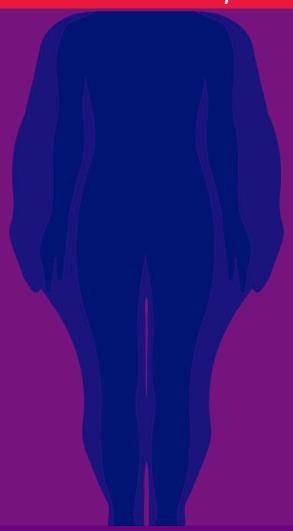


# OBESITY AND WEIGHT MANAGEMENT CONGRESS

World

October 18-19, 2021



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# WOC 2021 BOOK OF ABSTRACTS

# WORLD OBESITY AND WEIGHT MANAGEMENT CONGRESS

OCTOBER 18-19, 2021

#### Theme:

Advanced Concepts in Treatment and Prevention of Obesity

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# Phout 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 WOC 2021

Magnus Group welcomes members from different parts of the world to join our Online Event - "World Obesity and Weight Management Congress" scheduled during October 18-19, 2021. It includes prompt Keynote presentations, Oral presentations, Poster presentations, interactive and informal exchanges. This is going to be one of the most remarkable events of the year. Through the theme "Advanced Concepts in Treatment and Prevention of Obesity" conference will explore the advances in the field. WOC 2021 goal is to bring together bright minds to give talks that are ideas-focused, and on a wide range of scientific sessions, to faster learning inspiration. It will provide an international platform to share expertise, foster collaborations, discover new information, stay current with trends and networking.



# KEYNOTE FORUM

WORLD OBESITY AND WEIGHT MANAGEMENT

**CONGRESS** 

OCT 18-19, 2021



Vaclav Bunc
Charles University, Czech Republic

# Effect of physical exercise on adiposity and aerobic fitness in middle age women differing in body mass

verweight and/or obesity is a growing problem over the world. Alongside a range of health problems associated with increased body mass (BM) - adiposity and reducing of fitness level it is an important limiting factor for realization of regular physical exercise and quality of life. The study goal was to assess the effect of movement intervention in women differing in the BM. Study was carried out in 56 women with normal BM (mean age=44.7±3.2years; BM=65.3±3.2kg; height= $166.0\pm4.1$ cm; %BF= $24.1\pm2.1$ %), 49 overweight women ( $43.9\pm3.2$ ;  $80.3\pm3.1$ ;  $167.1\pm4.0$ ; $\pm2.2$ ), and 41 obese women (43.8±3.0; 92.3±4.1; 166.3±3.2; 32.1±3.4). All these subjects were without regularly movement training before the starting of intervention. Body composition was assessed by bioimpedance method using prediction equations that are valid for the Czech middle aged women population, functional variables were assessed on a treadmill. The majority of exercise was aerobic (85%) with an intensity of exercise assessed by HR ranged from 80 to 90% of HRpeak determined on treadmill. Rest of movement activities were activities like an aerobic and/or home gymnastic, swimming, etc.. The energy content of weekly movement program for women with normal BM ranged from 1000 kcal to 2300 kcal (mean 1600±350 kcal) in females with overweight from 1350 kcal to 2420 kcal (1800±270 kcal) and in obese women from 1710 kcal to 2540 kcal (2100±330 kcal). After 10 weeks of intervention, the reduction in %BF ranged from 15.6% in obese to 14.1% in normal BM of starting value, ECM/BCM relationship decreased from 11.9% in subjects with normal BM to 13.8% in obese, and in VO2peak increased from 15.2% in normal BM to 16.4% in obese. In middle aged women differing in BM are absolute changes in adiposity and aerobic fitness like a result of imposed movement intervention substantively and statistically significant. On the contrary, differences in percentages of pre-intervention values are non-significant. We can conclude that an exercise program with a similar energy content, form and intensity causes the similar changes in adiposity and in motor and functional performance in women, differing in BM.

#### **Audience Take Away:**

- Background of physical activity intervention
- Results of PA intervention
- Interpretation of data in weight management

#### Biography:

Vaclav Bunc – earned the PhD from Technical University Prague, professor in the Exercise Physiology from Charles University Prague Main topics: exercise physiology, obesity reduction, body composition, BIA methods, moving regimes for prevention in cardiac and obese patients. He is member of Czech and International scientific societies, head of many research projects, author of the great numbers of research reports.



# F. Buck Willis PhD FACSM\*, Ram Shanmugam PhD, Janet H. Southerland DDS MPH, PhD, Charles P. Mouton MD MS MBA

Galveston Clinical Research, Saint Kitts and Nevis

### Food allergen elimination for obesity reduction; A longitudinal, case-control trial

**Objectives:** This study was designed to examine efficacy of separate and combined protocols for obesity reduction with sequential outcomes after one year. This was an Experimental Case vs Control study, lasting 12months, conducted from 2018 to 2020.

**Methods:** Ninety-four obese subjects (ages 14-76 with BMI > 30) enrolled in this multi- centre study in Texas, USA. Treatments included food allergen identification/elimination (ALCAT, leukocyte reaction test which showed reactions to 237 foods) and/ or a brief, aerobic- surge exercise (2-minute sessions, 5/day). Foods with significant reaction for each subject were eliminated from their diet for 12-months (mean 36 foods/subject).

Subject categorization was as follows: Group 1 Combined Food Allergen Elimination and Aerobic-surge exercise (N=23); Group 2 Food Allergen Elimination alone (N=23); Group 3 Aerobic-surge exercise alone (N=18); Group 4 was the Control group who chose no treatments (N=30). The dependent variables included changes in weight, BMI, and waist circumference.

**Results:** There was a significant difference between groups and between therapeutic protocols (P < 0.0001). The greatest changes came from Group I, Combined (Mean changes: Weight -32.2lbs, BMI -4.6, and Waist -4.3 inches). Subjects who chose food allergen elimination alone, also showed a significant change in comparison to exercise-only and control subjects (P < 0.0001).

Conclusion: Food allergen elimination was effective for obesity reduction in this 12- month study.

#### **Biography:**

After earning his medical degree in the British Commonwealth and PhD in clinical Kinesiology, Dr. Willis conducted research in connective tissue rehabilitation. After his first 20 studies, he was chosen to be a Fellow of the American College of Sports Medicine. Dr Willis has over 50 publications with five books and has received a total of \$2 million dollars in research funding. He is now conducting research to build the evidence in food allergen elimination for obesity reduction.



Joon Young Kim

Department of Exercise Science, Syracuse University, Syracuse, NY, USA

#### Lifestyle intervention on biomarkers of type 2 Diabetes risk in obese youth

Once thought to be an adult disease, type 2 diabetes has emerged as an increasingly prevalent health condition in pediatric populations in parallel with the widespread pediatric obesity epidemic. The oral glucose tolerance test (OGTT) is traditionally used to either diagnose diabetes or capture prediabetes, including impaired fasting glucose (IFG) and impaired glucose tolerance (IGT), a state of heightened risk for future type 2 diabetes. However, limitations of IFG and IGT were described by prospective epidemiological studies in adults demonstrating that only one-half of prediabetic individuals eventually convert to type 2 diabetes. For this reason, there is increasing interest in finding novel biomarkers derived from the OGTT that can identify metabolic abnormalities beyond fasting and 2-h glucose concentrations. Such emerging risk indicators include OGTT-glucose-response-curve and 1-h glucose concentration. For this presentation, the followings are discussed: 1) a core defect in the pathogenesis of type 2 diabetes which is pancreatic β-cell failure in the face of severe insulin resistance in obese youth; 2) recent findings of adipose tissue insulin resistance in obese youth across the spectrum of glucose tolerance from normal glucose tolerance to IGT to type 2 diabetes; 3) differences in disease process between obese youth vs. obese adults; 4) introduction of emerging biomarkers that are effective to identify obese youth who are at highest risk for type 2 diabetes by providing evidence of verifications against the gold standard measures of type 2 diabetes pathophysiological factors (hyperinsulinemic-euglycemic clamp-, hyperglycemic clamp-, and IVGTT-measured insulin sensitivity and β-cell function); and 5) effects of lifestyle intervention on emerging biomarkers of type 2 diabetes risk in obese youth.

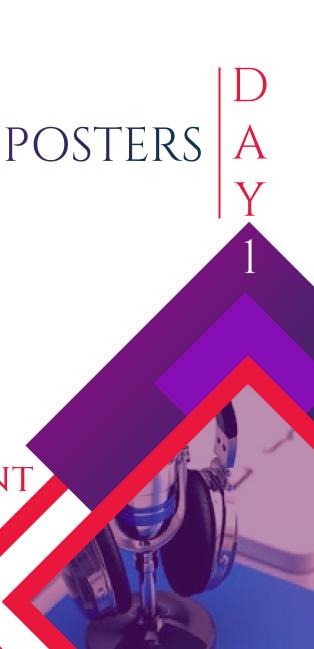
#### **Audience Take Away:**

- Knowledge regarding pathophysiology of youth-onset type 2 diabetes, especially among obese populations
- Novel biomarkers of type 2 diabetes risk in addition to the classical risk factors
- Appropriate application of lifestyle intervention in obese youth beyond weight loss

#### **Biography:**

Joon Young Kim, Ph.D., is an assistant professor in the Department of Exercise Science at Syracuse University. Dr. Kim earned his Ph.D. with concentrations of pediatric obesity & diabetes and exercise physiology at Arizona State University. He worked as a T32-funded postdoc in the Division of Endocrinology and Metabolism at University of Pittsburgh School of Medicine, after completing 2 years of postdoc fellowship in the Division of Weight Management and Wellness at UPMC Children's Hospital of Pittsburgh. He has had multiple peerreviewed publications in high impact journals including Diabetes Care, Diabetes, and the Journal of Clinical Endocrinology & Metabolism.





WORLD OBESITY AND WEIGHT MANAGEMENT

**CONGRESS** 

OCT 18-19, 2021



Alexander de St. Amatus

AIHEM, Sunshine Coast, Queensland, Australia

# A method and a device for weight control in humans by using real-time calorimetry

Humans metabolise carbohydrates, fats and proteins to generate energy, using food as a fuel and atmospheric oxygen as an oxidiser. The energy consumption of a human body, Ei (Cal), can be calculated from the amount of oxygen consumed by using the Karlberg's equation:  $E_i = |\Delta C|W(a_{CH}X_{CH} + a_{fat}X_{fat} + a_{prot}X_{prot})$ , wherein C is the concentration change of CO2 or O2; W (l) is the volume of the inhaled or exhaled air; aCH, afat and aprot (Cal/l) are the calorific values of the carbohydrates, fats and proteins per litter of O2 consumed; XCH, Xfat and Xprot are the ratios of carbohydrates, fats and proteins in the dietary intake. Thus, measuring the volume of the inhaled or exhaled air and knowing the ratio of the basic food groups in the dietary intake allows calculating the energy consumption of the human body.

The present method is based on the fact that for each individual there is a unique correlation between the measured volumes of the inhaled or exhaled air during a respiratory cycle, and the characteristic changes to the time, intensity and frequency spectrum of the recorded breath sounds of the same individual.

The device comprises a spirometer that measures the tidal volume of the breathing air, a sensitive microphone that is used to record the breath sounds and a programmable processor that is combined with a controlling interface, a display, and storage of digital data. Alternatively, a smart phone connected to the spirometer and the microphone can be used to store, process and display the data.

The programmable processor utilises two sub-algorithms: (i) a calibration sub-algorithm, which is used to establish a correlation between the measured tidal volume of the breathing air and the recorded breath sounds, in a form of an equation that fits a calibration curve; and (ii) a reverse sub-algorithm, which uses the equation fitting the calibration curve to find the levels of energy consumption that correspond to particular breath sound patterns.

In practical terms this means that the user firstly completes a set of exercises, simultaneously recording data from the spirometer and the sound recorder, which data is needed to create calibration curves at different levels of physical stress of the user. Then, during the routine use of the device, the user employs only a microphone to provide input data to the reverse sub-algorithm and to obtain real-time, accurate and individualised estimate on his/her energy consumption.

The energy consumption data can be used by dieticians, athletes and people looking to loose weight for an estimate of the energy consumption and demands during different levels of physical activities and when the body rests, as well as for monitoring the balance of energy input and output. The energy consumption data can also be transmitted to external observers (e.g. trainers) for a distant observation of the physical conditions of the users.

#### **Audience Take Away:**

• This presentation relates to a method and a device for weight control that allow for real-time, accurate and individualised measurement of the energy consumption and balance of energy input and output. The presented novel weight control

method utilises a correlation that exists between the energy consumption and the recorded breath sounds of the people, which correlation is unique for each person

• The World Health Organisation estimates that about 13% of the world's adult population (11% of men and 15% of women) is obese. The device can be used by defence personnel, dieticians, other medical practitioners, athletes and the general public affected by obesity and wishing to control their weight

#### **Biography**

Alexander de St. Amatus studied electronic engineering at La Trobe University in Melbourne and completed his MBA at the University of the Sunshine Coast, Queensland, Australia in 2017. Currently, he is a Juris Doctor Candidate at the Australian National University in Canberra, Australia. Alexander de St. Amatus is a supervisor of engineering interns of the Australian Institute of High Energetic Materials (AIHEM) since 2016. He is an inventor, an author and a co-author of research papers in mechanical and electronic engineering, which includes holding an Australian Novelty Patent #2017101440 entitled "Method and apparatus for calorimetry in humans and air-breathing animals".



#### Sammie Mak<sup>1\*</sup>, Mrs Arpita Jain<sup>2</sup>

<sup>1</sup>NHS Junior Doctor, Manchester, UK <sup>2</sup>Associate Specialist in Ophthalmology, Manchester, UK

# Audit of preoperative, perioperative and postoperative management of diabetic patients undergoing cataract surgery in the United Kingdom

**Introduction:** Diabetic Macular Oedema (DMO) is the commonest reason for visual loss in all forms of diabetic retinopathy. Over 4 million people in England have diabetes with estimate of 6% of total population (1). The majority of these are type 2 diabetes, which is linked to obesity. The incidence of both obesity and diabetes is increasing (2).

Type 2 diabetes is a risk factor for cataract development (3). With better treatments and increasing life expectancy, more patients are needing cataract surgery to restore their sight. Cataract surgery is known to induce and adversely affect DMO (4). Royal College of Ophthalmologists and NICE guidelines recommend diabetic patients undergoing cataract surgery to be assessed and treated specifically to reduce rates of this preventable complication (5).

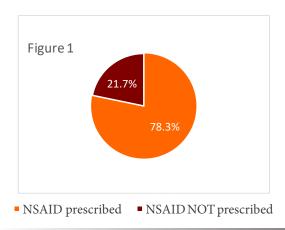
**Objectives:** The primary aim is to assess management of a small sample of diabetic patients undergoing routine cataract surgery at Rochdale Infirmary, Northern Care Alliance NHS Trust in England, with an aim to discuss evidence and introduce standardised care for this group of patients.

**Methods:** Retrospective analysis of 24 consecutively performed cataract surgery in diabetic patients between January to March 2021 was performed. The electronic patient record (open eyes) and Heidelberg Optical Coherence Tomography (OCT) macula scan were accessed. Data on patient demographics, visual acuity, operating notes, and central retinal thickness (CRT) were analyzed using Microsoft Excel.

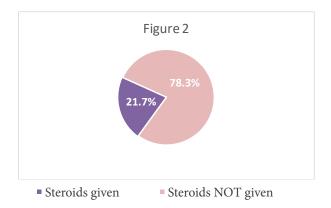
**Results:** Pre-operative best corrected visual acuity (BCVA) ranged from 6/12 to counting fingers. All patients had better post operative BCVA, except two patients who had dry age-related macular oedema and worsening of DMO as a cause respectively.

8 out of 23 patients (34.8%) had pre-operative optical coherence tomography (OCT), while 5 out of 23 patients (21.7%) had post operative OCT. Only four patients (17.4%) had both pre- and post-operative OCT.

Intraoperative steroids were given to 5 out of 23 (21.7%) patients (Figure 1).



18 out of 23 (78%) patients were prescribed topical NSAIDs postoperatively (Figure 2).



Amongst 23 patients, 2 (8.7%) had pre-operative macular laser and 4 (17.4%) patients had preoperative intravitreal anti vascular endothelial growth factor (VEGF) injection, as treatment for DMO. Of these patients who had pre- existing DMO, one patient had worsening outcome.

Conclusions: The results from this audit demonstrated that there is significant variability in the management of a preventable complication. A significantly small proportion of Diabetic patients had fundus examination with OCT scan before and after cataract surgery. Appropriate use of intra operative steroid injection and post-operative topical non-steroidal anti-inflammatory drugs (NSAID) needs to be given as a standard to reduce the incidence of visually consequential DMO. This will reduce the risk of preventable complications of inflammation, worsening of DMO and post operative pseudophakik Cystoid Macular Oedema (CMO). We have since developed departmental protocols to be followed. A re-audit after implementation of above action points is planned in 6 months' time.

#### **Audience Take Away:**

- Our audit highlights specific management steps that should be undertaken specifically for diabetic patients undergoing cataract surgery to ensure that they receive the best possible care
- It also demonstrates the various attitudes between different consultant ophthalmologists and the implementation of a questionnaire can help to identify common practice and any particular reason for the deviation from the gold standard
- This audit has been presented to ophthalmology clinicians working at a local departmental meeting at Rochdale Infirmary,
  which has helped to raise awareness of the topic and driven towards a protocol for standardised care for diabetic patients
  who are at increased risk of post-surgical complications

#### **Biography**

Dr. Mak completed her undergraduate medical degree at the University of Leeds, United Kingdom and graduated with an MBChB in 2019. Since, she has returned to her hometown, Manchester, where she is doing her foundation postgraduate training. In addition, she obtained the position of Design and Communications Officer for London WHO simulation 2020 and was subsequently appointed as the Head of Communications for UK Model WHO committee 2021. Last year, she presented a poster regarding the Obesity Epidemic in the UK at the Society of Acute Medicine annual conference and over the years, has been proactively combating this global issue.



Nalini Kumari\*, N.K. Narayanan, Ravi S. Erukulapati, Rabinder Nath Mehrotra Sambit Das, Kalpana Dash, Balaji Jaganmohan, Dwarakanath CS, Anish Behl, Harpal Singh Malhotra

Apollo Sugar Clinics, India

# The prevalence of overweight and obesity in type 2 dm in indian population - A perspective from Apollo sugar clinics

**Background:** The prevalence of overweight and obesity in India is rapidly increasing than the world's average. For instance, between 1998 and 2015, the prevalence of overweight among women increased from 8.4% to 15.5%, and obesity increased from 2.2% to 5.1% The increasing prevalence of obesity is a growing concern for many chronic diseases.

**Methods:** Apollo Sugar is a pan India network of Diabetes and Endocrinology Clinics with more than 45,000 registered patients. Data of 6439 patients were available during the duration of study period (i.e., from March 2020 to March 2021), and a complete data set was available for 2458 patients from the Electronics Medical Records (EMR).

Among the Type 2 DM patients, over 20 years of age who attended the OPD, and were overweight as well as obese were identified on the basis on the Body Mass Index (BMI) criteria prescribed by the WHO.

Patients with Type 1 DM, Gestational Diabetes Mellitus (GDM), Thyroid Disease, Diabetes with Thyroid disease, Cushing Syndrome, Acute Myocardial Infarction (MI), Acute Heart Failure (HF), Acute Kidney Disease (AKD), Chronic Kidney Disease (CKD) were excluded from the study. A cross-sectional analysis was done.

**Results:** The overall prevalence of overweight and obesity was 39.47%, with male 58.08% (n=1471), and female 42.34% (n=1077). The prevalence of overweight and obesity in male patients was maximum in the age group of 51-60 years was 27.97% (n =414). The prevalence among different BMI categories were as follows: in Overweight category was 68.73% (n =1011), Class I Obesity was 23.66% (n =348), Class II Obesity was 5.85% (n = 86), and Class III Obesity was 1.78% (n = 26).

The prevalence of overweight and obesity in female patients was maximum in the age group of (51-60) years was 33.64% (n = 363). The prevalence with respect to BMI categories were: in Overweight was 54.87 % (n =591), Class I Obesity was 30.83% (n=332), Class II Obesity was 10.77% (n =116), Class III Obesity was 3.53% (n=38). The prevalence of overweight and obesity in younger age group of (20-40) years was 18.96% (n=483), and in elderly group >60 years was 28.96 % (n=738). The percentage of morbid obesity was 2.5 % (n=64).

**Conclusion:** The overall prevalence of overweight and obesity was more in male patients and rising obesity is a growing concern for many chronic diseases. Young population will suffer comorbidity for longer period

#### **Biography**

Dr. Nalini Kumari's career spans over 11 years in medicine, consulting, and pharma research. She brings her comprehensive knowledge to accelerate the clinical development process by designing and implementing innovative, adaptive, platform trials and clinical studies across all therapeutic areas. Currently, she is working at Apollo Sugar Clinics as Senior Manager, Medical Affairs & Research, where she is responsible for conducting scientific studies for various therapeutics areas and medical products. In this role, she also oversees clinical partnerships, strategic CRO relationship.

Before this, Dr.Nalini served as a Head of Clinical Pharmacology and Principal Investigator at rapidly growing ZenRise CRO at Hyderabad. Here she partnered with various global pharma companies for their Phase-II, III, and Phase-IV trials, also did clinical research/pharma consulting services. She has also worked with Sipra Labs as Principal Investigator and Site Monitor and has led numerous research studies and projects. In the past, Dr.Nalini has worked in various government and private hospitals (namely, E.S.I. Hospital - Nagpur, Jharkhand Govt. P.H.C. - Jamshedpur, Apollo Hospital - Hyderabad, etc.) as Medical Officer and Consulting Physician.

Dr.Nalini has obtained M.D. (Pharmacology) degree from Government Medical College (GMC), Nagpur, one of the premier medical institutions of India. She did her M.B.B.S. from Rajendra Institute of Medical Science (RIMS), Ranchi. She has experience driving initiatives that impact global processes, people, and technology, which creates value for external partners and the company.



#### Anastasiia Radchenko\*, Kolesnikova Olena

L. T. Mala National Institute of Therapy of the NAMS, Ukraine

# Associations between some cardiovascular risk factors and biological age in patients with arterial hypertension and subclinical hypothyroidism

**Background:** In patients with arterial hypertension (AH), the presence of subclinical hypothyroidism (SH) worsens the course of AH and leads to the new cardiovascular diseases (CVD) development. Therefore, search for early CVD predictors is especially important for patients with AH and SH. Premature aging is closely related to the CVD emergence and biological age (BA) can be used as indicator.

**Purpose:** The aim of our study was to evaluate changes in anthropometric indicators and carbohydrate, lipid profile in patients with AH and SH and to evaluate the relationship of these parameters with BA.

Materials and methods: Our study included 76 patients with the mean age 46,0±22,0 years (59% women, 41% men) divided into two groups: the 1st control group, that included patients without AH and SH (n=24), the 2nd one (comparison) included patients with AH and SH (n=52). Patients with a diagnosis of diabetes or coronary artery disease were excluded. Anthropometric parameters, fasting glucose levels and lipid profile indicators were determined and body mass index (BMI) was calculated for all patients. BA was calculated using patient's weight, blood pressure, the duration of balancing on the left leg and breath holding.

Results: Significant differences were revealed between the two groups in the level of fasting glucose (p=0.002), triglycerides (TG) (p=0.049), very low density lipoprotein cholesterol (VLDL-C) (p=0.049), waist circumference (WC) (p=0.000), BMI (p=0.000), BA (p=0.000). In control group, a significant correlation with BA was detected only for low density lipoprotein cholesterol (r=0.554, p=0.01). In patients with AH and SH, glucose (r=0.326, p=0.01), TG (r=0.533, p=0.01), VLDL-C (r=0.532, p=0.01), high density lipoprotein cholesterol (HDL-C) (r=-0.406, p=0.01) were found to be significantly correlated with BA. Therefore, BA reflects the risk of CVD developing. BA in the 2nd group also correlated with WC (r=0.581, p=0.01), hip circumference (r=0.461, p=0.01), BMI (r=0.540, p=0.01), the increased values of which are independent cardiovascular risk factors (CVR). Chronological age (CA) in patients with AH and SH had a significant correlation only with fasting glucose (r=0.349, p=0.01) and also positive with HDL-C (r=0.277, p=0.01). These data indicate that BA has a greater prognostic value as a predictor of CVD compared to CA. The association of BA with the given indicators makes the measurement of BA more sensitive for CVR predicting in patients with AH and SH compared to controls.

**Conclusions:** The study results confirm that BA calculated using patient's weight, blood pressure, the duration of balancing on the left leg and breath holding is associated with such CVR factors as impaired lipid, carbohydrate profile and obesity development in patients with AH and SH. That is why it is a simple, fast and reliable indicator of increased CVR in this category of patients on an outpatient basis.

#### **Audience Take Away:**

- SH contributes to the development of arterial hypertension
- CA does not always reflect the functional state of the body

- BA correlates with waist and hip circumferences, BMI, levels of fasting glucose, TG, VLDL-C and HDL-C in patients with AH and SH
- BA assessment can be widely used on an outpatient basis

#### **Biography**

2011-2017 - studied in Medical School of V. N. Karazin Kharkiv National University, Kharkiv, Ukraine.

2017-2019 - internship with a degree in "Internal Medicine": partly on the basis of the Government Institution "L.T. Malaya Therapy National Institute of the National Academy of Medical Sciences of Ukraine" (Department of Internal Medicine No. 1), partly on the basis of the municipal non-profit enterprise "City Hospital No. 3" of the Kharkiv City Council.

2019 - present - full-time PhD at the Department of the Study of Aging and Prevention of Metabolic-Associated Diseases of the GI "L. T. Mala National Institute of Therapy of the NAMS of Ukraine", Kharkiv, Ukraine. Scientific advisor: MD, PhD, Doctor of Medical Science, professor Olena Kolesnikova. Thesis: Pathogenetic mechanisms of premature aging development in patients with arterial hypertension with concominant subclinical hypothyroidism





WORLD OBESITY AND WEIGHT MANAGEMENT

**CONGRESS** 

OCT 18-19, 2021



### Adrian Sturza\* $^{1,2,4}$ , Adrian Merce $^{1,2}$ , Claudia Borza $^{1,2}$ , Danina M. Muntean $^{1,2}$ , Octavian M. Cretu $^{3,4}$

<sup>1</sup>Department of Functional Sciences III – Pathophysiology

<sup>2</sup>Centre for Translational Research and Systems Medicine

<sup>3</sup>Department of Surgery IX – Surgical Semiotics I

<sup>4</sup>Centre for Hepato-Biliary and Pancreatic Surgery, "Victor Babes" University of Medicine and Pharmacy, E. Murgu Sq. no. 2, 300041, Timi□oara, Romania

# Monoamine oxidase is a source of cardiac oxidative stress in rats with diet-induced obesity

besity and diabetes are the major risk factors for cardiovascular diseases being associated with increased reactive oxygen species (ROS) generation. We have previously demonstrated that monoamine oxidase (MAO), and mitochondrial enzyme with two isoforms, A and B, is a novel source of cardiac oxidative stress in rats with streptozotocin-induced diabetes. We hypothesized that MAO contributes to ROS generation in hearts isolated from rats with diet-induced obesity (24 weeks of high calorie junk food diet that lead to a prediabetic state). Cardiac MAO expression (immune fluorescence and qRT-PCR) and ROS level (spectrophotometry – ferrous oxidation xylenol orange assay, and immune fluorescence – dihydroethidium staining) were assessed in samples isolated from obese vs control rats. Experiments were performed in the presence vs absence of MAO A and B inhibitors (clorgyline and selegiline,  $10 \mu M$ ). Both MAO isoforms were increased in cardiac samples from diseased animals, being associated with high ROS generation. In vitro treatment with MAO inhibitors mitigated the ROS production in the hearts from obese rats. In conclusion, both MAO isoforms contribute to cardiac oxidative stress and can be targeted with the available armamentarium of MAO inhibitors in the settings of obesity and prediabetes.

#### **Audience Take Away:**

- Monoamine oxidase (MAO) is a source of cardiac oxidative stress in obesity and prediabetes that can be targeted with the MAO inhibitors already in clinical use for other pathologies
- MAO is target for drug repurposing in the cardio-metabolic diseases

#### **Biography**

Dr. Adrian Sturza - Associate Professor, Pathophysiology Department, Faculty of Medicine and researcher at the Centre for Translational Research and Systems Medicine, "Victor Babeş" University of Medicine and Pharmacy, Timisoara, Romania; MD, Specialist in Diabetes, Nutrition and Metabolic disorders, Centre of Diabetes, Nutrition and Disorders of Metabolism, Timişoara County Hospital, Romania.



Karli Burridge, PA-C, MMS, FOMA Gaining Health, Glen Ellyn, IL USA

#### **Facilitating Behavior Change**

The audience will learn why obesity is a neurobehavioral disease, and why, biologically, behaviour change can be difficult. Beyond hormonal and biological influences of behaviour, changing behaviours can still be difficult. In this course, I will explain how providers can how we can use evidence-based behavioural strategies and therapies as well as communication styles to help facilitate health behaviour change.

#### **Audience Take Away:**

- Recognize obesity as a neurobehavioral disease
- Describe strategies to facilitate behavior change and identify components of behavior change models, including the Transtheoretical Model, Motivational Interviewing, and Cognitive Behavioral Therapy
- Choose appropriate evidence-based strategies for patient communication

#### **Biography**

Karli Burridge is an internationally recognized expert in obesity management. She is a PA and Fellow of the Obesity Medicine Association and holds the Certificate of Advanced Education in Obesity Management. She is the President of PAs in Obesity Medicine and serves on the Board of Trustees for the Illinois Obesity Society. Karli is the owner and founder of Gaining Health, which she developed to provide resources and tools for providers who want to incorporate obesity management into their medical practice.



#### Kingsley Agyemang\*, Subhash Pokhrel, Christina Victor, Nana Kwame Anokye

Division of Global Public Health, Department of Health Sciences, College of Health, Medicine and Life Sciences, Brunel University London

#### Determinants of obesity in West Africa: A systematic review

**Introduction:** Obesity is rising in West Africa. However, there is limited evidence on the determinants in the sub-region, and where available, the evidence base is patchy.

**Objectives:** This is the first study to provide a synthesis of the determinants of obesity in West Africa to inform policy and research practice.

**Data Sources:** A systematic search of the electronic databases; Scopus, Web of Science and PsycINFO and stakeholders' engagement workshop were conducted.

Study eligibility criteria: Eligibility criteria included studies on obesity determinants conducted in West Africa, and involving participants aged eighteen years and above.

Study appraisal and synthesis of methods: The quality of the studies was appraised by two independent reviewers using the Agency for Healthcare Research and Quality checklist. Data was synthesized qualitatively.

**Results:** Sixty-three (63) papers were selected. Majority of the studies originated from Ghana (n=22) and Nigeria (n=19). All included studies used cross-sectional study design. In all, 36 determinants were identified, of which majority (56%; n=20) were demographic, socio-economic, lifestyle and biological factors, and remainder were environmental factors, like physical proximity to fast food outlets. Only one study explored the effect of both individual and contextual factors on obesity. Increasing age (OR=0.09, 95% CI= 0.12 to 65.91) and being a woman (OR=1.38, 95% CI=1.18 to 55.40) were the common determinants of obesity in West Africa. Lifestyle behavior including smoking and alcohol were found to be significant predictors of obesity.

Limitations: Heterogeneity of the methods of reviewed study methods precluded quantitative synthesis

**Conclusions and recommendations:** Obesity in West Africa is determined by complex multi-faceted factors, requiring robust engagement with wider stakeholder groups to develop obesity prevention and control policies in West Africa. Studies accounting for contextual factors are inadequate and there is the urgent need to address this gap in knowledge.

#### **Audience Take Away:**

- This is the first synthesis of literature on the determinants of obesity in West Africa
- The study uses a wide-ranging search strategy including stakeholders engagement workshops (covering multi sectoral policy makers from West Africa, academia, patient and public groups) and academic databases
- Whilst the review included studies from most West African countries, there was a significant imbalance in the country representation because 65% of the studies were from Nigeria and Ghana
- The findings of this review indicated that obesity in West Africa is determined by demographic, lifestyle, biological and socio-economic factors such as age, sex, physical activity, and education. These findings present an urgent need for robust engagement with broader stakeholder groups to develop sustainable obesity prevention and control policies to address the obesity epidemic in West Africa. These policies could include education, awareness and implementation of diet and

physical activity interventions to stimulate individual and environmental changes at subpopulation and population levels

This review recommends that future studies are conducted in other African subregions, like East Africa, to provide
evidence on determinants of obesity to proffer obesity interventions that would have far-reaching benefits to the broader
African continent

#### **Biography**

Kingsley is a Doctoral Researcher in the Division of Global public Health at Brunel University London. His research focusses on understanding the multi-level determinants of obesity with particularly the nexus between physical activity and healthy eating. Previously, he was a Senior Lecturer at the Ghana Insurance College.



Catherine Lefranc-Millot\*1, Pariyarath Sangeetha Thondre2, Ifunanya Achebe2, Alistair Sampson2, Tyler Maher2, Elisabeth Ahlstrom2, Helen Lightowler2, Caroline Perreau1, Laetitia Guerin-Deremaux1

<sup>1</sup>Nutrition and Health R&D, Roquette Freres, Lestrem, France <sup>2</sup>Oxford Brookes Centre for Nutrition and Health, Faculty of Health and Life Sciences, Oxford Brookes University, Oxford UK <sup>3</sup>Department of Life Sciences, Imperial College London, Ascot, UK,

# Co-ingestion of NUTRALYS® pea protein and a high-carbohydrate beverage influences the glycaemic and the insulinaemic responses: preliminary results of a randomized controlled trial

Context: Type 2 diabetes and obesity are major global public health concerns as they affect the health and the socio-economic development of millions of people. The glycaemic response of foods may have important implications for the prevention and treatment of Type 2 diabetes and obesity. Many factors such as particle size, cooking and food processing, starch structure and presence of other food components such as fat, dietary fibre and protein impact the glycaemic response. Insulin secretion is elicited primarily by the carbohydrates present in the food; however, studies have shown that there are other insulinotropic factors such as amino acids, fatty acids and gastrointestinal hormones.

**Objective:** The current study aims at evaluating the effect of two different doses of NUTRALYS® pea protein on postprandial glycaemic and insulinaemic responses following a high-carbohydrate beverage intake in healthy individuals.

**Methods:** Thirty-one participants, aged 19 to 55 years, were given 50 g of glucose (Control), 50 g of glucose with 25 g of pea protein (Test 1) and 50 g of glucose with 50 g of pea protein (Test 2) on three separate days in a single-blind, randomised, controlled, repeat measure, crossover design trial. Blood samples were taken before each test and at fixed intervals for 180 minutes. Blood glucose and plasma insulin were measured. The data were compared using repeated-measures ANOVA or the Friedman test.

**Results:** Glucose incremental Area under curve (iAUC-180) was significantly reduced by 31% for Test 1 compared to Control, by 53% for Test 2 compared to Control and by 32% for Test 2 compared to Test 1.

Insulin iAUC-180 was significantly increased by 28% for Test 1 compared to Control, by 40% for Test 2 compared to Control and by 17% for Test 2 compared to Test 1.

**Conclusion:** The consumption of pea protein reduced postprandial glycaemia and moderately stimulated insulin release in healthy adults with a dose-response effect, supporting its role in regulating glycaemic and insulinaemic responses.

#### **Audience Take Away:**

- Have information on study design: dosage information, number of participants, sampling...
- Know more about a health benefit of a plant-based protein isolate
- Have solutions to propose or use a healthy ingredient for lowering the glycaemic impact of high-carbohydrate beverage using NUTRALYS® pea protein with a demostrated dose-response effect

#### **Biography**

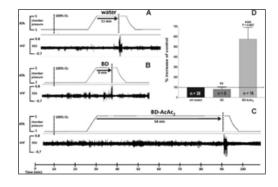
Catherine qualified as a Doctor of Veterinary Medicine (from the National Veterinary School, Maisons-Alfort, France) and later obtained a French PhD in Biotechnology (from the University of Technology, Compiègne, France). Prior joining Roquette, she managed a research team in a French dairy company, working in the area of milk peptides, proteins and hydrolysates with specific biological activities, compatible with food and nutraceutical applications. She joined Roquette in 2005 as a Corporate Scientific Communications Manager for Nutrition and Health (R&D). Since 2016, she is Nutrition and Health Senior Research Manager at Roquette, more specifically focused on long-term, prospective research, around plant-based proteins and their derivatives.



Raffaele Pilla
Pharm D, PhD – St. John of God Hospital – Fatebenefratelli, Benevento, Italy

# Therapeutic ketosis and the broad field of applications for the ketogenic diet: Ketone ester applications & clinical updates

Tt has been recently shown that nutritional ketosis is effective against seizure disorders and various acute/chronic ▲ neurological disorders. Physiologically, glucose is the primary metabolic fuel for cells. However, many neurodegenerative disorders have been associated with impaired glucose transport/metabolism and with mitochondrial dysfunction, such as Alzheimer's/Parkinson's disease, general seizure disorders, and traumatic brain injury. Ketone bodies and tricarboxylic acid cycle intermediates represent alternative fuels for the brain and can bypass the rate-limiting steps associated with impaired neuronal glucose metabolism. Therefore, therapeutic ketosis can be considered as a metabolic therapy by providing alternative energy substrates. It has been estimated that the brain derives over 60% of its total energy from ketones when glucose availability is limited. In fact, after prolonged periods of fasting or ketogenic diet (KD), the body utilizes energy obtained from free fatty acids (FFAs) released from adipose tissue. Because the brain is unable to derive significant energy from FFAs, hepatic ketogenesis converts FFAs into ketone bodies-hydroxybutyrate (BHB) and acetoacetate (AcAc)-while a percentage of AcAc spontaneously decarboxylates to acetone. Large quantities of ketone bodies accumulate in the blood through this mechanism. This represents a state of normal physiological ketosis and can be therapeutic. Ketone bodies are transported across the bloodbrain barrier by monocarboxylic acid transporters to fuel brain function. Starvation or nutritional ketosis is an essential survival mechanism that ensures metabolic flexibility during prolonged fasting or lack of carbohydrate ingestion. Therapeutic ketosis leads to metabolic adaptations that may improve brain metabolism, restore mitochondrial ATP production, decrease reactive oxygen species production, reduce inflammation, and increase neurotrophic factors' function. It has been shown that KD mimics the effects of fasting and the lack of glucose/insulin signaling, promoting a metabolic shift towards fatty acid utilization. In this work, the author reports a number of successful case reports treated through metabolic ketosis.



**Figure 1:** Ketone Ester significantly increased resistance against Central Nervous System Oxygen Toxicity seizures (D'Agostino D.P. et al., 2013 Am J Physiol Regul Integr Comp Physiol. 304(10):R829- 36).

#### **Biography**

Raffaele Pilla, Pharm.D., Ph.D., Doctor Europaeus, received his Master's degree in Pharmacy at G. d'Annunzio University in Chieti-Pescara, Italy in 2005, where he also served internships at the Cell Physiology Laboratory and Molecular Biology Laboratory. Prior, he was an Erasmus Student at Faculte de Pharmacie de Reims in Reims, France. He received his Doctor Europaeus in 2010 from Pitie-Salpetriere Institute in Paris, France. Also in 2010, he received his Ph.D. in Biochemistry, Physiology, and Pathology of Muscle at G. d'Annunzio University in Chieti-Pescara, Italy. He was hired as a Postdoctoral Scholar in the Department of Pharmacology and Physiology at the University of South Florida in Tampa, on two research grants funded by the Office of Naval Research (US Navy) and Divers' Alert Network. He has written and lectured widely worldwide. He has been involved in ongoing research at the University of South Florida with the use of ketone esters.



Silvana Pannain

Obesity Medicine. Section of Endocrinology, Diabetes and Metabolism, Department Of Medicine, University of Chicago, Chicago, II, USA

#### Obesity pharmacotherapy in complex obesity

More than 40 % of adults in the United States suffer from obesity. Worldwide, the most recent estimates includes over 650 million individuals with obesity.

Obesity is inextricably linked to many of the most common chronic illnesses like hypertension, hyperlipidemia, heart disease, sleep apnea, stroke, type 2 diabetes and 13 types of cancer. In recent years, clinical practice guidelines have emphasized the need for a chronic disease approach to obesity management. This is especially important given the high rates of recidivism seen with lifestyle modification for weight loss. When used appropriately in combination with lifestyle modifications, pharmacotherapy has an important role in the treatment of obesity and improves short-term and long-term outcomes. The field of anti-obesity drugs has been growing exponentially in the last decade. As a result, there are a growing number of physicians who are now focusing on obesity medicine as a career specialty. This year, in the US approximately 1400 physicians sat for the American Board of Obesity Medicine certification. This is six times the number of candidates from the first ABOM examination in 2012, and a 40% increase from last year. Despite a record number of physicians seeking Obesity Medicine Certification, only a small percentage have the opportunity to receive formal education in the in pharmacotherapies for the management of obesity and many are seeking to learn more. More importantly, physicians are seeking guidance on how to treat the most complex patients, those who in real life present to their offices. The proposed lecture will offer a case-based, practical guide to the use of AOMs across various obesity related comorbidities, as well as application of AOMs in complex clinical cases. This lecture will guide the audience on how to choose the best medication for their patients and in how to individualize the treatment of obesity across various comorbid conditions such as type 2 diabetes, psychiatric disease, cardiovascular disease, hypertension, and renal disease. Additionally, weight loss is particularly challenging when medications for such co-morbidities favor weight gain. To optimize success, it is also imperative to recognize and address iatrogenic weight gain, which will also be discussed in the proposed lecture.

#### **Audience Take Away:**

- The field of anti-obesity drugs has been growing exponentially in the last decade. As a result, there is a growing number of physicians and other providers who are now focusing on obesity medicine as a career specialty. Despite a growing interest in obesity medicine, only a small percentage of these providers have the opportunity to receive formal education in the use of obesity pharmacotherapy and many are seeking to learn more
- The lecture will offer a case-based, practical guide to the utilization of antiobesity medications across various conditions
- The audience will learn about the currently approved weight loss medication and effective combinations. It will receive guidance on why and when to prescribe weight loss medications, how to choose the best medication for our patients and how antiobesity medications can benefit special populations, such as patients with obesity and comorbid conditions such as diabetes, cardiovascular disease, hypertension, renal and psychiatric disease. Additionally the audience will learn to recognize and address iatrogenic weight gain, and learn a weight centric approach to the cure of patients with complex obesity

#### **Biography**

Dr. Pannain is an Associate Professor of Obesity Medicine and Endocrinology, and the Founder and Director of the Weight Management Program at the University of Chicago, Chicago, Illinois. She has been Board Certified in Endocrinology, Diabetes and Metabolism since 2007 and a Diplomate of ABOM since 2016. Since 2018 she has served as a member of ABOM Obesity Medicine Certification Committee, tasked of developing Obesity Medicine recertification pathway for ABOM and a Board of Trustee of the Illinois Obesity Society (IOS) and since 2020 the society Treasurer. She is the Chair of the yearly University of Chicago/IOS Obesity CME.

Dr. Pannain's clinical interest is in obesity medicine and specifically obesity pharmacotherapy. She lectures locally, nationally and internationally on the topic of anti-obesity medications.



### Monica Gonzalez-Carrasco<sup>1\*</sup>, Ferran Casas<sup>2</sup>, Sara Malo<sup>1</sup>, Xavier Oriol<sup>1</sup>

<sup>1</sup>Quality of Life Research Institute, University of Girona, Girona, Catalonia, Spain <sup>2</sup>Doctoral Program on Education and Society, Faculty of Education and Social Sciences, Universidad Andres Bello, Santiago. Chile

# The role of satisfaction with the way that you look in health and well-being evaluations among 10-12 year-olds: A gender and cross-cultural analysis

Satisfaction with the way that you look is among the less valued life satisfactions domains among more than 93,000 children aged 10 to 12 belonging to 35 countries and recruited through a representative sampling procedure in the context of the Children's Worlds project. Satisfaction with the way that you look also makes a rather important contribution to satisfaction with life as whole and even more to satisfaction with health. This suggests that interventions aimed to feeling better with oneself should be part of public policies to improve health and well-being at these ages.

Differences among age groups and genders are outstanding as well as they are among countries. Thus, a decreasing with age trend from 10 to 12 is observed in satisfaction with the way that you look. In most countries girls express to be significantly less satisfied with the way that they look compared to boys. The variability in the mean range for this life domain among countries oscillates in more than 2 points in a 0-10 point-scale. The results point to the need to take particular account of age, gender and cultural factors when designing interventions to increase satisfaction with the way that you look.

This communication will additionally explore to what extent satisfaction with the way that you look is mediating the relationship between satisfaction with health and satisfaction with life as whole and how the relationship between these variables is associated to gender and country of origin in the two age groups. The results are thought to expand knowledge on the contribution that satisfaction with the way that you look has for health and well-being evaluations at these ages, as well as helping to adopt a broader and more preventive approach to improve them.

#### **Audience Take Away:**

The communication will help to show the relationships between satisfaction with the way that you look and health and
well-being evaluations of children aged 10 to 12 worldwide. Besides contributing to expand scientific knowledge on this
little-studied relationship so far, it can offer new clues to address the improvement of perceptions of health and well-being
through interventions aimed at feeling better with oneself

#### **Biography**

Dr. Mònica González-Carrasco is full professor in social psychology at the University of Girona (Catalonia, Spain). She's the co-coordinator of the research team on Childhood, Adolescence, Children's Rights and their Quality of Life and researcher at the Quality of Life Research Institute. Her main areas of research are children's and adolescents' subjective well-being and children's right to social participation. She's involved in the Children's Worlds, International Survey of Children's Well-Being (ISCWeB) (https://isciweb.org/), aimed to collect solid and representative data on children's lives and daily activities, their time use and in particular on their own perceptions and evaluations of their well-being.



Marlene Fabiola Escobedo-Monge<sup>1\*</sup>, Maria Carmen Torres-Hinojal<sup>1</sup>, Enrique Barrado<sup>2</sup>, Maria Antonieta Escobedo-Monge<sup>3</sup>, Jose Manuel Marugán-Miguelsanz<sup>4</sup>

<sup>1</sup>Faculty of Medicine, Valladolid University, Valladolid, Spain <sup>2</sup>Department of Analytical Chemistry, Science Faculty, University of Valladolid, Valladolid, Spain

<sup>3</sup>Department of Chemistry, Science Faculty, University of Burgos, Spain <sup>4</sup>Department of Paediatrics of the Faculty of Medicine, Valladolid University; Section of Gastroenterology and Paediatric Nutrition, University Clinical Hospital of Valladolid, Valladolid, Spain

#### Zinc nutritional status in children with chronic diseases and obesity

**Background:** Zinc is an essential nutrient, and its deficiency affects the normal human growth and development. Objective: The main aim of this study was to investigate the nutritional status of zinc using serum zinc and dietary zinc intake in a series of children with chronic disease and obesity.

**Methods:** A cross-sectional study was carried out in 24 patients (15 female). Anthropometric measurements and blood tests were performed. Hypozincemia was determined by serum zinc concentration by atomic absorption spectrophotometry and zinc deficiency in the diet by prospective 72-h dietary surveys.

Results: The mean serum zinc concentration of 87  $\mu$ g/dL and dietary zinc intake of 81% of the dietary reference intake (%DRI) were normal. Two out of 24 obese patients (8%) had hypozincemia and fourteen (58%) had a deficient zinc intake. Two adolescents with a low zinc content in the diet had hypozincemia. The remaining twelve patients (50%) with deficient zinc intake without hypozincemia would present a high risk of marginal zinc deficiency. Linear regression analysis shows a positive and significant association between serum zinc concentration and wrist circumference (r = 0.229, p = 0.018), magnesium intake (r = 0.244, p = 0.014), and serum iron (r = 0.228, p = 0.021); and dietary zinc intake with iron intake (r = 0.366, p = 0.002) and prealbumin (r = 0.303, p = 0.010). Multiple regression analysis shows that wrist circumference and serum iron had a meaningful association with serum zinc levels (r = 0.487, p = 0.008).

Conclusion: Serum zinc levels were associated with nutritional status, expressed as wrist circumference, magnesium intake and serum iron; and dietary zinc intake with iron intake, and prealbumin. This situation with 50% of marginal zinc deficiency and 8% with hypozincemia should alert us to a high risk of zinc deficiency in this series of children with chronic disease and obesity.

#### **Audience Take Away:**

- The audience will be able to use what they have learned in this presentation, because it is important to know zinc as an essential micronutrient for the growth and development of children and adolescents, especially those who suffer from chronic diseases
- The knowledge they acquire will make them more aware of the needs of children
- This presentation will help the audience in their work, improving their knowledge of the subject at hand. Inspiring other researchers or pediatricians to develop zinc-related projects
- This research constitutes a first step towards recognizing the problem, which in this case is zinc deficiency in
- children and adolescents with chronic kidney disease and obesity, and at the same time, it can serve as a guide for future research projects

#### **Biography**

Dr Marlene studied medicine at the National University of San Marcos, Peru, and graduated with a master's degree in Clinical Nutrition in Spain and Biological Aspects of Nutrition in Peru. She has a doctorate in Health Sciences Research in Spain and works as a research pediatrician at the Faculty of Medicine of the Valladolid University. She is a peer reviewer for the editorials of MDPI, International Journal of Environmental Research and Public Health and Medicine. She is very interested in food security and biofortification, and in the nutritional status of patients with chronic diseases, especially in childhood and adolescence.



# KEYNOTE FORUM

WORLD OBESITY AND WEIGHT MANAGEMENT CONGRESS

OCT 18-19, 2021



#### Satish Kumar David

Department of Information Technology, Strategic Center for Diabetes Research, College of Medicine, King Saud University, Riyadh, Kingdom of Saudi Arabia

# Engaging the future research in diabetes and endocrine with creative intelligence

The Future is not tomorrow and next week, the Future is now. According to the World Economic Forum, Creativity is one of the top three skills needed in this Century. Creativity is the Future of every other aspect of life. Every field and sector need Creativity to thrive effectively in the Century. However, the application of Creativity is known as Creative Intelligence. It is a skill that helps you to go beyond the existing to create new and unique ideas, values, situations, solutions, and substance. Creative Intelligence is the combination of Creativity and Intelligence and its help to move your work from the stage of work to competence and from competence to accomplishment. In a scientific world it is imperative that if you are going to accomplish any tangible or significant result or invention you must be willing to move beyond what is obtainable to what is attainable. Creative Intelligence gives you leverage on Scientific Investigations and Discovery. It enables our innermost Creativity to be fully engaged to come up with new inventions that can solve complex or wicked problems in the field of science. Looking at research on Endocrinology and Diabetes, Creative Intelligence helps in research and development concerning finding new and unique solutions to Endocrine and Diabetes related issues. Creative Intelligence helps you in identifying and proffering solutions to complex problems. With various research and findings on Endocrine and Diabetes related issues, engaging Creative Intelligence makes it possible to use its various tools to generate a lasting solution. In conclusion, Creative Intelligence empowers and enables individuals to use their minds to recognize, appreciate and imagine brilliant situations, solutions and values or ideas that can revolutionize any field of interest with emphasizing endocrine and diabetes related issues.

#### **Audience Take Away:**

- Creative Intelligence helps in research and development
- · Helps in identifying and proffering solutions to complex problems in obesity and weight management
- Finding new and unique solutions to obesity related issues

#### Biography:

Dr. Satish K David working as Researcher in Strategic Center for Diabetes Research, King Saud University, Saudi Arabia. 24+ years of professional experience, his research interests include mHealth, data mining, AI and Creative Intelligence. Several publications in reputed international journals. Also, co-author of 2 book chapters: Novel Health Mobile Technology as an Emerging Strategy in Diabetes Management (IntechOpen, 2017) and Classification Techniques and Data Mining Tools Used in Medical Bioinformatics (IGI-Global, 2019). Dr. Satish K David is Certified Speaker, Trainer with The John Maxwell Team and have trained over 3000 leaders in Middle East through various leadership programs.



# **Renata Machado Pinto**Federal University of Goias, Goiania - GO, Brazil

## Pediatric endogenous obesity: When to suspect endocrine or genetic causes?

besity is a condition with a multifactorial etiology, influenced by genetic, epigenetic, endocrine-metabolic, and behavioral factors. In about 95% of cases, obesity is called "common", "exogenous," or "polygenic."

For exogenous obesity to occur, common variants (polymorphisms) of hundreds of genes need to add up, each one conferring a slight increase in risk for weight gain. When this higher risk gene pool is associated with some habits and environmental factors, obesity ensues. Several pieces of research show the importance of genetics in the susceptibility to obesity. Studies with twins and adopted children show that 55 to 80% of the variation of body mass index (BMI) is attributed to genetic factors.

#### According to the genetic criteria, obesity is classified as:

- A) Monogenic when a mutated gene is responsible for the phenotype;
- B) Syndromic when a set of specific symptoms are present and a small group of genes is involved; usually the term is used to describe obese patients with cognitive delay, dysmorphic features, organ-specific abnormalities, hyperphagia, and/or other signs of hypothalamic dysfunction
- C) Polygenic also called "common" obesity, present in up to 95% of cases. Many genes add up to provide a further risk to the individual, and if associated with some habits culminate in weight gain.

The main warning sign for obesity secondary to endocrine diseases is the presence of short stature or reduced growth velocity since in exogenous obesity, height growth and bone maturation are generally accelerated. The primary endocrine diseases that lead to obesity are hypothyroidism, growth hormone (GH) deficiency, Cushing's syndrome, and hypothalamic dysfunction.

Suspect hypothyroidism if goiter, dry and cold skin, pubertal delay, constipation, poor school performance, and drowsiness. In the case of GH Deficiency, the critical reduction in growth rate, centripetal adiposity, and thin voice calls attention. Hypercortisolism courses with stretch marks, high blood pressure, full moon face, and hump. Obesity resulting from hypothalamic dysfunction, on the other hand, is hyperphagia, signs of intracranial hypertension, in addition to a history of radiation or central nervous system surgery.

#### **Audience Take Away:**

This review guides the clinician towards situations in which investigation for endogenous causes of obesity should be
carried out. The diagnosis of endogenous obesity, whether due to endocrine, monogenic or syndromic disease, is not just
an academic curiosity but impacts treatment and guidance on family recurrence

#### **Biography:**

Renata Machado Pinto graduated in Medicine in 1997, then held a medical residency in Pediatrics and later in Pediatric Endocrinology. She has a master's degree in genetics and a doctorate in health sciences, researching the effect of genetic polymorphisms in the genesis of childhood obesity and its complications. She is a professor in the department of pediatrics at the Federal University of Goiás, and is coordinator of the academic leagues of Pediatrics and Endocrinology. She is a member of the Scientific Department of Endocrinology of the Brazilian Society of Pediatrics. She works in a doctor's office, attending mainly the topics: growth, puberty, genital disorders, nutrition, dyslipidemia, and childhood obesity.



### **Huang Wei Ling**

Medical Acupuncture and Pain Management Clinic. Franca. Sao Paulo. Brazil

#### Is there any correlation between diabetes and obesity?

**Introduction:** The majority of the studies that we have nowadays are saying about obesity as one of the causes of formation of diabetes or the complication of diabetes due to insulin intake. But in this article, the author will show a different point of view about the formation of obesity and diabetes as coming from the same root, that are the energy imbalances and the deficiency in energy in the chakras' energy centers.

**Purpose:** to demonstrate that there is correlation between obesity and diabetes in the energy point of view, not one causing the other but both coming from the same energy imbalances, invisible by the naked eyes.

**Methods:** through two cases reports, one man and one women, with history of diabetes and obesity, using anti-glycemic medications to reduce glucose levels. Chakras' energy centers measurement were done to evaluate the energy of the internal massive organs according to traditional Chinese medicine.

**Results:** both patients were in the lowest level of energy, rated one out eight. Treatment were done using homeopathies according to the theory Constitutional Homeopathy of the Five Elements based on Traditional Chinese Medicine and crystal-based medications. Using this method of treatment, the body was able to restore all the functions of balacing Yin, Yang, Qi and Blood production, that was very compromised until than and after the begining of this treatment, the body started to reduce the hiperglycemia and also, the patient felt that they were urinating better and losing the stools every day and reducing the body's size .

**Conclusion:** obesity and diabetes has the same root as the problem that are the energy deficiencies in the chakras' energy centers and the treatment of this condition, replenishing the chakras' energy using homeopathy medications, were treating both conditions at the same time because both came from the same cause, that are the energy deficiency in the chakras' energy centers.

#### **Biography:**

Huang Wei Ling, born in Taiwan, raised and graduated in medicine in Brazil, specialist in infectious and parasitic diseases, a General Practitioner and Parenteral and Enteral Medical Nutrition Therapist. Once in charge of the Hospital Infection Control Service of the City of Franca's General Hospital, she was responsible for the control of all prescribed antimicrobial medication and received an award for the best paper presented at the Brazilian Hospital Infection Control Congress in 1998. Since 1997, she works with the approach and treatment of all chronic diseases in a holistic way, with treatment guided through the teachings of Traditional Chinese Medicine and Hippocrates. Researcher in the University of São Paulo, in the Ophthalmology department from 2012 to 2013. Author of the theory Constitutional Homeopathy of the Five Elements Based on Traditional Chinese Medicine.





WORLD OBESITY AND WEIGHT MANAGEMENT CONGRESS

OCT 18-19, 2021



### Sammie Mak<sup>1\*</sup>, Beth Turnpenny<sup>2</sup>, Samuel Trewick<sup>3</sup>

<sup>1</sup>NHS junior doctor, Manchester, United Kingdom

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<sup>3</sup>Dr, Trainee Doctor in Internal Medicine, Manchester, United Kingdom

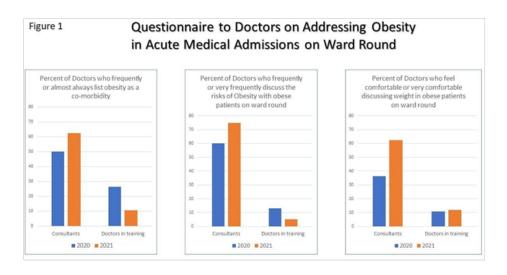
## Addressing the obesity epidemic on acute medical hospital admissions within the National Health Service (NHS)

**Introduction:** Obesity is a common, chronic condition, its prevalence rapidly rising, which carries significant morbidity and mortality as well as health economic burdens (1). Hospital admission provides an opportunistic occasion to discuss benefits of losing weight to our growing proportion of obese patients. During the COVID-19 pandemic, this is an even more urgent part of clinical practice given its links with greater risks of severe consequences from COVID-19 (2). As clinicians, it is necessary to focus our attention on tackling obesity and to empower our patients to impact their future health.

In 2020, physicians both in training, and consultants (attending physicians) at an NHS District General Hospital in Manchester, United Kingdom, demonstrated considerable variability in clinicians' confidence and awareness regarding obesity assessments, and efforts to improve this are discussed.

**Method:** A questionnaire was sent to physicians of both training and consultant grades, on a variety of issues surrounding tackling the obesity epidemic on ward round in acute medical presentations to hospital in morbidly obese patients, including current practice of addressing obesity, barriers perceived, and knowledge of local referral pathways for weight management. Following this, an educational programme was developed including teaching seminars, posters, and a pathway introduced to directly refer in-patients to weight management services in the community. The questionnaire was repeated in 2021.

**Results:** Fifty and twenty-eight clinicians responded in 2020 and 2021 respectively, the latter of whom eight (28.6%) were consultants and the remainder (71.4%) were junior doctors (training grades). Most junior doctors had rotated on their training programme to new hospitals, while there was minimal turnover amongst consultants. Figure 1 shows three questions with responses in 2020 compared to 2021, showing that confidence in addressing obesity on ward round increased after training in consultants, but decreased in training grades.



On being offered seven barriers to addressing obesity on ward round, the top two major perceived barriers in both 2020 and 2021 were a lack of clinical time and fear of causing upset to the patient.

Across both years, the majority of clinicians believed that a patient information leaflet with advice and weight loss services would be very useful.

Discussion and Conclusion: Amongst consultant physicians, by highlighting the issue of obesity, having an educational focus and installing a referral pathway, this led to increased confidence in discussing and documenting obesity with obese patients. Work on smoking cessation has proved that acute hospital admission can be an effective teachable moment in empowering patients to make lifestyle changes (3). Undoubtedly, the effect of the COVID-19 pandemic and increased awareness of the risks associated with obesity are likely to have contributed to increased awareness in consultants. Continued efforts are needed to educate healthcare professionals on identifying morbid obesity as a comorbidity, embracing ward round as an opportunity to discuss lifestyle factors and educating on available weight management services. Doctors in training who rotate regularly require this in core undergraduate and postgraduate training across the board, in order to make an impact to an obesity epidemic that is of grave global concern.

#### **Audience Take Away:**

Despite global health concerns around the rise in obesity, clinicians often lack confidence, time, and knowledge of local referral options when addressing the issue of weight in morbidly obese patients admitted acutely to hospital

Our questionnaire showed improvement in senior doctors tackling obesity in the acute hospital setting over a year after a variety of education events, posters, and investment in an online referral pathway for weight management services were introduced, suggesting that institutions that invest and focus on tackling obesity will see improvements in this area which will benefit patient care

Using acute hospital admission as a teachable moment and investing in smoking cessation training and services has had positive global consequences and there is an urgent need to treat obesity, and the empowering of patients to make better lifestyle choices, in a similar way

#### **Biography**

Dr. Mak completed her undergraduate medical degree at the University of Leeds, United Kingdom and graduated with an MBChB in 2019. Since, she has returned to her hometown, Manchester, where she is doing her foundation postgraduate training. In addition, she obtained the position of Design and Communications Officer for London WHO simulation 2020 and was subsequently appointed as the Head of Communications for UK Model WHO committee 2021. Last year, she presented a poster regarding the Obesity Epidemic in the UK at the Society of Acute Medicine annual conference and over the years, has been proactively combating this global issue.



### Liang Zheng<sup>1,2\*</sup>, Yaxin Li<sup>1,2,3</sup>, Aijun You<sup>1,2,3</sup>

Medicine, Shanghai, China

<sup>1</sup>Shanghai Heart Failure Research Center, Shanghai East Hospital, Tongji University School of Medicine, Shanghai, China <sup>2</sup>Research Center for Translational Medicine, Shanghai East Hospital, Tongji University School of Medicine, Shanghai, China <sup>3</sup>Department of Epidemiology and Public Health, Tongji University School of

## Association between four non-insulin-based indexes of insulin resistance and hypertension with hyperuricemia in elderly people in Shanghai, China

**Objective:** To compare the association between hypertension with hyperuricemia (HTN-HUA)with four non-insulin-based insulin resistance indicators, including the product of glucose and triglycerides (TyG index), TyG index with BMI (TyG-BMI), the ratio of triglycerides divided by HDL (TG/HDL ratio), and a novel non-insulin-based fasting score (METS-IR).

**Methods:** Data from a cross-sectional epidemiological study enrolling a sample representative for Shanghai, China population aged ≥65 years, were used to calculate the four indexes. The association with HTN-HUA was examined with binomial and multinomial logistic regression.

Results: A total of 4,352 participants were included, including 93 patients with hyperuricemia, 2,875 with hypertension, and 587 with hypertension combined with hyperuricemia. Multiple-logistic regression showed that TyG index, TyG-BMI, TG/HDL, HOMA-IR were all significantly correlated with hyperuricemia, hypertension and HTN-HUA. Compared with the lowest quartile, the ORs of the highest quartile of the four indicators for HTN-HUA were TyG index:4.977 (95%CI: 3.540-6.997), TyG-BMI: 10.037 (95%CI: 7.041-14.372), TG/HDL: 7.055 (95%CI: 4.972-10.099), METS-IR: 9.668 (95%CI: 6.739-13.870), respectively. TyG-BMI and METS-IR had significant discriminative ability for HTN-HUA and the AUC values were 0.716 (0.698-0.743) and 0.726 (0.700-0.753).

**Conclusion:** Our study suggested that TyG index, TyG-BMI, TG/HDL, HOMA-IR had a more significant correlation with HTN-HUA risk than that with HUA or HTN, and TyG-BMI and METS-IR had significant discriminative abilities for HTN-HUA

### **Biography**

Liang Zheng, Male, Ph.D, Associated professor of Tongji University, Shanghai East Hospital; Visiting scholar of Massachusetts University Medical School, Member of the Branch of Clinical Epidemiology and Evidence-based Medicine, Chinese Medical Association, Member of the Branch of Clinical Epidemiology and Evidence-based Medicine, Shanghai Medical Association, Editorial board committee of Chinese Journal of Evidence-based cardiovascular journal, and journal of Tongji University (medical science).



**Aboubakr Elnashar** Benha university Hospital, Egypt

### Obesity & gynecological cancer

An increasing number of women are obese. Several meta-analyses have studied the association between obesity and gynecological cancer and the effect of weight loss interventions on these outcomes. The proposed associations in previous meta-analyses could be causal but could also be affected by different inherent biases. Recent studies have provided solid evidence for an independent, linear, positive correlation between a pathologically increased body mass index and the probability of developing endometrial cancer, premenopausal ovarian cancer and postmenopausal breast cancer. The pathogenesis is complex and the subject of current research. Proposed causes include pathologically increased serum levels of sexual steroids and adiponectin, obesity-induced insulin resistance, and systemic inflammatory processes. The scientific evidence for an association between obesity and other gynecological malignancies is, however, less solid. The clinical relevance of obesity as a risk factor for cervical cancer and vulvar cancer appears to be negligible. Nevertheless, obesity appears to have a negative impact on prognosis and oncologic outcomes for all gynecological cancers.

### **Biography**

Prof Obs Gyn. Benha university Hospital, Egypt. President of Clinical Society of Obs & Gyn. Editor of Middle East Fertility Society Journal, Egyptian Fertility Sterility Journal, Benha Medical Journal. Member of Egyptian fertility sterility society board. 37 international publications in: Lancet, Human Reproduction, British J Obs Gyn, Fertility Sterility, J Assist Reprod Genet, International J Gyn Obs, Acta Obstet Gynecol Scand, J Obstet Gynaecol. Speaker in international conferences: ESHRE (5 times), RCOG, European Congress of Obs Gyn, MEFS. 480 lectures on Slide share. International reviewer of ESHRE Guidelines: 1. PCOS 2. COS3. Female fertility preservation 4. Terminology of ectopic pregnancy



### Vaijayanthi Kanabur<sup>1\*</sup>, Uma Jayasimha<sup>2</sup>

<sup>1</sup>Department Food and Nutrition, Smt.VHD Central Institute of Home Science, Bangalore, Karnataka, India

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### Obesity and food choice: Free will Vs forced choice

Edecision-making, family and community interaction, agriculture and food systems, ecology, in addition to individual factors. Food choice decisions often focus on what is eaten, while food consumption decisions are a subset of food choice which focuses more specifically on volume decisions. The former determines what we eat, the latter determines how much we eat. Food decisions determine energy intake. Overconsumption is the main driver of obesity, the effects of weight status on food decision-making are of increasing importance. Many food-related decisions occur in distracting environments and may lead to relatively "mindless eating."

A study was conducted Food decision making in families with adolescents. Families (n=60) residing in urban Bangalore, India, with at least one adolescent family member (13-17 years) were selected by purposive sampling. An interviewer administered questionnaire was developed and used for data collection. Food decisions were divided into 3 categories. Decisions related to preparation, purchasing, and decisions related to eating out. The results of the study indicated that ease of preparation, taste, health consciousness and joy of cooking were most important factors with respect to food preparation at home, Price of food commodity, Value for money-were determining factors with respect of purchase of food items (both ready to eat and ready to cook) whereas majority were not particular about nutritive value of a food when purchasing food. Craving for Variety, lack of time to prepare food and inevitable situations of being away from home were driving factors with respect to eating food outside home.

So it can be concluded that different factors influence food choice in different situations. Though it appears that most of us exercise free will in choosing foods, it becomes a forced choice due to the factors that determine the food behaviour. There is a need to understand the interaction between various factors under different situations that ultimately decide what we eat and how much we eat. This can help the policy makers to plan interventions for moving towards healthy eating behavior.

#### **Audience Take Away:**

- Food choice decisions vary with a situations under which food is consumed
- Understanding food decision making can help to improve individual, family, and community health and well-being by planning interventions to incorporate healthy eating behaviors
- There is a need to create awareness regarding mindful eating if food choice has to become healthy

### **Biography**

Dr. Vaijayanthi Kanabur, studied M Sc Food and Nutrition at Agricultural University, Hyderabad in 1999. She received her PhD from Bangalore University. She is a recipient of Junior Research Fellowship from Indian Council of Agricultural Research, New Delhi. She has received summer research fellowship from Indian Academy of Sciences, Bangalore. She has published 14 research papers and 4 books. She has completed two research projects. She is working as Assistant Professor in Department of Food and Nutrition, Post graduate and Research Centre, Smt. VHD Central Institute of Home Science, Bangalore.



## Ranakishor Pelluri<sup>1,2,3\*</sup>, Kongara Srikanth<sup>2</sup>, Jithendra Chimakurthy<sup>1</sup>, Shriraam Mahadevan<sup>3</sup>, Vanitha Rani Nagasubramanian<sup>3</sup>

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## The role of body mass index causing depression in women: An observation from weight reduction trial

**Background:** Depression is much prevalent in Women than men. Obesity and depression are leading causes of both physical and mental disability and the link between these disorders had not explored well. In view of this, in the present study we aimed to investigate the association between Body Mass Index (BMI) and depression in the trail participants of weight loss intervention.

**Methods:** The vital and biochemical parameters including lipid profile, homeostasis model assessment of insulin resistance (HOMA-IR) and metabolic syndrome (MetS) components were measured for eligible screened subjects who participated in the trial of weight loss intervention at first visit. A self-reported Patient Health Questionnaire (PHQ-9) scale was employed to evaluate the depression among the participants.

Results: Obesity was associated with significant increases in depression (OR=13.01, 95% CI 4.40 to 38.49) as compared to overweight subjects. Female subjects with OB had a greater risk for depression of ( $\beta$ : 3.725, OR: 42.62, 95%CI: 5.74-316.3 and P=0.000) then male subjects ( $\beta$ : 1.922, OR: 6.83, 95%CI: 1.8-26 and P=0.005) and it was statistically significant. There was no associations were found between other models (Insulin Resistance and Metabolic syndrome components) and depression in both genders (P<0.05).

**Conclusion:** As women are much concerned of their physical appearance, they are psychologically much depressed. The odds of depression were more in obese women than overweight subjects. The other factors including metabolic syndrome and insulin resistance are not contributing to any form of the depression.

#### **Biography**

Mr. Ranakishor Pelluri was Research Scholar at Department of Pharmacy Practice, Sri Ramachandra Institute of Higher Education & Research, Deemed to be University, Porur, Chennai-600116, Tamil Nadu, India. The are of interest in Endocrinology and Metabolism, Clinical Research.

### Onimawo Ignatius Akhakhia<sup>1\*</sup> and Ejiofor Philomina<sup>2</sup>

<sup>1</sup>Department of Human Nutrition and Dietetics, Ambrose Alli University Ekpoma

## Obesity and body composition of young adults (students) in a Nigerian university

The study was designed to assess the body mass index (BMI) and body composition in order to predict the prevalence of under weight and obesity among the students in Faculty of Agriculture and Veterinary Medicine of Imo State University, Owerri, Imo state. A cross sectional study was conducted on the students and a stratified method of sampling was used in the sample selection. A structured pre-tested questionnaire was used to obtain information on the socio economic data and dietary pattern of the students while their weight (kg) and height were measured using standard methods. Body mass index was calculated from the weight and height measurements. Waist and hip circumference were measured to obtain the value waist –hip ratio of the students. Skin fold thickness was measured in (mm) at four sites to determine the % total body fat of the students. A total of three hundred students voluntarily participated in this study made up of one hundred and twenty (120) males, and one hundred eighty (180) females. The age range was 18-31 years. About 4.6% had BMI <16kg/m² (severely underweight) while 33.3% had BMI range of 18.5-25 kg/m² (normal) and approximately 21% had BMI range of 25-29.9 kg/m² (overweight). About 10.6% had BMI range of 30-34.9kg/m² (mildly obese) while 6.6% had BMI range of 35-39.9kg/m² (moderately obese while 2% had BMI >40kg/m² (morbid obesity). The results showed that 29.6% were underweight (13.6% females), 20.6% were overweight (6% males, 14.6% females) and 17.2% were obese (3.6% males, 13.6% females). The prevalence of overweight and obesity was higher among the females than males (P<0.05).

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## Comparative analysis of different anthropometric indicators of obesity and obesity-related diseases

Obesity and obesity-related diseases are among the leading causes of mortality in middle and high-income countries. Despite the large volume of data collected worldwide the most cost effective, efficient and accurate methods and/or indicators for obesity evaluation remain unknown.

In recent decades several new obesity and obesity-related disease indicators have offered a more reliable estimate. These new indicators are primarily based on calculations using anthropometric data. Easily identifiable values are required when using an indicator that can rapidly and conveniently assesses health risks in a wide population or cross-sectional studies. However, highly accurate measuring devices tend to be expensive and more time-consuming, thereby unlikely to be used as daily routine methods for determining body composition for epidemiological studies.

We performed a study aimed to estimate common anthropometric parameters and calculations associated with increased risk of obesity and obesity-related diseases, primarily cardiometabolic diseases. The main purpose of this presentation is to give insight into the inconsistencies of results produced by using different approaches.

This cross-sectional study enrolled 584 students (aged 19–25 years) from the University of Latvia. Anthropometric parameter measurements (height, weight, waist circumference, hip circumference, and six skinfolds) and bioelectrical impedance analysis were performed in each participant. Using the anthropometric data, we calculated the health risk indices, namely, body mass index, waist-to-hip ratio, body fat percentage, body adiposity index, relative fat mass, and the Clínica Universidad de Navarra - Body Adiposity Estimator. Subsequently, the prevalence of increased risk of obesity-related diseases in the study group was estimated using the anthropometric and calculated health risk data.

When using different easily identifiable anthropometric measurements and calculations in assessing the prevalence of the increased risks of obesity-related diseases, by implementing different approaches the results were significant inconsistent. It is important to note that it is quite difficult to accurately assess the risk due to the lack of uniform gender and age-specific standards. Because of these inconsistencies and lack of standards, future research is needed to develop best practice recommendations for optimal and easily identifiable anthropometric indicators and/or combinations of indicators in assessing obesity-related health risks in large populations.

### **Audience Take Away:**

- The audience will gain knowledge regarding implementing various easy to use indices useful for assessing cardiometabolic
- The presentation will highlight the problem of inconsistent results obtained using different indices
- This presentation will help the audience identify the best approaches to cardiometabolic risk assessment for their daily routine

### **Biography**

Z.Lukstina studied Biology with a specialization in Human physiology at the University of Latvia and graduated as MS in 2014. She is a part of the research group of Assoc. Prof. L.Ozolina-Moll at the Department of Human and Animal Physiology, University of Latvia. Currently she is a third year PhD student at the University of Latvia. Her field of interest is Nutritional Physiology. Z.Lukstina also obtained the position of a lecturer in University of Latvia.



### Zaid Al-Attar1\*, Saba Jasim2, Imad Hashim1

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## Anemia prevalence among overweight/obese patients. A cross-sectional study

**Introduction:** The World Health Organization considers anemia to be a worldwide public health issue. Weight gain may cause low-grade systemic inflammation and an increase in hepcidin, which causes iron to be sequestered in various cells such as macrophages, liver cells, and enterocytes. This can lead to anemia of inflammation.

**Objective:** The goal of this study is to see what impact a person's BMI has on various complete blood count parameters.

**Materials and methods:** A total of 200 overweight and obese people of various ages were studied in this cross-sectional research. They were allocated into overweight and obese categories based on their BMI, and several complete blood count data were recorded. Different blood parameters were compared between intergroups, and the relationships between body mass index and those values were computed.

**Results:** The prevalence of anemia was 26%. For anemic cases 71.2% are females and the residual are males. WBC count is higher in obese patients as compared with over weight. There is a defect in the management of anemia in obese patients.

**Conclusions:** There were effects of increasing body mass index on complete blood count parameters in terms of anemia and increased WBC count which reflect an underlying inflammatory mechanism. It is vital to reevaluate the management scheme for obese patients to focus and treat obesity related anemia.

### Audience Take Away:

- · Recognize the impact of obesity on other health related issues which is anemia in our study
- Update and improve our clinical practice to focus on and manage obesity related anemia

#### **Biography**

Dr. Zaid has studied and awarded in medicine and surgery in 2001. He practiced medicine in Al\_Khadimyah Teaching Hospital/Baghdad for 2 years. In 2003 commenced Msc study in pharmacology and been awarded the degree in 2005 from Al-Nahrain College of Medicine. He was lecturer in Al-Kindy College of Medicine /University of Baghdad till 2012 when he started PhD- pharmacology study in University of Liverpool/UK. He has been awarded the degree in 2017. Now he is an associate prof. at Al-Kindy college of Medicine/Dept. of pharmacology with 31 research article most of them are in scopus journals.



### Juliana Pulsena Cunha

Faculty of Nutrition, Federal University of Goias, Goiania, Goias, Brazil

### **Meditation and Nutritional status**

overweight is influenced by several factors such as lifestyle, genetics, social class and education, but also psychological and psychiatric factors. Those people usually have their body image affected, causing them to have a problematic relationship with their own body.

People with excess weight can be dissatisfied with body image, especially women. This can lead to the development of eating disorders, causing poor weight loss or increasing weight gain. The conventional treatment has lower impact in these individuals, becoming a challenge for health professionals to provide treatment.

Other methods have been used alongside conventional ones to improve self-esteem and in consequence eating behaviors can be affected. One of these approaches is meditation, which can promote a change in psychological and emotional states and influences how individuals deal with food and the body.

The practice of meditation has been tested as a potential therapeutic intervention for a wide range of clinical problems including eating disorders and other addictions wherein anxiety and impulsivity are key features. Even a short time of practicing can be effective in reducing anxiety and promoting self-observation, which is an important process to be aware of. To be aware is the key to achieve a healthy life, as well as live by taking the focus away from criticism. Small changes are needed to reflect on their results.

Our preliminary results have been shown that eating patterns can be changed even for a short time a day of exposure to meditation practice, including expressive changes in mental suffering.

### **Audience Take Away:**

- To see an individual like they are, not as a disease
- Let go the control of treatment and be a part of it
- Look at them as able to handle their own process

### **Biography**

Dr. Cunha graduated in Nutrition from University of Brasília (1995), she is Master's degree at University of Brasília (2000) and Ph.D. in Science Health from University of Brasília (2005). She is a researcher in Nutrition, Mental Health, Meditation and Self-care. Dr. Cunha is an Associate Professor from Federal University of Goiás (UFG) in Clinical Nutrition and Coordinates a Project entitled Mental Health is Integral Health in her University.

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We wish to meet you again at our upcoming Conference:

2<sup>nd</sup> Edition of Obesity and Weight Management Congress October 17-18, 2022 | Orlando, USA

### **Questions? Contact**

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