

Hydration

By now it should be hot and sunny...! This means it's even more important to keep hydrated. The following essential recommendations from our nutritionist Gary Baverstock can help promote the best hydration for improved energy and concentration levels.

Why is water important? Your body is mostly (50% to 70%) water. Exactly how much depends on how old you are and how much muscle and fat you have. Muscle tissue has more water than fat tissue. Because the average male body has proportionately more muscle than the average female body, it also has more water. For the same reason – more muscle – a young body has more water than an older one. Food intolerance or allergies can also make the body retain unwanted water.

Water is brimming with minerals and electrolytes and acts as a solvent, dissolving other substances and carries nutrients and other material (such as blood cells) around the body, making it possible for every organ to do its job. This is why nobody can live more than 3 to 5 days without any fluid intake. There is no system in the body that does not depend on water, which means maintaining your fluid balance is essential to life.

Water is used for:

- Digesting food, dissolving nutrients so that they can pass through the intestinal cell walls into your bloodstream, and move food along through your intestinal tract.
- The transportation and use of nutrients to cells, such as minerals, vitamins and glucose.
- The safe elimination of toxins and waste products out of your body.
- Providing a medium in which biochemical reactions such as metabolism (digesting food, producing energy, and building tissue) occur.
- Sending electrical messages between cells so that your muscles can move, your eyes can see, your brain can think, and so on.
- Regulating body temperature — cooling your body with moisture (perspiration) that evaporates on your skin.
- The lubrication around joints and it also acts as a shock absorber for eyes, brain and spinal cord, and even for the foetus through amniotic fluid.

How the body stores water? As much as three-quarters of the water in your body is in intracellular fluid, the liquid inside body cells. The rest is in extracellular fluid, which is all the other body liquids, such as:

- Interstitial fluid (the fluid between cells)
- Blood plasma (the clear liquid in blood)
- Lymph (a clear, slightly yellow fluid collected from body tissues that flows through your lymph nodes and eventually into your blood vessels)
- Bodily secretions such as sweat, seminal and vaginal fluids
- Urine

What is dehydration? Dehydration is a condition that results when the body loses more water than it takes in. This imbalance disrupts the usual levels of salts and sugars present in the blood, which can interfere with the way the body functions.

Symptoms and signs of dehydration: Some of the early signs of dehydration include:

- Intense thirst
- Feeling dizzy or light-headed, also a symptom of low blood sugar
- Having concentrated urine that is dark in colour and strong in smell
- A reduction in the frequency of urination
- In babies, signs include the soft spot on the top of the skull (fontanel) being sunken; few or no tears shed on crying, fewer wet nappies, and drowsiness.

HEALTH MATTERS!

Causes of dehydration: Dehydration is usually caused by an inadequate intake of fluids to replace those that have been lost. Other contributing factors include climate, physical activity and diet. Dehydration is also caused by illnesses that may lead to fluid loss such as persistent diarrhoea and vomiting. Remember if you have a dry mouth and lips then it is likely that you are becoming dehydrated.

How much should we drink? The European Food Safety Authority (EFSA) recommends an intake of 2.5 litres of water for men and 2.0 litres of water for women per day, via **food** and **drink** consumption. Of this, they suggest that 70-80% of the daily water intake should come from drinks, and the remaining 20-30% should come from food, especially vegetables and fruits. The NHS, who recommends that women should drink eight 200ml glasses (1.5ltrs) and men should drink 10 200ml glasses (2ltrs) of fluid per day, supports this. The British Nutrition Foundation gives guidelines for the types of fluid to drink, and water is the only fluid which they recommend drinking "plenty" of, as it contains no sugar, calories or additives.

How to stay hydrated Sip water throughout the day from a refillable **glass** water bottle, which is easy to carry. Aim for at least 1ltr per day (or 4 medium glasses) of fresh water [more in hot weather], as only water hydrates, cleans and detoxifies like water. So, apart from drinking adequate liquids you can improve hydration levels by eating at least 5-a-day (of 75% veg and 25% fruit). Low sugar vegetable juices can also provide staggeringly good levels of hydration and nutrients and herbal teas can also provide antioxidants. Listen to your body, some people mistake thirst for hunger and eat instead of drinking. Keep hydrated and keep young!

Foods (See MAY's Food in Focus Handout) Apart from increasing your fluid intake there are other things that can help to hydrate you. Research shows that eating foods that are full of water not only helps to keep you satisfied and hydrated on fewer calories, but they provide essential nutrients. Great reasons to start eating your water! The following foods are nine of the best for hydrating us.

Watermelon (92% water)
Celery (95% water)
Cucumber (96% water)

Strawberry (92% water)
Lettuce (Cos) (96% water)
Grapefruit (91% water)

Peppers (92% water)
Tomatoes (95% water)
Radishes (95% water)

Does tea and coffee count? Tea and coffee can count towards your total, as can non-calorie beverages, although the body does have to metabolise them to get the benefits. They are best drunk black without sugar and milk. Caffeine only acts as a diuretic when consumed in large amounts – in excess of 5-6 medium cups.

Juices and carbonated drinks? Soft drinks and fruit juices can also provide hydration, but also contribute to a lot of unwanted excess calories, sugars, chemicals (diet drinks) and additives. The simplest the better – ideally with very low sugar (not diet), or diluted to avoid disrupting blood sugar levels.

Hydration and exercise: It's important to stay hydrated during exercise. For the average workout of 60 minutes or less, you typically won't need anything more than water. More than this, or if it's hot and humid outside, then you may need the extra calories and electrolytes that sports drinks provide. Each individual has different needs based on weight; sweat rate, and how hard you're working. **Simple mineral water is the best way to go.** But if you just can't stomach it, try one of the many flavoured, calorie-free waters on the market. Be sure to read the nutrition label and avoid extra sugar/calories and chemicals. If you want a natural option that's a little tastier, try adding a slice of orange, lemon, lime, grapefruit, a few mint leaves, or even cucumber to your water.

Can you drink too much? (Over-hydration) Yes – drinking excessive amounts of fluid is not helpful and, in rare cases can be dangerous as it may negatively disrupt the electrolyte balance. The amount can vary drastically between people. If you are passing urine too frequently and your urine is very pale or clear, you may be drinking more than you need.

Please Note: This handout should only be used as a guide to help inform you as to the diet and lifestyle modifications that **may** help to support adequate hydration levels. It **should not** be used as definitive guide to hydration. If you think you may be suffering from dehydration then please contact your medical doctor.