Perceived barriers to the uptake of personalised nutrition: a comparison between European countries

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Personalised nutrition is a relatively new field of research aiming to provide personalised dietary advice, which can be based on an individual's genotype, phenotype, dietary and lifestyle data. According to this approach, dietary recommendations are tailored to meet personal nutritional needs. The main advantage is that genetic differences between individuals, which may interact with phenotype and co-determine health impacts of dietary choices, are explicitly taken into account. The success of a personalised nutrition approach will depend upon consumer acceptance and the barriers for the adoption of personalised nutrition may vary between different socio-demographic and cultural contexts across Europe. The goal of this analysis is to explore differences in perceived barriers to the uptake of personalised nutrition between consumers in different European countries. Data for this research were collected in February and March 2013, using on-line survey methodology. A total of 9,381 participants from 9 European countries (Germany, Greece, Ireland, Poland, Portugal, Spain, the Netherlands, the UK, and Norway) were quota sampled from an existing panel of a social research agency to be nationally representative for each country, on sex, age (18-29, 30-39, 40-54, 55-65 years) and education level. The questions were derived from prior qualitative research and formed part of a larger survey. Perceived barriers for the adoption of personalised nutrition were measured using 18 items for which responses were on a five-point scale where respondents had to indicate their level of concern regarding various circumstances that could potentially prevent them from taking up personalised nutrition. Factor analysis indicated the existence of three factors: trust; family; and, social barriers. Trust was related to confidence in the safety of personal data, while family and social barriers were related to concerns about the impact personalised nutrition could have on their social functioning. One-way ANOVA showed significant differences between the 9 European countries in perceptions of barriers to the uptake of personalised nutrition. In some countries, like Greece, Spain and Germany, trust barrier was dominant while in other (e.g. Poland and Ireland) family and social barriers were deemed more important. This implies that policies targeted at promoting adoption of personalised nutrition need to be adapted for each country. The results presented here are a part of Food4Me project that has received funding from the European Union's Seventh Framework Programme under grant agreement n°265494.