What's in Tap Water?

Your tap water can contain a range of contaminants from a number of sources. Some of these contaminants can have an adverse effect on the look, smell and taste of your drinking water and others can potentially have more harmful effects on your health and on your appliances. Boiling tap water does not purify the water, it only kills the bacteria. The other pollutants remain along with the dead bacteria. You still have the dirt, chemicals, heavy metals, bad taste and odour in concentrated form.

Environmental Contaminants

Pollutants from the natural environment can find their way into our water supply by leeching into our groundwater, from erosion of natural deposits, surface run-off and rain. Dust, smoke and poisons from industrial facilities, pesticides and herbicides from farming and residential gardening and even animal waste can contaminate your drinking water. Some of these contaminants include;

Pesticides and Herbicides

Pollutants from industrial, agricultural and residential uses can leach into our groundwater supply sometimes existing for years after their use has ended.

Fertilisers and Nitrates

These can come in run-off from crop fertilisers as well as animal and industrial waste. Nitrates are highly leachable and are extremely dangerous for children under three months old.

Calcium and Magnesium

Calcium and magnesium are natural minerals found in our water supply particularly as we increase our use of groundwater. They are key contributors to "hard water" which can cause scale in heating appliances leading to increased corrosion.

Added by the Water Authorities
The water authority is required to treat our water supply with a range of chemicals in order to comply with the relevant regulations.

Key among these are:

Chlorine: Chlorine is used as a disinfectant to remove potentially dangerous bacteria and other micro-organisms. Chlorine is one of the major causes of objectionable taste, smell and odour in our drinking water. Chlorine has been identified as a potential carcinogen.

Fluoride: Fluoride is added to protect against dental decay particularly in young children.

Aluminium: Aluminium is added to our water supply to act as a flocculants, ironically to make the water look clearer.

From Pipes: Water travels from the water treatment plants to your house through a network of pipes, including those in your own home, and some of these pipes may be well over 70 years old. These pipes can contain a range of contaminants which may enter our water supply. Among these are:

Dirt, Rust, Slime, Sand and Mud: These contaminants build up over a number of years and can cause the water to be dirty or worse. They can be particularly prevalent when pipes are accidentally broken or accessed for repairs and maintenance.

Copper and Lead: Copper and Lead can leach into the water supply from the copper pipes in your house and they have been identified as particularly dangerous to health.

Chlorine Resistant Parasites: There are a number of hard shelled protozoa which are resistant to chlorine disinfection. Cryptosporidium and Giardia have been discovered in domestic water supplies in Australia and they can cause immediate health problems if ingested.