

## **The Portuguese tool for menu planning for school children**

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### **Aims**

In Portugal, the number of children attending public schools has been increasing every year. The school canteen assumes an unquestionable and increasing responsibility for the promotion of healthy eating habits and also for the supply of safe meals in an adequate social context. With this purpose the Faculty of Nutrition and Food Science of Porto University designed and created an informatics' tool to help planning healthy menus in a safe context: the System of Planning and Evaluation of School Meals.

### **Methods**

The tool focuses on four main areas: menu planning, menu evaluation, evaluation of the sanitary aspects and environment, and current food policies. The software was developed to allow both quantitative and qualitative approaches.

For the qualitative evaluation of meals, users can develop a menu step by step, including ingredients and the quantities needed for the different components, to obtain the final meal and menu. It also allows the analysis of the menu concerning variety, daily, weekly and monthly. Data editing is possible at every step of the process. A database was created for nutritional evaluation, including national and international foods and using as reference Portuguese Food Composition Tables and others.

### **Results and conclusions**

The recommendations used to evaluate the nutritional balance were from the World Health Organization and the United States Department of Agriculture and Institute of Medicine. These were the basis to establish the energy adequacy and distribution of nutrients for food intake considering the four age groups, which were considered for this goal.

In addition, two quantified grids were developed according to National, European and International references, to the sanitary / environment evaluation, one directed to canteens that produce meals and the other for the ones that only distribute meals, and a check list was created to enable the characterization of schools in terms of food policies. With the exception of the last check list, the

reports are automatically produced by this software and can help to establish and rank priorities for action in a healthy environment context.