

Thirst Mechanism and Salt Intake

Salt has been a natural flavouring and preserving agent in food since ancient times.

Medical research has shown that a low-salt diet is indicated for persons with high blood pressure.

Our current high salt intake is regularly in the headlines. The daily recommended allowance for salt is 6 grammes per day. The average consumption per adult in the UK is 9 grammes per day.

By far the biggest contributor of salt in our diets is processed food – including a wide variety of foods such as cereals, confectionary, savoury snacks, ready made meals, sauces, sausages and take away foods etc.

But, we need salt, we can't do without it.

Without salt our bodies would cease to function. Muscles would not work, nerves would not carry messages and food would remain undigested.

Between fifty and sixty per cent of the body consists of fluids, which contain appreciable amounts of salt. Every day, the body loses a quantity of salt in perspiration and urine excreted by the kidneys.

So, we definitely need some salt to be healthy, but as with most things too much of a good thing tends to be when problems start.

So how does salt intake affect your thirst?

Everyone knows that after eating a meal or a snack containing high levels of salt you automatically reach for a drink.

The body always keeps and regulates a fluid balance. The regulation of this fluid balance is tightly controlled by various homeostatic mechanisms, one of which is the thirst mechanism. Thirst can be activated by one of two triggers:

- A lower blood volume (excessive sweating after exercise or in hot weather);
- A higher plasma osmolarity - meaning there are more salt molecules in the blood and the concentration is too high.

Eating a meal that is very high in salt will lead to too much salt in the blood. Although the kidney gets rid of the excess salt, the thirst mechanism will kick in as well. The minute this happens the body releases hormones – antidiuretics, which also act on the kidney to reduce the amount of water excreted in the urine, the urine will become very concentrated- and often dark and smelly.

It is unavoidable to have the occasional high salt meal. Afterwards though make sure that you drink plenty, and water remains the best cure to restore the balance. Alcohol, milk, fizzy drinks, fruit juice, caffeine-containing drinks may all quench your thirst but, on the downside, they all contain calories.