### conferenceseries.com 732nd Conference

# 7<sup>th</sup> Obesity & Endocrinology **Specialists Congress**

October 10-12, 2016 Manchester, UK

# Scientific Tracks & Abstracts (Day 1)









# Obesity: Causes | Genetics of Obesity | Obesity: Associated Health Problems | Obesity and Weight Management | Advances in BMI Test

Session Chair Don S Schalch

University of Wisconsin School of Medicine and Public Health, USA

Session Co-chair Maria Fernanda Cury-Boaventura University of Cruzeiro do Sul, Brazil

#### **Session Introduction**

Title: Determination of plasma and leukocyte vitamin C concentrations in a randomized, double-blind, placebo-controlled trial with Ester-C®

Susan Hazels Mitmesser, Stony Brook University, USA

Title: Almost all antipsychotics result in weight gain: A meta-analysis

Maarten Bak, Maastricht University, Netherlands

Title: Thermographic profiling of post bariatric female patient's abdominal pannus region

Deborah A Christel, Washington State University, USA

Title: Benefits of regular exercise on inflammatory and cardiovascular risk markers in normal weight,

overweight and obese adults

Maria Fernanda Cury-Boaventura, University of Cruzeiro do Sul, Brazil

# 7<sup>th</sup> Obesity & Endocrinology Specialists Congress

October 10-12, 2016 Manchester, UK

Determination of plasma and leukocyte vitamin C concentrations in a randomized, double-blind, placebo-controlled trial with Ester-C®

**Susan Hazels Mitmesser** Stony Brook University, USA

Rapid uptake of vitamin C into blood and retention in tissues are important indicators of the efficacy of vitamin C supplementation and its immune-supporting role. This double-blind, placebo-controlled, crossover study evaluated the bioavailability of vitamin C in plasma (reflective of recent intake) and leukocytes (reflective of tissue stores on immune function) from a novel vitamin C formulation, Ester-C\*. Thirty-six adults were randomized to receive placebo (PL, 0 mg vitamin C), ascorbic acid (AA, 1000 mg vitamin C) and Ester-C\* (EC, 1000 mg vitamin C). Plasma and leukocyte vitamin C were measured predose and at 2, 4, 8 and 24 hours postdose. The concentration and percent change from baseline in plasma were significantly higher with EC at all-time points when compared to PL. No significant differences between EC and AA were observed in plasma concentration. Plasma area under the curve (AUC0-24h) was higher for EC (P<0.001) compared to PL. The concentration change from baseline in leukocyte vitamin C was increased with EC at 24 h post-dose (P=0.036) while no significant within-group changes were observed in AA or PL at any time point. The percent change in leukocyte vitamin C concentration was higher for EC at 8 and 24 hours compared to AA (P=0.028 and P=0.034, respectively) and PL (P=0.042 and P=0.036, respectively). It is concluded that a single dose of EC resulted in favorable percent change in leukocyte vitamin C concentration compared to AA and PL, indicating EC is retained longer within leukocytes.

#### Biography

Susan Hazels Mitmesser completed a PhD in Nutritional Biochemistry from the University of Nebraska and a Master's degree from the University of Nebraska Medical Center. She brings numerous years of industry experience and is an Adjunct Professor in the Department of Family Medicine at Stony Brook University. She has published in many peer-reviewed journals and is a contributing author for numerous book chapters relating to nutrition in adult and pediatric populations. She serves on the Editorial Board of four peer-reviewed journals and is an active member of the American Society of Nutrition, the American Association for the Advancement of Science and the New York Academy of Sciences. She serves on the Senior Scientific Advisory Council for the Council for Responsible Nutrition.

susanmitmesser@nbty.com

# 7th Obesity & Endocrinology Specialists Congress

October 10-12, 2016 Manchester, UK

Almost all antipsychotics result in weight gain: A meta-analysis

Maarten Bak

Maastricht University, Netherlands

**Introduction:** Antipsychotics (AP) induce weight gain. However, reviews and meta-analyses generally are restricted to second generation antipsychotics (SGA) and do not stratify for duration of AP use. It is hypothesized that patients gain more weight if duration of AP use is longer.

**Method:** A meta-analysis was conducted of clinical trials of AP that reported weight change. Outcome measures were body weight change, change in BMI and clinically relevant weight change (7% weight gain or loss). Duration of AP-use was stratified as follows: ≤6 weeks, 6-16 weeks, 16-38 weeks and >38 weeks. Forest plots stratified by AP as well as by duration of use were generated and results were summarized in figures.

**Results:** 307 articles met inclusion criteria. The majority were AP switch studies. Almost all AP showed a degree of weight gain after prolonged use, except for amisulpride, aripiprazole and ziprasidone, for which prolonged exposure resulted in negligible weight change. The level of weight gain per AP varied from discrete to severe. Contrary to expectations, switch of AP did not result in weight loss for amisulpride, aripiprazole or ziprasidone. In AP-naive patients, weight gain was much more pronounced for all AP.

**Conclusion:** Given prolonged exposure, virtually all AP are associated with weight gain. The rational of switching AP to achieve weight reduction may be overrated. In AP-naive patients, weight gain is more pronounced.

Addendum: New data will be available, considering association of psychiatric diagnosis and obesity and antipsychotic medication.

#### **Biography**

Maarten Bak is a Psychiatrist since 1999, trained in Maastricht University Hospital. He has completed his PhD in 2004 in "Coping with Psychosis; Blueler's Right". He is Director of the Medication Monitor, assessing effects and side effects of long term antipsychotic use. The side effects monitored are metabolic effects, movement disorders and sexual side effects. His scientific work centers on effect and metabolic side effects of antipsychotics. He has published over 50 papers in reputed journals.

m.bak@maastrichtuniversity.nl

# 7<sup>th</sup> Obesity & Endocrinology Specialists Congress

October 10-12, 2016 Manchester, UK

#### Thermographic profiling of post bariatric female patient's abdominal pannus region

**Deborah A Christel, Linda Arthur Bradley** and **Megan Vulcan** Washington State University, USA

This manuscript addresses the added value of thermography in the practice of product development of garments for post-bariatric patients and the obese. The development of new thermal technologies applied in medical settings has allowed better understanding of wound healing post-surgery. Infrared thermography is a technique that allows visualization of heat radiated from a body using infrared emission, a spectrum that is not visible to human. Used in the medical field, it can provide doctors with information about the physiological responses associated with skin temperature (Tsk) to identify possible pain symptoms. Recently, thermography has been used in product development in sport settings and is an increasingly important tool for diagnosing medical issues. The objective of this study was to establish the thermographic profile of the abdominal pannus in post-bariatric female patients. Ten post-bariatric female patients from the Pacific Northwest of the USA (53.8±9.15 years) participated in the study. Four thermal images of each patient allowed us to record minimum, maximum and average skin temperature in 3 regions of interest (Anterior, Anterior while lifting the pannus, Sagittal and Posterior). Small bilateral differences were found. Significant differences occurred under skin folds of the pannus and pubic region compared to other Tsk. Heat and sweat form excess skin and the pannus skin folds should be seriously considered in apparel product development for post-bariatric and obese populations.

#### **Biography**

Deborah A Christel completed her PhD in 2010 from Oregon State University and focuses her research on plus-size apparel, functional and comfort design for obese bodies, and weight bias. She is an Assistant Professor at Washington State University in the Department of Apparel Merchandising, Design and Textiles.

deborah\_christel@wsu.edu

# 7th Obesity & Endocrinology Specialists Congress

October 10-12, 2016 Manchester, UK

Benefits of regular exercise on inflammatory and cardiovascular risk markers in normal weight, overweight and obese adults

Maria Fernanda Cury-Boaventura University of Cruzeiro do Sul, Brazil

Desity is a worldwide epidemic that increases the risk of several well-known co-morbidities. There is a complicated relationship between adipokines and low-grade inflammation in obesity and cardiovascular disease (CVD). Physical activity practices have beneficial health effects on obesity and related disorders such as hypertension and dyslipidemia. We investigated the effects of 6 and 12 months of moderate physical training on the levels of adipokines and CVD markers in normal weight, overweight and obese volunteers. The 143 participants were followed up at baseline and after 6 and 12 months of moderate regular exercise, 2 times a week, for 12 months. The volunteers were distributed into 3 groups: Normal weight group (NWG,), overweight group (OVG) and obese group (OBG). We evaluated blood pressure, resting heart rate, anthropometric parameters, body composition, fitness capacity (VO2max and isometric back strength), cardiovascular markers (CRP, total cholesterol, LDL-c, HDL-c, homocysteine) and adipokine levels (leptin, adiponectin, resistin, IL-6 and TNF-alpha). There were no significant changes in anthropometric parameters and body composition in any of the groups following 6 and 12 months of exercise training. Leptin, IL-6 levels and systolic blood pressure were significantly elevated in OBG before the training. Regular exercise decreased HDL-c, leptin, adiponectin and resistin levels and diastolic blood pressure in OVG. In OBG, exercise diminished HDL-c, homocysteine, leptin, resistin, IL-6 and adiponectin. Moderate exercise had no effect on the body composition; however, exercise did promote beneficial effects on the low-grade inflammatory state and CVD clinical markers in overweight and obese individuals.

#### **Biography**

Maria Fernanda Cury-Boaventura has completed her PhD on Human Physiology and Post-doctoral studies from University of São Paulo. She is Professor and Researcher at Institute of Physical Activity and Sport Sciences since 2007. She has published more than 40 papers in reputed journals and has been serving as an Editorial Board Member of repute.

mafecuryb2009@hotmail.com

### **Conference Series.com** 732nd Conference

# 7<sup>th</sup> Obesity & Endocrinology **Specialists Congress**

October 10-12, 2016 Manchester, UK

# **Video Presentation** (Day 1)









# 7th Obesity & Endocrinology Specialists Congress

October 10-12, 2016 Manchester, UK

The determinants of obesity among students of the University of Venda, Limpopo Province of South Africa

Aghanenu Godfrey Chukwudi

University of Venda, South Africa

**Background:** Obesity is a serious public health issue; recognized as a global epidemic by the World Health Organization (WHO, 1998).

Purpose: The purpose of the study was to describe the determinants of obesity among students of the University of Venda.

**Methodology:** The design of the study was a quantitative correlational survey. Instrument for data collection was a questionnaire. Simple random sampling and systematic sampling methods was used to select the participants. The data were analyzed using statistical package for social science (SPSS), version 22. Descriptive analyses were performed to show frequency distributions. Chi square test was used to compare relationship between obesity and socio-demographic; dietary and environmental variables among students.

**Results:** Overweight and obesity is prevalent among student population with 20% of the participants being overweight and 9.5% obese. Unhealthy eating practices were found among the participants. There was statistical significant difference in BMI between male and female gender with female (66%) being more obese than male (34%). In terms of socio-demographic variable this study found gender and age of participants as important factor of overweight and obesity.

**Conclusion & Recommendations:** Regular nutrition education campaign needs to be carried out in the University in order to motivate more healthy food choices. Also, moderate to vigorous physical activities (MVPA) is recommended.

#### **Biography**

Aghanenu Godfrey Chukwudi has completed his Master of Public Health (MPH) from the University of Venda, Limpopo Province of South Africa.

godfreygoc@gmail.com

### conferenceseries.com 732nd Conference

# 7<sup>th</sup> Obesity & Endocrinology **Specialists Congress**

October 10-12, 2016 Manchester, UK

# Young Researcher Forum (Day 1)









# 7th Obesity & Endocrinology Specialists Congress

October 10-12, 2016 Manchester, UK

Is BMI≥50 kg/m² a predictor of higher morbidity during doing laparoscopic sleeve gastrectomy? An observational study at King Khalid University Hospital, Saudi Arabian experience

Munira Alghufaily, Fahad Bamehriz, Yara Alanazi, Rawan Alotaibi, Nawt Alfuweres, Najla Alsaikhan and Waad Almanie King Saud University, Saudi Arabia

**Objectives:** This study was to assess operative and post-operative complications, of laparoscopic sleeve gastrectomy (LSG), in super-obese and compare it to morbid obese on in KKUH, Saudi Arabia.

Methods: We reviewed 708 medical records of consecutive patients who underwent LSG surgery at KKUH from 2009 till 2015. Then, we compared our SMO (BMI≥50 kg/m²) patients' data results to (our international reports) MO (BMI<50 kg/m²) patients' category who underwent LSG.

Results: Male sex was predominant in SMO (63.6%). Both groups had homogeneous baseline characteristics and comorbidities except sleep apnea were higher in SMO. There is no significant difference in the duration of operation, length of stay and recovery room time between the 2 groups. Mean number of trocars was 4 for both groups. HDU admission 62 (28.6%) patients of SMO, and 32 patients of MO. No conversion to open or documented intraoperative complications in both groups. For postoperative complications: It has developed in 6% of patients in SMO included 1.4% of patients developed leakage, and 10 patients developed bleeding in the drain. On the other hand, 4.3% of patients in MO had developed complications, includes, (2.2%) patients developed leak, 2% patients developed bleeding and 4 patients only needed blood transfusion. There was no surgical mortality.

**Conclusion:** There is no significant difference in the duration of operation, number of trocars and intra-operative complication between SMO and MO. The BMI $\geq$ 50 kg/m<sup>2</sup> is not a predictor of higher morbidity during doing LSG if done in a tertiary care center with dedicated bariatric center serves.

#### **Biography**

Munira Alghafaily is a final year Medical Student at King Saud University, Saudi Arabia. She has no publications until now, but she has participated in three researches on cardiology, gastroentology and laparoscopic sleeve gastrectomy.

dr.muniraalghufaily@gmail.com

### **ConferenceSeries.com** 732nd Conference

# **7th Obesity & Endocrinology Specialists Congress**

October 10-12, 2016 Manchester, UK

Workshop (Day 2)









# **7th Obesity & Endocrinology Specialists Congress**

October 10-12, 2016 Manchester, UK



### Deborah A Christel

Washington State University, USA

#### Weight bias in health care: Optimizing care through personal assessment of obesity and weight biases

To examine their own biases towards obese people. While significant research has been conducted about obesity, little has been done to address and stop bias. Weight bias is highly common in health care setting sand studies have shown that health care professionals are among the most common source of bias. This includes physicians, nurses, psychologists, dietitians, medical students and other professionals who specialize in obesity. Weight bias in health care can cause serious harm. Studies demonstrate that patents with higher weights are more likely to avoid, cancel or delay important preventative appointments. Patients with obesity, state the avoidance results from disrespectful treatment and negative attitudes from providers, unsolicited advice to lose weight, embarrassment about being weighed and negative experiences with medical equipment that is too small for them. The workshop will include an introduction, self- assessment survey, personal reflection, a17-minute video discussing weight bias, a second opportunity for reflection and concrete strategies to help combat the significant societal problem of weight bias.

#### **Biography**

Deborah A Christel has completed her PhD in 2010 from Oregon State University and has studied new approaches of Reducing Weight Bias in many fields including retail, fashion design, marketing, law and medical settings. She is an Assistant Professor at Washington State University in the Department of Apparel Merchandising, Design and Textiles.

deborah\_christel@wsu.edu

### conferenceseries.com 732nd Conference

# 7<sup>th</sup> Obesity & Endocrinology **Specialists Congress**

October 10-12, 2016 Manchester, UK

# Scientific Tracks & Abstracts (Day 2)









Day 2 October 11, 2016

# Childhood Obesity and Effects | Diabetes and Obesity | Obesity Treatment | Medical Weight loss | Endocrinology

#### Session Chair Don S Schalch

University of Wisconsin School of Medicine and Public Health, USA

#### **Session Introduction**

Title: Effect of orange juice on body composition and biochemical profile of obese individuals submitted to weight loss diet

Thais Cesar, Paulo State University (UNESP), Brazil

Title: Coping by crossdressing: An exploration of exercise clothing and consequences for obese heterosexual women

Deborah A Christel, Washington State University, USA

Title: Childhood overweight and obesity at school: Case of the city of Parakou (Benin) in 2016

Codjo H Leopold, University of Parakou, Benin

# 7th Obesity & Endocrinology Specialists Congress

October 10-12, 2016 Manchester, UK

Effect of orange juice on body composition and biochemical profile of obese individuals submitted to weight loss diet

**Thais Cesar, Carolina Ribeiro** and **Renata Benassi** Sao Paulo State University (UNESP)

We have evaluated the effect of regular consumption of orange juice in body composition and biochemical variables. The subjects of this study were obese men and women (36.3±0.8 y) who were submitted to an energy-restricted diet for 12 weeks. They had normal blood serum levels of cholesterol, triglycerides and glucose, and were randomly divided into 2 parallel groups. Group 1 (n=39) had an energy-restricted diet (-500 kcal/d) and Group 2 (n=39) had the same energy-restricted diet supplemented with orange juice (500 mL/d). The assessment of body composition (weight, BMI, fat mass, waist and hip circumference and ratio) were performed at week 0 and every 2 weeks until the end of the 12-week trial period. Evaluations of biochemical parameters (total cholesterol, LDL-C, HDL-C, triglycerides, glucose, insulin, HOMA-IR and CRPu) were performed 0, 4, 8 and 12 weeks. After the treatment, individuals undergoing only energy-restricted diet had a reduction in body composition parameters as well as biochemical parameters. In addition, individuals who also regularly consumed orange juice showed lower levels of blood serum cholesterol (-20%), LDL-C (-19%), CRPu (-49 %), insulin (-27%) and HOMA-IR (-33%). In conclusion, orange juice enhanced the effects of energy-restricted diet improving both lipid and glucose metabolism, showing that it is suitable for weight loss purposes as well as for the improvement of the biochemical profile of obese individuals.

#### Biography

Thais Cesaris an Associate Professor of Nutrition, Faculty of Pharmaceutical Sciences, Sao Paulo State University (UNESP), Araraquara, Brazil. She has a BS in Biology and PhD in Food Science and Nutrition from University of Sao Paulo, Brazil. She did Post-doctoral at the Boston University and at the Citrus and Subtropical Products Research Laboratory, ARS-USDA. Her scientific focus is investigating the nutritional and metabolic properties of citrus fruits in clinical studies and animal models, regarding the effect of its bioactive compounds as a protection factor against the development of chronic diseases.

tcesar@fcfar.unesp.br

# 7th Obesity & Endocrinology Specialists Congress

October 10-12, 2016 Manchester, UK

Coping by cross-dressing: An exploration of exercise clothing and consequences for obese heterosexual women

**Deborah A Christel, Nicole H O'Donnell** and **Linda Arthur Bradley** Washington State University, USA

Over the past decade participation in physical activity for adult women has decreased while body size has increased. Overweight and obese individuals are considered the majority demographic in the United States; however, plus-sized clothing sales are minimal in comparison to other segments. Furthermore, there is little known about the clothing practices of obese women who engage in physical activity. The current study addresses this research gap by exploring obese heterosexual women's clothing practices for exercise, with an emphasis on what women wear, their perceived choices, alternatives and satisfaction. Lowe and Anspach's notion of freedom of dress was the guiding conceptual framework for in-depth interviews with (n=56) obese women. A majority of the women perceived having limited freedom in dress, and reported cross-dressing in men's clothing to engage in physical activity, which resulted in a perceived lack of gender expression. Cross-dressing is wearing clothing of the opposite sex and gender expression; it is a way in which a person acts to communicate gender within a given culture. Women in this study indicated and the authors discuss that as clothing size increases, perceived freedom in dress decreases. In order to increase freedom in dress, our participants tended to believe that it is their personal responsibility to lose weight.

#### **Biography**

Deborah A Christel completed her PhD in 2010 from Oregon State University and focuses her research on plus-size apparel and weight bias. She is an Assistant Professor at Washington State University in the Department of Apparel Merchandising, Design and Textiles.

deborah christel@wsu.edu

### **Conference Series.com** 732nd Conference

# 7<sup>th</sup> Obesity & Endocrinology **Specialists Congress**

October 10-12, 2016 Manchester, UK

# **Video Presentation** (Day 2)









# 7th Obesity & Endocrinology Specialists Congress

October 10-12, 2016 Manchester, UK

Childhood overweight and obesity at school: Case of the city of Parakou (Benin) in 2016

Codjo H Leopold

University of Parakou, Benin

**Introduction:** The objective of this study was to determine the prevalence of overweight among adolescents in public schools in the city of Parakou.

Methods: It was a descriptive and analytical cross sectional study with prospective data collection from 7 December 2015 to 31 March 2016. Students were regularly enrolled in public secondary schools of Parakou, aged 10 to 18 who received the written consent of their parents. The selection of students was done in a three degree random sampling technique. Overweight was defined by body mass index, according to BMI curves of the World Health Organization. The threshold values provided by the NHANES III were used to define abdominal obesity. The blood glucose and lipids were performed by enzymatic colorimetric methods on specimens from patients fasted for at least 6 hours. Other variables were blood pressure, eating habits, smoking, alcohol consumption and physical activity.

Results: A total of 422 students including 259 girls were identified. The mean age was  $15.22\pm2.27$  years. The prevalence of overweight was 27.96% (95% CI [23.78%-32.55%]), while that of obesity was 18.48% (95% CI [14.96%-22.55%]). Abdominal obesity was at 10.19% (95% CI [7.55%-13.58%]). The majority (95.35%) of students with abdominal obesity was overweight. Metabolic syndrome was observed in 5.45% (95% CI [3.24%-7.56%]). The factors significantly associated with overweight were the female sex, age  $\geq 15$  years, high blood pressure, total cholesterol and LDL, hypertriglyceridemia and hyperglycemia.

**Conclusion:** These data from a poor country like Benin revealed a high prevalence of obesity and metabolic syndrome in children and adolescents in schools. Preventive measures need to be taken.

#### **Biography**

Codjo H Leopold has completed his PhD and Post-doctoral studies from Faculté des Sciences de la Santé de Cotonou. He is the Head of the Cardiology Unit of Departmental Teaching Hospital of Borgou (North Bénin). He has published more than 15 papers in reputed journals and has been serving as an Editorial Board Member of repute (Cardiovascular Journal of Africa, annales de l'université de Parakou, British Journal of Medicine and Medical Research).

leostelles@yahoo.fr