



Water quality affects the domestic user in terms of:

HEALTH

The health effects of water quality on the domestic user can be divided into two types:

- ✓ **Acute effects** – effects that can be seen after a very short time.
- ✓ **Chronic effects** – effects that show only after the water has been used for a long time.

The effects themselves could be serious and long-lasting or they may be insignificant and only temporary. For example, a high magnesium concentration in the drinking water may result in an upset stomach for a few days. However, a low concentration of arsenic in your drinking water will slowly accumulate in the body until severe effects appear after a number of years.

In some cases, it is not the water quality alone that affects the health of users, but a combination of circumstances. For example, water with a low pH level may cause the corrosion of galvanized or copper water pipes. This may lead to increased zinc, cadmium or copper concentrations in the water and these in turn can cause health problems. Similarly, water from a source can be contaminated by disease-causing organisms at home due to poor sanitation practices.

AESTHETICS

- 💧 The appearance of the water or the effects it has on clothes and household fixtures, such as baths.
- 💧 Aesthetic effects can also be immediate, such as the staining of laundry by manganese, or long-term, such as the staining of baths.
- 💧 In some cases it is not the water quality alone that affects the users' health, but a combination of circumstances. For example, water with a low pH level may corrode galvanised or copper pipes inside homes. This may lead to increased zinc, cadmium or copper in the drinking water and these in turn may cause health or aesthetic problems. Similarly, water taken directly from a borehole may contain few disease-causing organisms, but poor sanitation practices in the home may result in the water being contaminated before it is used.

ECONOMICS

Economically the water quality can have an affect on the consumer in as far as it might become necessary to replace pipes, hot water geysers, etc.

Information on the economic effects is limited and the effects vary greatly from situation to situation. Therefore it is difficult to include a detailed description of these effects.

