conferenceseries.com

Global Summit on OBESITY AND HORMONES

May 03-04, 2022 | Webinar

Artificial Intelligence in Metabolic Bariatric Surgery: Where we stand and the road ahead

Athanasios G. Pantelis
Queen Mary University of London, Greece

Statement of the problem: Artificial intelligence (AI) should be deemed as a novel statistical tool through which, in contradistinction to traditional methods, the investigator can manage and process a large quantity of digitized data. Literature of AI applications in the fields of Medicine and Bioscience has increased exponentially in less than half a decade. Metabolic bariatric surgery (MBS) spearheads modern surgical technology and represents the most effective and enduring way for losing weight and alleviating the comorbidities that accompany obesity. There have been numerous reports on the application of AI in the field of MBS but attempts to systematize pertinent literature have emerged only recently.

Methodology: We conducted a literature review spanning 2000-2021, in accordance with the PRISMA extension for scoping reviews. Eligible studies included adults who had undergone any bariatric/metabolic operation and the data were analyzed with at least one AI algorithm.

Conclusion: This is the first attempt to systematize the applications of AI in MBS. Pertinent evidence is accumulating constantly, but a lack of uniform reporting has prevented us form performing a meta-analysis. Future studies should focus on meticulous validation, strict reporting, and objective benchmarking. Additionally, potential areas of investigation include standardization of bariatric operations based on big data from international registries, individualized choice of bariatric operation with maximal effectiveness and minimal complications, individualized perioperative thromboprophylaxis and micronutrient supplementation etc.

Biography

Athanasios G. Pantelis is a surgeon practicing in the largest public hospital of Greece, with a special interest and expertise in Metabolic Bariatric Surgery, as well as Trauma and Acute Care Surgery. He received his MSc in Thrombosis, Hemostasis and Transfusion Medicine in 2015 from the University of Athens and his MSc in Trauma Sciences in 2020 from Queen Mary University of London. He has been a member of the International Federation for the Surgery of Obesity and Metabolic Disorders (IFSO®) since 2017 and has taken part in all international and regional IFSO meetings ever since. He has been awarded the IFSO-EC Scholarship in 2019 in the context of the 2nd IFSO-EC Symposium in Lyon, France. During the Covid-19 pandemic he, along with other faculty of his department, has been part of the GENEVA collaborative, an international working group studying the impact of the pandemic on MBS and conversely the protective effect of MBS on the vulnerable population of patients living with obesity.

conferenceseries.com

Global Summit on OBESITY AND HORMONES

May 03-04, 2022 | Webinar

Association of physical fitness, screen time, and sleep hygiene according to the waist-to-height ratio in children and adolescents from the extreme South of Chile

Javier Albornoz Guerrero
Universidad de Magallanes, Chile

Abstract: Objective: To analyze the perception of physical fitness, screen time, and self-reported Sleep hygiene in children and adolescents (CA) from the extreme south of Chile and its associations with waist-to-height ratio (WtHr).

Material and methods: An observational cross-sectional study was conducted in a sample of 594 schoolchildren from 5th to 8th grade of primary education, belonging to municipal educational establishments in the Magallanes region, Chile. Cardiorespiratory fitness was assessed through the 20-m shuttle run test, muscle strength through handgrip and the standing broad jump test, physical fitness perception through the International Fitness Scale, and central Obesity through the waist-to-height index. In addition, sleep hygiene and screen time were measured.

Results: More than 92% of CA spent more than two hours a day watching or using screens. In addition, CA with excess central adiposity had a lower perception of physical fitness, and lower muscle strength and cardiorespiratory fitness compared to CA with normal values of adiposity.

Conclusions: CA of the present study spent a high number of hours watching or using screens and had poor sleep quality.In addition, excessive central adiposity was associated with lower physical fitness.

conferenceseries.com

Global Summit on OBESITY AND HORMONES

May 03-04, 2022 | Webinar

Effects of Bariatric Surgery on non-alcoholic Fatty Liver Disease associated with Diabetes and Obesity

Louis Ragolia

New York University Long Island School of Medicine Mineola, USA

The incidence of obesity and related comorbidities of cardiovascular disease (CVD), nonalcoholic fatty liver disease (NAFLD) and type 2 diabetes (T2DM) continues to rise globally. Bariatric surgery is currently the most efficacious option for sustained weight loss, with the two most common procedures being the Roux-en-Y gastric bypass (RYGB) and the vertical sleeve gastrectomy (VSG). In addition to weight loss, reduced NAFLD and remission of T2DM have been reported in response to these surgeries, prior to any significant weight loss. Clearly, the development of safer, noninvasive alternatives to surgery requires a deeper understanding of mechanisms involved and represent a worthwhile endeavor. The use of rodent models for bariatric surgery has emerged with standardized procedures for rat and mouse models of RYGB and SG now existing, which to a high degree resemble operations in humans. A growing body of evidence demonstrates a strong association between serum levels of lipocalin-type prostaglandin D2 synthase (L-PGDS), obesity, atherosclerosis and diabetes. Our laboratory has reported accelerated atherosclerosis and glucose intolerance in L-PGDS knockout (KO) mice. We have exciting data demonstrating that the beneficial metabolic effects of bariatric surgery are procedure dependent and not realized in L-PGDS KO mice. In this lecture, a brief introduction to bariatric surgery in rodents, which compares RYGB to SG outcomes, will be presented. A more detailed discussion will focus on L-PGDS as a novel adipokine modulating crosstalk between adipose tissue and the liver, which contributes to the beneficial cardiovascular effects of bariatric surgery.

Biography

Louis Ragolia received his Bachelor of Science degree in Biochemistry from Stony Brook University in 1985 and his Ph.D. in Biochemistry/Molecular Biology from Queens College in 1994. He is presently a Professor in the Department of Foundations of Medicine at the New York University Long Island School of Medicine. He has published over 80 publications in highly respected peer-reviewed journals as well as several review articles, book chapters. He sits on the editoral board of multiple journals and holds two U.S. Patents.

conferenceseries.com

Global Summit on OBESITY AND HORMONES

May 03-04, 2022 | Webinar

Obesity and food habits of primary school going children: A longitudinal study

Mohammad Ohid Ullah
Shahjalal University of Science and Technology, Bangladesh

Childhood obesity has become a serious public health problem because of its strong association with adulthood obesity and the related adverse health consequences. The aim of this study was to reveal the changes of food habits and the effect of gender and time on body mass index (BMI) of primary school going children in this city based on a longitudinal study. Initially it was built a cohort of 94 primary school going children in Sylhet. The data were collected from the same children at the initial time (T0), after six months (T6) and after twelve months (T12). Principal Component Analysis (PCA), Multi-factor Analysis (MFA) and Linear Mixed model (LMM) have been applied to analyze the data. It is found that the rate of overweight has decreased among the male children and the rate of obese has increased among the female children over time. This indicates that female children have a tendency to keep themselves at home and to like indoor game most which may cause the risk of obesity. Food habits revealed that over time obese and overweight children consumed more carbohydrates, protein and junk foods than others. The results of LMM exposed that BMI of male students' are comparatively less than female students' over the study period of time. Taken together, it may conclude that overweight and obese children are increasing and male children are becoming less obese than female over time. We should make awareness to the students about the obesity problem to improve public health sector.

Biography

Dr. Mohammad Ohid Ullah has completed his MSc in Applied Statistics and Biostaistics from Hasselt university, Belgium and PhD from Wageningen University, the Netherlands. Now he is a professor at the department of Statistics, Shahjalal University of Science and Technology, Sylhet, Bangladesh (https://www.sust.edu/d/sta/faculty-profile-detail/17). He has published more than 30 papers in reputed journals and has been serving as an editorial board member of a reputed journal.

conferenceseries.com

Global Summit on OBESITY AND HORMONES

May 03-04, 2022 | Webinar

Impact of adolescent's obesity in cardiac function: An association of Cardiac structural and metabolic risk factors with physical fitness

Ram Lochan Yadav
Chitwan Medical College, Nepal

There is evidence of metabolic, cardiac structural, and functional derangements in the elderly obese. However, such alterations including physical fitness in early age obesity are still controversial. This study aimed to evaluate physical fitness, cardiac structural, functional, and metabolic remodeling and their association with BMI markers in adolescents.

This cross-sectional comparative study included 90 adolescents with median age -14(2) years were grouped into Normal weight (NW) and Overweight/Obese (OW/OB) based on the BMI percentile for age and sex, WHO, 2007 CDC. International Diabetes Federation criteria for adolescents selected for lipid profiles, fasting sugar, SBP and DBP. Echocardiographic standard 2-dimensional measurements for cardiac structures, percent ejection fraction (EF%) were performed with standard procedure. Physical fitness index (PFI) was graded using the modified Harvard step test. The data compared with Mann Whitney U test and Spearman's Rank correlation test was used to find an association among study variables.

The cardiac functional and metabolic parameters-heart rate (NW Vs OW/OB: 80 (9)- 91(12) beats/min, $p<0.001$), SBP, DBP (NW Vs OW/OB: 74.33±3.64-80.32±4.8 mmHg, $p<0.001$), LDL were higher whereas HDL (NW Vs OW/OB: 45.5 (8)- 40(6), $p<0.001$) was lower in OW/OB adolescents. They had cardiac structural remodeling with increased left atrial wall thickness, EDD with significantly reduced % LV ejection fraction (NW Vs OW/OB: 65(4)- 63(8), $p=0.002$). PFI was 'fair-poor'. Moreover, physical fitness (PFI, rho=0.589, $p<0.001$), cardiac structural (LA, rho=+0.473, $p<0.001$; %EF, rho= -0.346, $p=0.001$) and functional (SBP, rho=+0.308, $p=0.003$) parameters revealed unfavorable correlation with obesity markers.

Adolescent obesity ensues detrimental consequences in early life-modifying not only the metabolic, hormonal, and chemical functions but also bringing unfavorable structural changes especially in cardiovascular and musculoskeletal health thereby halting overall physical fitness to poor.

Biography

Dr. Yadav is an Associate Professor and Head of the Department of Clinical Physiology at Chitwan Medical College, CMC, affiliated to Tribhuvan University, Nepal. He obtained MD degree in Basic and Clinical Physiology under full scholarship from B.P. Koirala Institute of Health Sciences, Nepal (listed in the WHO and FAIMER/IMED). He bears an expertise of Clinical Neurophysiology including NCS, EMG, EEG, VEP, BERA and AFT clinical tests. He has dynamic professional experience for more than 9-years in teaching Physiology to under-and post-graduate medical students. He is a core member of curriculum development and health professional workshops. He has worked as MBBS–I phase and PBL coordinators and a medical education trainer in several teacher's trainings. He has more than 27 publication records in peer reviewed journals. He serves as a manuscript reviewer for several national and international journals. His research interests are Neurophysiology, Cardio physiology, Metabolic disorders, obesity and Medical education..

conferenceseries.com

Global Summit on OBESITY AND HORMONES

May 03-04, 2022 | Webinar

Beneficial effects of different chili pepper in treating Obesity

Dr. Mst. Sharmin Sultana
International Rice Research Institute, Malaysia

Fruits and vegetables are important components of a healthy diet. They are rich sources of vitamins and minerals, dietary fiber, and a host of beneficial non-nutrient substances including plant sterols, flavonoids, and other antioxidants. It has been reported that reduced intake of fruits and vegetables may increase the risk of non-communicable diseases (NCDs). Chili pepper commonly used in cuisines is an important spice that brings spiciness and nutrition. Over the years, it has been reported on its potential as an antioxidant and anti-obesity agent. Obesity is a serious health concern as it may initiate other common chronic diseases. Due to the side effects of synthetic antioxidants and anti-obesity drugs, scientists are now focusing on the potential natural products which produce a similar effect to synthetic chemicals. This up-to-date presentation addresses this research gap and presents, in an accessible format, the nutritional, antioxidant content, and anti-obesity properties of different chili papers. Overall, this lecture has the merit to serve as a reference guide for the usage of chili peppers as an anti-obesity agent.

Biography

Dr. Mst. Sharmin Sultana has completed her Ph.D. at the age of 28 years from the University Malaya and postdoctoral studies from University Putra Malaysia School of Nutrition and Dietetics. Currently, I am acting as the head of Grain Quality and Testing Laboratory, IRRI-IBO. I have published more than 25 papers in reputed journals and have been serving as an editorial board member of some journals.

conferenceseries.com

Global Summit on OBESITY AND HORMONES

May 03-04, 2022 | Webinar

Exploring the effect of cereal cell wall against different chronic diseases

Tabussam Tufail
The University of Lahore, Pakistan

Humans consume calories from the food from which half calories are provided by cereal grains. Along with this, cereals comprise crucial components advantageous for human health. Oats (Avena sativa L.) are main cereals owing to the presence of high content of phytochemicals, dietary fibres and beneficial nutritional value. In this research, an outline has provided about nutritional and health benefits delivered by oat brans its values added products. Two indigenous oat varieties DN-8 and S-20000 were characterized physico-chemically and nutritionally. Oat bran variety S-20000 showed higher values of protein (15.8%), ash (3.13%) and fiber (14.26%) while the highest proximate components shown by DN-8 was Moisture (8.4%), Fat (8.6%) and NFE (57.59%) respectively. Oat bran variety S-20000 were moderately higher in potassium (626 mg/100g), phosphorus (844 mg/100g), magnesium (271 mg/100g), zinc (8.23 mg/100g) and iron (3.43 mg/100g). Though DN-8 had higher values of calcium (56 mg/100g), Sodium (9.1 mg/100g) and copper (0.25 mg/100g). Vitamin E content of variety S-20000 showed higher value (0.85 mg /100g) while highest value provided by DN-8 was riboflavin B2 (0.68 mg /100g). Oat bran variety S-20000 showed highest soluble (6.31%) and insoluble dietary fiber (7.46%). The highest β-glucan (7.76%) content was also showed by variety S-20000. The totality of essential amino acid is 11.98mg/100g- 21.7 mg/100g of both varieties DN-8 and S-20000. The sum both varieties DN-8 and S-20000 of non-essential amino acid contents of the cultivars was 25.08 and 35.68 mg/100g. Conclusively, Oat bran variety S-20000 is showing better results comparatively DN-8 among most of the parameters chemical, nutritional, vitamin and amino acids respectively.

Biography

Tabussam Tufail is currently working as Assistant Professor in University Institute of Diet & Nutritional Sciences, Faculty of Allied Health Sciences, The University of Lahore, Lahore, Punjab, Pakistan. He completed his PhD Food Science & Technology, MS Food Science & Technology from Government College University Faisalabad. He has completed 25 International and national trainings as well as courses from different organizations. He has published 70peer-reviewed research/ review papers, 14 book chapters, 1 Book and Presented in 25 International and National Conferences as well as attended a number of conferences, seminars, workshops and webinars. Tabussam Tufail is serving as an editorial board member in Acta Scientific Publications. He is a frequent reviewer of several reputed journals in the area of Food & Nutrition as well as Food Science and Technology. He is Life time member of Life-Time Member of "Scientific and Technical Research Association (STRA), Life-Time Member of Healthcare & Biological Sciences Research Association (HBSRA), Life-Time Member of Teaching and Education Research Association (TERA), Life-Time Member of Social Science and Humanities Research Association (SSHRA), Life-Time Member of Pakistan Society of Food Scientists &Technologist (PSFST)..