Posters

**Profile of patients with metabolic syndrome recruited for a study of an automated dietary assessment website in primary care**

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**Background** - An automated dietary assessment website has been developed for patients with metabolic syndrome.

**Objective** - This study outlines the profile of patients using the website and their rates of completion of the assessment.

**Design** - Computers have been set up in local GP practices to which the GP may refer their patients. These patients enter their dietary information into the website and receive an individualised dietary prescription put together by a dietitian.

**Outcomes** - Recruited patients were primarily female (70%). Ranging between 22 and 75 years of age patients reported to be overweight (99%), have high cholesterol concentrations (47%), elevated blood pressure (41%) and/or type 2 diabetes mellitus. Intermediate levels of computer experience were reported with most patients preferring to use the website at home as opposed to in their GP practice. Of the 73 patients recruited 57 completed the entire assessment, 17 allowed their accounts to expire and the remainder had partially completed the assessment.

**Conclusions** - Results indicated that use of a computer for dietary assessment appears to capture a large proportion of the population who otherwise would not be able or willing to receive face-to-face advice from a dietitian. Such an application is highly useful in the field of nutrition due to the ever increasing rates of overweight and obesity within Australia.

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**Dietary quality in under-reporters and non-under-reporters**

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**Background** - Exclusion of under-reporters (UR) have affected conclusions in some dietary studies.

**Objectives** - To investigate differences between non-UR (NUR) and UR in dietary quality.

**Design** - Analysis of four day records of dietary intakes and activities in 475 non-pregnant, non-lactating female university students, studied between 1998 and 2003. Daily energy expenditure (EE) was determined using a factorial method. Subjects were classified as UR when their reported energy intake (EI) was <76% of their EE. Dietary quality was measured using three composite indexes: the Healthy Eating Index (HEI), the Dietary Quality Index Revised (DQIR) and the Dietary Guidelines for Americans Index (DGI-US). Differences between UR and NUR were evaluated using the Mann Whitney U test.

**Outcomes** - Of the subjects, 267 were classified as NUR and 208 as UR. The total dietary quality scores and the statistical significance of differences between NUR and UR (P value) are shown in the table. There were no differences between NUR and UR in dietary quality using the HEI or DQIR, but UR had higher dietary quality using the DGI-US. However, analysis of scores for each component of the composite indexes showed many significant differences between NUR and UR. Scores relating to total food consumption (especially grains, meat, dairy, dietary variety and nutrient adequacy) were higher in NUR than UR in all but a few instances, while scores relating to dietary balance (percentage of energy from fat and saturated fat, cholesterol, sodium and moderation) were higher in UR than NUR (data not shown).

<table>
<thead>
<tr>
<th>Index</th>
<th>Maximum score</th>
<th>NUR (mean ± SD)</th>
<th>UR (mean ± SD)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEI</td>
<td>100</td>
<td>72.8 ± 12.7</td>
<td>72.4 ± 12.7</td>
<td>0.370</td>
</tr>
<tr>
<td>DQIR</td>
<td>100</td>
<td>67.8 ± 12.8</td>
<td>68.4 ± 13.3</td>
<td>0.549</td>
</tr>
<tr>
<td>DGI-US</td>
<td>18</td>
<td>10.3 ± 2.8</td>
<td>10.9 ± 2.4</td>
<td>0.050</td>
</tr>
</tbody>
</table>

**Conclusions** - There were no differences between NUR and UR in dietary quality using the HEI or DQIR, but UR had higher dietary quality using the DGI-US. However, total scores for composite indexes of dietary quality hide apparently different dietary patterns for NUR and UR.