

Satellite Symposium for Euro Global Summit & Medicare Expo on

Weight Loss



Mathematical Modeling and Optimisation in Nutrition

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Over the years, research in the life sciences has been fit greatly from the quantitative tools of mathematics and modeling. Many aspects of complex biological systems can be more deeply understood when mathematical techniques are incorporated into a scientific investigation. Modeling can be fruitfully applied in many types of food and nutrition research. As an example, modelling and optimization in nutrition is very important in planning meals for groups and individuals. Data base of nutritional composition of foods with mathematical and numerical methods covers the central concepts of practical optimization techniques such as fundamentals of linear optimization and simplex method, viewing software for optimization, programming and analysis, basics of fuzzy optimization.

Using the field of nutrition, you can find many cases of recent advances in knowledge and understanding that were facilitated by the application of mathematical modeling to kinetic data, model of quality and needed food products which has influence of changing habits in food and diet.

Biography

Vesna Antoska Knights is University Professor at Faculty of Technology and Technical Science-Veles at University "St.Clement Ohridski", Macedonia. Teaching subjects: Mathematic, Mathematic1, Mathematic2, Biostatistics, Modeling and Optimization. Currently is a University Senator at University "St.Clement Ohridski", R.Macedonia. Represented as a Women in Robotics Supporting and Collaboration - International Journal of Advanced Robotic Systems, InTech, 2014. Participant at following international project: EU FP7 project: Potkonjak V., Principal Leader, Antoska, V., and all. Embodied Cognition in a Compliantly Engineered Robot", 2008-20013. (www.eccerobot.org); FOODLINKS (www.foodlinks.eu), 2010-2013; World Bank project FY09 Conditional Cash Transfer project, Simulation Modeling of the Social Protection System in the Republic in Macedonia, 2008. DAAD project: SimLab - Parallel Numerical Simulation. Vesna Antoska Knights, is author and co-author of over 30 published original scientific articles, academic books and chapters.

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