











# Twelfth International Conference on Culinary Arts and Sciences

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The Worshipful Company of Cooks
&
The Institut Paul Bocuse Research Center





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REPORT OF ICCAS PROCEEDINGS

Twelfth International Conference on Culinary Arts and Sciences







# TWELFTH ICCAS INTERNATIONAL CONFERENCE ON CULINARY ARTS AND SCIENCES

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# Food Preparation Patterns and Diet Quality in the Portuguese population

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#### Introduction

Diet-related chronic diseases are a relevant public health problem that is spreading worldwide. To encourage consumers to eat healthier there is an urgent need to better understand dietary habits. Eating out has been pointed as responsible for inadequate dietary intake, but it is uncertain if this relates simply to the place of consumption or if the place of preparation is also involved. Although the consumption of food prepared away-from-home is increasing and time spent on cooking at home is decreasing, the potential role that eating homemade meals could have in health promotion is uncertain. Due to the lack of accurate, comprehensive, and up-to-date information about this subject, it was considered relevant to focus on if food and beverages were prepared at- or away-from-home.

#### **Objectives**

To identify food preparation patterns and to study their associations with diet quality.

#### Methods & design

Participants were taken from a representative sample of the Portuguese population (aged between 3-84 years old) (n=5005), from the most recent Nacional Food, Nutrition and Physical Activity Survey (IAN-AF 2015/2016).

Dietary data was collected by trained researchers with a background in Nutrition or Dietetics, using an electronic platform ("You eAT&Move") and following European Food Safety Authority (EFSA) recommendations for dietary assessment. Interviews 8 to 15 days apart were conducted over 12 months (from October 2015 to September 2016), distributed over the four seasons, and included all days of the week (randomly selected). Food consumption data was collected by two non-consecutive days of 24-hour food diaries for children (<10 years old) and two non-consecutive 24-hour recalls for the other age groups. Food photos for portion size estimation and automatic intake conversion using databases with the nutritional composition of foods and recipes were applied.

The "eAT24" module, integrated in the electronic platform, enabled the description of food intakes by interviewers through various facets (divided in 3 groups: facets for "Foods", for "Composite dishes/Recipes" or for "Food supplements") and respective descriptors, if applicable, using the EFSA FoodEx2 classification system. However, this module does not include a descriptor variable that evaluates only the food preparation. For this reason, an alternative descriptor variable was used, the "Preparation/production/acquisition place" — a descriptor referred to the immediate food or recipe source (food supplements were not included) of a reported intake, i.e., the place where the food being consumed was prepared, produced, or acquired. This descriptor was first considered at the level of the "Recipes" facet (RF22) and, if the foods/beverages consumed were not part of a recipe, the "Preparation/production/acquisition place" was considered at the level of the "Foods" facet (F22).

For the purposes of the present study, both RF22 and F22 "Preparation/production/acquisition places" descriptors were grouped. Still, if food preparation/acquisition places (F22) had been classified as "Food industry", "Street vendor/kiosk", "Butchery" or "Fishery", it was necessary to reclassify them through the analysis of the respective consumption place and type of food/beverage, as the exact place of preparation was unclear, namely whether they had been prepared at home or not. This