

## How much water does my body need?

### The scientific answer from the European Food Safety Authority\*

European scientific experts recommend that adolescents (>14 years), adults and elderly should absorb daily 2.5 / 2.0 litre of water (male/ female, respectively) in conditions of moderate temperature and moderate physical activity.

This water can come from various foods and beverages.

As foods usually contribute to 20% of water intake, adolescents, adults and elderly should drink daily 2 / 1.6 litre (male / female, respectively) from beverages including tap and bottled water.



Following a request from the European Commission, the European Food Safety Authority (EFSA) gathered a *Panel* of 21 experts in nutrition and health to deliver a scientific opinion on dietary reference values for water.

A scientific opinion based on 138 articles was released on March 26, 2010 by the EFSA *Panel on Dietetic Products, Nutrition and Allergies*. Reference: EFSA Journal 2010; 8(3):1459 (48 pages).

See also: <http://www.efsa.europa.eu/en/scdocs/scdoc/1459.htm>

#### EFSA's findings can be summarised as follows:

- Water plays a vital role for life and health
- Water is key for our body to function properly
- Water intake needs to balance water losses

#### Adequate water intake depends on:

- Individuals and/or specific age groups (a combination of observed intakes in population groups with desirable osmolarity values of urine and desirable water volumes per energy unit consumed)
- Environmental conditions (i.e. temperature and humidity)
- Energy expenditure (1 ml/kcal)



Adequate intakes of water for different population groups are given in the table below.

These values, defined by the *Panel*, include:

- Water from beverages, including tap and bottled water
- Water from food moisture

These values apply to conditions of moderate environmental temperature and moderate physical activity levels. Water losses under extreme conditions of external temperature and physical exercise, which can be up to about 8000 ml/day, have to be replaced with appropriate amounts of water.

	Male	Female	
<b>Population group(s)</b>	<b>Adequate intake of water (ml/kg/day)</b>		<b>Comments from the <i>Panel on Dietetic Products, Nutrition and Allergies</i></b>
< 6 months	<b>100 - 190</b>		<i>"Based on water intake from human milk in exclusively breast-fed infants"</i>
	<b>Adequate intake of water (ml/day)</b>		
6-12 months	<b>800 - 1000</b>		<i>"From observed intakes of human milk and typical patterns of complementary food and beverages"</i>
1-2 years	<b>1100 - 1200</b>		<i>"Defined by interpolation as intake data are not available"</i>
2-3 years	<b>1300</b>		<i>"Adequate intakes of water for children can be derived from observed intakes, corrected for a desirable water-energy relationship and corrected for inter-individual variation"</i>
4-8 years	<b>1600</b>		<i>"Adequate intakes of water for children can be derived from observed intakes, corrected for a desirable water-energy relationship and corrected for inter-individual variation"</i>
9-13 years	<b>2100</b>	<b>1900</b>	<i>"Adequate intakes of water for children can be derived from observed intakes, corrected for a desirable" water-energy relationship and corrected for inter-individual variation"</i>
Adolescent (14years) and Adults	<b>2500</b>	<b>2000</b>	<i>"The Panel concludes that available data for adults permit the definition of adequate intakes and that these adequate intakes should be based on observed intakes and on consideration of achievable desirable urine osmolarity"</i>
		<b>2300</b>	<i><u>Pregnant women:</u> "the Panel did not find data on habitual water intake and proposes the same water intake as in non-pregnant women (i.e. 2000 ml/day) plus an increase in proportion to the increase in energy intake (300 ml/day)"</i>
		<b>2700</b>	<i><u>Lactating women:</u> "the Panel recommends adequate water intakes of about 700 ml/day above the adequate intake of non-lactating women of the same age"</i>
Elderly > 75 years	<b>2500</b>	<b>2000</b>	<i>"The Panel defines the same adequate intakes for the elderly as for younger adults, because both renal concentration capacity and thirst are decreasing with age"</i>

\* The European Food Safety Authority (EFSA) is the keystone of European Union risk assessment regarding food and feed safety and provides independent scientific advice in close collaboration with national authorities and its stakeholders.