

54th Days of Preventive Medicine

International Congress

27-30. September 2022.
Niš, Serbia



BOOK OF ABSTRACT



Public Health Institute Niš



Faculty of Medicine,
University of Niš



Serbian Medical Society

Niš, 2022.

*122 years of Public Health Protection in Serbia
from regular preventive activities
to great challenges in COVID-19 pandemic time*

*122 године заштите јавног здравља у Србији
од редовних превентивних активности
до великих изазова у време пандемије COVID-19*

**PUBLIC HEALTH INSTITUTE NIŠ
FACULTY OF MEDICINE, UNIVERSITY OF NIŠ
SERBIAN MEDICAL SOCIETY, NIŠ**

**54TH DAYS OF PREVENTIVE MEDICINE
INTERNATIONAL CONGRESS**

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- **Environment and health**
- **Nutrition and health**
- **Microbiology today**
- **Current parasitosis**
- **Theoretical and practical problems of communicable diseases**
- **Theoretical and practical problems of non-communicable diseases**
- **Health promotion – challenges and solutions**
- **Preventive aspect of healthcare organization**
- **Application of information and communication tools in the health care system**

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2. DIETARY SUPPLEMENTATION OF PROBIOTIC AND VITAMIN D DURING PANDEMIC OF COVID-19

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The beneficial effects of probiotics have been demonstrated in wide range of pathological conditions. One of the major mechanisms of action is through the regulation of host immune response. Likewise, the probiotics that colonize the human host are most numerous in the intestines. The commensal intestinal microbiome contributes to increased resistance against infections, host immune system differentiation, and synthesis of nutrients.

Probiotics such as *Lactobacillus* and *Bifidobacterium* can restore host-health by eliminating pathogens and regulating immune responses in intestinal epithelial cells. Also, circumstantial evidence has supported the presumption that probiotic supplementation decreases the severity of COVID-19 responses. Literature data show that the immunomodulating activity of vitamin D, which absorption could improve by probiotics, plays a role in viral infections. An analytical retrospective approach to the data of 34 pharmacies of Association Apoteka plus from all country region showed a significant increase in sales of probiotics (2019/20 by 29% and 2020/21 by 47%) and vitamin D (2020/21 registered drug 53.6%, supplements 19.9%). In addition, sales of *Over the counter* (OTC) cold and flu medicines remained flat. In conclusion, self-care and prevention have been at a high position during the last three years, but still, due to serious health problems such as COVID 19, patients are seeking professional health services and prescription drugs.

Keywords: Probiotics, vitamin D, COVID-19, dietary supplements