

## **VITAMIN D CONTENT IN FOOD SUPPLEMENTS**

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Vitamin D is a liposoluble vitamin that has numerous and significant roles in the human body. Daily needs for vitamin D are met through food intake and sun exposure, which enables the synthesis of this vitamin in the skin. Vitamin D affects the process of mineralization of the skeletal system. Vitamin D deficiency is a major cause of rickets. Vitamin D plays an important role in the function of the immune system and it affects both innate and acquired immunity. Our goal was to determine the quality of dietary supplements when it comes to vitamin D content (1). We mapped products that are already on the market of the Republic of Srpska and contain vitamin D. Also, we investigated the compliance of the declared content of vitamin D on the package with actually determined content. Our research showed that most of the samples complied health safety requirements. One sample in tablet pharmaceutical form did not have the appropriate content of vitamin D (it was lower than the declared one). The quality of food supplements and their active ingredients affect the overall health, because the composition and its purpose are the main reason of placing such products on the market. Therefore, it is necessary to control the qualitative and quantitative composition, especially the active ingredients, in addition to the usual health parameters for a particular category. In general, the quality of food supplements should be an imperative for both, producers and food business operators who place them on market (2).

### **References**

1. Vitamin D and Health: Scientific Advisory Committee on Nutrition. 2016. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/537616/SACN\\_Vitamin\\_D\\_and\\_Health\\_report.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/537616/SACN_Vitamin_D_and_Health_report.pdf)
2. Rulebook on food supplements (Official Gazette of the Republic of Srpska, No. 10/18)

## VITAMIN D U DODACIMA ISHRANI

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Vitamin D je liposolubilni vitamin koji ima mnogobrojne, značajne uloge u ljudskom organizmu. Dnevne potrebe za vitaminom D ostvaruju se putem unosa hrane i izlaganjem suncu, čime je omogućena sinteza ovog vitamina u koži. Aktivni oblik vitamina D, odnosno kalcitriol i njegovi analozi imaju ključnu ulogu u održavanju homeostaze kalcijuma i fosfora. Na ovaj način vitamin D utiče na proces mineralizacije koštanog sistema. Deficit vitamina D glavni je uzrok rafitisa. Vitamin D ima bitnu ulogu u funkciji imunog sistema, on utiče i na urođeni i na stičeni imunitet. Cilj nam je bio utvrditi kvalitet dodataka ishrani kada je u pitanju sadržaj vitamina D (1). Mapirali smo proizvode koji se već nalaze u prometu u Republici Srpskoj, a sadrže vitamin D. Takođe, istražili smo usklađenost deklarisanog sadržaja vitamin D na pakovanju sa stvarno utvrđenim sadržajem. Naše istraživanje je pokazalo da je većina uzoraka bila zdravstveno ispravna. Jedan uzorak nije imao odgovarajući sadržaj vitamina D (bio je niži od deklarisanog) i to u preparatu u farmaceutski doziranom obliku tableta. Kvalitet dodataka ishrani i njihovi aktivni sastojci utiču na ukupnu zdravstvenu ispravnost, jer su upravo sastav i namjena svrha stavljanja takvog proizvoda na tržište. Stoga je nužno kontrolisati i kvalitativni i kvantitativni sastav, posebno aktivne sastojke, pored uobičajenih parametara zdravstvene ispravnosti za određenu kategoriju. Generalno kvalitet dodataka ishrani treba da bude imperativ i proizvođačima i subjektima u poslovanju sa hranom koji ih stavljuju na tržište (2).

### Literatura

1. Vitamin D and Health: Scientific Advisory Committee on Nutrition. 2016. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/537616/SACN\\_Vitamin\\_D\\_and\\_Health\\_report.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/537616/SACN_Vitamin_D_and_Health_report.pdf)
2. Pravilnik o dodacima ishrani (Službeni glasnik Republike Srpske, br. 10/18).