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## Nutrient Supplements, Probiotics and Modulation of the Immune System of Ulcerative Colitis Patients

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Ulcerative colitis (UC) a major form of inflammatory bowel disease (IBD) is a cause of significant morbidity worldwide and its incidence and prevalence appear to be increasing with time. Patients with UC frequently experience episodes of bloody diarrhea with or without mucous, abdominal pain, fever and weight loss. UC patients are faced with malnutrition due to numerous pathogenic factors including anorexia, malabsorption, altered metabolism, fluid and electrolyte loss and side effects of medications. That is why the nutrient supplements should be provided to avoid development of nutrient deficiencies. UC is assumed to be a result of a breakdown of tolerance to intestinal environmental antigens such as resident enteric bacteria and altered barrier properties of the mucous and epithelial layers. These alterations can allow luminal antigens to penetrate the intestinal mucosa and elicit an overproduction of pro-inflammatory cytokines and trafficking of effector leukocytes into the intestinal mucosa. This can ultimately lead to uncontrolled and exaggerated intestinal inflammation. This review will present and discuss the immune response of UC patients to different species of probiotics and nutrient supplements.

### Biography:

Dr. Sheikhi started his B.Sc. in ShahidChamran University in Biological Sciences and then his master in Medical Immunology in Tarbiat Modarres University. He did his Ph.D. at Immunology Institute, Kiel, Germany and Department of Immunology, Faculty of Medicine, Shiraz University of Medical Sciences (UMSc). Currently he is the Professor of Immunology, head of department of Immunology and Microbiology, Dezful University of Medical Sciences. He currently studying the effect of yogurt derived probiotics and some support nutrients on the immune response of ulcerative colitis (UC) patients.