

## Background

The understanding of the long-term determinants and barriers of healthy food choice requires the longitudinal observation of dietary behaviour and related factors. The I.Family study is a five-year multilevel epidemiological approach funded by the seventh EU framework programme and investigates the determinants of eating behaviour in European children, adolescents and their parents. By its longitudinal design, the study will also investigate predictors and determinants of diet- and lifestyle-related health outcomes.

## Study design

Building on the large IDEFICS cohort of more than 16.000 children from 8 European countries (aged 2-9 years at baseline), the I.Family study will start in 2013 with the 5-year follow-up, focusing not only on the individual but also on his/her family.

The study offers the unique opportunity to assess the impact and interplay of biological, behavioural, social and environmental factors on dietary behaviour and health over time and during transition into adolescence, with an enhanced protocol in subgroups with contrasting dietary profiles and divergent developmental health trajectories, e.g. children getting overweight versus children diminishing overweight.

## Examination protocol

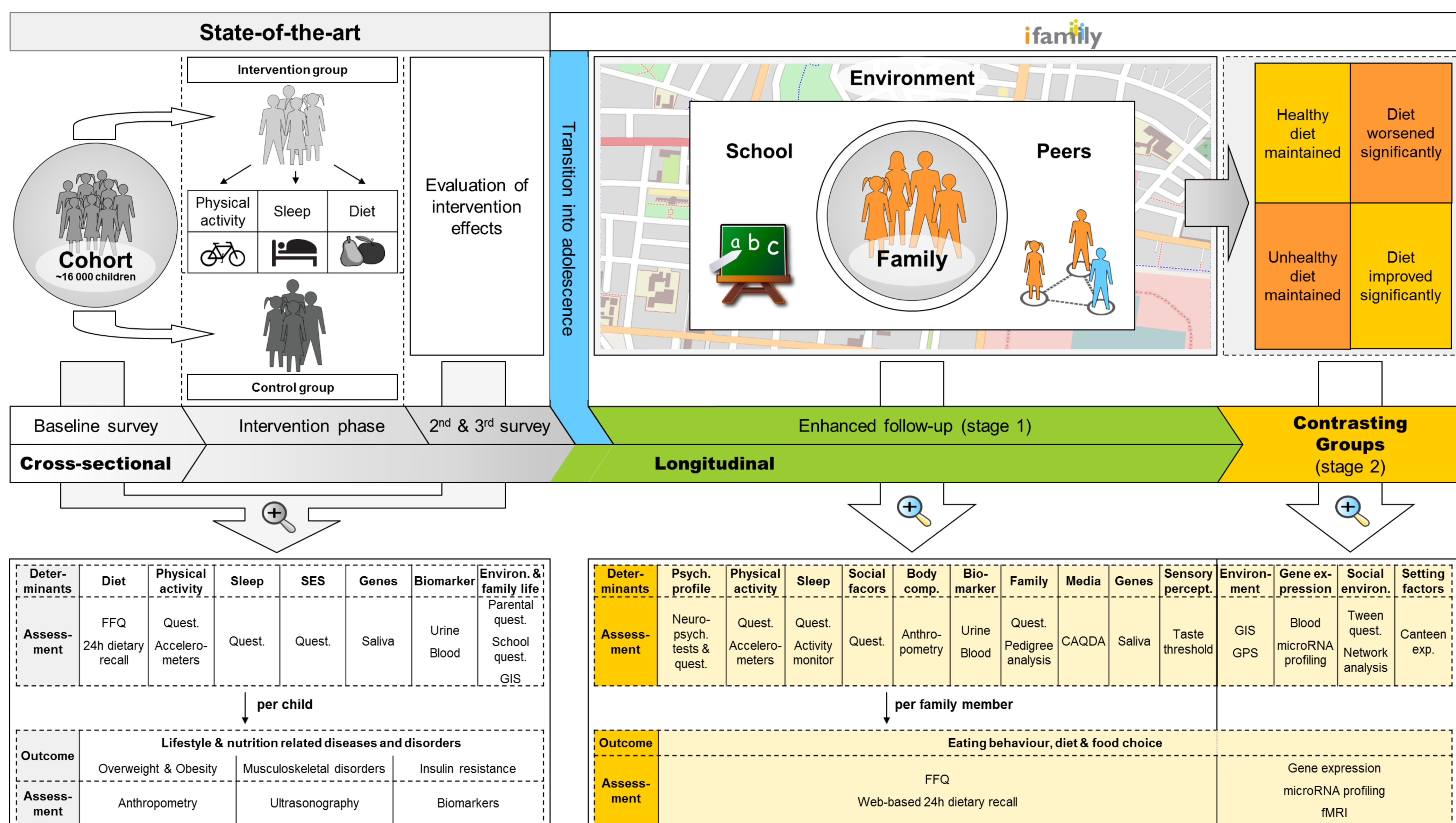
The examination protocol of children and their families will include IDEFICS baseline-measurements like anthropometry and blood pressure, the collection of bio-samples, sensory tests and the assessment of physical activity using accelerometers.

The follow-up in I.Family will additionally assess the complex family structure and neuropsychological characteristics of family members. Questionnaires for children (aged up to 11 years, proxy-report filled by their parents), teens (aged 12 to 15 years, self-administered) and parents (self-report and family-report) will collect core information on behavioural (e.g. family rules and parenting style, eating habits, physical activity, media consumption) and social factors (e.g. education and income). A food frequency questionnaire (FFQ) and a web-based 24-hours dietary recall will provide detailed information about the eating behaviour, diet and food choice of children and their families over time.

Subgroups with contrasting profiles and divergent developmental trajectories will undergo an enhanced protocol including measurement of brain activation, expression of genes related to food choice, biological and genetic determinants of sensory taste perception, role of sleep, sedentary time, physical activity and impact of the built environment.

## Objectives

- 1 Identification of the main driving factors for food choice and eating habits to understand consumer behaviour and consumer preferences
- 2 Understanding of discrepancies between actual versus optimal dietary behaviour to identify targets for intervention
- 3 Elucidation of the interaction between determinants and lifestyle factors and their influence on food choice to understand the impact of food on health/well-being
- 4 Development of strategies to induce behavioural changes and facilitate consumers' choice for a healthy diet
- 5 Setup of methods for communication and dissemination to reach children, adolescents and their parents to induce favourable changes of health behaviour



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