magnus Group

3RD EDITION OF INTERNATIONAL

NUTRITION RESEARCH

CONFERENCE

SEPT **12-13**

VIRTUAL EVENT

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BOOK OF
ABSTRACTS

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ABOUT MAGNUS GROUP

Magnus Group (MG) is initiated to meet a need and to pursue collective goals of the scientific community specifically focusing in the field of Sciences, Engineering and technology to endorse exchanging of the ideas & knowledge which facilitate the collaboration between the scientists, academicians and researchers of same field or interdisciplinary research. Magnus group is proficient in organizing conferences, meetings, seminars and workshops with the ingenious and peerless speakers throughout the world providing you and your organization with broad range of networking opportunities to globalize your research and create your own identity. Our conference and workshops can be well titled as 'ocean of knowledge' where you can sail your boat and pick the pearls, leading the way for innovative research and strategies empowering the strength by overwhelming the complications associated with in the respective fields.

Participation from 90 different countries and 1090 different Universities have contributed to the success of our conferences. Our first International Conference was organized on Oncology and Radiology (ICOR) in Dubai, UAE. Our conferences usually run for 2-3 days completely covering Keynote & Oral sessions along with workshops and poster presentations. Our organization runs promptly with dedicated and proficient employees' managing different conferences throughout the world, without compromising service and quality.
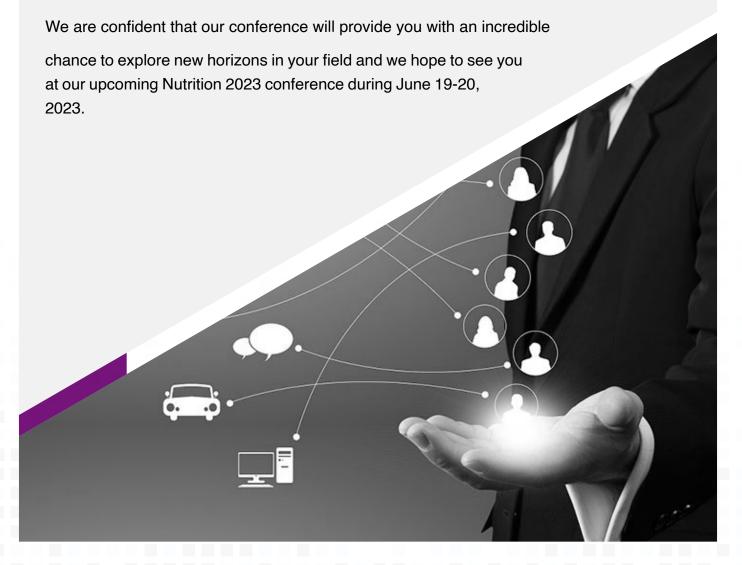
ABOUT NUTRITION 2022

With an earnest objective to congregate Nutrition professionals, researchers, Nutrition industry experts and scientists Magnus Group proudly enunciates and welcomes you to its **3rd Edition of International Nutrition Research Conference   (Nutrtion 2022)**, which was organized Virtually during **September 12-13, 2022**. This year the global summit will move forward with the theme *From Evolution to Revolution: A Holistic Perspective on Nutrition's Frontier Novelties.*

The conference provides the food and beverage industry, researchers, healthcare professionals, food technologists, nutrition experts, scientists, and scholars the opportunity to use our global platform to help consumers navigate their changing needs by showcasing their research findings, latest trends, breakthroughs, and innovations in the field of nutrition

The two-day colloquium is designed to foster collaboration and innovation, with Nutrition and technology poster presentations, interactive panel discussions, and visionary keynotes sessions.

We are confident that our conference will provide you with an incredible

chance to explore new horizons in your field and we hope to see you at our upcoming Nutrition 2023 conference during June 19-20, 2023.

3RD EDITION OF INTERNATIONAL

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Correlations of fatty acids profiles in erythrocyte phospholipids and estimated desaturases activities with cadiometabolic risk indicators in non-diabetic women

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The profile of fatty acids in erythrocyte membranes and estimated activities of desaturases can be altered in metabolic syndrome and obesity.

The aim of study: To correlate anthropometric and biochemical parameters of metabolic risk with fatty acids composition in erythrocyte phospholipids and estimated activities of desaturases, in obese and non-obese non-diabetic women, with or without metabolic syndrome.

Methods: In 40 non-diabetic and otherwise healthy women (aged 24-68 years, BMI=25.5 ± 6.0 kg/m²), the fatty acid composition in erythrocyte phospholipids was measured by gas-liquid chromatography. The activities of desaturases: delta-9 (D9D), delta-6 (D6D) and delta-5 desaturase (D5D) were estimated from product-precursor fatty acid ratios (D9D: 16:1n-7/16:0,D6D: 20:3n-6/18:2n-6; and D5D: 20:4n-6/20:3n-6).Correlations were made with anthropometric (BMI, FM, %FM, visceral fat level, waist/hip/upper arm/mid-thigh circumferences and WHR) and biochemical indicators of cardiometabolic risk (triglycerides, HDL-C, glucose, CRP).

Results: The level of dihomo-γ-linolenic acid (DGLA, 20:3n-6) in erythrocytes was in positive correlations with the levels of CRP, triglycerides and all measures of adiposity and centripetal fat distribution (BMI, FM, %FM, visceral fat level, all circumferences and WHR). The level of stearic acid (18:0) was in negative correlations with all measures of adiposity, but not with measures of centripetal fat distribution (waist circumference and WHR) nor with biochemical indicators. The level of palmitoleic acid (16:1n-7) was in positive correlations with CRP, glucose and negative correlations with HDL-C. The estimated activities of D9D and D6D were in positive correlations with CRP, glucose, triglycerides, all measures of adiposity and centripetal fat distribution, and in negative correlations with HDL-C. In contrast, the activity of D5D was in negative correlations with all measures of adiposity and centripetal fat distribution, except %FM. The corrections for age did not influence the results, but additional corrections for the level of adiposity (BMI or FM) annulled the significance for all of the mentioned correlations, except for D9D and 16:1n-7 with glucose and CRP (which remained).

Conclusion: In non-diabetic women, the level of adiposity mediates the associations of desaturases activities and fatty acids composition in erythrocyte phospholipids with biochemical indicators of cardiometabolic risk, except for associations of D9D and 16:1n-7 with glucose and CRP.

Audience Take Away:

- In non-diabetic, otherwise healthy women, the profile of fatty acids in erythrocyte membranes and estimated activities of desaturases are related to measures of adiposity and centripetal fat distribution, as well as with biochemical indicators of metabolic syndrome and chronic inflammation (levels of glucose, triglycerides, HDL-C and CRP).
- In particular, the level of dihomo-γ-linolenic acid (DGLA, 20:3n-6), palmitoleic acid (16:1n-7), as well as the estimated activities D9D and D6D show the positive association with those parameters, while the activities of D5D desaturases show the opposite pattern.The level of adiposity is the most significant predictor of desaturases activities and fatty acids composition in erythrocyte phospholipids and their association with biochemical indicators of cardiometabolic risk, except with glucose and CRP.

Biography:

Dr. Ivana sarac studied Medicine at Faculty of Medicine, University of Belgrade, Serbia, and graduated as GP in 1998. She then entered the MSci postgraduate studies in Nutrition at the same institution, and received her MSci degree in 2004.In 2006 she finished her medical specialization in Hygiene with medical ecology at Faculty of Medicine, University of Nis, Serbia. She conducted her PhD studies in Diabetes and Metabolic Medicine at University of Surrey, UK, and obtained her PhD degree in 2014. In 2016, she joined the Center of Excellence in Nutrition and Metabolism Research,Group for Nutrition and Metabolism, at the Institute for Medical Research, National Institute of Republic of Serbia, University of Belgrade, where she at present works as Research Associate.