



MANGANESE

Manganese in your drinking water.

Manganese

Manganese is a non-hazardous substance; but it can be a nuisance to the water supply. Iron and Manganese are chemically similar and cause similar problems. Iron will cause reddish-brown staining of laundry, dishes, utensils and even glassware. Manganese acts in a similar way but causes a brownish-black stains. Soaps and detergents do not remove these stains, and use of chlorine bleach and alkaline builders (such as sodium and carbonate) may intensify the stains. Symptoms for manganese deficiency are weight loss, nausea and vomiting, changes in hair colour, slow growth of hair and beard.

Sources of Manganese

Manganese is a common metallic element found in the earth's crust. Water percolating through soil and rocks can dissolve minerals containing manganese and hold them in solution. Manganese is found in manganese-bearing water

Indications of the presence of Manganese

In deep wells/boreholes, where oxygen content is low, manganese-bearing water is clear and colourless (manganese is dissolved). When this water is brought to the surface it may be clear, but when exposed to air manganese changes from colourless, to the following phases (i) dissolved forms to coloured, then to (ii) solid forms.

Food Sources and Intake

The manganese content in foods varies greatly. The richest sources are whole grains, legumes, nuts and tea. Fruits and vegetables are moderate sources. Seafood and dairy products are poor sources. Relatively high amounts occur in instant coffee and tea. Human Milk is relatively low in Manganese.

Estimated Safe and Adequate Daily Dietary Intake (ESADDIs)

ESADDI in the range of 2 to 5mg/day was established for Manganese for adults and children 11 years of age and older. For children, 1 to 3mg/day is suggested depending on age. . It is highly recommended that you consume at least eight glasses of water a day. Rand Water purifies the water through a conventional purification process; resulting in a Manganese level in your tap water, which is within the SABS 0241 water specification limit (0.1mg/l).

Visit www.reservoir.co.za for further information on water quality in your area.

