Rickets, scurvy and vitamins

Vitamins (a contraction of the old term ‘vital amines’) are organic compounds that, in limited quantities, represent vital nutrients for health. Lack of the vitamins C and D is responsible for scurvy and rickets, respectively, and shows what devastating effects this can have, even in the 21st century.

**Rickets**

- **Cause**: Deficiency of dietary vitamin D, which is an essential nutrient for humans and involved in the maintenance of intercellular connective tissue, cartilage, dentin and collagen.
- **Symptoms**: Painfulness of bones, misshapen bones, deformed teeth, and bone deformities.
- **Laboratory diagnosis**: Lack of vitamin D in the blood.
- **Treatment**: Vitamin D supplements and exposure to sunlight.

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Timeline

- **Rickets**
  - 1922: Albert Szent-Györgyi identified vitamin C as the chemical required to prevent scurvy.
  - 1956: Nobel Prize awarded to Edward Doisy for his work on vitamins.

- **Scurvy**
  - 1745: 10 of 10 sailors on a British Royal Navy ship died of scurvy.
  - 1922: Albert Szent-Györgyi identified vitamin C as the chemical required to prevent scurvy.
  - 1932: Vitamin C deficiency identified as the cause of scurvy in sailors.

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