1. Record Nr. UNINA9910370252803321 Drinking Water Minerals and Mineral Balance: Importance, Health Titolo Significance, Safety Precautions // edited by Ingegerd Rosborg. Frantisek Kozisek Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa **ISBN** 3-030-18034-4 Edizione [2nd ed. 2019.] Descrizione fisica 1 online resource (XIII, 175 p. 26 illus.) Disciplina 363.6 551.9 (edition:23) Analytical chemistry Soggetti Geochemistry Environmental health Water pollution Health promotion Mineral resources **Analytical Chemistry** Water and Health Waste Water Technology / Water Pollution Control / Water Management / Aquatic Pollution Health Promotion and Disease Prevention Mineral Resources Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Background -- Mineral composition of drinking water and daily uptake -- Minerals at optimum concentrations - protection against diseases --Potentially toxic elements in drinking water -in alphabetic order --Technical and mineral level effects of water treatment -- Health effects of demineralization drinking water -- Why drinking water with mineral balance and not just optimal concentration ranges? -- Drinking water regulations today and a view of the future. Following the successful first edition of this book on drinking water Sommario/riassunto

quality and health, this new edition puts more focus on the importance of minerals in drinking water. It includes new scientific material and presents additional studies on the negative health effects of reverse osmosis water. The various safety organizations working on drinking water all warn about unhealthy constituents, as well as elements that can cause corrosion or scaling on pipes and installations. However, drinking water may also provide a substantial portion of the daily mineral intake, especially for the elderly and children, or those at risk of deficiencies due to unhealthy eating habits or starvation. Thus, a holistic approach to drinking water is presented in this book and the scope is extended from standards for undesirable substances to the basic mineral composition of water, examining 22 nutrient elements and ions and 21 toxic substances. The function of the nutrients in the body, symptoms of deficiency and overload, and advantages of the minerals from drinking water are presented, as well as symptoms of toxic elements from drinking water. The authors also suggest healthy ranges of minerals and mineral ratios for drinking water. The book offers a valuable resource for the health evaluation of drinking waters, for private well owners, public water producers and safety organizations alike.