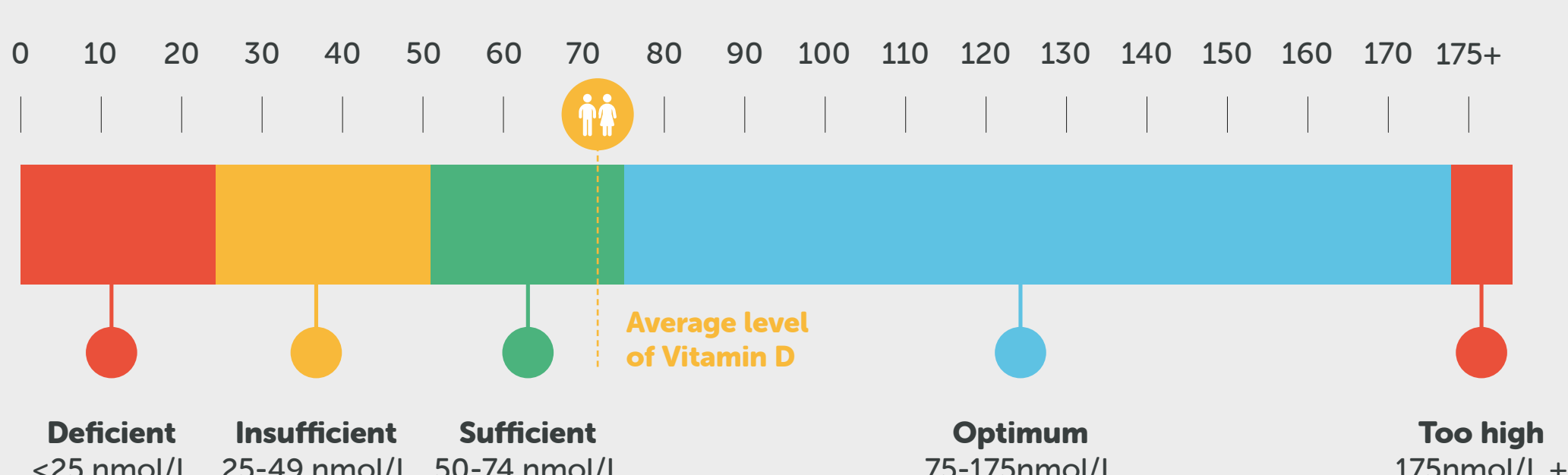




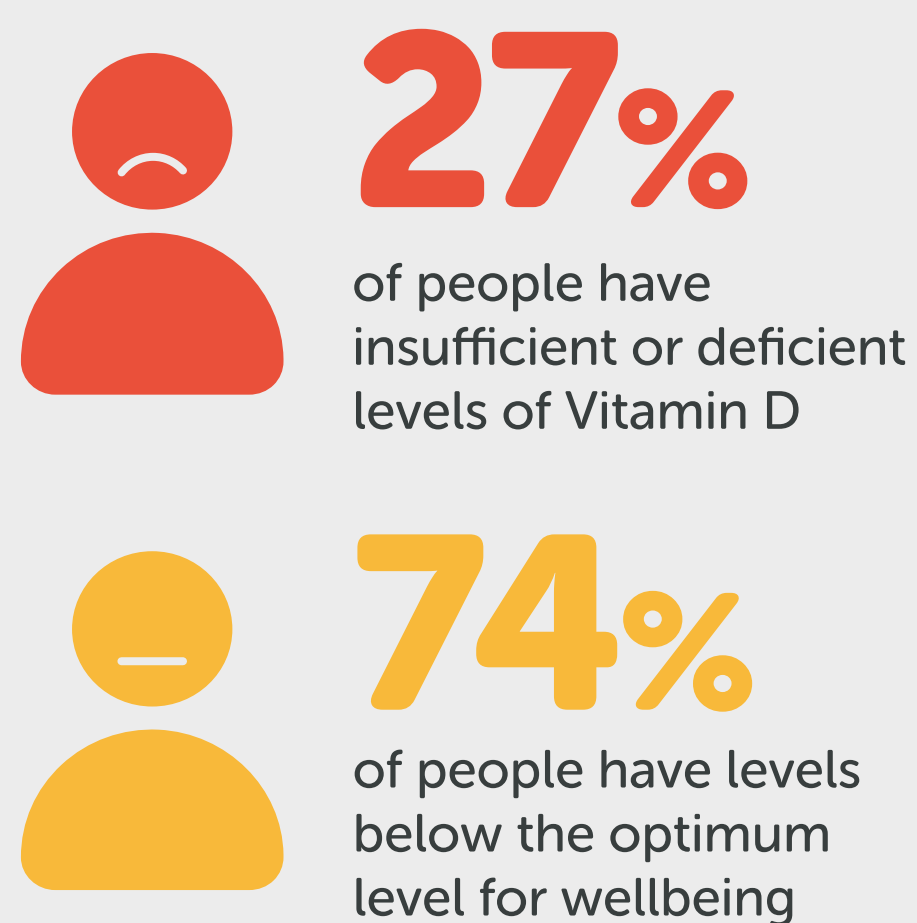
# Vitamin D

Vitamin D plays an essential role in our health including the development and preservation of healthy bones, boosting our immune system, our muscle function, energy levels and helping to reduce inflammation. Vitamin D regulates the amount of calcium and phosphate in the body, both of which are essential for bone, tooth and muscle health. Without adequate Vitamin D deformities such as rickets and osteomalacia can occur.

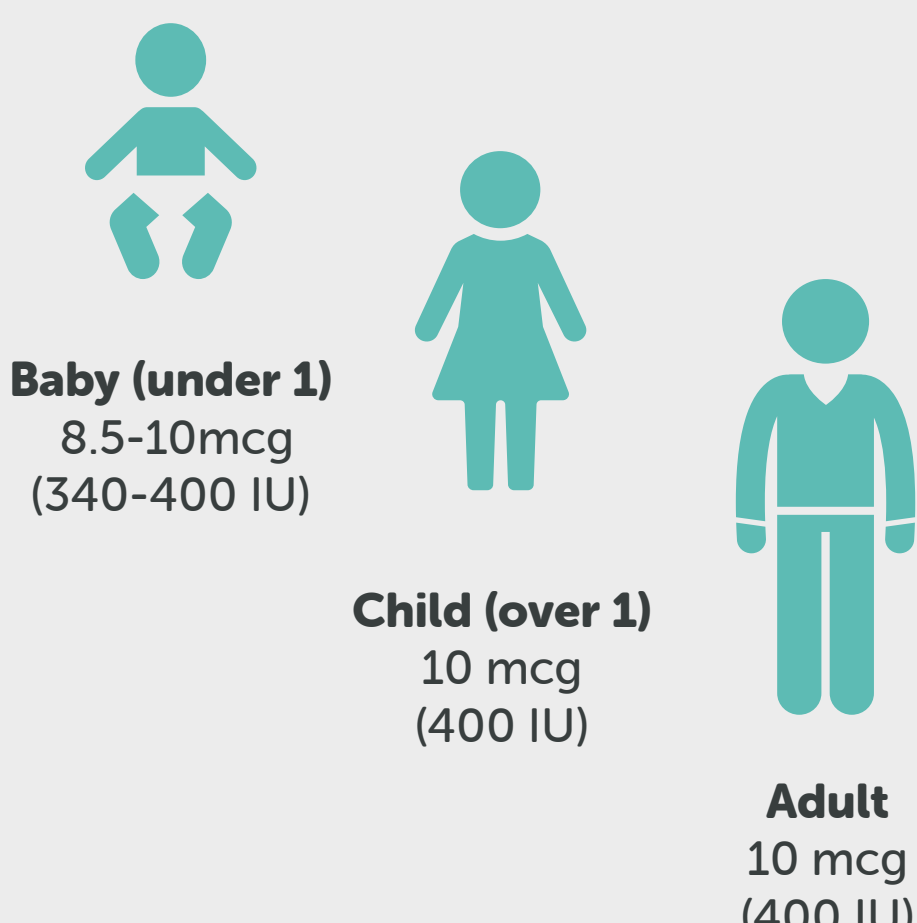
## Vitamin D Levels (25-OH)



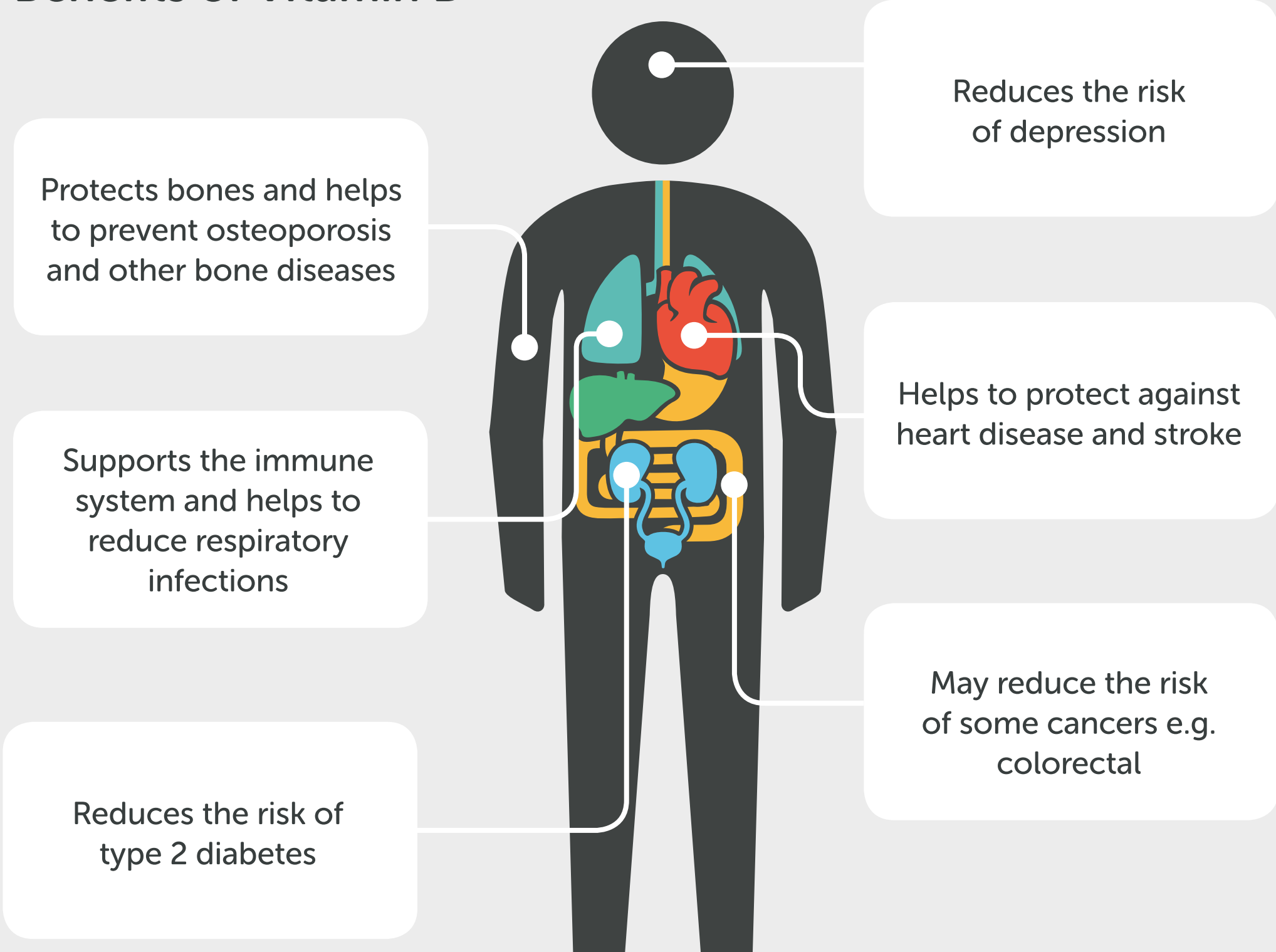
## Forth Data



## Daily Vitamin D Requirement<sup>1</sup>



## Benefits of Vitamin D



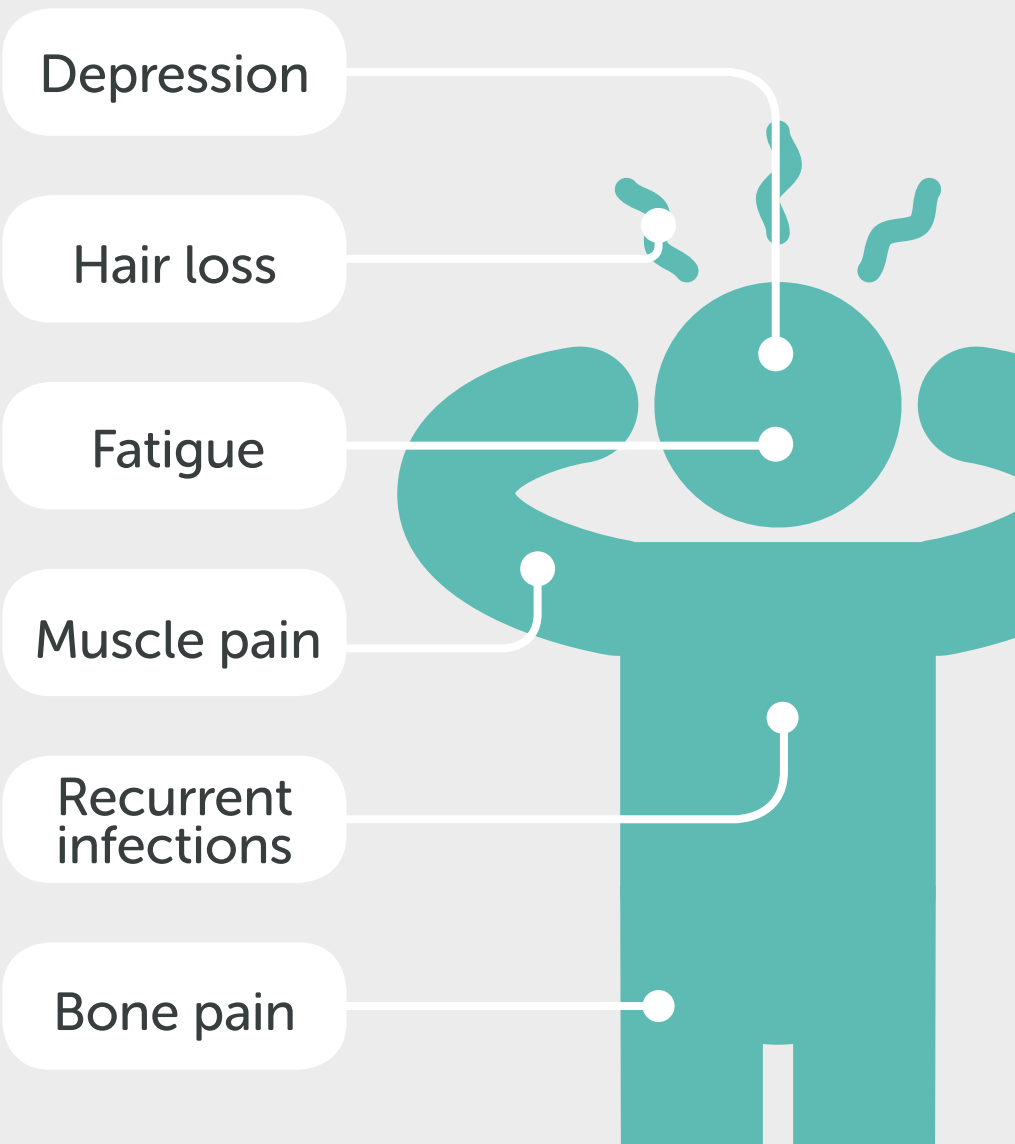
## Sources of Vitamin D

- Sunshine
- Food – oily fish, egg yolks, red meat, fortified foods eg. cereal
- Supplements

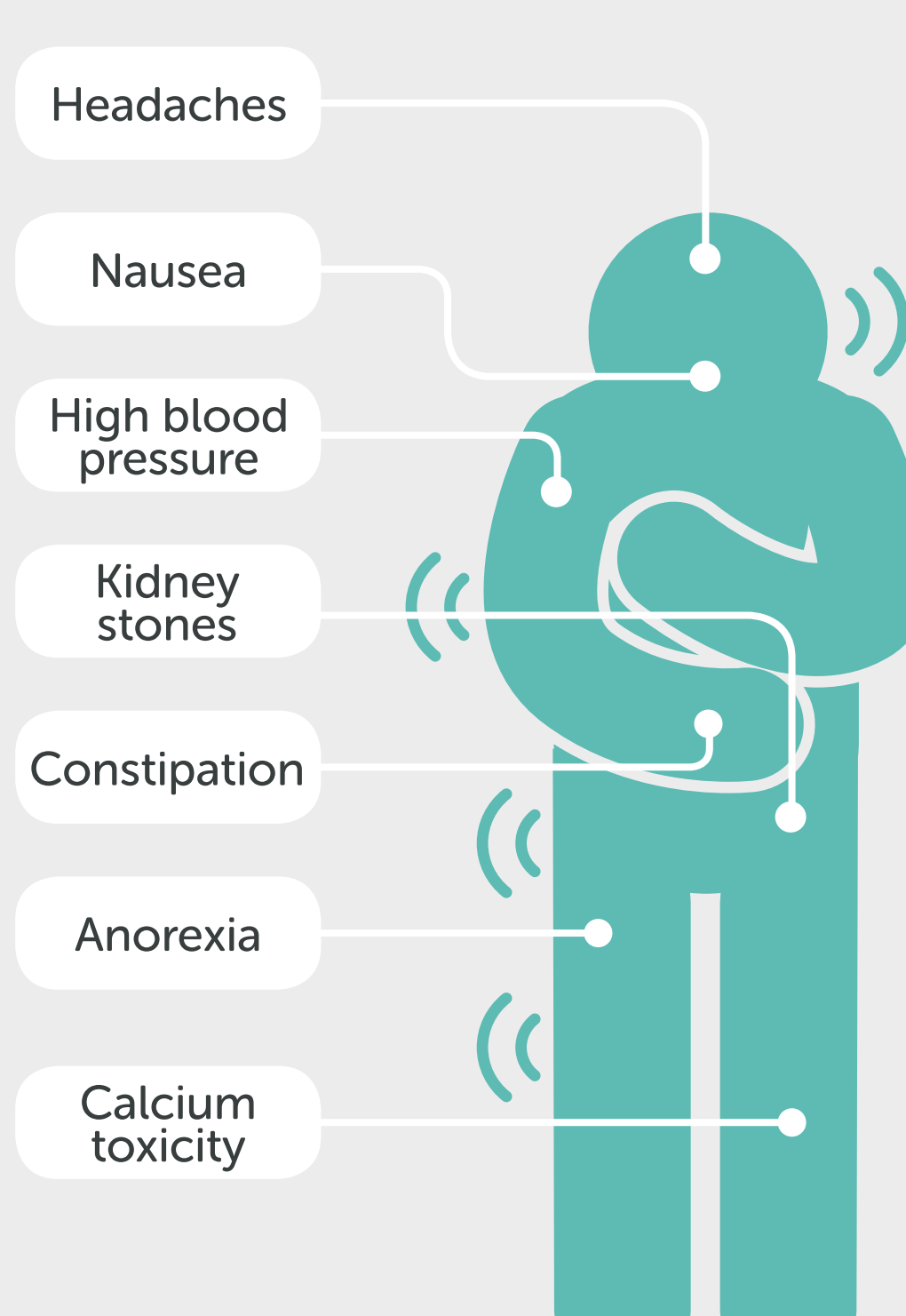
## Most at Risk

- Pregnant and breastfeeding women
- Adults 65+
- Children under 5
- People with darker skin
- People who have limited exposure to quality sunshine

## Symptoms of Vitamin D Deficiency



## Symptoms of Vitamin D Overload



## Sources

1. <https://www.nhs.uk/conditions/vitamins-and-minerals/vitamin-d/>  
 2. Jorde R, Sneve M, Figenschau Y, Svartberg J, Waterloo K. Effects of vitamin D supplementation on symptoms of depression in overweight and obese subjects: Randomized double blind trial. J Intern Med. 2008;264:599-609  
 3. Ahn J, Peters U, Albanes D, Purdue MP, Abnet CC, Chatterjee N, et al. Serum vitamin D concentration and prostate cancer risk: A nested case-control study. J Natl Cancer Inst. 2008;100:796-804