Being overweight or obese increases your risk of a number of non-communicable diseases, such as diabetes, some cardiovascular diseases, cancer and dementia.

The next generation is anticipated to have a shorter life expectancy. As nutrition influences long-term health in infants, scientists can identify risk factors for health consequences at the earliest stages of life. The critical nutrients supporting optimal immune development in early life are under debate. This activity aims to create a clear consensus on two main questions:

- How long should research studies run in order to give confidence in the sustained efficacy of interventions with supposed age-related benefits? To address this, ILSI Europe is conducting a systematic review of the literature on testing safety effects over extended exposures.
- How long should research studies run in order to give confidence in the sustained efficacy of interventions with supposed age-related benefits? To address this, ILSI Europe is conducting a systematic review of the literature on testing safety effects over extended exposures.

This project aims to link these different frameworks in food safety, nutrition and efficacy studies.

A lot of debate has surrounded the use of animal studies in nutrition and food safety, especially regarding identifying when they are mandatory and when they can be replaced by alternative methods. The development of new alternative methods offers new opportunities for food safety, nutrition and efficacy studies.

Nutritional Research, Development & Healthier Aging

FGA of Pregnancy, Reduction of Post-Prandial Glucosamie

Metabolic Syndrome Studies

What is the impact of diet on individual factors of metabolic syndrome (e.g. low HDL-cholesterol, high blood pressure, hyperglycaemia, insulin resistance, hypertension, obesity and adiposity) and their effects on cardiovascular disease and type 2 diabetes? A model will be developed for the dietary and/or food extracts/food supplements on the risk, presence or penetrance of the metabolic syndrome.

Status: Manuscript in preparation

PPG Response in Children

In childhood, the immediate benefits of lowering blood glucose excursions may be relatively small. But longitudinal effects can be potentially large when adopted and sustained over a lifetime. This activity aims to create a clear consensus on two main questions:

- Is there any difference in glycaemic index or other glycaemic response data on health outcomes in children?
- What is the impact of glycaemic index or other glycaemic response data on health outcomes in children?

Gestational Diabetes and Diet

Gestational Diabetes Mellitus (GDM) occurs when a glucose intolerance (of any degree) develops during pregnancy, estimated to affect approximately 2-6% of all pregnancies in Europe. Recent studies have shown that different dietary patterns are associated with a lower risk of developing GDM. The next edition of ILSI Europe’s series of events on this topic will take place in 2023.

Status: Manuscript in preparation

GLYCAEMIA & INFLAMMATION

ILSI Europe is conducting a systematic review of the presence or penetrance of the metabolic syndrome and breast milk pathways and its influence later in life. The influence of the elderly on nutrition health later in life will be also evaluated. It is intended to provide nutritional recommendations for an optimal performing immune system throughout life.

Status: Manuscript in preparation

Evidence Base for Population Targeted Protein Intake: Muscle Health

Current dietary recommendations for protein intake established by major authorities are based on the amount of protein required to maintain health and not on the overall health impact. However, there is evidence that protein quality, composition and protein intake pattern as well as the food matrix can exert beneficial effects such as building and maintenance of muscle mass and strength. More evidence-based research on these issues is needed. A systematic review and meta-analysis has been published in recent years, yet a systematic review that compares the evidence base for protein intakes across muscle health outcomes in different populations groups is missing. This activity will address the evidence base for the above targeted parameters in adults (18-35y), middle (35-70y), and elderly (70+), both physically active and inactive. It explores whether the optimum protein intake for individuals differs in different population groups and how they compare against the protein intake recommendations from EFSA. Status: New activity

Nutrient Density

Besides sedentary lifestyle, the widespread adoption of the ‘convenience diet’ concept could help to rebalance diets and, thereby, to reduce the incidence of obesity-related NCDs.

Status: Manuscript in preparation

Reduction of Post-Prandial Glucosamie

There is a general consensus that reductions in post-prandial glycaemic (PPG) and relative insulinaemic (PPI) responses are likely to reduce the risk of several non-communicable diseases (e.g. diabetes or cardiovascular disease). This activity will provide practical guidance on how to quantify effects of the food consumed on blood glucose and assess what the impact on is on health.

Status: Two manuscripts in preparation

Nutrition for the Ageing Brain

A balanced healthy diet must satisfy human needs for energy and all essential nutrients. Energy balance refers to the relationship between the energy that we eat up, and the energy we use. If energy balance is positive for some time, the excess energy is deposited as fat. A negative energy balance for long periods (insufficient food energy intake to meet requirements) is almost always accompanied by a deficiency in the intake of many nutrients.

Status: Manuscript in preparation

Adaptation to Changes in Satiety

How long should research studies run in order to give confidence in the sustained efficacy of interventions with supposed age-related benefits? To address this, ILSI Europe is conducting a systematic review of the literature on testing safety effects over extended exposures.

Status: Complete

Physical and Sensory Attributes to Improve Satisf

Satiety is impacted by many factors, including sensory characteristics and sensory attributes, which are of interest to food producers. This activity will review which key food physical characteristics and sensory attributes can influence satisfaction and well-being at meal termination. This project aims to link these different frameworks in food safety, nutrition and efficacy studies. Gaining such an understanding will ultimately lead to the development of new food products that enhance healthy choices and eating behavior.

Status: Complete

EU Project SWEET in the past years, sweeteners and sweetness (flavour) enhancers (S&SEs) have become useful ingredients to lower sugar content of food products. However, information is lacking about new and emerging S&SEs in terms of efficiency, safety. The EU Project SWEET aims to examine the barriers and facilitators to the use of S&SEs and examine the likely risks and benefits of using them in the context of health, obesity, safety and sustainability.

Status: Manuscript in preparation