

HYDRATION TIPS

RECOGNISING SIGNS AND SYMPTOMS OF MILD DEHYDRATION



Dehydration occurs when the **body loses more water than it takes in**.

Signs and symptoms of mild dehydration are neither specific nor sensitive, but may include: thirst, tiredness¹, palpitations due to an increase in heart rate² and/or increased body temperature as a result of compromised thermoregulation².

Mild dehydration (1-2%² decrease in body mass) may have an effect on performance and may lead to an increased risk of adverse health outcomes such as:

Physical performance: Dehydration equivalent to 2% of body mass loss can have a negative effect on endurance³.

Cognitive performance: Acute dehydration - such as that resulting from 2 hours exercising in the heat without drinking can affect mental performance⁴.

Disorders and diseases: Chronic mild dehydration is associated with conditions such as urolithiasis and urinary tract infection⁵. The association with common conditions such as constipation or hypertension is less strong.

Most people drink in response to thirst, and in many cases this is enough to avoid dehydration. However, it is important to take into account that this regulatory mechanism is impaired with age.

The daily water requirement depends on a number of factors including the person's diet, environment, age and activity level⁶. For adolescents over 14 years old and adults

the European Food Safety Authority (EFSA) has given an adequate water intake of 2 L for females and 2.5 L for males.

Under special circumstances, when large amounts of water and electrolytes are lost due to vomiting, diarrhoea, or even sweating (e.g. after intensive sport or during hot weather), oral rehydration electrolyte solutions may be useful.

It is calculated that of the total water consumed...^{7,8}

about
20-30%
typically comes from food

and about
70-80%

from beverages (all types, not just plain water).^{7,8}

However, this may vary greatly depending on the diet that an individual chooses.^{7,8}



1. Kolasa KM, *et al.* Nutrition Today 2009;44:190-201. 2. Kavrouas SA, *et al.* Nutrition Today 2010;45:S27-S32. 3. Cheuvront SN, *et al.* Curr Sports Med Rep 2003;2:202-8. 4. Szinnai G, *et al.* Am J Physiol Regul Integr Comp Physiol 2005;289(1):R275-80. 5. Manz F, *et al.* Nutr Rev. 2005;63:S2-S5. 6. Panel on Dietary Reference Intakes for Electrolytes and Water (2005) Dietary reference intakes for water, potassium, sodium, chloride, and sulfate. National Academy Press: Washington DC. 7. 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: www.efsa.europa.eu/en/efsajournal/pub/1459.htm. 8. Manz F, *et al.* Br J Nutr 2011;1-9 [Epub ahead of print].