1. Record Nr. UNINA9910683376703321 Commemorative Issue in Honor of Centennial of the Discovery of Titolo Vitamin D-The Central Role of Vitamin D in Physiology / / edited by Carsten Carlberg Basel:,: MDPI,, 2023 Pubbl/distr/stampa **ISBN** 3-0365-6919-7 Descrizione fisica 1 online resource (414 pages) Disciplina 612.399 Vitamin D Soggetti Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia This reprint is about vitamin D, a molecule that can be absorbed from Sommario/riassunto certain foods, such as fatty fish, which can also be produced endogenously when we expose our skin to sufficient doses of ultraviolet B radiation. When vitamin D is metabolized into 1,25(OH) 2D3 (also called calcitriol), it acts as a high-affinity ligand for the transcription factor VDR, i.e., it has direct effects on gene regulation. The key physiological functions of vitamin D are the regulation of calcium homeostasis, which is essential for bone mineralization, and the modulation of the immune system by stimulating innate immunity and preventing overreactions of adaptive immunity. This reprint presents recent developments and the latest research in the fascinating broad range of today's vitamin D biology, from evolution to systems biology.