

**SUN-PP203****PAC24 – THE PORTUGUESE SELF-ADMINISTERED  
COMPUTERISED 24-HOUR DIETARY RECALL**

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**Rationale:** Measuring the diets of school-aged children is a challenging process. Technology offers the opportunity to automate more accurate methods of dietary assessment, making them less expensive, easier to use and an alternative to nutritionist interviews.

**Methods:** PAC24 is a web-based 24-hour Dietary Recall designed for use with second-, third-, and fourth-grade Portuguese children. PAC24 guides children through six daily eating occasions and queried about food and drink consumption on the previous day. For the majority of foods, amounts consumed are estimated by selecting the closest portion size served and leftover, if any, among seven different digital images. Data about time, place and television watch and computer use are assigned to each eating occasion. A literature review and focus groups informed the development of PAC24. A prototype system was tested and its content was validated through an expert meeting. Accuracy was determined by comparison of PAC24 with lunch observations. A pilot study was conducted on two non-consecutive days to test reliability, and also check the feasibility in respect of procedures, methods and data processing.

**Results:** PAC24 was well received by children taking part in the usability and validity studies; was relatively quick to complete; and, worked in the school environment. The accuracy and reliability was close to that of similar computer-based systems currently used in dietary studies. Comparison of PAC24 against lunch observations at the food level indicated 67.0% for matches, 11.5% for intrusions and 21.5% for omissions. Significant differences were not observed in reliability of energy and nutrient intakes ( $p > 0.05$ ).

**Conclusion:** PAC24 is an intuitive, cost-effective and engaging method to collect detailed dietary data from school-age children. Further development to improve the usability and accuracy of PAC24 is necessary.

**Disclosure of Interest:** None declared