

Immediate recovery of patient suffering from chronic irritable bowel syndrome following ingestion of probiotics supplied in fermented milk beverage

Abstract

Female patient, 68-years-old, suffering for 42 years from irritable bowel syndrome (IBS) reached to my attention in social media during summer 2020 by complaining miserable experience devastating her life quality. Patient has been resided in Salt lake City, UT for the past 23 years and has been examined by numerous physicians throughout the years. She has been under medication and severe dietary program. She consumed daily dosages of digestive enzyme complex (Holoenzyme™) and Probiotic 10 capsules (Nature's Bounty™). She had been restricted in consumption of fruits, vegetables, dairy products either cooked or raw. She suffered severe stomachache, bloating and crumpling for hours to come after consuming incompatible food ingredients. The patient communicating only by means of text messages was advised to stop the current medication and consume fermented milk beverages in order to provide sufficient supply of live probiotics. Within a day or two, she started to send complements by experiencing joy and surprise after ingesting fermented milk beverage known as Kefir manufactured by Lifeway™. No pain whatsoever, while being able to ingest various foods and fresh organics. According to the recent communications, it is assumed that patient was diagnosed skeptically and ill-advised by previous practitioners for many years hence devastating her quality of life. Regardless of assigning IBS or confirming any other clinical symptom, the patient simply was suffering from simple physiological disorder caused by incompatible microbial activity in her guts.

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Background

Microbial population residing in the guts generally known as intestinal flora is now described as microbiome or microbiota.¹ Bacteria, viruses, fungi and parasites are all part of this complex ecosystem, having different biological role while interacting with each other in the process of food digestion hence affecting the health conditions of the individual host. Among all microorganisms, the role of bacteria in food digestion and its processing is prevalent.

Probiotics and prebiotics

In recent years, research and implications of probiotics have drawn wide attention. The comprehensive definition outlined by FAO and WHO states that "Probiotics are live microorganisms that, when administered in adequate amounts, confer a health benefit on the host". On the other hand "Prebiotics are simply non-digestible fibers which would provide required nutrition for beneficial bacteria living in colon through microbial fermentation". Hence the microorganisms used in food processing would vary from those of live microbes introduced to digestive track for their beneficial roles in human health. By the same token, microbes used in other non-edible supplies such as shampoo or shaving cream, etc., are not considered to be "Probiotics". Abusing these terms for commercial purposes is misleading to public. Marketing non-specific supplies of fiber and live bacteria in 1000's of brands and products which could not address specific deficiencies is not useful enough for public.²

Probiotic microorganisms including bacterial or fungal cells coexist in human (regardless of other animals and organisms) guts for

as long as human-being lived on planet earth. These microbes lived and propagated in the colon through fermentation of fibers ingested as part of raw or cooked organic foods such as fruits, vegetables and seeds. The quantity of the probiotics in an individual colon is in order of billions. According to recent studies, the diversity of species from one individual to the next is mind-bugling and is influenced by many nutritional and environmental factors with no consistent pattern along with significant ambiguities. The current data corresponding with specific role(s) of each species for their host's health is remained to be answered. Therefore, recommendation of specific uptakes and administration would be different and difficult task among individuals.^{3,4}

Patients in need of probiotic supplements are those who have been under vigorous antibiotic treatment, the ones who could not replenish their coexisting microorganisms readily. Patients who are suffering gastro-intestinal malfunctions and having difficulties in taking up natural foods in their diet, or individuals suffering from food shortage would be deficient in prebiotic fibers hence encounter reduced levels of probiotics. It is a necessity to define and interpret vital symptoms associated with such deficiencies. It would be very critical to be in a position to address the specific symptoms in accordance with specific absence of microbial species or shortage of supplementary fibers. The current knowledge to address these issues in a comprehensive prescription is in primitive stage.⁵

Probiotics in products of Lifeway™

Probiotic products with a wide diversity are manufactured and consumed internationally. The patient in this report was advised to

consume “fermented milk beverages” or drinks labeled as “Kefir”, general terms to include numerous products offered by different manufacturers. Living in Salt Lake City, UT, USA, she readily reached at products manufactured by Lifeway™. Following consumption, the beneficiary effects of the Kefir drink, made of fermented milk along with mango provided immediate results in matter of day or two. The wellness news was reported to Lifeway and inquiry was made to disclose the identity of microbial culture in Kefir drink consumed by the patient. The company reacted kindly and provided the following list indicating the live microbial culture used in the product. However, proportion of each microorganism was not disclosed, but indicated that the overall colony forming unit (CFU) count for an 8-ounce serving is 25-30 billion.⁶

Lactobacillus lactis

Lactobacillus rhamnosus

Streptococcus diacetylactis

Lactobacillus plantarum

Lactobacillus casei

Saccharomyces florentinus

Leuconostoc cremoris

Bifidobacterium longum

Bifidobacterium breve

Lactobacillus acidophilus

Bifidobacterium lactis

Lactobacillus reuteri

Conclusion

After more than two years, patient is currently doing satisfactorily by consuming the same product at small dosages of about 50 ml every other day and avoiding all other prescribed drugs. She would get pain on the stomach only when she experiences mental stresses.

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None.

Conflicts of interest

The authors have no conflicts of interest.

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