A Canadian study published in 2001 reported that 23% of adolescent females were dieting to lose weight.1 Outside of Canada, a high prevalence of dieting has also been reported among preadolescent females.2 Dieting has been identified as a risk factor for eating disorders3,4 and the associated chronic health problems.5 A recent longitudinal study involving 14 972 males and females between the ages of 9 and 14 years revealed that dieting to control weight was not only ineffective but actually led to weight gain.6 The weight gain appeared to result from a cycle of restrictive dieting followed by bouts of overeating or binge eating. If the trend toward girls dieting at a younger age is also found in Canada, additional risk factor research will be required to foster the development of age-appropriate prevention programs.

The mean ChEAT score for the entire sample was 9.3 (SD 9.0), with 10.5% reporting ChEAT scores above the clinical threshold score of 20. ChEAT scores of 20 or more have been associated with more disturbed eating attitudes and behaviours and an increased vulnerability toward development of an eating disorder.12 A total of 29.3% answered Yes to the question “Are you currently trying to lose weight?” Binge eating and self-induced vomiting occurred regularly in only 3.9% and 1.5% of the overall sample respectively.

Using a one-way analysis of variance controlling for BMI, a significant main effect of age on total ChEAT scores was found ($F_{[4,1677]} = 30.43$, $p < 0.001$) (Table 1). Posthoc multiple comparisons, using Bonferroni corrections, showed that 14-year-old girls had significantly higher scores than all other age groups ($p < 0.001$). Similar age differences were found on the ChEAT subscales (dieting, bulimia, food preoccupation and oral control) ($p < 0.001$).

Eating and weight loss behaviours among girls with nor-
mal and elevated ChEAT scores are compared in Table 2. The girls with scores of 20 or higher were significantly more likely to be trying to lose weight and engaging in other extreme weight control methods and attitudes (e.g., vomiting, binge eating). The high-risk group had significantly higher BMI scores, an association reported elsewhere with older females. However, the majority of the present sample (92.7%) were within, or below, the normal weight range for their age and height.

Although previous studies examined adolescent girls, our study suggests that unhealthy dieting behaviours are reported in girls as young as 10 years of age (Table 1). The potential negative health outcomes associated with dieting and disordered eating stress the need for primary prevention efforts to begin at the elementary school level. Our findings highlight an opportunity for prevention strategies for girls during the preadolescent phase that will avert future disordered eating behaviours. It is logical that any such program would be distinct from those aimed at older adolescent girls, for whom strategies for prevention and normalization of existing disordered behaviours are necessary.

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Table 1: Prevalence of eating attitudes and behaviours among preadolescent and young adolescent girls, by age

<table>
<thead>
<tr>
<th>Measure</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 107</td>
<td>n = 729</td>
<td>n = 741</td>
<td>n = 547</td>
<td>n = 34</td>
</tr>
<tr>
<td>Desire to be thinner</td>
<td>28 (26.2)</td>
<td>180 (24.7)</td>
<td>202 (27.3)</td>
<td>162 (29.6)</td>
<td>18 (52.9)</td>
</tr>
<tr>
<td>Fear of being overweight</td>
<td>21 (19.6)</td>
<td>179 (24.6)</td>
<td>221 (29.8)</td>
<td>204 (37.3)</td>
<td>20 (58.8)</td>
</tr>
<tr>
<td>Feeling of being “too fat”</td>
<td>34 (31.8)</td>
<td>178 (24.4)</td>
<td>235 (31.7)</td>
<td>200 (36.6)</td>
<td>18 (52.9)</td>
</tr>
<tr>
<td>Currently trying to lose weight</td>
<td>33 (30.8)</td>
<td>172 (23.6)</td>
<td>211 (28.5)</td>
<td>201 (36.7)</td>
<td>15 (44.1)</td>
</tr>
<tr>
<td>Binge eating</td>
<td>2 (1.9)</td>
<td>24 (3.3)</td>
<td>29 (3.9)</td>
<td>28 (5.2)</td>
<td>2 (5.9)</td>
</tr>
<tr>
<td>Self-induced vomiting</td>
<td>0 (0.0)</td>
<td>10 (1.4)</td>
<td>10 (1.3)</td>
<td>12 (2.2)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>ChEAT score ≥ 20†</td>
<td>7 (6.5)</td>
<td>57 (7.8)</td>
<td>81 (10.9)</td>
<td>69 (12.6)</td>
<td>18 (52.9)</td>
</tr>
<tr>
<td>ChEAT score,† median (IQR)</td>
<td>6.0 (10.0)</td>
<td>7.0 (7.9)</td>
<td>6.5 (9.0)</td>
<td>6.0 (9.4)</td>
<td>21.5 (31.4)</td>
</tr>
<tr>
<td>BMI, mean (SD)</td>
<td>17.6 (3.4)</td>
<td>18.1 (8.2)</td>
<td>18.8 (3.9)</td>
<td>19.5 (3.4)</td>
<td>18.1 (4.3)</td>
</tr>
</tbody>
</table>

Note: The sum of the respondents is less than the full sample size because some respondents did not answer all of the questions. SD = standard deviation, ChEAT = Children’s version of the Eating Attitudes Test, IQR = interquartile range.

†ChEAT scores ≥ 20 are more frequently associated with disordered eating attitudes and behaviours and may identify individuals at an increased risk for an eating disorder.
References


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