

# KEY TIPS ON HYDRATION IN HOT WEATHER

**Hot weather conditions** can increase the body temperature resulting in serious stresses for the body, placing it in greater danger of injury (heat cramps, heat exhaustion or heat stroke) or in extreme conditions, death.

**Sweating or perspiration** is one of the mechanisms used by the body to cool itself in conditions of heat. This water loss is often accompanied by disturbances in the body's mineral salt or electrolyte balance – especially disturbances in the concentrations of sodium and potassium.

That's why, besides usual water losses (2-3 L/day), water (and salt) lost as additional sweat must also be replaced when we are exposed to high temperatures.

**As environmental temperature rises**, the risk of dehydration increases. Dehydration symptoms should be carefully monitored, especially in those people particularly susceptible to heat reactions:

- elderly people,
- young children,
- chronic invalids and those taking certain medications which increase the risk of dehydration, such as diuretics,
- people with weight or alcohol problems.



## SYMPTOMS OF DEHYDRATION

- **MILD** (around 1% of body weight). Symptoms may include: thirst, headache, weakness, dizziness, feeling tired and lethargic.
- **MODERATE** (around 4% of body weight). Symptoms may include: Dry mouth, little or no urine, sluggishness, rapid heartbeat, lack of skin elasticity.
- **SEVERE** (10% or more of body weight). Symptoms may include: Extreme thirst, no urine, rapid breathing, altered mental state, cold, clammy skin.

**Severe dehydration is a life-threatening medical emergency and can be fatal.**



It is calculated that of  
the total water consumed...

**20-30%**  
typically comes from food and  
**70-80%**  
from beverages (all types,  
not just plain water)<sup>1,2</sup>

However, this may vary greatly  
depending of the diet that an  
individual chooses.<sup>1,2</sup>



### Some tips to ensure proper hydration of the body in hot weather.

#### Reduce water loss:

- In Summer, avoid going out in the hottest temperatures (11 to 16 h in Europe).
- If outside during these times, wear a hat, and light clothes.
- Reduce intensity and duration of exercise.
- Avoid badly ventilated places, close the shutters during the day and do not open the windows before the outside temperature has dropped (at night).
- Ask for advice about any medications you are taking, especially if they increase the risk of dehydration.
- Monitor your weight. In the short term (1-2 days), any weight that is gained or lost is probably water.

#### Learn to recognise signs of dehydration and heat stroke:

- These are neither specific nor sensitive, but monitor headaches, fatigue, thirst.

#### Increase fluid intake:

- Ensure adequate water intake during the whole day, and pay special attention to the needs of the most susceptible people.
- Drink regularly even when you are not thirsty.
- Eat food which is rich in water and avoid excess alcohol.

The Panel on Dietetic Products, Nutrition and Allergies from the European Food Safety Authority (EFSA)<sup>2</sup> issued reference intakes for water in 2010. These are defined as total water intake, which is water from beverages (including drinking water) and from food moisture. It is normally assumed that the contribution of food to total dietary water intake is 20 to 30%, while 70 to 80% is provided by beverages. This relationship is not fixed and depends on the type of beverage and on the choice of foods.

To know more about the sources of water, please visit us at:

[http://www.europeanhydrationinstitute.org/nutrition\\_and\\_beverages.html](http://www.europeanhydrationinstitute.org/nutrition_and_beverages.html)

1. Manz F, Johner SA, Wentz A, Boeing H, Remer T. Water balance throughout the adult lifespan in a German population. *Br J Nutr* 2011; 1-9 [Epub ahead of print] 2. EFSA Panel on Dietetic Products, Nutrition, and Allergies (NDA); Scientific Opinion on Dietary reference values for water. *EFSA Journal* 2010; 8(3):1459. Available online: <http://www.efsa.europa.eu/en/efsajournal/pub/1459.htm>