Food education for children instills healthy eating habits, nutritional awareness, and a lifelong appreciation for the importance of nourishing their bodies and making informed food choices.

WANTED:

EDUCATORS FOR A HEALTHIER NEXT GENERATION

Viktória Soós FoodEducators

Food systems challenges are on the rise globally — and so is the need for well-equipped food educators. In the autumn of 2022, 15 teachers gathered in Budapest, Hungary, to discuss food education and learn about new approaches to teaching this important topic. Many of them took the time for the training amid ongoing teachers' protests going on almost next door, at the Parliament building. "We can join them after the training," said a teacher with a pencil holder shaped like corn (clearly showing her dedication to the food topic). "This topic about health, sustainability, and food education is at least as important as the protests."

Teachers from Hungary and four other countries participated in the food education teacher training led by EIT Food's FoodEducators team. Despite their quite different cultural contexts (from Israel to Czech Republic to Spain), all the participants recognized the need for teachers who want to deal with the issue of food in a more complex way than talking only about food waste and composting. An interdisciplinary approach is clearly needed that allows us to discuss food and health and society and sustainability at the same time.

This interdisciplinary approach was an aspiration of the education expert team that created the



FoodEducators program, which offers easy-to-use, ready-made, free lesson plans for food educators around Europe and beyond. The goal is to empower teachers to feel confident talking about complex issues, such as food systems and food science, and showing students the vivid and colorful world of agrifood careers.

## Rise of Obesity and Non-Communicable Diseases

"There's a lot of junk food nowadays readily available for our students," noted one teacher at the Budapest training when the group was discussing a lesson plan about urban food deserts and food oases. Indeed, in recent years, the world



has witnessed an alarming rise in obesity and diet-related non-communicable disease (NCD) rates.

Obesity has become one of the largest health problems globally, contributing to approximately 8% of deaths worldwide (increasing from 4.5% in 1990). The prevalence of obesity is especially pronounced in middle-income countries, particularly in Eastern Europe, Central Asia, North America, and Latin America. Alarmingly, even Mediterranean countries renowned for their healthy diet, such as Spain, Italy, and Greece, have witnessed a sharp increase in childhood obesity rates: 10.8% in Spain, 12.5% in Italy, and a whopping 13.8%

in Greece.<sup>1</sup> The World Health Organization reported that the share of children and adolescents age 5-19 who are affected by obesity has risen from 4% in 1975 to approximately 18% in 2016.<sup>2</sup>

Meanwhile, the increasing prevalence of diet-related NCDs poses a significant burden on disadvantaged populations, exacerbating health disparities both within and between countries. According to the World Health Organization, NCDs, including heart disease, stroke, cancer, and diabetes, account for a staggering 74% of all global deaths, resulting in premature deaths every two seconds. Disparities in incidence of diet-responsive NCDs extend to

different regions and genders. In Europe, the middle and eastern EU countries, notably Bulgaria, report the highest all-cause mortality, as well as mortality rates for cardiovascular diseases and colorectal cancer. Moreover, women have a higher death rate from Alzheimer's disease, while men tend to have higher mortality rates from colorectal cancer.

## Sustainability of Food Systems

While we see a decrease in health — especially for youth — due to unsuitable dietary habits, we also witness a plethora of food system challenges linked to climate change and sustainability that



require urgent intervention.3 Such challenges include unsustainable food production practices threatening food security (e.g., over-fishing, soil erosion, water shortages, overuse of plastics) and the negative effects of climate change (e.g., droughts, floods, fires). Food production is a major greenhouse gas emitter, responsible for biodiversity loss. To address these challenges, we not only need more food-literate and conscious consumers in the next generation, we also need critical systems thinkers and innovators who will be able to find solutions and create more sustainable and healthier food systems. A wide range of topics and issues need to be discussed, reframed, and rethought for this to happen; without question, teachers have to play a key role in this process.

## Teaching Food Literacy: Are Educators Up to the Task?

To raise a more conscious generation that makes healthier food choices, food education should be a vital component in all school curriculums. Right now, however, as the teachers shared in five different training rooms in five different countries last year, it is hard to find a place for food-related lesson plans in the packed school curriculums. There was also a consensus about the difficulty in finding adequate learning materials that go beyond nutrition and discuss food science, food systems, and agrifood careers.

A survey conducted along with the trainings indicated that many teachers are not prepared, and thus lack the confidence, to discuss systemic challenges and complicated concepts such as circular economy, sustainable food production, and basics of food science with their students.

### WHAT IS FOOD LITERACY?

Food literacy involves equipping individuals with the knowledge, skills, and mindset to make informed and sustainable food choices. Teaching food literacy from a young age is critical in transforming the food system toward healthier and more sustainable diets. Through food literacy, children can better understand the impact of their food choices on their health and the environment. Developing healthy lifestyle habits and resource management skills at a young age can help prevent the development of non-communicable diseases later in life.

The answers of 600 participants made it clear that teachers — from both elementary and secondary schools - need further support in order to become effective food educators. The survey results showed that 80% of the teachers were not sure what circular economy and food production were. Furthermore, the topics of food production, shorter supply chains, or gardening are often missing or lacking in the curriculum. Systems thinking and the topic of sustainable food systems are also gaps that need to be filled.

# **Supporting Teachers:** FoodEducators Program

In 2022, based on the above data and survey results, EIT Food launched the FoodEducators





program with the purpose of supporting teachers as they promoted healthy and sustainable food choices among young people and encouraged them to be agents of change within the food system. The program's core aims include inspiring leadership, promoting conscious consumerism, developing food science literacy, nurturing entrepreneurial mindsets, and presenting vocational possibilities in the agrifood sector to young people age 9 to 18 years old. The focus is not on telling others how to eat; rather, it is on how to think about food and be a critical thinking, conscious consumer.

EIT Food piloted lesson plans successfully in five countries — Cyprus, Czech Republic, Israel, Hungary, and Spain — where they reached an impressive 382 teachers and 39,354 students. A month after the Budapest training, feedback was pouring in. The lesson plans that gained the most traction among teachers revolved around food and foodscape maps; understanding food labels, food waste, and food loss; and exploring agrifood careers. The program's diverse learning experiences were well-received by teachers and students alike, with 93% of teachers reporting

their students' enjoyment and 80% observing active participation in the classes.<sup>4</sup> The teacher with the corn pencil holder wrote to us, saying, "The material inspired me as a teacher to connect to local food stakeholders. The lesson plans are a treasury box with plenty of good ideas and supporting materials for teachers."

### **Looking Ahead**

The FoodEducators program is more than lesson plans; it is also enriched by the A Day in the Life series of agrifood profession videos, <sup>5</sup> Career Days events, <sup>6</sup> food education, behavior change-related proof of concept projects, <sup>7</sup> and numerous background supporting materials for teachers.

### **BECOME A FOOD EDUCATOR!**

The FoodEducators program equips teachers with fun, creative, and science-based food education materials in four themes to enhance students' (age 9-18) learning experience, fostering a new generation of conscious consumers. The focus themes are: food & health, food & sustainability, food science & food systems, agrifood jobs & careers. The creators of the program recognize how busy teachers are, and therefore all lesson plans are brief and easy to follow and implement.

Lesson plans in eight available languages can be downloaded from www.foodeducators.eu

In 2023, the FoodEducators program entered phase two, extending its outreach to three additional countries: Poland, Turkey, and the UK. This phase will witness the development of more educational materials, including a resource pack for event organizers and facilitators. The program's sustainability is further ensured through research, synthesis, and integration of existing projects and materials.

If you or your organization is interested in joining FoodEducators' mission of empowering the next generation with food



literacy, check out the freely available resources and/or contact us (https://www.eitfood.eu/projects/food-educators)!

#### Notes:

- <sup>1</sup>Landgeist. (n.d.). *Obesity among children in Europe.* Author. Retrieved July 26, 2023, from https://landgeist.com/2023/02/18/obesity-among-children-in-europe/
- <sup>2</sup>World Health Organisation. (n.d.). *Obesity and overweight.* Author. Retrieved July 26, 2023, from https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight
- <sup>3</sup> University of Oxford. (n.d.). *Challenges facing the food system*. https://www. Futureoffood.ox.ac.uk/. Retrieved July 26,

- 2023, from https://www.futureoffood.ox.ac.uk/food-system-challenges
- <sup>4</sup>EIT Food. (n.d.). *Action report 2022*. Author. Retrieved July 26, 2023, from https://www.eitfood.eu/projects/food-educators/action-report-2022
- <sup>5</sup> https://www.eitfood.eu/projects/ food-educators/a-day-in-a-life-agrifoodcareer-videos
- <sup>6</sup> https://www.eitfood.eu/projects/food-educators/career-days
- <sup>7</sup> https://www.eitfood.eu/projects/food-educators/proof-of-concepts

#### Further Reading

Visit the EIT Food blog at www.eitfood.eu/blog to learn more about food education, including the following articles:

- "How can we all fight childhood obesity?"
- "Obesity, malnutrition and food insecurity: what are the solutions?"
- "Overcoming the challenges of a just transition in the food system"

#### Nutrition for Health and Sustainability

Learn what makes up a healthy, sustainable diet and how certain food types can help to treat and prevent disease: https://www.futurelearn.com/courses/ nutrition-for-health

#### Disclosure Statement:

The author is the FoodEducators Communications Lead.

### Disparities in Access to Healthy and Nutritious Food

Food Deserts: A food desert refers to an area, typically in an urban or rural setting, where there is limited or no access to affordable, fresh, and nutritious foods. In these areas, residents often have difficulty finding and purchasing fruits, vegetables, whole grains, and other healthy foods. Food deserts can contribute to poor dietary choices and health outcomes, as residents may rely on convenience stores and fast food restaurants for their meals, which tend to offer less healthy

options. Factors that contribute to the creation of food deserts include the absence of grocery stores or supermarkets within a reasonable distance, transportation limitations, socioeconomic conditions, and overall community development.

**Food Oases:** Conversely, a food oasis refers to an area where residents have easy access to a variety of fresh, healthy, and affordable foods. These areas typically have well-stocked grocery stores, farmers' markets, and other sources of nutritious food. In food oases, residents have the opportunity to make healthier dietary choices and lead healthier lifestyles.

The concept of food deserts and food oases highlights the importance of equitable access to



nutritious foods for maintaining public health and reducing health disparities. Efforts to address food deserts often involve initiatives to improve access to healthy food options, such as supporting the opening of new grocery stores, promoting farmers' markets, encouraging urban agriculture, and advocating for better transportation options in underserved areas.

The terms are used to describe geographic disparities in food access and should not be interpreted as fixed labels for specific locations. Food access can vary widely within communities and can change over time due to various factors, including urban development, economic changes, and policy interventions.