



Fund “Nauka” Project № 22003 Resume – Competition-Based Session 2022:

“A comparative study of the biological effects of sulfur natural sources on human intestinal cells”

Project leader: Assoc. prof. Milka Asparuhova Nashar, PhD

This project is in support of a dissertation for the obtaining of the educational and scientific degree “PhD” of a doctoral student from the department of “Biochemistry, molecular medicine and nutrigenomics”. The topic is a continuation of the research carried out in the last few years by the department team focused on the health benefits of sulfur-containing mineral water from the Varna basin and revealing the molecular mechanisms supporting these effects.

The main research objective of the project proposal is to compare and analyze the biological effects of sulfur-containing biologically active compounds from food and water on human intestinal epithelial cells. The effect of sulfur-containing mineral water on markers of redox status, inflammation, and potential to activate xenobiotic metabolizing enzymes will be compared to that of plant-derived organosulfides and with sulfur-containing amino acids.

With the successful implementation of the project, new data on the biological effects of sulfur-containing mineral waters, compared to the beneficial effects of other natural sources of sulfur is to be obtained. A doctoral student will participate in the development of the project, as well as students from the Medical University of Varna, with a strong interest in science. All the members of the team have the necessary qualification and experience for the successful completion of the project’s scientific program.