

Nutritional Quality of Ready to Eat Meals – A European Perspective

Sonja Kanzler, Martin Manschein, Anita Gruber, Karl-Heinz Wagner

Department of Nutritional Sciences, University of Vienna, Austria

Nutrition is one of the most important issues addressing public health. In the past, ready to eat (RTE) meals constitute a lower part of the overall dietary intake of European populations, but this percentage is rising every year. Simultaneously the consumption behaviour is changing towards convenience products and away from traditional home cooked meals. Therefore frequent users of RTE meals (e.g. convenience seeking workers or singles) are covering one substantial part of their dietary intake via RTE meals. In order to contribute to these changes, these meals have to be evaluated periodically, and if necessary improved towards nutritional quality, total energy and nutrient composition. This is the aim of the Double Fresh project (FP6, Priority 5).

Altogether 10 RTE meals (5 various batches of each meal) of 5 different producers (Northern Europe, Benelux Countries, Central Europe) were evaluated on their nutritional quality.

The meals were prepared according to the instructions given on the package and analysed on the following parameters: Total Energy (bomb calorimeter), total fat (ASE®100), total protein (Kjeldahl), carbohydrates (calculated), dry matter, ashes, salt content (titration) and dietary fibres (enzymatically).

The portion size varied strongly from 300 to 500 g. Total energy ranged from 407 to 828 kcal/portion, fat from 4.6 to 33.8 g/portion, protein from 16.9 to 33.9 g/portion and calculated carbohydrates from 47.4 to 143.3.

Salt content was generally too high (3.5-6.8 g/portion), dietary fibre were appropriate (6.0-15.1 g/portion).

The first results indicate that the salt contents are all above the recommended level for one meal (< 2 g/meal). Total energy and fat content exceeded the recommendations for 1 and 3 out of ten meals, respectively, depending on the portion size (one package).

Only 20% of the investigated meals were low in dietary fibre (< 8 g/meal).