

at the cellular level as well as on muscle enzymes. Modifications are also seen in terms of lipid profile, caused by the faster rate of metabolism of these molecules. The aim of this paper was to study the variation of biochemical and haematological parameters on football players.

#### Methods

Blood samples were drawn from 18 football players undergoing an 8 hour-a-week training program. The following parameters were tested: lipid profile, creatine kinase (CK), lactate dehydrogenase (LDH), aspartate aminotransferase (AST); red blood cells (RBC) and their indices, haemoglobin and haematocrit.

#### Results

The lipid profile showed that the HDL-Cholesterol mean ( $=53.33$  mg/dL) was above the value determined as target ( $37.00$  mg/dL). The LDL-Cholesterol mean was below the target-value, as it was for the triglycerides. There were no significant differences between the real mean and the target value for total cholesterol. All creatine kinase (CK) values were above the target-value of  $77$  UI/L. The values obtained for lactate dehydrogenase (LDH) and aspartate aminotransferase (AST) tests did not show any significant difference from target-values. No major differences from the target values were seen in terms of the haematological parameters.

#### Conclusions

The results of this study have shown that the practice of physical exercise has caused a modification in the subject's lipid profile, especially on the HDL-C values. Concerning muscle enzymes, the only altered value found was for creatine kinase (CK). The so called sports anaemia was not confirmed.

#### Keywords

Lipid profile, muscle damage, sports anaemia, athletes, football

#### P66

##### Body image dissatisfaction in inflammatory bowel disease: exploring the role of chronic illness-related shame

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#### Background

Inflammatory bowel disease (IBD) is characterized by a chronic, relapsing inflammation of the intestinal system which causes symptoms such as abdominal pain, bloating, diarrhoea, and weight loss. Although the majority of IBD patients experience body image dissatisfaction, which presents substantial implications for patients' quality of life, the mechanisms associated with this link are not clearly understood. Objectives: The aim of this study was thus to explore the role of chronic illness-related shame in the association between IBD symptomatology and body image dissatisfaction, while controlling for age, BMI and surgery.

#### Methods

Participants included 161 adult IBD patients (52 males and 109 females), that reported demographic and medical data and completed self-report measures.

#### Results

Results from path analyses revealed that age and IBD symptomatology significantly predicted illness-related shame with effects of  $-.23$  ( $p < .01$ ) and  $.43$  ( $p < .001$ ), respectively. Further, IBD symptomatology presented a total effect of  $.43$  on body image dissatisfaction: a direct effect of  $.23$  ( $p < .001$ ) and an indirect effect through the mechanisms of illness-related shame of  $.20$  (C.I. from  $.13$  to  $.29$ ). The model explained  $22\%$  of chronic illness-related shame and  $38\%$  of body image dissatisfaction, and revealed an excellent model fit.

#### Conclusions

These findings suggest that higher IBD symptomatology leads to higher levels of body image dissatisfaction in IBD patients. Further, part of this effect seems to be mediated by the experience of chronic illness-related shame. Therefore, it seems that, to diminish IBD patients' body image dissatisfaction, treatment programmes should address shame feelings and promote self-compassion abilities.

#### Keywords

Inflammatory Bowel Disease, chronic illness, body image dissatisfaction, chronic illness-related shame

#### P67

##### Obesity and sleep in the adult population - a systematic review

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#### Background

Current scientific evidence has reported associations between inadequate sleep patterns and overweight/obesity. Epidemiological studies show a curvilinear relationship in "U-shape" between inadequate sleep and obesity, resulting in consequences on individual and public health levels. Objectives: To identify the association between overweight/obesity and inadequate sleep patterns among adults.

#### Methods

We conducted a systematic review of the literature, using a search in PubMed, Cochrane Library, SciELO and Google Scholar. We identified studies published between January 2008 and November 2015. Inclusion criteria were previously defined, then the selected studies were assessed for their quality and later analysed. By applying the "Scale to critically assess a paper describing a prospective, randomized and controlled clinical trial" in the included studies, it was found that of the four studies that formed the textual corpus, three were considered of quality (final grade  $\geq 75\%$ ).

#### Results

Inadequate sleep patterns increase the risk of weight gain and consequently of overweight and obesity in adults. This was a result supported by the data presented in the studies analysed (systematic literature review, longitudinal studies of clinical intervention, randomized and controlled trials, cross-sectional analytic studies). Overweight/obesity are associated with inadequate sleep-wake patterns, namely the "short" duration of sleep in adults.

#### Conclusions

An association is suggested between decreased sleep duration and increase in weight. Longitudinal and experimental studies, using objective and repeated measures of sleep, are important to define a causal relationship between sleep deprivation and obesity.

#### Keywords

Sleep, sleep deprivation, obesity, overweight, adults

#### P68

##### Frequency of daytime sleepiness and obstructive sleep apnea risk in COPD patients

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#### Background

Chronic Obstructive Pulmonary Disease (COPD) is characterized by persistent and progressive airflow limitation associated with multisystem