



Nutritional Requirements of the Elderly (Minerals and Water)

Minerals

Aging produces physiological changes that affect the need for several essential nutrients. Nutritional surveys of the elderly have shown a relatively low occurrence of severe nutrient deficiencies. Poor mineral status in the elderly is attributable, in part, to low dietary intake. New dietary guidelines for the elderly should emphasize the value of high quality, nutrient dense food.

Bone loss resulting in osteoporosis, the presence of hypochlorhydria (low acid concentration in the stomach), and the attendant failure to absorb calcium efficiently suggest the need for increased calcium intake. The adequate intake (AI) of calcium intake reflects an increase in recommendations to 1200 mg per day for men and woman aged 51 and older.

Iron stores tend to increase with increasing age. Thus, iron deficiency anemia in the older population is most likely to be related to gastrointestinal blood loss, ulcer, or use of non-steroidal anti-inflammatory drugs.

Intake of zinc in the elderly declines in relation to the decrease in energy intake and are much lower than the recommended level of 15 mg/day for men and 12 mg/day for woman. Older people who avoid flesh foods may be at increased risk of poor zinc status owing to the reduced availability of zinc from other food sources. Zinc deficiency is associated with immune function, anorexia, and delayed wound healing and pressure ulcer development.

Water

Water accounts for approximately 50% of an older person's weight. This represents a decline of 10% from young adulthood, and is associated with a corresponding decline in body mass. Daily fluid replacement is essential, particularly in those who exercise regularly, consume large amounts of protein, use laxatives or live in areas with high temperatures. Hydration status in elderly people should be monitored carefully. Dehydration (lack of fluids) is the most common cause of fluid disturbance in the elderly.

Reduced thirst sensation, reduce fluid intake, limited access to water, and diminished water conservation by the kidneys are important contributing factors to potential dehydration. Lack of fluid intake in the presence of diarrhoea or fever can lead to clinical dehydration requiring hospitalization. Fluid needs are affected by variations in activity, insensible water losses, and concentrated urine. Generally, a daily fluid intake of 30 to 35 mℓ per kilogram of actual body weight and a minimum of 1500 mℓ (1.5ℓ) per day is adequate. Rand Water purifies the water through a conventional purification process, resulting in water that is safe to drink. Your tap water will satisfy your daily mineral requirements, and meets the SANS 0241 water quality specifications.

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

