

RECOMMENDED DIETARY INTAKE

RDI: Adult: 800 – 1000mg/day
Children: 700-1000mg/day
Infants: 300 - 550mg/day

RDI : Adult: 270- 320mg/day
Children: 80- 320mg /day
Infants: 40 – 60mg/day

RDI: Adults: 1950 – 5460mg/ day
Children: 980 - 5460mg/day
Infants: 390 – 1370mg/day

RDI: Adults: 920 – 2300mg/day
Children: 320 - 2300mg/day
Infants: 140 - 580mg/day

RDI:* Adults: 2 – 3mg/day
Children: 0.7 – 1mg/day
Infants: 0.01 – 0.5mg/day

RDI: Adults: 7 – 16mg /day
Children: 6 – 13mg /day
Infants: 0.5 - 9mg /day

RDI: Adults: 12mg/day
Children: 4 – 12mg/day
Infants: 3 – 6mg/day

RDI: Adults: 750mg/ day
Children: 600mg/day
Infants: 180 mg /day

*USA fluoride RDI values.

Why is Tap Water Good for You?

Strict guidelines are set for the quality of drinking water in Australia. Ipswich Water remains abreast of trends and meets water quality criteria of the National Health and Medical Research Council (NHMRC) Australian Drinking Water Guidelines (1996).

We conduct water quality tests for microbiological, physical and chemical parameters on a regular basis at various sites around our supply area to assure that the water we deliver to the Ipswich community is of the highest quality.

By working together with communities and government Ipswich Water delivers water services you can always trust.

The following elements occur naturally in the tap water provided by Ipswich Water:



Some water benefits....

- Water helps maintain energy levels. Without water you would feel tired more easily, suffer muscle cramps, and be unable to think straight (which is a major factor to be considered in school children).
- Increased water consumption can help you control weight by preventing you from confusing hunger with thirst.
- Adequate hydration helps prevent constipation and complications associated with diarrhea and gastroenteritis.
- Drinking water moisturizes your skin from the inside out.
- Water is useful to rinse out the mouth after eating to prevent the formation of dental cavities and bad breath.

References:

Krause & Mahan. Food Nutrition & Diet Therapy 7th edition. WB Saunders company (1984)

Mahan & Arlin Krause's Food Nutrition & Diet Therapy 8th Edition. WB Saunders Company (1996)

Julie Taylor Dietitian Nutritionist; BHMS Grad Dip Nutr Diet APD Accredited practicing dietitian; Dietitians Association Australia.

This brochure was developed by
IPSWICH WATER.

PHONE (07) 3810 7855

FACSIMILE (07) 3810 7964

VISIT OUR WEBSITE

www.ipswichwater.com.au

EMAIL US AT

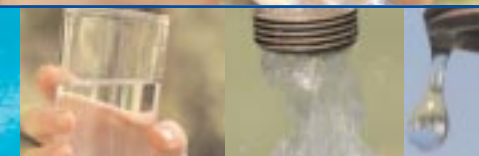
ipswichwater@ipswich.qld.gov.au

IPSWICH WATER

P O Box 191, Ipswich Qld 4305



The Value of Tap Water



Ipswich Water is committed to providing quality water services for the benefit of the Ipswich Community.



Why do You Need Water?

We all know that we have to drink water. Telling you to drink water is like telling you to breathe. But do you really know why you have to drink water? Do you really know what function water plays in your body? Here are a few reasons why water is good for you and why you should make drinking water part of your daily routine.

- Water makes up 60% of our total body weight. After oxygen, water is vital for maintaining our life. We can survive a few weeks without food but only a few days without water.
- The body loses approximately 1400 – 2100 mls of water each day, through the skin, lungs, kidneys and faeces. To maintain health, water balance is crucial. Water intake must equal water output.
- Water intake guide
Infants (to 1 yr) 120 – 160 mls per kg body weight per day
Children 1000 – 1500 mls per day
Adults 1500 – 2000 mls per day or 35 – 45 mls per kg body weight per day.
- Thirst is generally an adequate guide for water intake except for infants and the sick. In addition, when the weather is very hot or sweating is excessive, thirst may not keep up with water requirements. When exercising weigh yourself before and after exercise to measure the difference in weight, this amount is what you need to replace in fluid. That is, 500g or 0.5kg drop with exercise and you need 500mls or 0.5l of fluid.

- Water is the best fluid. Tea, coffee, soft drinks and alcohol are dehydrating fluids, therefore for every one cup of these drinks you need one to two cups of pure water to maintain adequate body hydration. It is difficult for the body to get water from any other source than water itself.

Some water facts...

- Water is vital in body functions such as digestion, absorption, circulation and elimination.
- No metabolic, physiological or bio-chemical reaction can take place in the body without the presence of water.
- Water is the transport medium for all nutrients and body substances.
- Elimination of metabolic waste and toxins is enhanced by water, helping the kidneys to function better.
- Water is a building material. It is part of all body fluids and tissues.
- Water is necessary for the oxidation of carbohydrates, proteins and fats.
- Water makes up a large part of fluid that lubricates and cushions your joints and muscles. Drinking water before, during, and after exercise can also help reduce muscle cramping and premature fatigue.
- Water regulates your body temperature.

ELEMENTS IN TAP WATER

(Average values, may change)

Calcium
(23 mg/L)

Magnesium
(14 mg/L)

Potassium
(4 mg/L)

Sodium
(36 mg/L)

Fluoride
(<0.1 mg/L)

Iron
(0.02 mg/L)

Zinc
(0.03 mg/L)

Chloride
(57 mg/L)

Tap Water refers to Ipswich supply area

NUTRITIONAL INFORMATION

Calcium is essential to build and maintain teeth and bones. It is important for the metabolism of some enzymes. It is important in the initiation of the blood clotting process. It is required in nerve transmission and regulation of the heart beat and tone. Deficiency leads to rickets, osteomalacia, osteoporosis, scurvy, leg cramps and hypertension.

Magnesium is essential for the production and transfer for protein synthesis, and for contractility of muscle and excitable nerves. It is also a co-factor in numerous enzyme systems. Magnesium deficiency results in the loss of appetite, growth failure, ECG changes and neuromuscular changes.

Potassium is involved in the maintenance of normal water balance, osmotic equilibrium and acid-base balance. Along with calcium it aids in the regulation of neuromuscular activity. Potassium also promotes cellular growth. Deficiency of potassium may lead to muscle weakness and mental apathy. Cardiac failure may also result.

Sodium is a major cation for extracellular fluid. Sodium helps regulate the size of extracellular compartment and the plasma fluid volume. It is also involved in the conduction of nerve impulses and muscle contraction control.

Fluoride increases bone mass and acts as an antibiotic locally by killing bacteria associated with dental caries. Some reports suggest that it is better if children under the age of 12 months are not exposed to fluoridated water. Toxicity will only occur at a level of 3mgs per day. Ipswich Water does not add any fluoride to its water.

Iron is essential for the production of haemoglobin and myoglobin. These are essential in oxygen transport. It is also present in serum transferrin and certain enzymes.

Zinc plays a role in a number of metabolic activities such as synthesis and degradation of major metabolites (carbohydrates, lipids, proteins and nucleic acids). Zinc deficiency has been associated with short stature, hypogonadism and mild anaemia – symptoms include hypogeusia (decreased taste acuity), delayed wound healing, alopecia, diverse forms of skin lesions.

Chloride deficiency has been seen on children fed formula mixed with chloride free water. This syndrome is characterized by loss of appetite, failure to thrive, muscle weakness, lethargy and severe hypokalaemic metabolic alkalosis. An interesting fact is that Chloride is the main anion of extracellular fluids. Together with sodium it helps to maintain water balance and osmotic pressure. Chlorine is converted by the body into chloride.