

14th Global Obesity Meeting

October 23-24, 2017 Dubai, UAE

Workshop (Day 1)

14th Global Obesity Meeting

October 23-24, 2017 Dubai, UAE



Daniel W JonesUniversity of Mississippi Medical Center, USA

School based prevention and management of childhood overweight and obesity

Childhood obesity is now a worldwide problem. Almost every country around the globe is experiencing increasing rates of overweight and obese children. Left unmanaged, this trend will eventually result in an exploding epidemic of adult obesity, type-2 diabetes mellitus, hypertension and cardiovascular morbidity and mortality. The United States childhood obesity rates are among the highest in the world. The state of Mississippi has the highest rates among the 50 states in the United States. A decade ago, a local foundation, The Bower Foundation, determined to turn most of its resources to addressing the challenge of childhood obesity. This effort is used here as an example of a successful strategy to address the issue of childhood obesity at a population level. A multi-prong strategy was initiated to use school based programs to bring about change. Move to learn is a simple approach to increase physical activity for children during school hours. Few schools in Mississippi have dedicated times for physical education. This program integrates 10 minutes exercise sessions throughout the school day into the regular academic curriculum. The title of the program emphasizes to teachers that use of the program will not only improves physical health, but improves academic performance. Nutrition programs were begun in schools to decrease the use of fried foods and to increase consumption of fresh fruits and vegetables. Elimination of sugar based beverages from vending machines in school was part of the nutrition strategy. Policy initiatives with state government were critical is achieving some of the program's goals. Over the first years of the effort, childhood obesity rates for the state decreased from 25.5% to 23.7%, one of the few states to achieve a decrease in rates over that time.

Biography

Daniel W Jones has received his Medical education and Internal Medicine training at The University of Mississippi Medical Center where he presently works as a Professor of Medicine and the Director of Clinical and Population Science for the Mississippi Center for Obesity Research. He has served as the Dean of the School of Medicine and Chancellor of The University of Mississippi. He is also the Past President of the American Heart Association.

djones@umc.edu



14th Global Obesity Meeting

October 23-24, 2017 Dubai, UAE

Scientific Tracks & Abstracts (Day 1)

14th Global Obesity Meeting

October 23-24, 2017 Dubai, UAE

Outdoor activities like a tool of overweight and obesity management in children

Vaclav Bunc and Marie Skalska Charles University, Czech Republic

The present is characterized by the increasing movement deficiency leading to severe complications including medical. Basic health concern is the rise in overweight and obesity. The reason is the mismatch of energy intake to its output. Energy expenditure in the last two decades of stagnating or even declining, output dropped significantly. Realized volume of physical activity during this period decreased by about 30%. In children, the regular realization of physical activities clearly depends on the form and method of the offer. The classic movement activity currently is not sufficiently interesting for children and therefore it is necessary to search for new forms and methods of the offer. To such activities it clearly belongs to outdoor activity. The effect of exercise intervention using outdoor activities (walking, cycling, outdoor games, inline skating, etc.) was studied in 135 girls 151 boys overweight or obese at the age of 6-14 years (mean age was 11.6±3.6 year, body mass was at least 90% of the population norms). The exercise program was at least 5.5 kcal.kg¹.day¹. Applied intervention increased exercise regimen at least 30% and caused significant body mass loss (13.8±2.8% of initial body mass in boys and 14.0±2.9% in girls). Body mass decrease expressed as a percentage of initial value was independent of age and sex and was directly proportional to the energy content of the imposed movement training. Outdoor activities that respect individual interests and physical experience are able to significantly reduce overweight and obesity in children aged 6-14 years.

Biography

Vaclav Bunc has completed his PhD from Technical University Prague in 1970 in Applied Physics. Currently he is the Faculty of Physical Education and Sports Charles University.

bunc@ftvs.cuni.cz

14th Global Obesity Meeting

October 23-24, 2017 Dubai, UAE

Can we really provide physical activity recommendations for obese people if we are not obese? A phenomenological perspective using a bariatric weighted suit

Claire Mills

University of Gloucestershire, UK

As researchers we are cognizant of the issues relating to the lack of physical activity associated with obesity. However, guidance given to the general population on physical activity levels fails to recognize the difficulties that obese people face to be physical active. Therefore, this study was designed to provide a phenomenological perspective in a practical context n=30 undergraduate sports degree students (x±s; age=20.6±2.1 years; body mass=79.1±8.5 kg and stretched stature=179.8±7.3 cm) were recruited. Participants performed in 5 standardized fitness testing parameters, sit and reach (SR), vertical jump (VJ), Illinois agility run (IAR), 10 m sprint (10 mS) and a 5 minute motorized walk (5 MW) whilst monitoring heart rate (HR). Upon completion, participants wore a bariatric weighted suit (BWS) which provided an additional 20 lbs of padded weight and repeated the 5 testing parameters. Results indicated pre and post ranges of SR from 28.0 to 20.1 cm, VJ=46.0-20.3 cm, IAR=16.8-32.1 s, 10 mS=5.10-7.98 s and the 5 MW found pre resting HR (x±s) 62.0±3.4 bpm compared to post HR (x±s) 184.0±3.5 bpm, indicating an significant increase (P<0.05) of 122 bpm or 234%. Wearing the BWS caused physical stresses and constraints, suggesting that the BWS could be used with those who are at risk of becoming obese to demonstrate what could happen if they fail to take preventative action.

Biography

Claire Mills has her research interests in body composition where she is actively involved with professional athletes, children and obese people. She has published many academic papers on body composition and obesity and is an Editorial Reviewer for both the Obesity Research Open Journal and the Sports and Exercise Medicine Open Journal.

clairem@glos.ac.uk

14th Global Obesity Meeting

October 23-24, 2017 Dubai, UAE

The phenomena of ectopic melanin synthesis in adipose tissue has great potentials and promises in relieving oxidative stress before obesity complications

Mohammed Jarrar and Ahmed El-Shafey University of Modern Sciences, UAE

The worldwide spread of obesity has become a global health subject. It has many related complications such as cardiovascular 👃 disease, insulin resistance and non-alcoholic fatty liver disease. Ectopic melanin synthesis in adipose especially in obese individuals is still a Pandora box. While there is a very strong correlation between obesity complications, oxidative stress and inflammation in adipose tissue, the molecular mechanisms of the potential function of ectopic melanin involved are still unknown. A better understanding of the relationship between the oxidative stress and inflammation biomarkers in the adipocytes treated with melanin and its precursors may shed some light on the mechanisms that give rise to the inflammatory process and ultimately, would lead to intervention strategies. As melanin is considered to have both antioxidant and inflammatory characteristics, we hypothesize that melanin and its metabolite intermediates could intervene in the adipose oxidative stress and inflammation status, in vitro and in vivo cultures. As there is no one definitive measure of oxidative stress and inflammation, multiple biomarkers such as protein carbonyl, malondialdehyde (MDA), glutathione oxidation, adiponectin and TNF-alpha and many other adipocytokines can be measured. We believe that melanin and or its precursors can block the lipids' peroxidation process through scavenging the reactive oxygen species (ROS) such as hydroxyl radical that oxidize lipids in adipocytes or/and prevent the lipid peroxidation byproducts such as MDA and 4-hydroxy-2-nonenal (4-HNE) from exerting their destructive impact on adipose cells. In addition, as a long-term strategy of prevention, adipose tissue in obese individuals get rewired and readapt to oxidative stress and inflammation by lunching rejuvenation program. Such activities could be in parallel or lead to stimulation of melanogenesis through intersecting signaling network. Some of newly discovered type of mesenchymal stem cells (MSCs), multilineage-differentiating stress-enduring (Muse) cells could be triggered to differentiate to melanocyte-like cells and reactivating melanogenesis enzymes. Even though some of the recent research has shed more light on possible preventive or therapeutic role of melanin in preventing obesity complications, lots of more research still needed to explain the mechanism of such new phenomenon of ectopic melanin synthesis in adipose tissue. Testing melanin in obese animal models and in vitro cell culture systems are paramount measures before clinical trials.

Biography

Mohammed Jarrar has worked as an Associate Professor of Biotechnology and Medical Technology at the American University of Ras Al Khaimah and Assistant Professor of Bioscience at George Mason University. He has also worked as Clinical Laboratory Scientist at Johns Hopkins Hospital, Laboratory Medicine, USA, Senior Research Associate at Kennedy Krieger Institute, Baltimore, USA and Adjunct Research Professor in Translational Research Institute and The Betty and Guy Beatty Liver and Obesity Program, Inova Fairfax Hospital, Fairfax, VA.

m.jarrar@ums.ae

14th Global Obesity Meeting

October 23-24, 2017 Dubai, UAE

A review of a holistic health intervention for improving the health status of obese national service recruits

Deborah Allen, Gareth Picknell, Kirstie Lawton, Graham Nicholson and Mouza Al Shehhi UAE Armed Forces, UAE

A systematic analysis of global obesity estimated the UAE's obesity prevalence at 12.2% for males less than 20 years of age and 27.1% for males aged 20 years and above. More recently, evidence has suggested that obesity rates of school children in the UAE are also rising at an alarming rate and that these increases are likely to continue into early adulthood. Given these trends and considering that national service is compulsory, it is not surprising that up to 30.0% of males enrolling into their military service are considered obese. In attempts to reduce this figure and to provide holistic support to these individuals, national service implemented health centers that aid the streamlining of recruits into tailored programs that include specific dietary, physical training and educational elements. National service recruits (age: 22.4±4.4 years, n=5749) with a Body Mass Index (BMI)>30.0 kgm² had their anthropometry measures taken at the beginning and end of initial training. Over the course of a 15 week period significant changes were noted for their body mass (T1=110.7±17.7, T2=94.2±15.19 kg; t=222.1, P<.001), BMI (T1=37.3±5.3, T2=37.8±4.6 kgm²; t=230.3, P<.001) and waist-to-height ratio (T1=0.66±0.07, T2=0.57±0.77 waist (cm)/height (cm)) t=131.8, P<.001).

Biography

Deborah Allen has been working as the Head of Dietetics for the UAE Armed Forces within the Physical Readiness Department since 2008 and is currently heading the Nutrition and Dietetic program for the UAE Armed Forces National Service. She has completed her Bachelor's degree in Sport Science and Biology and Master's degree in Human Nutrition and a PG Diploma in Dietetics. She has worked for renowned academic institutions including Deakin University, Australia and Trinity College, Dublin where she has been involved in a number of international research projects.

deborah.uae@gmail.com

14th Global Obesity Meeting

October 23-24, 2017 Dubai, UAE

Childhood obesity

Horia Mawlawi

Prince Sultan Military Medical City, Saudi Arabia

Childhood obesity is a major public health crisis nationally and internationally. The prevalence of childhood obesity has increased over few years in all pediatric age group in both sex. Approximately 22 million children under 5 years of age are overweight across the world. The number of overweight children and adolescents has doubled in last 2 to 3 decades in the world. World Health Organization on childhood obesity found 41 million children below 5 years either obese or over weight as of 2014. However more than 90% of cases are idiopathic and less than 10% are associated with hormonal or genetic causes. The idiopathic mainly caused by imbalance between calorie intake and calories utilized. High calorie density and fat content of modern diet and lack of physical activity is associated with increased risk of obesity. Physical, psychological and social health problems are caused due to child health obesity. Comorbidities associated with obesity and overweight are similar in children as in adult population elevated blood pressure, dyslipidemia and high prevalence insulin resistance and type-2 diabetes appear as frequent complication in the overweight and obese pediatric population. Approaches in the prevention and treatment of childhood overweight and obesity are urgently required including first healthy diet and physical activity when lifestyle modification is insufficient to reach weight loss and complication of obesity affect child health pharmacotherapy is recommended if age more than 10 years bariatric surgery is reserved for carefully selected sub group of young children with obesity related co-morbid condition threaten the child health where lifestyle and medication have been evaluated but found not be effective.

Biography

Horia Mawlawi has received her Bachelor's degree from King Abdulaziz University, Jeddah, Saudi Arabia. She is part of Arab Board in Pediatric, National Guard Hospital, Riyadh, KSA. She was the Consultant of Pediatric Endocrinology and Director of Fellowship training program of Endocrinology.

hmawlawi@psmmc.med.sa

14th Global Obesity Meeting

October 23-24, 2017 Dubai, UAE

Dietary habits, practices and knowledge among young athletes in the United Arab Emirates

Seham M AlRaish and Carine Platat United Arab Emirates University, UAE

An appropriate diet is crucial for athletes. An insufficient nutrient intake can lead to health disorders. To describe the nutritional knowledge, nutritional practices and dietary habits for athletic individual in the United Arab Emirates cross-sectional study was conducted. 59 male soccer players 13 to 18 years were recruited from Al Jazira Academic sports clubs. Nutrition knowledge, practices and habits was evaluated by questionnaire, different components of the nutritional status and socio-demographic data were collected. Both questionnaires were administered in groups under the supervision of a trained interviewer. The software SPSS version 23 was used. Food frequency consumption separated the frequency of consumption of different food per week. Food were separated into the six main food groups: Cereals (14.11±4.56), dairy (10.00±3.32), meat, fish (5.93±2.28), fruits and vegetables (11.11±4.55), snack (7.91±3.23) beverages (8.25±2.55) .The significant relationship was found between mothers education level and milk group (p-value<0.01), snack group and weight (kg) (p value<0.03) and athletes consumed snack group and skin fold sub-scapular (p value=0.04). Knowledge score was (80.73±8.81), score for self-efficiency (18.88±3.66) and attitude (21.30±1.88). The majority of the adolescent Soccer players considered in this study fell into the normal weight category and all are of a normal height according to the anthropometric data. The implication of this finding is that the athletes are considered to have an excess of body fat stores and less skin fold then it is desirable. A quite good dietary knowledge but limited healthy dietary practices and ability to change were observed, also a significant influence of the family environment.

Biography

Seham M AlRaish is currently pursuing PhD at the United Arab Emirates University after completing her Master's degree in Environmental Science. She has published two posters in reputed conference.

200440261@uaeu.ac.ae

14th Global Obesity Meeting

October 23-24, 2017 Dubai, UAE

Hyoscine butylbromide: A study of its use as an antispasmodic in bariatric surgery

Syed Imran Abbas

Dubai Health Authority, UAE

Background: During bariatric surgery one of the challenges is spasm of stomach and small intestine especially during measuring the exact length of small intestine.

Introduction: Pharmacological studies revealed that hyoscine butylbromide is an anticholinergic drug with high affinity for muscarinic receptors located on the smooth-muscle cells of the GI tract that cause smooth-muscle relaxation.

Objectives: This study focuses on effect of hyoscine butylbromide as an antispasmodic drug and is helpful during bariatric surgery to relax the tonicity of stomach and small intestine.

Methods: We started use of hyoscine butylbromide since March 2016 and applied for 20 patients randomly and compare with control group. Our comparative factors were number of staplers, number of endoclips for hemostasis, time of surgery. Dose of hyoscine 40 mg in 100 cc N/S for 10 minutes before stapling till 30 minutes.

Results: From 20 patients under study average BMI 43.3, female 13, male 7, average age 34, sleeve 7, MGB 10, RNYGBP 3, average time of surgery sleeve 45 min, MGB 48 min, RNYGBP 66 min. Average number of stapler sleeve 5, MGB 5, RNYGBP 4. Average number of endoclips is sleeve 4, MGB 7, RNYGBP 5. In control group from 20 patients average BMI 42.5, female 12, male 8, average age 35.6, number of sleeve 8, MGB 9, RNYGBP 3, average time of surgery sleeve control group 53 min, MGB 58 min, RNYGBP 78 min. Average staplers sleeve control group 6, MGB 6, RNYGBP 4. Average number of endoclips sleeve control group 13, MGB 16, RNYGBP 10.

Conclusion: These clinical results support the use of hyoscine in a range of indications related to spasm of GI tract during bariatric surgery, than stapling of stomach and measurement of small intestine become much easy and exact.

Biography

Syed Imran Abbas is a Consultant Laparoscopic Metabolic and Bariatric Surgeon Dubai Health Authority, Dubai and Medical Specialists Centre Dubai, Life Line Hospital Dubai, Iranian Hospital Dubai. He has completed his Doctor of Medicine degree from Qazvin University of Medical Sciences and Health Services in Iran and Iranian Diplomat of Board of General Surgery from Tehran Medical University in Iran.

dubaiobesity@gmail.com

TA. T		4		
	O	TΩ	•	۰
Τ.4	v	w	O.	۰



14th Global Obesity Meeting

October 23-24, 2017 Dubai, UAE

Scientific Tracks & Abstracts (Day 2)

14th Global Obesity Meeting

October 23-24, 2017 Dubai, UAE

Eating frequency and lactation in relation to changes in body weight and body fat during the first 12 months postpartum: A prospective observational study

Aisha Abdalla Almulla Tawam Hospital, UAE

Introduction: There are many factors that are related to postpartum weight retention such as pre-pregnancy weight, breastfeeding, physical activity level (PAL) and total energy intake (EI). Studies investigating maternal eating frequency (EF) postpartum and its relation to body weight (BW) and body fat (BF) are limited.

Objectives: To examine if there are relationships between maternal EF, lactation and changes in BW and BF from 2 weeks to 12 months postpartum. And to investigate if there is a difference in maternal EF in relation to lactation behavior, or changes over time in BW, BF, body mass index (BMI), PAL, EF and EI depending on lactation duration.

Methods: 83 postpartum healthy women (25-40 years) from Gothenburg were included. Study visits were at 2 weeks, 4 months and 12 months postpartum. At each time points, BW and BF were measured and data from four-day diet records were used to determine EF at each time point. Women were also classified in accordance with their lactation behavior and duration at 4 months postpartum.

Results: There was a significant increase in BW from estimated pre-pregnancy BW to 4 months postpartum within all lactation duration groups. A significant reduction in BW, BF and a significant increase in PAL was shown from 2 weeks to 12 months postpartum only among those who breastfed longer than 4 months. EI was higher at 4 and 12 months postpartum, among those who breastfed longer than 4 months. There were no significant relationships between EF at 4 and 12 months postpartum, respectively and changes in BW and BF. There were significant positive relationships between EF and EI both at 4 and 12 months postpartum. EF at 4 months postpartum was significantly higher in the full breastfeeding group compared to the no breastfeeding group.

Conclusion: Changes in BW and BF postpartum are related to factors such as lactation behavior and duration, PAL and total EI, but the relation to maternal EF is still unclear.

Biography

Aisha Almulla has completed her Bachelor's and Master's degree from the University of Gothenburg, Sweden in Clinical Nutrition and Dietetic field. She is a Registered Dietitian working in Tawam Hospital in the Community Nutrition Department dealing with patients and conducting researches in the nutrition field. She is a Member in the American Society for Nutrition and the Swedish Association of Clinical Dieticians and the United Arab Emirates Nutrition Group.

almulla.aisha@gmail.com

T AT	4	
	otes:	
Τ.4	utts.	

14th Global Obesity Meeting

October 23-24, 2017 Dubai, UAE

Association between β-amino-isobutyric acid and cardiometabolic risk factors

Mirey Karavetian¹, Suzan Haidar², Nanne de Vries², Alessandro Laviano³ and Mohammad Rachid⁴

- ¹Zayed University, UAE
- ²Maastricht University, Netherlands
- ³Sapienza University of Rome, Italy
- ⁴Lebanese International University, Lebanon

Physical activity protects from the development of chronic diseases. Preclinical studies suggest that circulating levels of the myokine β-amino-isobutyric acid (BAIBA) may prevent obesity and improve cardiometabolic health. We aimed at assessing among healthy young individuals whether serum BAIBA is associated with physical activity, markers of cardiometabolic risk and whether gender differences exist. The design was cross-sectional, conducted on 80 university students. Anthropometry, blood pressure, lipid profile, blood glucose, C-reactive protein, cortisol and physical activity were measured and analyzed against serum BAIBA levels. Mean age of the sample was 19.3±2.0 years. BAIBA levels were 1.57±0.61 μM. Males had significantly larger waist (86.0±9.6 cm), systolic and diastolic blood pressure (124.9±11.7 mmHg and 77.9±9.9 mmHg, respectively), fasting blood glucose (84.6±7.5 mg/dL), cortisol (594.8±158.9 nmol/L) and physical activity levels than females. They also had significantly lower HDL (46.9±7.3 mg/dL). BAIBA concentrations in males and females were not significantly different. No significant association was found between BAIBA concentrations and nutritional, metabolic and functional parameters, except for diastolic blood pressure (DBP) in males (P=0.03). BAIBA in males predicted DBP as disclosed by ROC curve analysis. The BAIBA value of 0.97 μM was estimated as the best predictive value in distinguishing normotensive DBP in males whereby lower levels would distinguish higher diastolic blood pressure. In conclusions, among healthy, young individuals, serum BAIBA levels were not related to nutritional status, metabolic status and physical activity, but they were inversely related to DBP in males only.

Biography

Mirey Karavetian has earned her PhD in Health Promotion in Medical Sciences from Maastricht University, Netherlands and her Dietetics degree from American University of Beirut, Lebanon. She has extensive experience in nutrition management of the chronically and critically ill. Her research is focused on finding effective strategies to change dietary behavior in chronically ill patients. Her publications focus on dietary management of hemodialysis patients and finding the optimal dietitian-to-patient ratio needed in the hemodialysis unit in the Arab world for optimal clinical outcomes.

mirey.karavetian@zu.ac.ae

Christine Greaves, J Obes Weight Loss Ther 2017, 7:6 (Suppl)
DOI: 10.4172/2165-7904-C1-051

14th Global Obesity Meeting

October 23-24, 2017 Dubai, UAE

International health policy trends and industry response in the GCC

Christine Greaves

Mars GCC, UAE

The International Food & Beverage Alliance (IFBA), is a group of twelve global food and soft drink companies - The Coca-Cola Company, Danone, Ferrero, General Mills, Grupo Bimbo, Kellogg, Mars, McDonald's, Mondelēz International, Nestlé, PepsiCo and Unilever - that share a common goal of helping people around the world achieve balanced diets and healthy lifestyles.

IFBA was formed in 2008 in response to a call for action contained in the 2004 WHO Global Strategy on Diet, Physical Activity and Health. Building on individual efforts already underway, IFBA came together and made a set of global commitments to the WHO:

- To develop products that help people eat healthy, balanced diets
- To provide clear, fact-based nutrition information to consumers
- To market responsibly to children
- And to promote healthy lifestyles in our workplaces and in communities around the world

In 2009 IFBA members based in the GCC came together with the objective of implementing the IFBA commitments across the GCC. Since then industry members implemented many voluntary initiatives to meet these commitments.

We believe that an effective response to the global burden of NCDs requires a "whole of society effort", which includes the participation of the private sector. Furthermore we believe that food and non-alcoholic beverage companies have an important and unique role to play in helping to address NCDs. Non-communicable diseases (NCDs), and particularly obesity, are prevalent in the Middle East and have become an important public health issue and a major economic burden on the countries in the region. This presentation will provide an overview of global and regional policy trends, and industries voluntary pledges & initiatives implemented in the GCC.

Biography

Christine Greaves is the Corporate Affairs Director for Mars GCC with over 38 years in the food industry she has been based in the Gulf markets for close to 16 years, working for Mars Incorporated in a number of different capacities. In 2009, Christine led the formation of the GCC Food & Beverage Alliance (GCC FBA) and is currently the chairperson of the group. As with the International Food & Beverage Alliance, the GCC FBA is a forum for bringing together food and soft drinks companies based in the GCC, around a common goal of helping people to achieve balanced diets and healthy lifestyles.

christine.greaves@effem.com

TA. T	4	
	ores:	
Τ.4	utts.	

14th Global Obesity Meeting

October 23-24, 2017 Dubai, UAE

RFRP-3 acts as a mediator between obesity and impaired testicular function

Shabana Anjum¹, Amitabh Krishna¹and Kazuyoshi Tsutsui²
¹Banaras Hindu University, India
²Waseda University. Japan

The aim of the present study was to evaluate the roles of RFamide related peptide-3 (RFRP-3) a novel hypothalamic 🗘 neuropeptide, as an endocrine link between increasing adiposity and impaired testicular function in mice. To achieve this, the effect of RFRP-3 on changes in nutrients uptake and hormonal synthesis/action in the adipose tissue and testis was investigated simultaneously by in vivo study and separately by in vitro study. Mice were treated in vivo with different doses of RFRP-3 for 8 days. In the in vitro study, adipose tissue and testes of mice were cultured with different doses of RFRP-3 with or without insulin or LH for 24 hours at 37°C. The RFRP-3 treatment in vivo showed increased food intake, up-regulation of glucose transporter 4 (GLUT4) and increased uptake of triglycerides in the adipose tissue. These changes may be responsible for increased accumulation of fat into white adipose tissue, resulted in increase in the body mass. On the contrary to the adipose tissue, treatment with RFRP-3 both in vivo and in vitro showed decreased uptake of glucose by down-regulation of glucose transporter 8 (GLUT8) expressions in the testes, which in turn resulted in the decreased synthesis of testosterone. The RFRP-3 treatment in vivo also showed the decreased expression of insulin receptor protein in the testis which may also be responsible for the decreased testicular activity in the mice. These findings thus suggest that RFRP-3 increases the uptake of glucose and triglycerides in the adipose tissue resulting in increased accumulation of fat, whereas simultaneously in the testis RFRP-3 suppressed the GLUT8 mediated glucose uptake, which in turn may be responsible for decreased testosterone synthesis. This study thus demonstrates RFRP-3 as mediator of increasing adiposity and impaired testicular function in mice and may be used as therapeutic agent for male infertility.

Biography

Shabana Anjum has completed her PhD in 2015 from Banaras Hindu University, India. She has published 5 papers and book chapters in reputed international journals. She has presented many papers in national and international conferences.

anjum6repro@gmail.com

14th Global Obesity Meeting

October 23-24, 2017 Dubai, UAE

Effect of oleanolic acid on lipid metabolism of rats (Sprague Dawley) with fructose-induced obesity

Molefhi M Abotseng

North West University, South Africa

besity has become the recent times prevailing phenomenon which has serious implications on human health. This is a process where the body accumulates fats due to factors such as genetics, diet and physical inactivity. Lipid metabolism is the synthesis and degradation of lipids in cells. Lipid metabolism is the break down or storage of fats for energy and these fats are obtained from consuming food and absorbing them or they are synthesized by an animal's liver. Lipid synthesis and oxidation are two processes which plays an important in lipid metabolism. Mitochondria are organelles for cellular metabolism and function through regulation of energy production. Mitochondria are often called the powerhouses or energy factories of a cell because they are in charge of making adenosine triphosphate (ATP), the cell's main energy-carrying molecule. Therefore, lipid metabolism, signaling and apoptosis and its alterations may add to the development of metabolic disorders such as obesity, type-2 diabetes, insulin resistance and cardiovascular related diseases. The statistics shows that there is great intake of fructose worldwide due to fast foods; this consequently leads to obesity across the world. Oleanolic acid is a pentacyclic triterpenoid complex which possesses many promising pharmacological activities, such as hepatoprotective, anti-inflammatory, antioxidant and anticancer activities. However, there is limited information about direct influence of oleanolic acid on mechanism of antidiabetic activity of oleanolic acid. The morphological changes (weekly weight recordings), GC-MS for lipid analysis, RT-qPCR differentiation marker genes and western blot analysis was done as well. In this study, the results showed that oleanolic acid down regulated the expression of genes responsible for fat deposition such as fatty acid synthase (FAS) while on the other hand, up regulated the expression of genes which are play significant role in alleviating lipid oxidation such as Carnitine Palmitoyl Transferase 1 (CPT-1), consequently reducing obesity.

Biography

Molefhi M Abotseng is currently pursuing PhD in Biochemistry at the Department of Biological Sciences, North West University, South Africa. He has completed his Master of Science degree in Biochemistry and Molecular Biology from Huazong Normal University, China. He has worked at the University of Botswana as Medical Scientist Lecturer at Faculty of Medicine in Botswana.

molfabots@gmail.com



14th Global Obesity Meeting

October 23-24, 2017 Dubai, UAE

Young Research Forum (Day 2)

14th Global Obesity Meeting

October 23-24, 2017 Dubai, UAE

Body fat percentage, BMI, skinfold thickness and waist circumference among young athletes in the United Arab Emirates

Seham M AlRaish and Carine Platat United Arab Emirates University, UAE

Tutrition is a critical part of human health and development. However, overweight and obesity prevalence is raising worldwide, with associated obesity related diseases. Body mass index (BMI) is an index of weight-for-height that is commonly used to classify weight category, the skinfold measurement method is the most widely used body fat composition testing method for assessing body fat percentage. The purpose of this study was to evaluate the prevalence of body weight, body fat and waist circumference. A cross-sectional study among 59 male soccer players aged 13-18 years recruited from Al Jazira Academic sports clubs in the United Arab Emirates were Body Mass Index (BMI) and body fat percentages calculated by different skinfold thickness and by body fat analyzer and waist circumference were calculated for each subject, WHO classification was used for defining the cut points. The results indicate that the prevalence of underweight, overweight and obesity were 1.69%, 6.7% and 0%, respectively while the healthy weight was 91.50%. The average mean body fat percentage measured by body fat analyzer of the respondents was 16.46±3.28%. The mean body fat percentages calculated by different skinfold thickness were: biceps 4.66±2.20 mm, triceps 7.44±2.58 mm, supra-iliac 7.55±2.94 mm and subscapular 8.17±2.00 mm. Skinfold reading for athletes fell into average for triceps was 55.91% and sub-scapular=72.85%. Waist circumference classification according to NCHS waist percentiles show 69.60%, athletes fell into 5th-25th percentile and 26.80% in 50th and the rest were <5th. Our findings could be used in obesity awareness promotion and nutrition education program as it show there are some athletes fell in unhealthy weight, skin fold and waist circumference category where they should be in optimal status comparing to others. However, further investigation about the determinants of obesity and body fat, including age, sex, race and nutrition and changes over time, is needed.

Biography

Seham M AlRaish is currently pursuing PhD at the United Arab Emirates University after completing her Master's degree in Environmental Science. She has published two posters in reputed conference.

200440261@uaeu.ac.ae