

What are electrolytes?

Electrolytes are elements that conduct electricity when mixed with water. They contribute to regular nerve and muscle function, balance blood pressure, help rebuild damaged tissue and keep you hydrated. In fact, the muscles and associated neurons in the human body are often referred to as the “electric tissues” of the body. That’s because they in particular rely on electrolytes to function properly. The different types of electrolytes in the human body include:

- ✓ Sodium
- ✓ Potassium
- ✓ Calcium
- ✓ Bicarbonate
- ✓ Phosphate
- ✓ Chloride
- ✓ Magnesium

What do electrolytes do and why do we need them?

Electrolytes are essential for our bodies to function as they should. Many automatic processes in the body, such as muscle contraction, rely on the small electric current provided by electrolytes to function by interacting with each other and the cells in the tissues, nerves, and muscles.

For example: a muscle needs calcium, sodium, and potassium to contract. When these substances become imbalanced, it can lead to either muscle weakness or excessive contraction. Another example is the nervous system, which relies on electrolytes to carry electrical impulses to other cells.

A balance of different electrolytes is vital for healthy function.

What happens when my electrolytes go down?

There are several factors that can cause your electrolyte levels to decrease. The predominant cause of low electrolyte levels & electrolyte imbalance is a change in relation to the water levels in your body. eg. important electrolytes such as sodium & potassium are lost through sweat during exercise or due to hot climate. The concentration of electrolytes in your body can also be affected by rapid loss of fluids, such as diarrhoea or vomiting. There are many ways in which electrolytes are lost within the body, including:

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| Sweating | Age: the kidneys of adults become less efficient over time | Diarrhoea |
| Dehydration | Lack of fruit and vegetables/poor diet | Vomiting |

Though some health conditions, such as kidney disease, congestive heart failure and bulimia, and some drugs including diuretics can cause an electrolyte imbalance. Please speak to your GP if you suffer from any of these conditions and are concerned about electrolyte imbalance.

How to replace electrolytes naturally

There are easy ways to replace electrolyte levels naturally and keep your electrolyte levels up, including:

Sports drinks: Though sports drinks such as Lucozade electrolyte and gels, are often recommended as quick-fix for restocking electrolyte levels during & after exercise, they typically contain high levels of refined sugars. Look for sugar-free options, or consider alternatives to prevent consuming empty calories post-workout.

Electrolyte tablets: Electrolyte supplements, such as electrolyte effervescent tablets, are a great option for topping up low levels of electrolytes after exercise. They are also particularly beneficial for older adults who are more likely to have an electrolyte imbalance. Electrolyte tablets are also almost sugar-free.

Nuts, fruit & vegetables: Pickles, tomato juices and sauces are all good sources of sodium, while lettuce and olives provide chloride. Pistachio Nuts, potatoes (with the skin left on) & bananas are some of the best sources of **potassium**. Spinach, Brazil Nuts & halibut are excellent sources of **magnesium**. Almonds, yoghurt, skimmed milk, dark greens such as kale and sardines are terrific sources of **calcium**. Finally just to round up the above, Cashew Nuts are a good source of **Carbohydrates & Iron**.