



WORLD HEALTH ORGANIZATION

“Water softeners are very popular in areas where the water is judged *hard* because it requires too much detergent for doing washing or because it causes pipes to become blocked with mineral deposits. However, studies done by the **WHO** (World Health Organization) suggest the *softened water may be harmful to your health*.

“Water contains organic substances of which our bodies need certain amounts. Moreover, our digestive system absorbs some minerals more easily when ingested in water rather than in food. Calcium and magnesium together account for 95 percent of the ‘hardness’ in the water. **Calcium is necessary for the body’s cardiovascular system: it constitutes one of the main elements in bone structure and is needed for the normal functioning of the nervous tissues. It also provides some measure of protection against the harmful effects of sodium.** Unfortunately, the water softeners available on the market, require strong concentrations of salt to be added to the water in order to eliminate calcium and magnesium.

Calcium:

- ☞ is vital in the formation of strong bones and teeth
- ☞ is important in the maintenance of regular heart beat and the transition of regular heartbeat and nerve impulses
- ☞ is needed for muscle growth
- ☞ is needed for the prevention of muscle cramps
- ☞ is essential in blood clotting
- ☞ helps prevent colon cancer
- ☞ may lower blood pressure
- ☞ prevents bone loss associated with osteoporosis as well
- ☞ provides energy
- ☞ participates in the protein structure of RNA and DNA
- ☞ is involved in the activation of several enzymes including lipase
- ☞ protects the bones and teeth from lead by inhibiting absorption of this toxic metal.

If there is a calcium deficiency, lead will be absorbed by the body and deposited in the teeth and bones. This may account for the higher levels of

The two images below are a microscopic representation of a healthy bone and a bone that has osteoporosis



Normal bone
is dense and strong



Osteoporotic bone
is weak and can
easily fracture

lead in children who have a higher incidence of cavities.

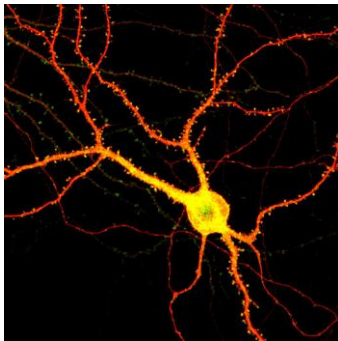
A calcium deficiency may result in the following symptoms:

- ☞ heart palpitation
- ☞ brittle nails
- ☞ edema
- ☞ hypertension
- ☞ aching joints
- ☞ increased cholesterol levels
- ☞ rheumatoid arthritis
- ☞ tooth decay
- ☞ insomnia
- ☞ rickets
- ☞ numbness in the arms and legs
- ☞ muscle cramps
- ☞ nervousness

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he amino acid lysine is needed for calcium absorption.

Magnesium is important for the human body because it maintains the functional integrity of the myocardium (the muscular tissue of the heart wall). In some cases, owing to a high magnesium content, water can provide us with up to 20 percent of our daily magnesium needs. This is no negligible amount if we consider that in the western countries we take in, on average, only 80 percent of our daily magnesium requirement.



Magnesium:

- ☞ is vital to enzyme activity
- ☞ assist in calcium and potassium uptake
- ☞ aids in maintaining the proper pH balance
- ☞ protect the arterial lining from stress caused by sudden blood pressure changes
- ☞ plays in the formation of bone
- ☞ plays a role in carbohydrate and mineral metabolism
- ☞ With vitamin B6 magnesium helps reduce and Dissolve calcium phosphate stones

A deficiency:

☞ interferes with the transmission of nerve and muscle impulse, causing irritability and nervousness

Supplementing the diet with magnesium helps prevents:

- ☞ **depression**
- ☞ **dizziness**
- ☞ **muscle weakness**
- ☞ **twitching**
- ☞ **heart disease**
- ☞ **high blood pressure**

“According to **WHO**, a decision to demineralize or soften water should be made only with the greatest caution and only after an in-depth study has been done of the range of minerals contained in the water. **The WHO also points out the water softeners used in the home can create a breeding ground for bacteria that could have harmful effects if the water is ingested without being boiled or pasteurized beforehand. Demineralize water also corrodes pipes faster than hard water does.**”

Reference: “**PROTECT YOURSELF**” – Consumer Magazine, Feb. 1985 (pgs 14-15)