

ICCN Poster Presentations

Obesity

Prevalence of general and central obesity in Zahedan university of medical sciences students, Iran

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Aims: Obesity is a major nutritional and public health problem linked to poor health outcomes. An index that can be used for overweight and obesity is the body mass index (BMI). BMI is used as an index for determining the total body fatness or general obesity. In determining the risk factors for health, both amount and location of adipose tissue is important. For evaluation of central obesity, the waist-to-hip ratio (WHR) can be used. To highlight the importance to young people's health, we studied BMI and WHR of students at Zahedan University of Medical Sciences.

Methodology and Results: 720 students (428 females, mean age 20.95 ± 2.41 and 292 males, mean age 23.25 ± 4.62) were selected using stratified sampling. The students were weighed on Seca scales without shoes and minimum clothes. Height, waist and hip were also measured and BMI and WHR calculated. The results show the mean and SD for BMI in females and males was 21.62 ± 3.14 and 21.70 ± 2.97 , respectively. Statistically, there were no gender differences between mean BMIs ($p < 0.72$). Mean and SD for WHR in females and males was 0.78 ± 0.06 and 0.83 ± 0.06 , respectively. Statistically there was a gender difference between mean WHR ($p < 0.0001$). 18.3% of students were underweight, 68.5% were in the normal weight range, 12.9% were overweight and 1.3% were obese. 39.5% of females and 3.1% of male students had central obesity.

Conclusions: Some of the female and male students were malnourished and a high percentage of female students had central obesity. This study suggests there is a need for nutritional programs and promotional life style modification programs.

Examining effectiveness of Ahmadreza Movahedi's metabolic theory and model for weight control

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Is it possible to establish a dietary program for weight loss or gain in which hypothalamus may not be stimulated in decline or increase Basal Metabolic Rate? The purpose of this study was to examine Ahmadreza Movahedi's metabolic theory and model for weight control. 18 healthy males and females (25 to 50 years old) were assigned to three groups. Group A experienced the Weight loss metabolic program, they decreased 10% of their normal daily calorie for three days (action phase) and returned to their normal daily calorie for one day (changing return phase) (We called this 3 and 1 day cycle). They observed it for twelve days and for the second twelve day period they decreased 15% of their normal daily calorie for the action phases and returned to their normal daily calorie minus 5% for the changing return phases. The decreases for the remaining twelve -day periods were 20%, 25%, 30%, for the action phases and 5%, 10%, 10%, for the changing return Phases alternatively. The program went on so that at the last nine twelve -day period the calorie decreased for action phases was 30% and for the changing return phases was 10%. Group B followed weight gain metabolic program just like the program for weight loss group except that they increased the percents instead of decrease. Group C was as control group. The total period for the experimental and control groups was 60 days. To analyze data T test was used. Results: Group A decreased their body weight from 86.5 kg to 79.3 kg that was significant. Group B gained 2.16kg that was significant. No significant change in body weight was seen in control group. Theory: It is possible to establish a proper diet program for regulating relationship among hypothalamus, Basal metabolism, routine metabolism and calorie consumption to modify body weight (i.e weight loss and weight gain). Model : By modifying the amount of calories consumption in each meal for a given period of time (i.e for three days: The action phase) and observing the previous dietary habit for a short period of time (i.e for one day: Changing return phase) with progressive changes in the calorie of action phase and return phase and follow the cycle for a long period of time (i.e for one or two months), it is possible to regulate human metabolic rate properly so that one may lose his/her excess weight (or gain weight) without any side effect. The amount of calories that is to be modified and the periods in each cycle, may be varied according to one's individual differences .The next step is to establish a new dietary habit for the reference part of the cycle.