**Role of magnesium in coronavirus disease 2019 (COVID-19)**

**NIKOLINA BANJANIN**

1Institute of Hygiene and Medical Ecology, Faculty of Medicine, University of Belgrade, Belgrade, Serbia

**Abstract:**

Magnesium is a cation that plays an important role in many physiological functions. Magnesium deficiency can lead to various diseases such as diabetes, cardiovascular disease, osteoporosis, dyslipidemia, metabolic syndrome. Low magnesium concentrations are also associated with oxidative stress, proinflammatory condition, endothelial dysfunction, platelet aggregation, insulin resistance and hyperglycemia. In food, magnesium is found in high concentrations in whole grain cereals, nuts, fruits and vegetables. The recommended magnesium intake may be hardly reached in western diet, due to food processing and food refining. Also, magnesium can be ingested through dietary supplements. All studies related to coronavirus disease 2019 are of great importance including studies related to the role of magnesium in coronavirus disease 2019. The results of the studies showed that there is a relationship between magnesium and coronavirus disease 2019. One study showed that the prevalence of hypomagnesemia in hospitalized patients for coronavirus disease 2019 is 48%. High-level serum magnesium is more prevalent in critical form. In coronavirus disease 2019 patients hypomagnesemia and hypermagnesemia possibly lead from a mild form to a severe outcome of coronavirus disease 2019. Dysmagnesemia could have an impact on inflammation and on the vascular complications of coronavirus disease 2019. Magnesium supplementation may be useful in managing the stress triggered by the coronavirus disease 2019 pandemic. Monitoring of magnesium is suggested. Also, when deficient, magnesium supplementation is suggested during the early phase of coronavirus disease 2019 or as a preventative in populations at risk. Further research is needed in order to obtain new results regarding the role of magnesium in coronavirus disease 2019.

**Biography of presenting author**

Nikolina Banjanin, MD, PhD is Assistant Professor at the Institute of Hygiene and Medical Ecology, Faculty of Medicine, University of Belgrade with a specialty in Hygiene. Currently on subspecialization in diet therapy. MC Member [CA18227 RS] to COST Action CA18227 The Core Outcome Measures for Food Allergy (COMFA).Certificate for Excellent Case Presentation, Salzburg Weill Cornell/IAS Seminar Lipid Metabolism, 3-9 November 2019. Certificate for Academic Exellence, Salzburg Weill Cornell/IAS Seminar Lipid Metabolism, 3-9 November 2019. In 2018. defended doctoral dissertation. Graduated from the Faculty of Medicine, University of Belgrade in 2010.

**Details of presenting author to be mentioned in the certificate:**

Name: Nikolina Banjanin, invited speaker

Affiliation: Institute of Hygiene and Medical Ecology, Faculty of Medicine, University of Belgrade, Belgrade, Serbia

Country: Serbia

**Other Details:**

Presentation Category: Oral Presentation

#### Session Name: Infectious Diseases, Prevention, Control and Cure

Email: nikolina.banjanin@med.bg.ac.rs

Alternative email: nikolina.banjanin85@gmail.com

Contact Number: +38163469408

Twitter/Facebook/LinkedIn: No

Recent Photograph: (High Resolution)

