At the XXVIIIth conference of the International Society for Fluoride Research (ISFR) in Toronto, Canada, Professor Jörg Spitz gave a presentation about “Fluoride: a growing problem of modern lifestyle?” and suggested that many chronic disorders are promoted or even caused by lifestyle conditions, i.e., lack of exercise and of micronutrients, among them vitamin D; environmental factors like exposure to toxic substances such as fluoride and aluminum; and social stress. He concluded that scientific effort should focus not just on the toxic effects of environmental factors but also on simple measures to alleviate them.

Readers of *Fluoride* are well aware of the possible beneficial influence of vitamins, including vitamin D, for countering fluoride toxicity in experimental animals as well as in human subjects suffering from fluorosis. (See, however, the papers by Raghuramulu N et al. and Meunier PJ et al.) Although Professor Spitz does not mention fluoride in his book on “Vitamin D: the sunshine hormone for our health and the key to prevention”, the book nevertheless is a valuable source of information on the many implications of vitamin D and might perhaps aid certain victims of fluoride intoxication.

The book is divided into three major parts subdivided in individual chapters: 1st: general information on vitamin D, 2nd: the deficiency syndrome, 3rd: prevention in daily practice. These are followed by a glossary, contact data, Internet addresses for additional information, and thirty pages of references to the medical literature addressed in the chapters.

Until the 1970s, vitamin D was regarded primarily as a factor in the development of hard tissues. Since then cell surface receptors for vitamin D have

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*a* Prof. Dr. Jörg Spitz. *Vitamin D: Das Sonnenhormon für unsere Gesundheit und der Schlüssel zur Prävention*. 240 pages; 16 tables and 45 figures in high-quality full-color printing; 2008, ISBN: 978-3-00-026656-0, published by Gesellschaft für Medizinische Information und Prävention (mip-spitz-gbr), Krauskopfallee 27, D-65388 Schlangenbad, Germany. Contact: info@mip-spitz.de; available from amazon.de or from the author, price: €19.50 within Germany, €21.50 to foreign countries; price includes postage and tax within Germany and the EU.

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been discovered not only in cells of bone, intestine, and kidney, but also in many other types of cells and organs. Nowadays it is regarded as a steroid hormone with implications for almost every cell in the body. Via signal transduction it exerts its influence on cellular metabolism and gene regulation. While its nutritional supply is usually negligible, it is synthesized mainly in skin and liver upon exposure of the body to sunlight (ultraviolet B radiation). Under modern lifestyle conditions, with predominant in-door living and activity, the supply of vitamin D is generally limited, which finally leads to deficiency syndromes in the form of chronic disease: cancer of the breast, the prostate or the colon; diabetes; neurological and cardiovascular disorders; immunodeficiency; and osteoporosis. To prevent these adverse effects, a daily supplement (alternative to walking in sunlight) is indicated until a blood level of 32 to 100 ng of vitamin D per mL is reached. Intake of 4,000 International Units (6,000 IU for nursing mothers) of vitamin D per day should be sufficient to achieve this goal (40 IU = 1 µg of vitamin D).

Professor Spitz is a graduate in nuclear medicine from the University of Bonn and has worked in clinics of Cologne, Wurzburg, Bamberg, and Wiesbaden. After his habilitation, he taught nuclear medicine at the University of Mainz. Additional training qualified him in nutritional as well as preventive medicine. He is a member of many scientific societies, such as the American Society for Nuclear Medicine, the Deutsche Gesellschaft für Osteologie, the International Society for Fluoride Research (past president), the European Society for Clinical Nutrition and Metabolism, the International Society for the Study of Fatty Acids and Lipids, and the American Society for Nutrition.

REFERENCES