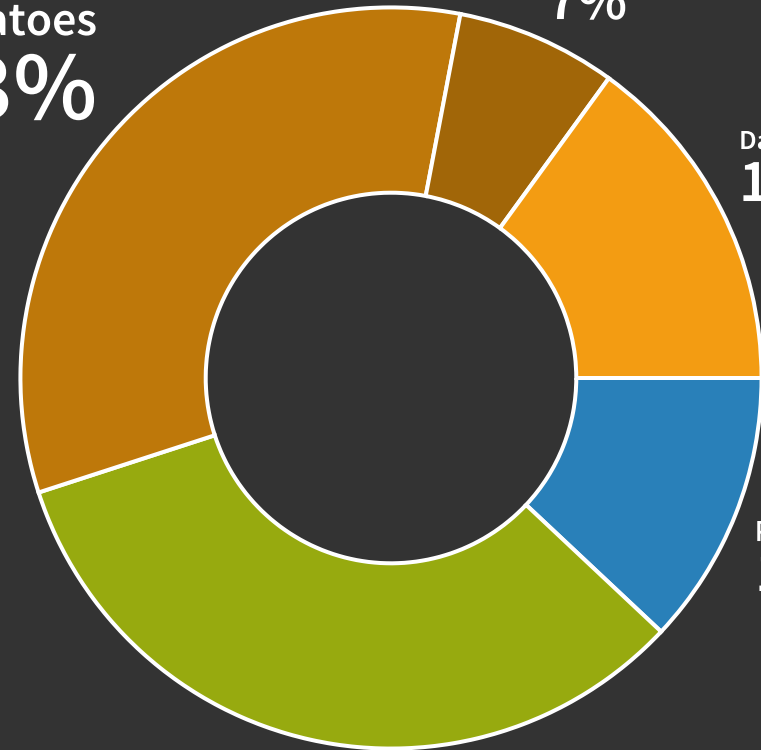
Bread Cereals
Potatoes
33%

Oils and Good Fats
7%

Dairy
15%

Protein
12%

Fruit/Veg
33%



How is Energy Measured?

1

A calorie is used to measure the energy value of foods and the energy cost of exercise

When we talk about calories we actually mean kilocalories, as being the unit of energy required to raise the temperature of 1kg of water through 1 degree centigrade

650

How many additional calories per hour do we burn when cycling?

During training and racing, you may actually burn more. Steady riding at endurance pace is about 650kcal per hour

2,000

The amount of energy used in a normal day depends on age, weight and muscle mass, plus normal activity levels

The average woman over 18 would burn around 2000kcal and men around 2500kcal - just staying alive!

Where do we get energy from?

1 GRAM OF:

1

Carbohydrate = 4kcal

2

FAT = 9kcal

3

Protein = 4kcal

4

Alcohol = 7kcal

Which fuels do we use for exercise?

Depends on the intensity and duration of the exercise (Fats for endurance/Glycogen for racing!)

the **Calorie** issue

- 1 Calorie counts are imprecise
- 2 We don't absorb all the calories we consume
- 3 How you prepare food changes the calorie load
- 4 Individuals absorb calories uniquely and variably
- 5 People are not accurate in managing portion sizes

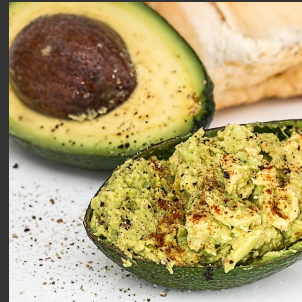


Energy Stores



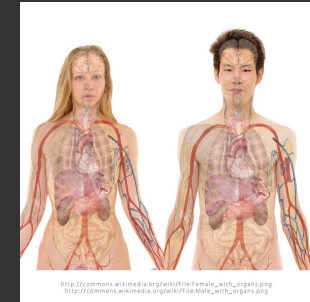
Protein in muscles

When FAT and GLYCOGEN are no longer available, the muscle starts to break down its own protein to provide energy for contractions



FAT cells in the body

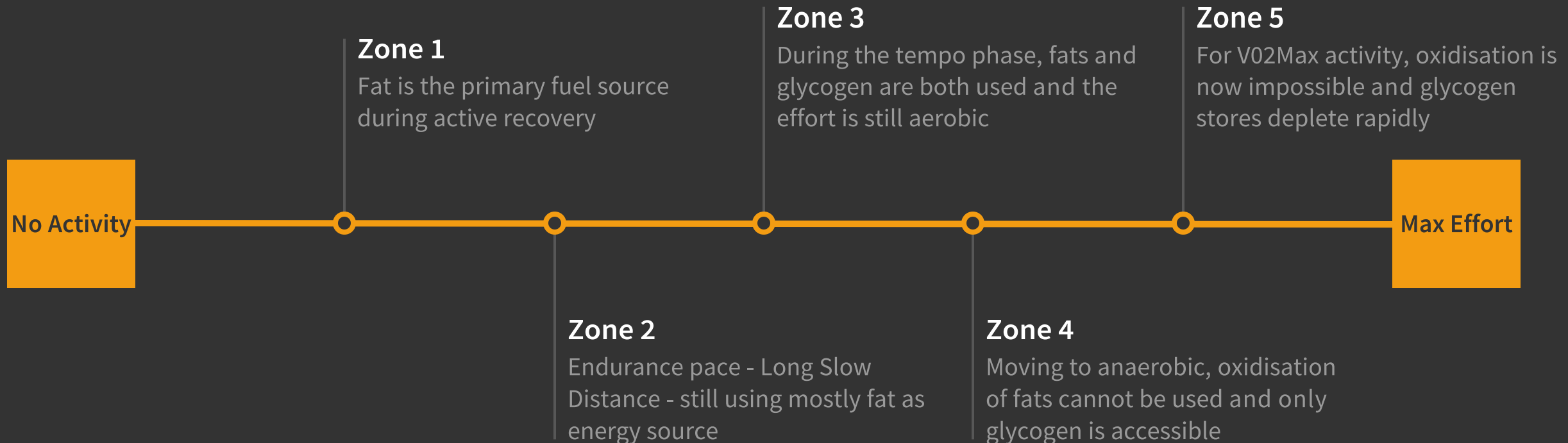
Whilst FAT is the most energy dense it is well protected and can only be transferred to energy with oxygen



Glycogen in muscles and liver

Glycogen is stored in muscles and the liver in a relatively small amount of about 500 to 2,000 kcal (20 minutes of high intensity effort)

How do we obtain energy from our stores?



EATING FOR SPORT



Eating the right type of food and drinking enough fluids before, during and after each race or training session can help young athletes reach their full performance potential, reduce fatigue and speed recovery.

Hydration



BE SERIOUS!

No official guidelines for fluid intake but drinking 1.5 to 2.0 litres per day a general guide

Needs increase for young athletes due to sweating



Dehydration

Losing too much fluid from the body

Early symptoms include lack of energy, headache, feeling very hot, feeling sick, lack of sweat, muscle cramps

Where fluid loss is $>15\%$ - risk of death



Stop and rehydrate

Advanced symptoms include severe headache, dizziness, disorientated, short of breath

Stop! Get **PROFESSIONAL HELP** and rehydrate

How to stay hydrated



Check your pee colour!

Pale straw colour - not deep yellow

Aim to keep hydration levels the same throughout the day

Drink before/during/after training and racing

Sip fluids rather than gulp

Aim for 500ml of fluid per hour



15-30 Minutes

For fluid to be absorbed in the bloodstream

Do not wait to feel thirsty

By the time you are thirsty you may already be dehydrated



Options to consider

Just Water (if under 40 minutes)

Sports Drinks (including home made)

Smoothies and Juices

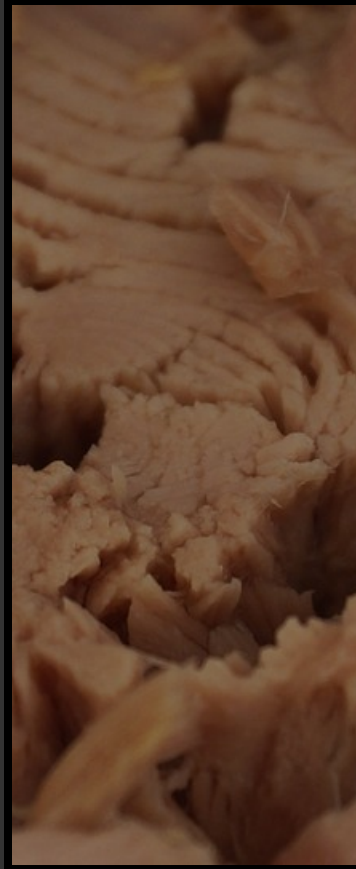
Milk/Chocolate Milk

What is 200 calories?



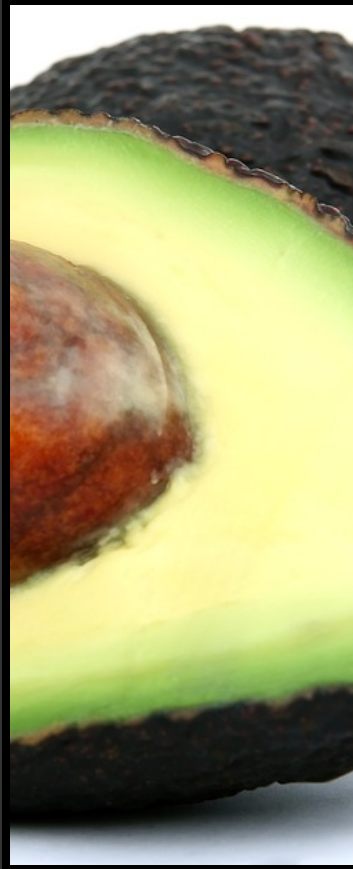
Dried Apricots

83g



Canned Tuna

102g



Avacado

125g



Pasta

145g



Apple

385g



Red Onion

475g

Discussion

The Human Body can only absorb
90g of carbohydrate per hour at peak

Think about and discuss:

Your meals
before a race

Solid food or
gels during a
race?

Your meal
after a race





LUCOZADE SPORT DUAL-FUEL ENERGY GELS - ORANGE

Available again in May 2022

Lucozade Sport Dual-Fuel Energy Gels provide 30g of Carbohydrates in a 2:1 Glucose/Fructose ratio to deliver energy to your body when it needs it most. They are easy and convenient to use on the go making them a great choice for endurance events.

Scientifically developed in partnership with experts, as chosen & used by the England football teams & handed out on route during the London Marathon. Orange Flavoured Carbohydrate Food Supplement Gel.

£26.99 (Per unit)

24 Pack

Quantity

Product Information

Close



PRODUCT INFORMATION

NUTRITION

INGREDIENTS

45G

100G

Typical values per 45g: Energy 509kJ (123kcal), Carbohydrate 30g, Sugars 10g, Salt 0.05g, Sodium 0g



Hillingdon
Slipstreamers

