Healthier Lives Through Food

Mission 1

More healthy live years for all

The **aim** is to achieve a reduction in the prevalence of obesity and Non-Communicable Diseases (NCDs) in target populations through a systemic approach, including technological innovation, education, awareness and collaborative initiatives of various stakeholders. The objective is to increase the healthy years of life. Nutrition is one of the key factors contributing to more health for all and to reduce the related economic burden of preventable NCDs.

According to the World Health Organization, NCDs, such as heart disease, stroke, cancer, or diabetes are collectively responsible for 74% of all deaths worldwide.

EIT Food is developing a roadmap to identify areas of impact and to provide solutions and opportunities for the food producing and retail systems to step change and evolve, providing to consumers healthy, affordable and tasty food.

NCDs are associated with an unhealthy diet, smoking, physical inactivity and excessive alcohol consumption. In turn, these lead to key metabolic changes such as raised blood pressure, blood cholesterol, blood glucose and overweight/obesity. The rapidly increasing magnitude of these diseases disproportionately affects poor and disadvantaged populations, contributing to widening health disparities between and within countries and is driven by forces that include ageing, rapid unplanned urbanisation and the globalisation of unhealthy lifestyles.

Some of these trends can be directly influenced and addressed, through concerted and interconnected actions at different levels. EIT Food is focusing on the influence of healthy nutrition, while taking into account a systemic, holistic approach to achieve a balanced diet for people and planet. Suggested common dietary recommendations for preventing NCDs are diets high in vegetables and fruits, whole grains, pulses and nuts and seeds, with balanced, diverse protein intake with minimised consumption of red and particularly processed meat. High nutrient density in food can benefit health and prevent malnutrition such as micronutrient deficiency, which is frequent in obesity.

In this Mission, three Mission Pathways are suggested to achieve more healthy life years for all. These three pathways together will help to achieve the target set by this mission: to reduce the prevalence of NCDs and thus reach more healthy life years for all. Specific target groups will need to be considered, as well as geographical differences addressing specific NCDs. Overarching topics of all three pathways are availability and affordability of healthy and nutritious foods, sustainability of food production and a positive carbon footprint, collaboration between various stakeholders specific to opportunities identified, and education and training to ensure that the necessary skills are available in the food production chain. The roadmaps are intended as starting points and guidance tools for stakeholders in the food supply chain on the way to make the food system more sustainable.

Pathway A: Achieve a balanced diet for people and planet

Pathway B: Diversify protein sources

Pathway C: Increase and retain the nutrient density of foods

Pathway A

Achieve a balanced diet for people and planet

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Focus

Prevention of Non-Communicable Diseases (NCDs) is strongly linked to healthy and sustainably produced food. Suggested common dietary recommendations for preventing NCDs are diets high in vegetables and fruit, whole grains, pulses and nuts and seeds, with balanced, diverse protein intake with minimised consumption of red and particularly processed meat, reduced salt, sugar and saturated fat contents.
Strong drivers behind this are industry and retailers offering and placing healthy food choices and consumers demanding and accepting the healthy food choices.

Focus Areas

1. Encourage production of healthy foods
Working with food industry, this focus area intends to encourage production of foods with reduced salt, less saturated fat and sugar content and more fibre, taking into account food processing technologies, which preserve the nutrient content and support healthy and sustainable food products for people and planet.

2. Improve dietary patterns and increase the intake of inadequately consumed foods
Working with consumers, this focus area considers consumer behaviour and education to encourage higher intake of fruit, vegetables, whole grains, etc. Targeted nutrition, enabling nutrient deficiency compensation or covering special nutritional needs should be considered in this focus area. Consumer education on how to choose more nutrient-dense foods or achieve more protein diversity in the diet should be part of this focus area.

Selected Stakeholders

- Primary Producers
- Food Industry (manufacturing and marketing)
- Researchers
- Consumers
- Educators (Schools, Universities, Ministries & Administrators)
- Nutritionists / Dietitians
- Policy makers

Food for thought

Product reformulation and new product innovation can lead to more balanced and sustainable diets. Consumers need to be encouraged to buy these products, which is seen as the responsibility of retailers and government. Accessibility, affordability, sustainability are critical aspects. Advertising and marketing to promote healthy foods is another important factor. The work environment, communities, restaurants and catering outlets need to play a role to transform the food system and provision of healthy and sustainable food for people and the planet.

Impact of this pathway

- ⇨ Food Industry and retailers to prioritise the development and promotion of healthier food options
- ⇨ Concerted effort of food service/ restaurants and canteens
- ⇨ Education and awareness to encourage consumers to make healthier choices

Pathway B

Diversify protein sources

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Focus

Proteins of animal origin are of higher quality thanks to their amino acid content and good digestibility. However, high consumption of protein-rich animal food, notably processed meat, is also associated with adverse health effects and higher risk for NCDs, partly related to other components of these foods, like saturated fatty acids. Other components have beneficial effects, such as calcium rich dairy product reducing risk of colorectal cancer. Moreover, the current production systems of some protein rich food is not sustainable. There is an urgent need to increase the diversification of proteins in the diets, including those of plant origin (principally legumes) and of recent introduction (insects and algae), for both human & plant health.

Focus Areas

1. Encourage diversification to include a wider range of sustainable protein sources

There is an urgent need to increase the diversification of proteins in the diets, including those of plant origin (pulse/legume/grain), while taking into account animal protein sources, considering their role as micronutrient sources and in the whole food system.

2. Encourage and explore 'unusual' protein sources

the production, acceptance and education to increase acceptance of complementary or alternative proteins is within this focus area.

Selected Stakeholders

- Primary producers
- Food Industry (manufacturing and marketing)
- Policy makers
- Government
- Consumers
- Educators (Schools, Universities, Ministries & Administrators)

Food for thought

Alternative proteins are an interesting landscape to explore, however they need to be properly investigated to fill gaps in the understanding of their impact on the taste of food, carbon footprint at scale production, availability and affordability and specifically for 'new' sources, their impact on human health when consumed for long periods. Importantly, consumer acceptability will also need to be evaluated. White meat is also an excellent source of protein with neutral effects on NCD risk. Dairy foods are also key sources of a range of micronutrients such as iodine and vitamin B12 as are fish and eggs. Replacing animal protein with plant protein may increase the risk of micronutrient deficiencies which must be accounted for in the whole diet.

Impact of this pathway

- ⇨ Increase in the sustainability of current protein production systems alleviating their burden due to the current high demand of land, water and energy.
- ⇨ More diversified proteins for human consumption and promotion of health benefits based on well accepted scientific principles (e.g. Mediterranean diet).
- ⇨ Increase the acceptance of alternative proteins by the consumers through proper education and effective communication

Pathway C

Increase and retain the nutrient density of food

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Focus

Nutrient-dense foods contain vitamins, minerals, complex carbohydrates, essential amino acids, and healthy fats. They are high in nutrients in proportion to energy content and include fruit, vegetables, seafood, lean meat, legumes, whole grains, dairy products and nuts, which are the opposite of energy-dense foods (also called "empty calorie" foods), such as alcohol and foods high in added sugar. The consumption of nutrient-dense foods is beneficial for health and essential in a healthy diet. Maintaining nutrient density is very important during food handling and preparation, furthermore consuming foods enriched in micronutrients is beneficial for preventing deficiencies, especially in populations at risk.

Focus Areas

1. Improve nutrient content (and bioavailability) of foods from soil to product. Increasing the nutrient content in food must be a collaborative action between primary production, research, nutritionists and the food industry. Appropriate environmental and economic strategies lead to improved food.

2. Preserve nutrient contents throughout the food value chain (production, processing, retail, etc.). Through short value chains, innovative delivery services, packaging or appropriate processing methods high nutrient contents in food can be maintained.

Consumer education on how to identify and manage nutrient dense foods is a point to be considered in both focus areas.

Selected Stakeholder

- Primary producers, seed experts
- Food industry (Ingredient & food manufacturers)
- Engineering companies
- Researchers
- Nutritionists/Dieticians
- Policy makers, Government
- Educators (Schools, Universities, Ministries & Administrators)
- Consumers

Food for thought

The production and consumption of sustainable and affordable nutrient-dense foods represents an industrial and economic challenge for all those involved. It is essential that these healthy, nutrient-dense foods become the main-stay of a healthy diet.

Impact of this pathway

- ⇨ Increase the nutrient density of foods through novel techniques in agriculture and aquaculture, but also gene technology and food fortification until adequate nutrient density is reached.
- ⇨ Respect natural production ecosystems (i.e., soil and water), favouring seasonal products, which may have a naturally better nutritional profile
- ⇨ Create novel beneficial foods to promote healthy diets based on scientific principles (food combination and preparation, limitation of energy-dense foods)