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Parental gender differences in the estimation of their offspring's dietary intake

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Objective: To assess parental gender differences in the estimation of the dietary intake of their offspring.
Methods: The study was performed in a convenience sample of 1976 subjects. Children's height and weight were measured and body mass index (BMI) was calculated. Children's caretakers completed a self-administered questionnaire, which provided information on family background characteristics, including dietary intake, using a food frequency questionnaire. Unconditional logistic regression models were fitted to estimate the magnitude of the association between children's food consumption and respondents (mother or father), adjusting for confounders (age, BMI, energy intake, and parental education).
Results: Higher consumption of vegetable soup was more frequently reported by mothers compared to fathers in girls (OR = 1.51, 95% CI 1.09 - 2.10, p = 0.010) and boys (OR = 1.63, 95% CI 1.06 - 2.29, p = 0.005), but after adjusting for confounders the association remained statistically significant only in boys (OR = 1.63, 95% CI 1.11 - 2.39, p = 0.013). Higher intake of fruit was also more frequently reported by mothers than fathers in girls (OR = 2.05, 95% CI 1.46 – 2.87, p < 0.001) and boys (OR = 1.48, 95% CI = 1.06 - 2.07, p = 0.020), even after adjusting for confounders (OR = 2.04, 95% CI 1.40 - 2.98, p < 0.001, in girls, and OR = 1.53, 95% CI 1.04 - 2.26, p = 0.030, in boys).
Conclusion: Compared to fathers, mothers tend to report higher consumption of vegetable soup in boys and fruit in both genders.

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An Examination of the Association of Heavy Metals with Weight Gain/Obesity: NHANES 99-02

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Recent evidence suggests that body chemistry imbalance can cause energy deficiency which consequently leads to weight gain/central fat. Heavy metals may play a role in causing obesity by displacing vital minerals such as zinc and copper, which in turn may affect energy production, carbohydrate tolerance, and other aspects of physiology. We examine the association between waist circumference (WC), and body mass index (BMI), with selected heavy metals. Approximately 4200 NHANES 99-02 participants were used. Linearity was improved by taking the natural log of each heavy metal. Heavy metals investigated were barium, cadmium, cobalt, cesium, molybdenum, lead, antimony, thallium, and tungsten. BMI was regressed on gender, ethnicity, age, creatinine, heavy metals, and gender by heavy metals. Main effects were found for barium (p=.0189), cadmium (p=.0429), cesium (p=.0004), lead (p<.00005), and thallium (p=.0062) along with a gender by cesium (p=.0402) interaction. When WC was regressed on the same variables, main effects were found for barium (p=.0255), cesium (p=.0002), molybdenum (p=.0018), lead (p=.0000), and thallium (p=.0071) along with a gender by cesium (p=.0414) interaction. There are positive associations for barium and thallium with BMI and WC. The association is reversed for lead and cesium with BMI and WC. However, the cesium relationship is stronger for females than males. Environmental exposure to heavy metals may burden the human body with toxicity as well as weight gain and hence obesity.
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Socioeconomic and behavioural correlates of overweight among South Mediterranean adolescents (Tunisia)

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Introduction: Obesity in adolescence is becoming a public health concern in developing countries. However, few data are available concerning its prevalence and related factors. This study aimed at assessing the overweight prevalence of adolescents and its correlated factors in Tunisia.
Methodology: This cross-sectional study, based on a multistage stratified random cluster sample, representative of 3 contrasted socioeconomic regions in Tunisia, was carried out in 2005 on 1019 adolescents aged 15-19 years. Socioeconomic characteristics, anthropometric measures, food consumption (from which diet patterning and quality index were derived) and physical activity behaviour characteristics were recorded during home visits. Multivariate analysis was performed to identify overweight's correlates.
Results: Prevalence of overweight (>=85thperc), and obesity (>=95thperc) ((NCHS-WHO reference) were respectively 18.9% and 4.3% (15.2% and 2.6% - IOTF definition). Prevalence of overweight increased significantly by socioeconomic level of region (from 3.7% to 22.9%) and was higher in urban (21.5%) than rural areas (8.1%) for boys; whereas no significant difference was found for girls. Overweight was related to diet structure and quality for boys only. After adjustment, overweight was positively associated to living in an urban area, higher educational level of the mother, sedentary lifestyle and irregular afternoon snacking, for boys, It was positively related to school dropout and the higher level of mother's education for girls.
Conclusion*:* Overweight in late adolescence has become a true public health problem in Tunisia. Girls were exposed equally to overweight in rural and urban areas whereas it was more related to the westernization of lifestyle for boys.
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Improvement in quality of life in obese patients is independent of weight loss

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Besides weight loss, quality of life (QL) is another measurement of treatment impact. If QL depends only on weight loss could be considered as surrogate and in this case could loss significance. This study investigated the relation between QL score and weight loss. The time of permanence in follow up was considered another variable of interest for QL assessment.
We used the IWQOL (Impact of Weight on Quality of Life) developed in the University of Duke. It has 8 areas, validated by our team.
We included 69 patients, 55 with complete data (44 women and 11men). Age 44.5±9.5 yo, BMI 38±5.8, waist circumference 107.2±13.13 cm and mean follow up using Kaplan-Meier was 7±0.4 months.
Changes in QL and correlation with weight change:

Area	Improvement in QL (IC 95%) (p)	Correlation with weight reduction (p)
Health	5.6 (3.6-7.7) (<0.001)	-0.10 (0.46)
Food enjoyment	2.3 (1.0-3.6) (<0.001)	0.044 (0.75)
Personal	3.7 (2.4-5.0) (<0.001)	-0.072 (0.60)
Labour	1.8 (0.3-3.3) (<0.05)	-0.09 (0.52)
Physical activity	5.8 (3.7-7.9) (<0.001)	0.07 (0.63)
Social	3.2 (1.7-4.6) (<0.001)	-0.052 (0.71)
Sexual	2.4 (1.2-3.6) (<0.001)	0.13 (0.34)
Self-confidence	3.4 (1.9-4.9) (<0.001)	-0.04 (0.78)

Fifty percent of conditioned success weight lost of 5 or 7% using Kaplan-Meier analysis was obtained at 6.3 months.
We concluded obese subjects with BMI >30 improved the QL score independently of BMI decrease and the time of follow up at the clinic.
To obtain at least 50% of conditional success in weight loss patients should be maintained in treatment for more than 6 months.