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T2P125

Psychometric properties of the Repetitive Eating Questionnaire (Rep(eat)-q): A self-report measure for grazing

Conceição E.¹; Simões J.¹; de Lourdes M.¹; Ramalho S.¹; Pinto-Bastos A.¹; Isabel Brandão²; Vaz AR¹; Machado PP¹; James E. Mitchell³

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Grazing, an eating behavior associated with obesity and weight regain, has recently been defined as the repetitive eating of small/modest amounts of food in an unplanned manner and/or not in response to hunger/satiety sensations. Two subtypes were considered: compulsive and non-compulsive. The Repetitive Eating Questionnaire (Rep(eat)-Q) is a self-report measure developed base on this proposed definition. This paper presents the psychometric properties of Rep(eat)-Q.

Participants were 1223 community individuals (70.3% female; 14–72 y.o). Assessment included: Rep(eat)-Q, Eating Disorder Examination Questionnaire (EDE-Q), and the Depression Anxiety Stress Scale (EADS) and Impulsive Behavior Scale (Negative Urgency Subscale) (UPPS-NU). For test-retest validity 405 participants filled in Rep(eat)-Q one week after their first assessment.

Rep(eat)-Q scores were significantly higher for women ($t = 3.88, p < .001$), younger participants ($F = 18,62, p < .001$), and higher BMI ($F = 7.11, p < .001$). Rep(eat)-Q showed good internal consistency ($\alpha = .93$), teste-retest reliability ($r = .68$) and convergent validity with significant correlations with EADS ($r = .34, p < .000$), EDE-Q ($r = .48, p < .000$) and UPPS scores ($r = .32, p < .000$). Factor structure revealed two factor supporting a compulsive and a non-compulsive subtype.

Rep(eat) presented good psychometric properties. Research is still needed with clinical samples, in particularly, post-bariatric patients, to test cutoff points associated with risk for poorer outcomes.

T2P127

Quality and quantity of carbohydrate affects the composition of erythrocyte fatty acid membrane in overweight and obese subjects

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Background: Cell membrane fatty acid (FA) composition may play a role in obesity and other metabolic diseases. However, the modulatory effect of diet is poorly explored.

Objective: To investigate the effect of moderate-carbohydrate diets with different glycemic index (GI) and a low-fat diet (LF) on red blood cell (RBC) FA membrane composition.

Design: The RBC FA profile was measured in 87 subjects from the GLYN-DIET study. Participants were randomly assigned to one of the following energy-restricted diet for 6 months: moderate-carbohydrate/low-GI diet (LGI), moderate-carbohydrate/ high-GI diet (HGI) or LF-diet.

Results: We observed a significant increase in C20:0 and decrease in C20:3n-6 in the LGI and HGI groups compared to LF group. Compared to LF-diet, C22:4n-6 was lower after the HGI while C22:6n-3 was higher after LGI diet. Also, a tendency was found for higher concentrations of long-chain omega-3 polyunsaturated fatty acids (LCn3PUFA) in LGI compared to HGI and LF groups. The intra-group analysis showed significantly increased levels of total monounsaturated FA (MUFA) after LGI and HGI interventions, as well as a significant increase in C22:5n-6 and a decrease in LCn3PUFA and omega-3-index after the LF diet. The decrease in C20:5n-3 after HGI and LF diets was also significant.

Conclusion: Diets with a moderate amount of carbohydrates and healthy fat, mainly with LGI, modify the RBC fatty acid membrane composition.

Conflict of Interest: The authors do not report any conflict of interest

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T2P128

Relation among emotional eating, chocolate craving and orthorexic behaviours in underweight, overweight and obese adults: A preliminary study

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Introduction: Research suggest that eating behaviours and eating patterns are related to abnormal weight and Body Mass Index. Furthermore, both men and women experience chocolate craving and have tendency to orthorexic behaviours and emotional eating.

The present study aimed to examine the relationship between emotional eating and attitudes to chocolate and orthorexic behaviours and to assess emotional eating as mediator between orthorexic behaviours and chocolate craving.

Methods: The study comprised of 159 individuals with varied BMI categories: underweight ($N = 36$), overweight ($N = 66$) and obesity ($N = 57$) We used the ORTO-15 test, the Attitudes to Chocolate Questionnaire and the Three-Factor Eating Questionnaire-R18.

Results: In underweight individuals high emotional eating was related to chocolate craving, negative feelings after eating chocolate and dissatisfaction with weight and body image as well as orthorexic behaviours. In individuals with obesity high emotional eating was associated with chocolate craving, chocolate consumption under emotional stress, guilt after eating chocolate and orthorexic behaviours. Furthermore, we found a positive relationship between chocolate craving and orthorexic behaviours.

In underweight individuals orthorexic behaviours emerged as a predictor of emotional eating.

In overweight individuals as well as individuals with obesity orthorexic behaviours and chocolate craving were found to be predictive factors of emotional eating

Emotional eating turned out to be the mediator of the relationship between chocolate craving and orthorexic behaviours in overweight and obese individuals.

Conclusion: The relationship between emotional eating and attitudes to chocolate and orthorexic behaviours is significant in all individuals with abnormal Body Mass Index. In addition, emotional eating is important variable for connection between chocolate craving and orthorexic behaviours in group with overweight and obesity.

Conflict of Interest: None Disclosed

Funding: Research relating to this abstract was funded by a grant from the SWPS University of Social Sciences and Humanities, Katowice Faculty of Psychology

T2P129

Relation between body mass index and periodic eating compulsion

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Introduction: Periodic Eating Compulsion (PEC) is most frequently associated to obese and overweight subjects. However, studies indicate that subjects with a normal weight also show PEC episodes.

Methods: A quantitative exploratory study was designed with the purpose to know the ratio between Body Mass Index (BMI) and PEC, involving a sample of 306 people of both genders with different BMI categories (0.3% of the sample was underweight, 21.9% had normal weight, 23.5% were

pre-obese, 31.4% had Grade I obesity, 14.1% had Grade II obesity and 8.8% had Grade III obesity). Data was collected by means of the Periodic Eating Compulsion Scale (PCES) at 4 hospitals in the North and Centre regions of the country.

Results: In the overall sample, 219 subjects (71.6%) were found to have no PEC, 49 subjects (16.0%) had moderate PEC and a further 38 subjects (12.4%) had severe PEC. In consonance with the literature in this field, the descriptive study of the study variables showed that all the BMI category groups - with the exception of a low weight patient - showed PEC behaviours.

Conclusion: It was observed that the higher the BMI, the higher the number of subjects with compulsive-type PEC, a fact considered to be pertinent for new studies in this overweight population. The results show the need for nutritional education and renewed vigilance in the population with PEC.

Conflict of Interest: None Disclosed

Funding: No Funding

T2P130

Relationship between body fat distribution obtained by dual-energy X-ray absorptiometry and alcohol consumption: The Fourth and Fifth Korea National Health and Nutrition Examination Survey

Kim, K.¹; Lee, K.²

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Background: Alcohol consumption is considered to induce abdominal fat deposition. However, the relationship was usually assessed with the indirect measurement such as body mass index (BMI) and waist circumference (WC).

Objectives: The aim of this study is to show the difference of body fat distribution assessed by dual-energy X-ray absorptiometry (DXA) between normal and problem drinking population, and the relationship between the amount of alcohol consumption and body fat distribution, in a large nationwide survey data.

Subjects: This study was based on data obtained from the Fourth and Fifth Korea National Health and Nutrition Examination Survey (KNHANES IV-V). DXA measurements were performed on survey subjects over 10 years old from July 2008 through to May 2011. Of these, 18198 individuals, aged 19 years and older for whom DXA data were available, were included. Dietary intake was assessed with 24-hr recall method.

Methods: A pooled analysis combining the datasets from each year together was conducted with a revised pooled weight. For minimizing the influence of sex hormone, the population was divided into three group, men, pre- and post-menopausal women, and the analysis was performed in each group. The comparison between normal and problem drinking population, and the regression analysis were performed with survey analysis methods.

Results: In men, problem drinkers had higher BMI and WC, higher whole body fat in kg (WBF) and trunk fat in kg (TF), higher trunk fat / leg fat ratio (TF/LF) and trunk fat / limb fat ratio (TF/LimbF), and lower appendicular skeletal muscle mass / body weight ratio (ASM/Wt), than normal drinkers ($P < 0.05$). However, there was no significant difference in percent body fat (pWBF) between both. In premenopausal women, problem drinkers had higher WC, WBF, TF, TF/LF, and TF/LimbF than normal drinkers ($P < 0.05$), while there were no difference in BMI, pWBF and ASM/Wt between both. In postmenopausal women, there were no significant difference in BMI, WC, WBF, pWBF, TF and AFM/Wt between normal and problem drinkers. However, problem drinking postmenopausal women showed higher TF/LF and TF/LimbF than normal drinkers ($P < 0.05$). In linear regression models including age and total energy intake, both of TF/LF and TF/LimbF were significantly related with the amount of weekly alcohol consumption in men, pre- and post-menopausal women groups ($P < 0.05$). The relationship between TF and the amount of weekly alcohol consumption in linear regression models including age and total energy intake was significant in men and premenopausal women ($P < 0.05$), not in postmenopausal women.

Conclusions: Alcohol consumption is positively related with truncal body fat accumulation in Korean.

Conflict of Interest: None Disclosed

Funding: No Funding

T2P131

Relationship between obesity and atherogenic dyslipidemia

Pérez, K.¹; Parejo, M.¹; Cedeño, J.¹; Solé, M.¹; Arnaiz, M.¹; Fernández, V.¹; Arrocha, M.¹; González, N.¹; Font, R.¹; Sol, G.¹; Niubó, M.¹

¹Centre d'Atenció Primària de Mollerussa

Objective: Determine the correlation between obesity and atherogenic dyslipidemia (AD).

Methods: Cross-sectional study.

The exhibition features a total of 5827 people over 18 years who have a BMI greater than 18.5, from primary care consultations in a rural community. In all the selected lipid profile has been registered in the last analysis, gender and age.

The diagnosis is established by AD:

- HDL: ♀ <46 ♂ <40mg / dL.
- Triglycerides:> 200mg / dL.
- One of the following:
 - Total Cholesterol / cHDL: ♀ <4 ♂ <4.5.
 - cLDL / cHDL: ♀ <2.5 ♂ <3.
 - CnoHDL / cHDL: ♀ <4 ♂ <4.5.
- Triglycerides / HDL:> 2.

Results: The 44.72% are men. The average age is 53.09 [52.62 to 53.56].

Of the total sample:

The prevalence of AD in obesity is 7.6%, in overweight is 4%, and in normal weight is 1.9% ($p < 0.000$).

If divide according to gender:

In Men (2606): The prevalence of AD in obesity is 10.5%, in overweight is 4.2%, and in normal weight is 2.5% ($p < 0.000$).

In women (3221): The prevalence of AD in obesity is 5.7%, in overweight is 3.7%, and in normal weight is 1.5% ($p < 0.000$).

If divide into quartiles according to age.

18–25 (349): The prevalence of AD in obesity is 4.9%, in overweight is 4.1%, and in normal weight is 0% ($p = 0.005$).

26–50 years old (2491): The prevalence of AD in obesity is 8.4%, in overweight is 4.4%, and in normal weight is 1.5% ($p < 0.000$).

51–75 years old (2154): The prevalence of AD in obesity is 8.4%, in overweight is 3.6%, and in normal weight is 3.1% ($p < 0.000$).

> 75 years (833): The prevalence of AD in obesity is 3.9%, in overweight is 3.9 and in normal weight is 2.8% ($p < 0.000$).

Conclusions: There is a clear relationship between obesity and AD, and this relationship its maintaining by gender and age. We also observed higher prevalence of AD in men, and in 25 to 75 subjects than others. The relationship between obesity and AD is also maintained in the different age groups, with the exception of patients over 75 years.

T2P132

Relationship between obesity and chronic obstructive pulmonary disease

Cedeño, J.¹; Parejo, M.¹; Perez, K.¹; Fernández, V.¹; Solé, M.¹; Arnaiz, M.¹; González, N.¹; Arrocha, M.¹; Niubó, M.¹; Font, R.¹

¹Centre d'Atenció Primària de Mollerussa

Objective: Determine the correlation between obesity and lung disease.

Methods: Cross-sectional study.

The exhibition features a total of 7540 people over 18 years who have a BMI > 18.5, from primary care in a rural community. In all selected subjects we registered if they have a diagnosis of chronic obstructive pulmonary disease (COPD), gender and age, according to the medical record.