

**THE USE OF PROBIOTICS WITH ANTIBIOTICS – HOW MUCH DO RESPONDENTS FROM THE TERRITORY OF NOVI SAD KNOW ABOUT IT**

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Human gastrointestinal tract microbiota offers many benefits to the human body through a number of physiological functions: strengthening the integrity of the gut, shaping the intestinal epithelium, collecting energy, protecting against pathogens and regulating host immunity. However, these mechanisms may be disrupted due to altered microbial composition. One of the reasons for this may be the use of antibiotics. The aim of this study was to determine the frequency of use of probiotic supplements during antibiotic therapy and knowledge of their proper use during and after antibiotic use. Quantitative non-experimental, descriptive design was used. The survey was distributed in pharmacies in Novi Sad. A total of 200 respondents were interviewed (50 male and 150 female). The results show that the largest percentage of respondents (53%) belong to the age category of 27-45 years. 72% stated that they used to use probiotics, and out of that number, 90% of them use probiotics during antibiotic therapy. Of those who use probiotics during antibiotic therapy, 85% use it properly, i.e. take a probiotic at least 2 hours before or after taking a dose of probiotics, while 15% take a probiotic at the same time as an antibiotic. When it comes to the length of probiotic use, 43% of respondents continue to use probiotics for at least 2 weeks after finishing antibiotic therapy, while 57% of respondents do not. The obtained results indicate the need for continuous education of the population, both on the potential benefits and on the proper use of probiotic-based supplements.

## UPOTREBA PROBIOTIKA UZ ANTIBIOTIK – KOLIKO O TOME ZNAJU ISPITANICI SA TERITORIJE NOVOG SADA

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Mikrobiota humanog gastrointestinalnog trakta sadrži  $10^{14}$  individualnih mikroorganizama (više stotina vrsta mikroorganizama, dominantno u kolonu). Mikrobiota nudi mnoge prednosti za organizam čoveka kroz niz fizioloških funkcija kao što su jačanje integriteta creva ili oblikovanje crevnog epitela, sakupljanje energije, zaštita od patogena i regulacija imuniteta domaćina. Međutim, postoji mogućnost da ovi mehanizmi budu narušeni kao rezultat izmenjenog mikrobnog sastava, poznatog kao disbioza. Jedan od razloga nastanka disbioze može biti i upotreba antibiotika. Cilj rada je bio utvrđivanje učestalosti upotrebe probiotskih suplemenata u toku antibiotske terapije i znanja o njihovom pravilnom korišćenju za vreme i nakon upotrebe antibiotika. Korišćen je kvantitativni neeksperimentalni, deskriptivni dizajn, a kao instrument anonimna anketa. Anketa je distribuirana u apotekama u Novom Sadu. Anketirano je ukupno 200 ispitanika, od čega 50 muškog, a 150 ženskog pola. Svi ispitanici su bili punoletni, a rezultati pokazuju da najveći broj ispitanika (53%) pripada starosnoj kategoriji 27-45 godina. 72% ispitanika se izjasnilo da je nekada koristilo probiotike, a od tog broja, njih 90% koristi probiotike tokom antibiotske terapije. Od ispitanika koji koriste probiotike tokom antibiotske terapije, njih 85% poštuje pravilnu upotrebu, odnosno uzima probiotik najmanje 2 sata pre ili posle uzimanja doze probiotika, dok 15% uzima probiotik istovremeno sa antibiotikom. Kada je u pitanju dužina primene probiotika, 43% ispitanika nastavlja upotrebu probiotika još najmanje 2 nedelje nakon antibiotske terapije, dok 57% ispitanika ne nastavlja upotrebu nakon završene antibiotske terapije. Dobijeni rezultati ukazuju na potrebu za kontinuiranom edukacijom stanovništva, kako o potencijalnim benefitima, tako i o pravilnom načinu upotrebe suplemenata na bazi probiotika.