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THE NEED TO STANDARDIZE VITAMIN D DOSAGE IN DIETARY SUPPLEMENTS

POTRZEBA STANDARYZACJI DAWEK WITAMINY D W SUPLEMENTACH DIETY

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Authors' contribution
Wkład autorów:
A. Study design/planning
zaplanowanie badań
B. Data collection/entry
zebranie danych
C. Data analysis/statistics
dane – analiza i statystyki
D. Data interpretation
interpretacja danych
E. Preparation of manuscript
przygotowanie artykułu
F. Literature analysis/search
wyszukiwanie i analiza literatury
G. Funds collection
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Dear Editor,

We read with great interest the article by Domański et al. describing the results of an analysis concerning vitamin D content in dietary supplements available in EU countries [1]. In our opinion, the article raises a very important issue, which is the lack of regulated standardization of dietary supplements in terms of the contained doses of vitamin D.

Recent data collected during a large observational study report that about 40% of Europeans are vitamin D deficient, and 13% are severely deficient [2]. A significantly reduced vitamin D level can cause serious metabolic disorders, leading to deregulation of calcium-phosphate metabolism, increased risk of infections, endocrine disorders, or increased risk of depression. With increasing public awareness of the potential consequences of vitamin D deficiency, the use of vitamin D-containing supplements has been steadily increasing in recent years [2,3].

However, the use of dietary supplements does not always give the expected results. Dietary supplements occupy a special place between food and drugs. By definition, they are a dietary product intended to help supply substances delivered by food in insufficient amounts [4]. However, the lack of effective regulations results in the fact that dietary supplements usually differ in the actual content of active ingredients in comparison with the information provided on the package. The classification of dietary supplements as food products only imposes on manufacturers the requirement to list the ingredients by weight in descending order and providing information on the weight of all ingredients contained in each unit of the preparation [5].

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The study conducted by Domański et al. [1] revealed that all analyzed dietary supplements, contained a significantly lower dose of vitamin D than declared in the product description. Moreover, 20% of the analyzed preparations contained a dose lower than an adult's daily requirement for vitamin D [1]. The presented results offer extremely valuable information that may have implications for the daily practice of many physicians. Indeed, it is common practice for doctors to recommend dietary supplements to patients in order to compensate for vitamin D deficiency. The study by Domański et al. [1] shows that this practice may be ineffective due to the insufficient vitamin D content in some of the supplements.

While the use of a vitamin D supplement by people who are not vitamin D deficient may enable them to maintain proper vitamin D levels, for those who are deficient, the use of a vitamin D supplement may give a false sense of treatment. Another contributor to this is the common practice used by manufacturers to style supplement packaging to resemble medical preparations.

The results of the study conducted by Domański et al. [1] offer food for thought on the public trust placed in the efficacy of vitamin D supplements. The performed analysis leads to the conclusion that the choice of a standardized drug may be a better option for vitamin D supplementation, especially for people with a significant deficiency. The study demonstrates the need for appropriate regulation of dietary supplements.

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