

**WP2 - Sub-task 2.3.4 Develop tool for school menu impact on consumers' perception****Report 2 - Food Consumption in Daily Life: Children's Socio-Cultural Values****Prof. Maria Giovanna Onorati****CZECH REPUBLIC**

The sensory test included **Section 2.2 – Food Consumption in Daily Life**, designed to **assess the socio-cultural values that influence children's attitudes towards food** and to provide insights into how these values might support the acceptance of new, healthier, and more sustainable dishes.

The **12 questions used in this section** are original, but not random. They are based, both in the dimensions explored and in the way they were designed, on some questions formulated in the VPQ (Values Portrait Questionnaire) developed by Shalom H. Schwartz (2006; 2021) within his theory on Universal Human Values, as well as on the reworking and simplification of these questions adopted in the European Social Survey (ESS, 2024). This provided the measurements carried out in this research context with a basis for comparison against indicators that have already been widely validated within scientific research on values, particularly in their adaptation to the European context.

**Considering the young target group and the** complexity of the dimensions investigated, the questionnaire was designed using illustrations to help represent the situations described in the questions, making it more engaging and enjoyable for the children.

**The 12 questions** were constructed as self-projective items using a 5-point Likert scale (1 = Not at all like me; 2 = Only a little like me; 3 = Somewhat like me; 4 = Largely like me; 5 = Exactly like me) supported by emoticons representing different states of mind:



The questions aimed at exploring the following dimensions:

**SocioCultural 1.** Openness to trying new foods  
(*Intellectual autonomy, Stimulation, Self-direction*)

**SocioCultural 2.** Active involvement in food choices  
(*Self-Direction, Intellectual autonomy*)

**SocioCultural 3.** Enjoyment of cooking and food creation  
(*Mastery, Hedonism, Affective autonomy*)

**SocioCultural 4.** Ethical and environmental food awareness  
(*Universalism*)

**SocioCultural 5.** Willingness to share food with others  
(*Benevolence*)



**SocioCultural 6.** Openness and enjoyment of social interactions during meals  
(*Universalism, Benevolence*)

**SocioCultural 7.** Openness to different and unfamiliar foods  
(*Self-direction, Universalism*)

**SocioCultural 8.** Preference for food security and family-approved sources  
(*Conformity, Security*)

**SocioCultural 9.** Respect for family rules in eating behavior  
(*Conformity, Tradition*)

**SocioCultural 10.** Seeking energy and pleasure from sweet foods  
(*Mastery, Achievement, Hedonism*)

**SocioCultural 11.** Pursuit of food for sensory pleasure  
(*Hedonism, Stimulation*)

**SocioCultural 12.** Frugality and care in food consumption  
(*Benevolence, Frugality*)

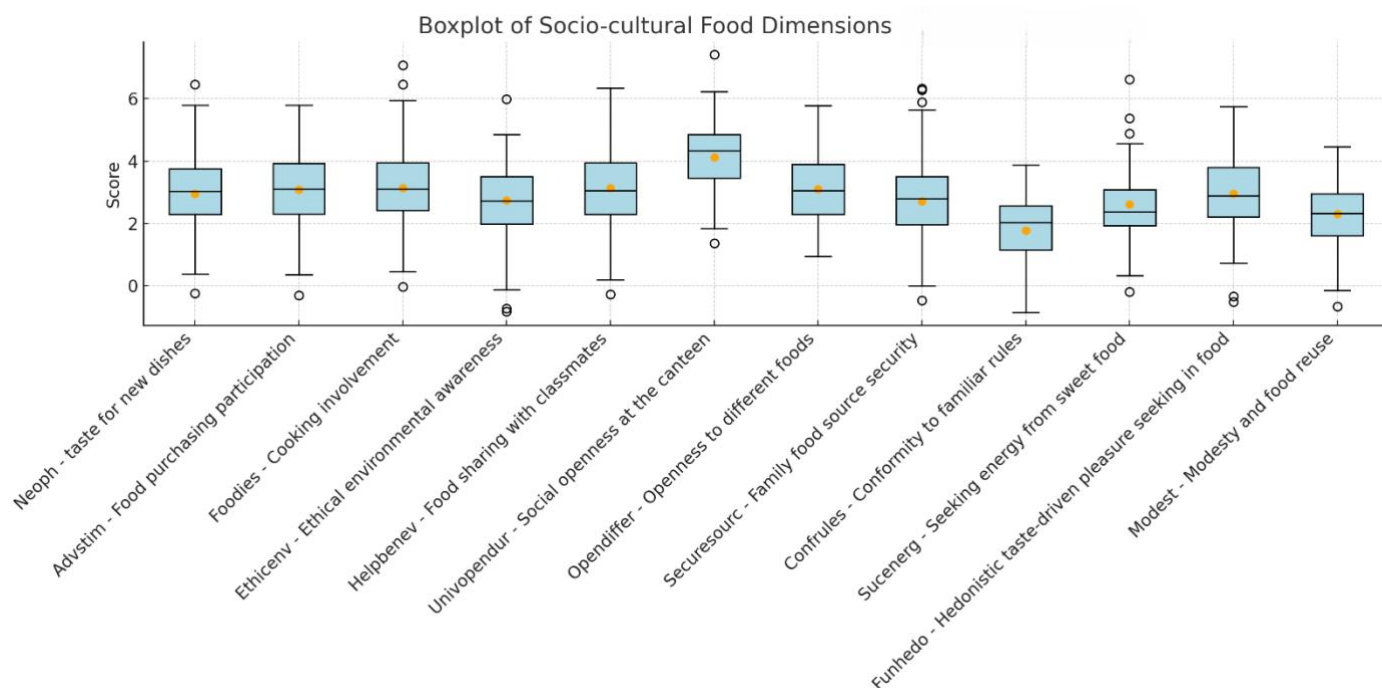
Based on the provided answers, mean scores on a 1–5 scale have been calculated.

Table 1. Average Scores Reflecting Children's SocioCultural Attitudes Toward Food in the Czech Republic

<b>SocioCultural Variable</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>
Neophilia, taste for new dishes	132	2,96	1,094
Participation in food purchasing	133	3,08	1,250
Cooking involvement	132	3,14	1,253
Ethical and environmental awareness	133	2,74	1,178
Food sharing	133	3,14	1,330
Social openness at the canteen	133	4,12	1,059
Openness to different foods	133	3,11	1,130
Food source security	133	2,72	1,208
Conformity to family rules	133	1,78	1,040
Seeking energy from sweet foods	133	2,62	1,020
Food hedonism	120	2,95	1,158
Modesty and food reuse	122	2,3	1,190

Participants: 122-133 valid responses per variable.

Fig. 1. SocioCultural Food Attitudes: Score Distribution among the surveyed children from the Czech Republic



## Key Findings:

### Overall Czech Republic:

Children in the Czech Republic exhibit **limited food neophilia, ethical food awareness, and modesty**, with **low conformity to parental food rules**. They are **less oriented toward frugality or food-saving behaviors** like eating leftovers. However, they show **moderate to strong social engagement** in food-related activities at school, such as **sharing food, eating with classmates**, and **openness to trying peers' foods**.

### More specifically:

#### Highest mean is found on the item:

Univopendur – Social openness at the canteen" ( $Mean = 4.12$ ). This indicates that Czech children strongly enjoy eating with classmates in the school canteen, reflecting a high level of social engagement in food-related settings.

#### Lowest mean is found on the item:

Confrules – Conformity to familiar rules" ( $Mean = 1.78$ ). This suggests a low tendency to strictly follow parental food rules, highlighting a degree of autonomy or resistance to traditional food norms within the family context.

**Overall trends reveal** that Czech children tend to show **moderate engagement** in food activities such as **participation in food shopping (Advstim)**, **cooking (Foodies)**, and **food sharing with peers (Helpbenev)**. However, they appear **less oriented toward ethical environmental food choices (Ethicenv)** and **modesty-related behaviors like food reuse (Modest)**. Across items, social dimensions of food culture score higher than ethical or rule-based ones..

#### Notable insight:

There is a clear **social openness** and **peer-influenced food dynamic** among Czech children, contrasted with **weaker internalized norms about sustainability, ethics, and parental authority**. This indicates a **youth-driven, socially dynamic food culture** that, while not deeply anchored in sustainability or ethics yet, offers a **fertile ground for peer-led, participatory food education**.

#### Levels of food waste of the proposed dish in the schools of the Czech Republic

Among the 133 children surveyed in the Czech school, food waste levels from the proposed dish show **29%** reported **none to very low waste** **21%** reported **high to complete waste**, and approximately **50%** fell into the **moderate to medium waste** category.

Table 2. Distribution of **Waste Dish levels among the children in the Czech Republic**

Waste Dish level			
	<b>N</b>	<b>Valid %</b>	<b>Cumulative %</b>
Nothing to very low	39	29,3%	29,3%
Moderate to medium	66	49,6%	78,9%
High to Everything	28	21,1%	100%
Total	133	100%	

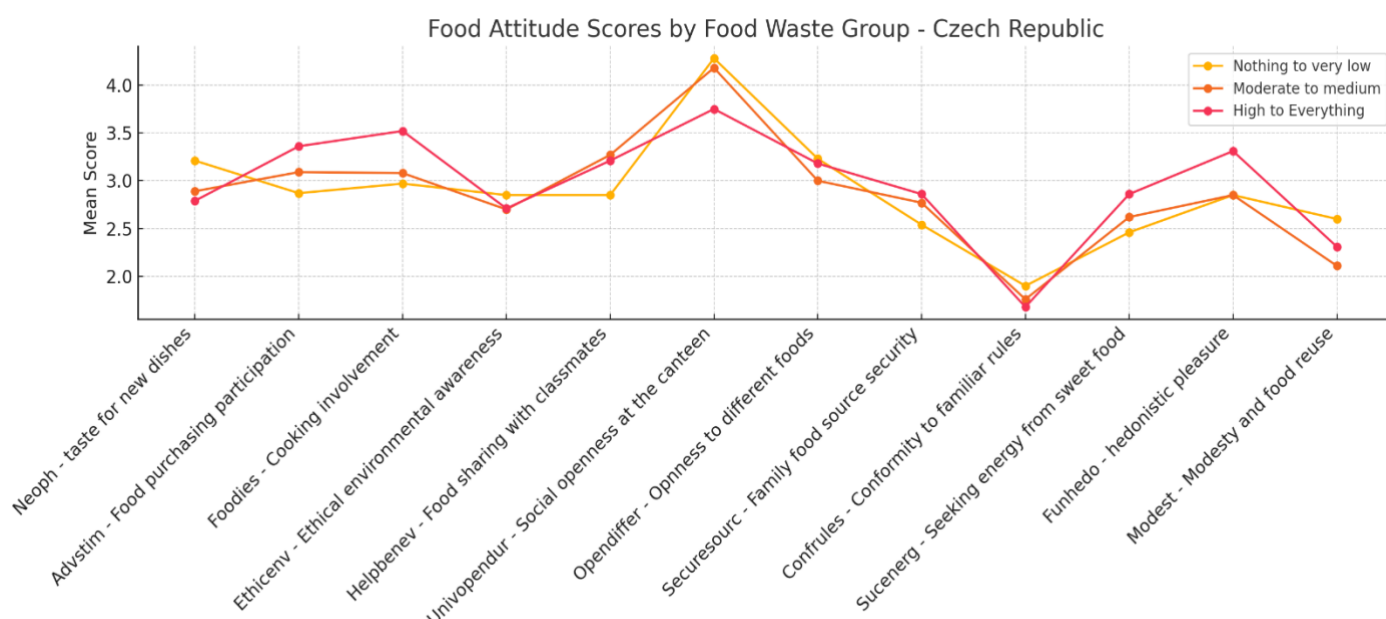
#### Comparison of Socio-Cultural Dimensions by Levels of Food Waste of the Proposed Dish

Table 3. Descriptive different levels of waste dish by socio-cultural attitude to food

Socio-cultural attitude to food	Levels of Waste dish	Mean	Std. Deviation
Neoph - like to try dishes different from at home	Nothing to very low	3,21	0,767
	Moderate to medium	2,89	1,134
	High to Everything	2,79	1,343
Advstim - children choose the groceries when they shop with parents	Nothing to very low	2,87	1,128
	Moderate to medium	3,09	1,274
	High to Everything	3,36	1,339
Foodies - usually cook with their parents or friends	Nothing to very low	2,97	1,088
	Moderate to medium	3,08	1,207

	High to Everything	3,52	1,528
Ethicenv - love foods made only with vegetable do not harm animals	Nothing to very low	2,85	1,204
	Moderate to medium	2,7	1,202
	High to Everything	2,71	1,117
Helpbenev - like sharing their food with classmates	Nothing to very low	2,85	1,329
	Moderate to medium	3,27	1,247
	High to Everything	3,21	1,5
Univopendurmeals - enjoy lunch with classmates in the school canteen	Nothing to very low	4,28	0,887
	Moderate to medium	4,18	0,943
	High to Everything	3,75	1,43
Opendiffer - like to taste the food offered by classmates	Nothing to very low	3,23	0,902
	Moderate to medium	3	1,203
	High to Everything	3,18	1,249
Securesourr - eat only food by their family	Nothing to very low	2,54	1,211
	Moderate to medium	2,77	1,187
	High to Everything	2,86	1,268
Confrules - only eat foods allowed by their parents	Nothing to very low	1,9	1,095
	Moderate to medium	1,76	1,039
	High to Everything	1,68	0,983
Sucenerg - prefers sweetened products because they give energy	Nothing to very low	2,46	0,942
	Moderate to medium	2,62	1,019
	High to Everything	2,86	1,113
Funhedo - eat many desserts, cakes or crisps because taste delicious	Nothing to very low	2,85	1,209
	Moderate to medium	2,85	1,087
	High to Everything	3,31	1,225
Modest - leftover food from previous family meals	Nothing to very low	2,6	1,168
	Moderate to medium	2,11	1,185
	High to Everything	2,31	1,192

**Fig. 2 – Line chart representing different socio-cultural food attitudes by levels of waste for the proposed dish**



Data from Table 3 and Fig. 2 illustrate **Stable (mean) Preferences Across Waste Levels**

In the Czech Republic, children who report **higher levels of food waste** tend to show greater **involvement in food-related decisions and enjoyment**, such as **shopping with parents (Advstim)** and **cooking (Foodies)**. They also favor **sweet, energy-rich foods (Sucenergy)** and eat more for **pleasure (Funhedo)**, suggesting a focus on autonomy and gratification over frugality.

In contrast, children with **lower food waste** tend to be more **open to new and different foods (Neoph, Opendiffer)** and show stronger **modesty and reuse behaviors (Modest)**, such as eating leftovers—indicating a more **curious and waste-conscious** mindset.

An ANOVA OneWay was conducted to show **statistically significant differences** across food waste groups:

**Table 4. OneWay ANOVA by levels of waste of the proposed dish**

Attitude (Item)	F	p-value	Significance
Univopendur – social openness	2.323	0.102	⚠ Trend toward significance

Based on the ANOVA, no variables show statistically significant differences ( $p < 0.05$ ) across food waste levels. However, in exploratory or hypothesis-generating contexts (like early-stage research), values between  $p = 0.05$  and  $0.10$  are sometimes referred to as "marginally significant" or "trending," especially when they align with theoretical expectations. Hence, **Univopendur (social openness)  $p = 0.102$**  might be cautiously described as **approaching significance**.



This **may suggest** an emerging pattern in which openness to new and different foods (Neoph, Opendiffer) is associated with lower waste of newer, healthier, and more sustainable dishes, a relationship worth exploring further through larger samples or complementary qualitative data.

## References:

European Social Survey. 2024. ESS11. 2023-24. accessed 13 April 2024.  
<https://www.europeansocialsurvey.org/>

Schwartz, S. H. 2006. "A Theory of Cultural Value Orientations: Explication and Applications." *Comparative Sociology* 5 (2-3): 137-182. doi:10.1163/156913306778667357.

Schwartz, S. H., & Cieciuch, J. (2021). Measuring the Refined Theory of Individual Values in 49 Cultural Groups: Psychometrics of the Revised Portrait Value Questionnaire. *Assessment*, 29(5), 1005-1019. <https://doi.org/10.1177/1073191121998760> (Original work published 2022).