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## Determination of vitamin C in different types of milk

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The major of consumed food is rich with antioxidants that have a protective role of the human cells against the oxidative damage. Vitamin C represents one of the most known antioxidants, and an investigation on it was performed in several types of milk. The antioxidant characteristics of vitamin C stem from the fact that it is exclusively good electron donor, and it represents a reducing agent neutralizing the free radicals. In the investigation as a medium was used a few types of milk: raw cow and sheep milk, sterilized whole milk and nonfat milk, milk with the addition of vitamins (vitaminized milk), and chocolate milk. Sample extraction was performed according to the method described by Roe and Kuether with certain modifications. Determination of vitamin C was done by spectrophotometer (Spectro Quant Pharo 300 – Merck) at 520nm using calibration curve according to the method of Al-Ani. The highest content of vitamin C was obtained with the vitaminized milk with the maximal value of 1.20 mg/dL, while the minimum value was obtained with no fat milk of 0.1 mg/dL. With the addition of vitamin C in milk, the antioxidant capacity of milk was improved. In addition to this, daily essential vitamin intake in the nutrition was also improved. Taking into regard the above stated, it was concluded that it is reasonable to add vitamin C in milk and to obtain milk with supplements having the status of functional food, providing so a number of benefits for the consumer health.

## Biography

Julijana Tomovska completed her graduation from Faculty of chemical science, Ss.Cyril and Methodius University, Skopje, Macedonia in 1985. After that she did Postgraduate studies in the field of Biochemistry in 2001. In 1985, she worked in the textile factory in Bitola as a Director of Dying section. From 1989, she worked in Clinical Centre, of Dr. Trifun Panovski, in the section of laboratory research as qualified coworker in Biochemical and Hematology Laboratory. From 2003 she worked as an Assistant of Chemical science at University St. Kliment Ohridski Bitola, Faculty of Biotechnical Sciences. In 2005, she completed her PhD in Chemistry and started to work as an Assistant Professor. From 2012-2015, she was the Dean of Faculty before that she was regular Professor during. For now, she is a member in the Senate of University and also a member in 12 editorial board and reviewer in several journals. She has worked in many scientific projects of international and domain research. She is actively involved in scientific research work in Chemistry, Biochemistry and Biotechnology. She is author and co-author of many scientific papers.

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