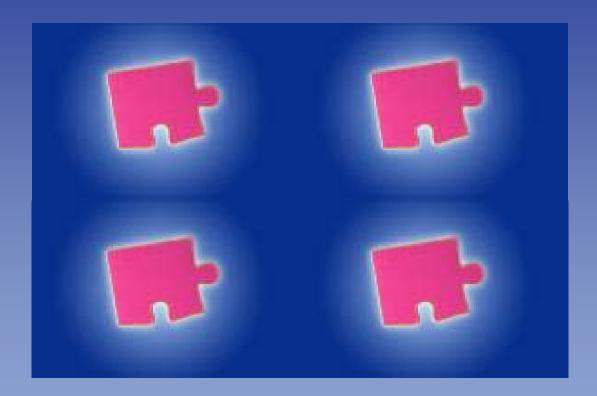
How do you use nutrition to improve your performance?

Dr Sharon Madigan

Accredited Sports Dietitian



Nutrition and hydration: One piece of the performance puzzle? Everyone can get something from it.



HAVEYOU GOTTHE ENERGY?



Planning your training day what do you eat and drink?

Morning \rightarrow Evening	WHAT DO YOU EAT NOW?	COULD YOU IMPROVE IT?
Breakfast		
Mid morning		
Lunch		
Mid afternoon		
Dinner		
Before bed		
Before training		······
During training		
After training		

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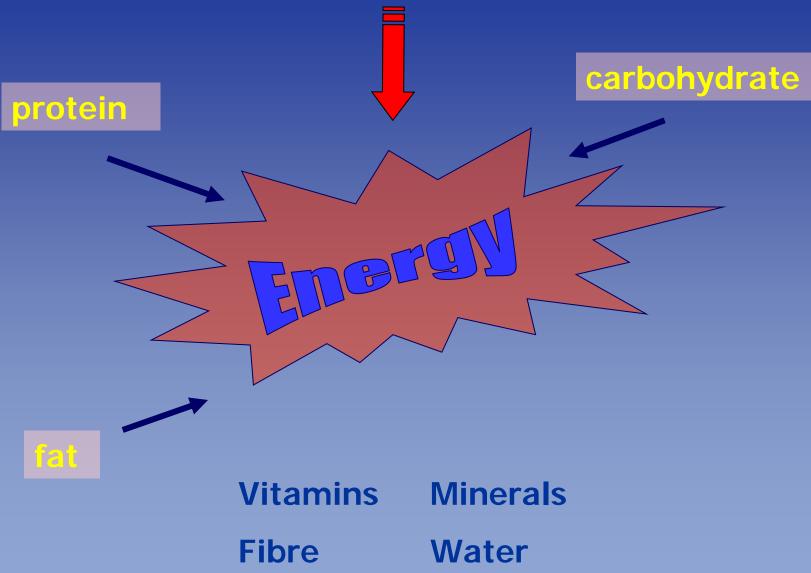
Key Nutritional Issues for performance

- Replacing fluid.
- Replacing Carbohydrates.
- Adequate Protein
- Healthy Balance
- Good habits
- Recovery
- Travel
- Supplements: Safety and necessity?

How much food and drink do you need?

Enough to Live
 Enough to Grow
 Enough for Training
 Enough for Competitions

Food and Drink

















Protein

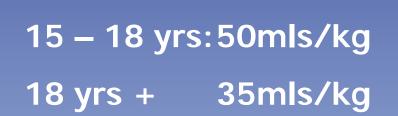
- Raw material for
 - Structure of the body
 - Hormones
 - Antibodies
 - Blood clotting
 - enzymes
- not stored in the same way as fat and carbohydrate



Fat

- a rich source of calories
- stored in adipose (fat) tissue mainly around the organs and under the skin, but some in muscle
- Essential for insulation, nerves, fat soluble vitamins, essential fatty acids





Fluids



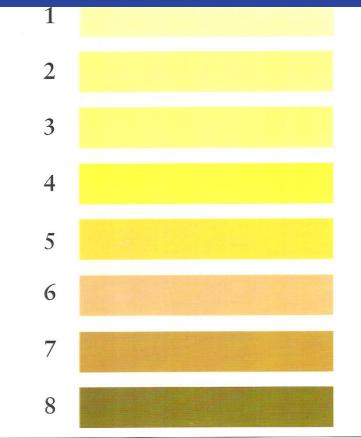
Sweat losses



- Your body sweats to keep you cool
- Being thirsty is not a good guide for your need for fluid
- Drink regularly the more you sweat, the more you need to drink

 Practice drinking during training

Measuring Hydration



Your target is to make sure that your pee is the same colour as numbers 1, 2 or 3. Colours 4 and 5 suggest dehydration and 6, 7 and 8 severe dehydration.



Dietitians in Sport & Exercise Nutrition PO Box 22360 London W13 9FL



Lucozade Sport for fast energy and fast fluid to help maximise performance

- PEE test aim 1 3
- Signs of dehydration
 - Thirst, headaches, dark coloured urine, irritability, dizziness, cramps, nausea, decreased performance
- Pre and post training weights

Choice of drinks for exercise

- Water
- Diluted fruit juice
- Diluted fruit squash
- Sports drinks
 - hypotonic
 - isotonic
 - hypertonic





Sports Drinks

Do you always need them????

Putting it all together

- <u>What</u> and <u>when</u> you eat and drink is important to make sure that:
 - You are well hydrated
 - Your muscles are well stocked before exercise
 - You are not hungry starting exercise
 - You rehydrate and refuel your muscles after exercise, ready for the next session

Eating and drinking before training or competition

 Carbohydrate meal or snack 1 – 2 hours before training or match

© Always take a drink (at least 500mls)

Eg

- ✓ Sandwich or roll
- ✓ Yogurt and fresh fruit
- ✓ Pancakes or scones
- ✓ Breakfast cereal with milk



What should you drink during training or competition?

- © Try to drink about 300mls before training starts
- © If the session is less than 1 hour, water is fine
- © If the session is more than an hour, drink diluted squash or sports drink
- © Don't wait until you are thirsty take regular sips throughout session: stop at regular intervals during laps.
- © Look after your teeth as sports drinks and squash contain sugar

Snacks for after training

 Water, diluted fruit juices, squash or sports drink

- ✓ Sandwiches or filled rolls
- ✓ Bananas, grapes, apples, mandarin oranges
- ✓ Sultanas, raisins, dried apricots
- ✓ Fruit loaf, pancakes, scones
- ✓ Jaffa cakes, fig rolls
- ✓ Cereal and energy bars
- ✓ Yogurts, Yogurt drinks

✓ Smoothies











Planning your training day



(what's in your kit bag?)

Key points Everyday nutrition

- Enjoy a variety of foods
- Focus on nutrient-rich, high carbohydrate foods, planned around your training/competition
- Consume small quantities of high fat foods
 - Nuts a good snack
- Include protein foods
 at each meal
- Look after fluid needs
- Have a snack / supper at night to prepare for the morning.
- Use milk or a smoothie before morning swim.

Key points competition nutrition

- Experiment during training to develop a food and fluid plan that best suits you
- Be organised take snacks and drinks with you
 - > Carbohydrate drinks / MILKY DRINKS.
 - > Water
 - Snacks
- Refuel and rehydrate after swim. HAVE A PLAN
- Investigate what to expect when competing away from home