



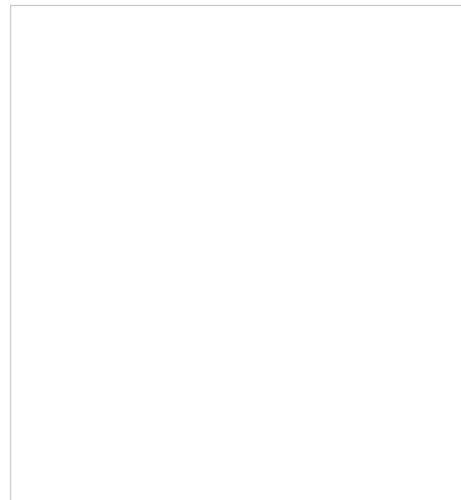
HSE NEWS

WORKING FOR YOU TO KEEP YOU SAFE

Latest HSE Statistics YTD

	2014	2015
Workplace fatalities		
Non-work related fatalities		
Non-accidental deaths (NADs)		
Lost Time Injuries (LTIs)		
All injuries (excluding first aid cases)		
Motor Vehicle Incidents (MVIs)		
Roll over - MVIs		
Serious MVIs		
Lost Time Injury Frequency (LTIF)		
Life Saving Rules Violations		
YTD		
Journey management		
Speeding/GSM		
Seatbelts		
Overriding safety device		
Working at heights		
Permit		
Confined space		
Lock out tag out		
Drugs and alcohol		
Gas testing		
Smoking		
Suspended Load		
Vehicle Class A/B Defect		
YTD		
Class A		
Class B		
HSE TIP		
Share it with a friend		

Important News

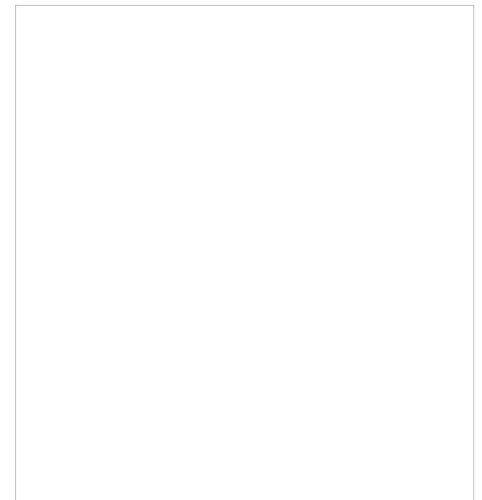


Vitamin D is a fat-soluble vitamin that is naturally present in very few foods, added to others, and available as a dietary supplement. It is also produced endogenously when ultraviolet rays from sunlight strike the skin and trigger vitamin D synthesis. Nutrient deficiencies are usually the result of dietary inadequacy, impaired absorption and use, increased requirement, or increased excretion. A vitamin D deficiency can occur when usual intake is lower than recommended levels over time, exposure to sunlight is limited, the kidneys cannot convert Vit D to its active form, or absorption of vitamin D from the digestive tract is inadequate.

What You Need to Know

Rickets and osteomalacia are the classical vitamin D deficiency diseases. In children, vitamin D deficiency causes rickets, a disease characterized by a failure of bone tissue to properly mineralize, resulting in soft bones and skeletal deformities. The diagnosis of vitamin D deficiency requires a clinical judgment of symptoms and signs related to the disease and confirmed by laboratory blood test measuring the level of vitamin D.

- Insufficient 50-100 nmol/L
- Mild 25-



Prolonged exclusive breastfeeding without the AAP-recommended vitamin D supplementation is a significant cause of rickets, particularly in dark-skinned infants breastfed by mothers who are not vitamin D replete. Additional causes of rickets include extensive use of sunscreens and placement of children in daycare programs, where they often have less outdoor activity and sun exposure. In adults, vitamin D deficiency can lead to osteomalacia, resulting in weak bones. Symptoms of bone pain and muscle weakness can indicate inadequate vitamin D levels, but such symptoms can be subtle and go undetected in the initial stages. Recent study done in Sultan Qaboos University resulted that about 78% of Omani population are vitamin D deficient.

Groups at Risk of Vit D Inadequacy:

1. Breastfed infants
2. Older adults
3. People with limited sun exposure
4. People with inflammatory bowel disease and other conditions causing fat malabsorption
5. People with dark skin
6. People who are obese or who have undergone gastric

Signs and symptoms:

- **Rickets**, a childhood disease characterized by impeded growth, and deformity, of the **long bones**.
- **Osteomalacia**, a bone-thinning disorder that occurs exclusively in adults and is characterized by **proximal** muscle weakness and bone fragility.



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HSE Advice Note

The Dietary Guidelines advises a healthy diet as one that:

- Emphasizes a variety of fruits, vegetables, whole grains, and fat-free or low-fat milk and milk products. Milk is fortified with vitamin D, as are many ready-to-eat cereals and some brands of yogurt and orange juice. Cheese naturally contains small amounts of vitamin D.
- Includes lean meats, poultry, fish, beans, eggs, and nuts.
- Fatty fish such as salmon, tuna, and mackerel are very good sources of vitamin D. Small amounts of vitamin D are also found in beef liver and egg yolks.

- Is low in saturated fats, trans fats, cholesterol, salt (sodium), and added sugars.
- Vitamin D is added to some margarines.
- Stays within your daily calorie needs

The recommended screening of Vitamin D level of only those individuals who are at high risk for vitamin D deficiency. The daily maintenance dose of vitamin D varies by age, but most children and adults generally require 600-2000 IU of vitamin D daily.

For vitamin D-deficient children and adults, higher doses of vitamin D given either daily or weekly are recommended. After correction of their vitamin D status with oral vitamin D, patients should have a repeat test of their Vitamin D level to confirm that they are in the normal range. If the 2D concentration remains persistently low despite several attempts at correction with oral vitamin D, a trial of UVB light therapy (ie, by tanning lamps) may be considered to improve vitamin D status.

