we assessed weight, height, BMI and z-BMI at diagnosis and 1 year later. We also investigated the compliance with the prescribed food program and GFD, then selecting only patients with strict adherence to GFD, and subdividing them into 2 groups: A (balanced diet) and B (non-controlled diet).

**Results** The characteristics of A and B, as in Tab 1, show a reduction of z-BMI (Δz-BMI = -0.49±0.41) in all patients of group A, while in group B (Δz-BMI = -0.28±0.54) the z-BMI increased in 2 cases and reduced in 6, but less than in A.

**Conclusions** Probably due to the small number of cases, the differences in the z-BMI changes between OCC with a balanced GFD and those with a non-controlled GFD are not significant. Nonetheless, we assert that it is fundamental that these patients follow an adequate diet, especially to avoid the worsening of a state of malnutrition in excess, often already present at the diagnosis.

### Abstract 1418 Table 1

<table>
<thead>
<tr>
<th>Age at diagnosis</th>
<th>z-BMI at diagnosis</th>
<th>z-BMI at follow-up</th>
<th>Δ z-BMI</th>
<th>follow-up length</th>
</tr>
</thead>
<tbody>
<tr>
<td>A group (3M and 4F)</td>
<td>11.35±3.79</td>
<td>1.93±0.69</td>
<td>1.44±0.11</td>
<td>-0.48±0.41</td>
</tr>
<tr>
<td>B group (5M and 5F)</td>
<td>9.12±4.26</td>
<td>1.86±0.53</td>
<td>1.57±0.96</td>
<td>-0.28±0.54</td>
</tr>
</tbody>
</table>

**Background** Binge Eating Disorder (BED) is related to obesity in children; treatment of obesity could be improved by using either a nutritional and psychotherapeutic strategy.

**Aims** To assess the prevalence of BED and weight trend in an overweight or obese pediatric population; to evaluate an Integrated Therapeutic Approach (ITA) in a BED positive group.

**Methods** Ninety-seven subjects (M/F 55/44, mean age 11.0±2.4 yr, range 6.1–16.2) with overweight (M/F 8/18) or obesity (M/F 45/26) underwent a physical examination, body weight, waist and hip circumference and blood pressure. A Binge Eating Scale (BES) to evaluate BED (positive>17) was used. All BED-positive patients were asked for a normocaloric diet for age and regular physical activity for at least an hour a day and followed with monthly checks; six BED-positive children underwent both medical visits and 10 sessions of psychotherapy (ITA). BED was evaluated before and after psychotherapy.

**Results** BED was found in 29/97 (29.9%) subjects, of whom 20 (69%) had a BMI >95th percentile. BMI did not change in the six BED-positive children followed with ITA nor in a matched group of six BED-positive children followed without ITA (3/6 dropped-out). Instead, ITA reduced gravity of BED in all patients and negativized (BES>17) in four patients.

**Conclusions** Early improvements in BED can be achieved with an integrated therapeutic approach as a first step for long-term reduction of obesity.

### Abstract 1419

**OBESITY AND BINGE EATING DISORDER IN CHILDHOOD: AN INTEGRATED THERAPEUTIC APPROACH**

**Background** Globesity has made visible the increased risk, yet among youngsters, of cardiovascular diseases, NAFLD, MS.(10)

**Aim** The aim of this study is to stress how two simple indexes (IR-HOMA and WtHR) can be used at out-patients level to detect the presence of an often still unidentified MS.

**Methods** 857 ow/ob children (405 female, 47.26%), aged 10.54±2.87, were included in this retrospective (5 years) study.

**Results** The standard risk factors of MS (NCEP ATP III modified) in the studied population were represented as follows: Waist Circumference >90°c 62.40%; Hypertension 21.52%; Triglycerides >95°c 12.34%, HDL <5°c 5.52%, Glycaemia >100mg/dl 4.72%, besides, 34.64% showed IR-HOMA >2.5. The overall MS prevalence was 5.49%.

Due to an OR=5.29 (p<0.05) for IR-HOMA vs. MS factors, all patients with an IR-HOMA >2.5 are very likely to have 3 or more elements of MS. If both IR-HOMA and WtHR are abnormal, OR becomes 6.24 (p<0.05).

**Conclusions** In the ow/ob child, IR-HOMA and WtHR are important anticipating factors of MS, even at a very young age, much below the age of 10, presently considered the lowest age to diagnose such complication. This stresses once again how, in any case of obesity, an early intervention is needed, in order to prevent the development of cardiovascular disease in early adult age.(10)


**Background and Aim** Metabolic syndrome is a clinical syndrome that increases the risk of cardiovascular disease in early adult age. The aim of the study was to assess the prevalence of obesity and weight trend in an over-weight population.

**Methods** Ninety-seven subjects (M/F 55/44, mean age 11.0±2.4 yr, range 6.1–16.2) with overweight (M/F 8/18) or obesity (M/F 45/26) underwent a physical examination, body weight, waist and hip circumference and blood pressure. A Binge Eating Scale (BES) to evaluate BED (positive>17) was used. All BED-positive patients were asked for a normocaloric diet for age and regular physical activity for at least an hour a day and followed with monthly checks; six BED-positive children underwent both medical visits and 10 sessions of psychotherapy (ITA). BED was evaluated before and after psychotherapy.

**Results** BED was found in 29/97 (29.9%) subjects, of whom 20 (69%) had a BMI >95th percentile. BMI did not change in the six BED-positive children followed with ITA nor in a matched group of six BED-positive children followed without ITA (3/6 dropped-out). Instead, ITA reduced gravity of BED in all patients and negativized (BES>17) in four patients.

**Conclusions** Early improvements in BED can be achieved with an integrated therapeutic approach as a first step for long-term reduction of obesity.

### Abstract 1420

**EXAMINATION OF THE RELATION OF DIET AND PHYSICAL ACTIVITY WITH THE APPEARANCE OF OBESITY AT GREEK STUDENTS**

**Methods** Ninety-seven subjects (M/F 55/44, mean age 11.0±2.4 yr, range 6.1–16.2) with overweight (M/F 8/18) or obesity (M/F 45/26) underwent a physical examination, body weight, waist and hip circumference and blood pressure. A Binge Eating Scale (BES) to evaluate BED (positive>17) was used. All BED-positive patients were asked for a normocaloric diet for age and regular physical activity for at least an hour a day and followed with monthly checks; six BED-positive children underwent both medical visits and 10 sessions of psychotherapy (ITA). BED was evaluated before and after psychotherapy.

**Results** BED was found in 29/97 (29.9%) subjects, of whom 20 (69%) had a BMI >95th percentile. BMI did not change in the six BED-positive children followed with ITA nor in a matched group of six BED-positive children followed without ITA (3/6 dropped-out). Instead, ITA reduced gravity of BED in all patients and negativized (BES>17) in four patients.

**Conclusions** Early improvements in BED can be achieved with an integrated therapeutic approach as a first step for long-term reduction of obesity.