

Press Release

Czech public opinion on sorting organic waste and composting – Food 2021

- ⊗ Almost three-quarters of Czech households sort their organic waste (32% always, 24% sometimes, 17% rarely) and less than one-quarter (24%) never do so.
- ⊗ The most common methods of sorting organic waste used by Czech households are garden composting (43%) or the 'brown-bin' organic waste containers provided by public services (36%).
- ⊗ According to households' own estimates, the average Czech household sorts an average of 18.2 kg of organic waste a month.
- ⊗ Almost one-half (49%) of respondents indicated that they at least sometimes use substrate compost for plant cultivation and just under one-third (31%) use commercially available compost for this purpose.

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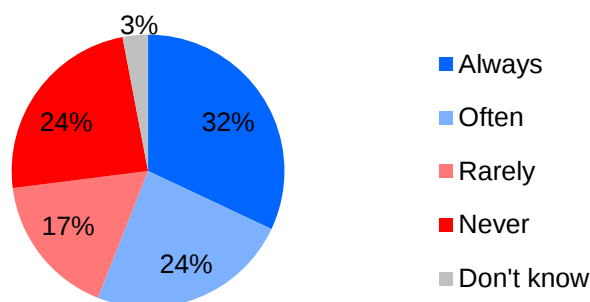
The Public Opinion Research Centre's special 'Food 2021' survey also explored the subject of the sorting of organic waste and composting. This is an important subject, because almost one-quarter (24.8%) of mixed communal waste is made up of organic waste,¹ which does not belong there. The amount of mixed communal waste being produced in the Czech Republic is growing. In 2019 the population of the Czech Republic produced 5.9 million tonnes of mixed waste, which equals 551 kg of waste per person.² In the survey we specifically examined whether Czech households do sort organic waste, and if they do, how much organic waste they produce in a month and how they use it. At the end of the survey, we were interested in whether people use any organic material (e.g. their own or commercially available compost, vermicompost, or worm tea) in plant cultivation.

Looking at Czech households and the sorting of organic waste, the results of the survey reveal (see Figure 1) that approximately one-third (32%) of households said that they always practise the sorting of organic waste and just under one-quarter (24%) do so often. Less than one-fifth (17%) of respondents said they rarely sorted their organic waste and almost one-quarter (24%) of respondents declared that they never did this. The remaining 3% of respondents selected 'don't know' as their response to this question.

¹ EKOKOM. (2021). Rozbory skladby směsného komunálního odpadu z obcí v roce 2020 (Analyses of the composition of mixed communal waste in communities in 2020). Available at: <https://www.ekokom.cz/rozbory-skladby-smesneho-komunalniho-odpadu-z-obci-v-roce-2020/>.

² MŽP. (2020). Odpadová data 2019: Každý Čech vyprodukoval 551 kilogramů "komunálu" (Data on waste 2019: every Czech produced 551 kilograms of 'communal' waste). Available at: https://www.mzp.cz/cz/news_20201124-odpadova-data-2019-Kazdy-Cech-vyprodukoval-551-tun-komunalu.

Figure 1: How often do Czech households sort organic waste? (in %)³



Source: Public Opinion Research Centre, Institute of Sociology, Czech Academy of Sciences, 'Food', 10–26 July 2021, 884 respondents over the age of 15, face-to-face interviews.

The respondents who said their household practises the sorting of organic waste tended to be people with a higher level of education, people who assessed their household's standard of living as good or 'neither good nor bad', people who lived in the Central Bohemia, Olomouc, and Vysočina regions, and people who lived in small communities of up to 5000 inhabitants.

We asked those respondents who said that at least on rare occasions their household did sort its organic waste what method of waste sorting they used.⁴ The results are clear (see Table 1). The most common method used to sort organic waste was garden composting, as 43% of respondents said they used this method. The second most common method cited was using the public 'brown-bin' organic waste containers, which was the method indicated by 36% of respondents. Less than one-tenth (9%) of Czech households said they used the large-volume containers provided by public services to sort organic waste, and 6% said they used a waste collection yard. Vermicomposters and bokashi composters are methods of household composting that are rarely used in Czech households.

Which method of organic waste sorting households use tends to be linked to the size of the community in which people live. Specifically, people in large towns more often use the public brown-bin waste containers, while people who live in small towns or communities of up to 5000 people tend to use garden composting.

Table 1: Methods used to sort organic waste

	Number	Percentage (%)
Garden composting	278	43
Brown-bin organic waste container	228	36
Large-volume container (skip)	60	9
Waste collection yard	41	6
Household vermicomposter/bokashi composter	11	2
Community garden	5	1
Other methods (neighbours, to feed animals)	11	2
Don't know	16	1

Source: Public Opinion Research Centre, Institute of Sociology, Czech Academy of Sciences, 'Food', 10–26 July 2021, 884 respondents over the age of 15, face-to-face interviews.

The respondents who indicated that they at least 'rarely' sort their organic waste were asked to estimate how much sorted organic waste they produce a month. The results (see Table 2) clearly indicate that this was a difficult question because a large share (28%) of respondents were unable to give a clear answer and selected 'don't know' as their

³ Question wording: 'Does your household sort its organic waste?' Response options: always, often, rarely, never.

⁴ Question wording: 'What method do you use to sort organic waste?' Response options: brown-bin organic waste container, waste collection yard, community garden, large-volume waste container, household vermicomposter/bokashi composter, other.

response. We calculated the averages of the amounts mentioned by the respondents, which ranged between 1 kg and 300 kg, and the results indicate that Czech households by their own estimate sort an average of 18.2 kg of organic waste a month (the median is 7 kg). The table also shows that the more often households practise sorting organic waste, the more sorted waste they produce. Specifically, those households that 'always' engage in the practice of sorting organic waste produce on average 22.2 kg a month, while those who do so 'often' produce 18.7 kg, and those who do so seldom produce just 7 kg.

Table 2: Estimated amount of sorted organic waste households produce (monthly)

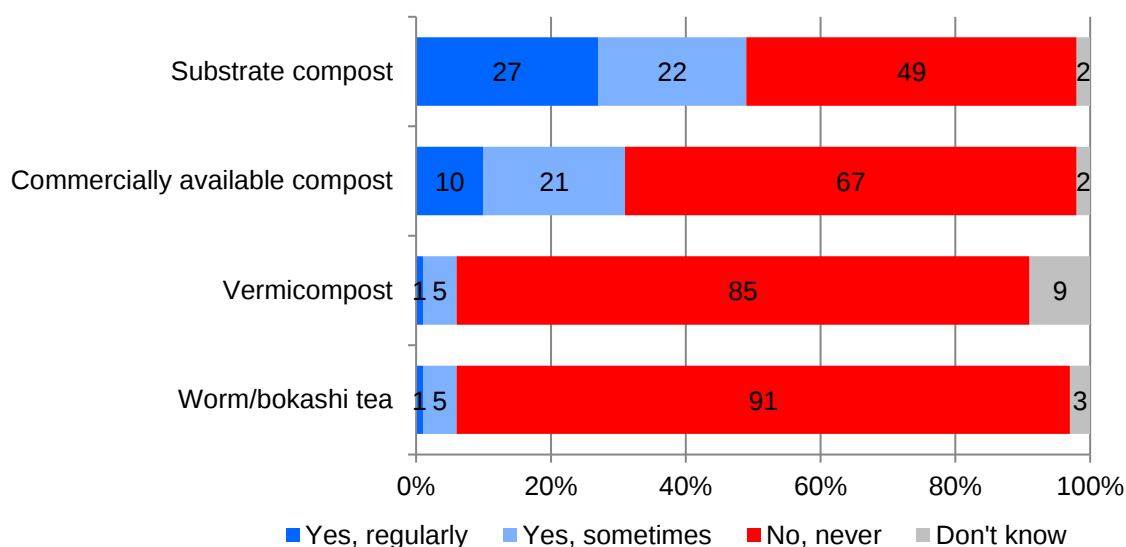
How often households sort organic waste	Kg / month
Always (N=221)	22.2
Often (N=158)	18.7
Rarely (N=87)	7.0
Average	18.2

The response 'don't know' was selected by 28% of respondents (N=179).

Source: Public Opinion Research Centre, Institute of Sociology, Czech Academy of Sciences, 'Food', 10–26 July 2021, 884 respondents over the age of 15, face-to-face interviews.

To conclude we ask all the respondents whether they use any organic material to grow plants. The results show that not many Czech households do this. Almost one-half (49%) of respondents said they at least 'sometimes' use substrate compost for plant cultivation and just under one-third (31%) said they use commercially available compost. Almost no respondents indicated using vermicompost or worm or bokashi tea, which is consistent with the results for the preceding question that showed these are not the methods that Czech households prefer to use to sort organic waste.

Figure 2: For growing plants do you use ...?



Note: Items are ordered according to the number of responses for 'yes, regularly' and 'yes, sometimes'.

Source: Public Opinion Research Centre, Institute of Sociology, Czech Academy of Sciences, 'Food', 10–26 July 2021, 884 respondents over the age of 15, face-to-face interviews.

Technical parameters of the survey

Survey:	<i>Food 2021</i>
Implementer:	<i>Public Opinion Research Centre, Institute of Sociology, Czech Academy of Sciences</i>
Project:	<i>Strategy AV21 'Food for the Future'</i>
Survey fielding dates:	<i>10 July – 26 July 2021</i>
Selection of the respondents:	<i>Quota sampling</i>
Quotas:	<i>Region (NUTS 3 regions), size of place of residence, sex, age, education</i>
Data weighting:	<i>Education X NUTS 2, age X NUTS 2, sex X region, size of place of residence X age, education X age</i>
Source data for quota sampling and data weighting:	<i>Czech Statistical Office</i>
Representativeness:	<i>Population of the Czech Republic aged 15 and over</i>
Number of respondents:	<i>884</i>
Number of interviewers:	<i>161</i>
Data collection method:	<i>Face-to-face interviews with respondents conducted by interviewers – combined CAPI and PAPI techniques</i>
Survey instrument:	<i>Standardised questionnaire</i>
Questions:	<i>PL.107, PL. 108, PL. 109, PL. 110</i>
Report code:	<i>or211105</i>
Published on:	<i>5 November 2021</i>
Prepared by:	<i>Radka Hanzlová</i>

Glossary:

Quota sampling: This sampling method replicates the structure of the basic survey population (in this case the population of the Czech Republic over the age of 15) by determining the size of selected sample parameters, i.e. 'quotas'. In other words, in quota sampling the same percentages of selected characteristics in the population are reproduced in the sample. To create quotas, we use data from the Czech Statistical Office. In our surveys we set quotas for sex, age, education, region, and size of the place of residence. The sample is therefore created to ensure that the percentage shares of men and women, for example, correspond to the percentage shares of men and women in each region of the Czech Republic. Similarly, the sample reflects the different percentages of the population living in the country's different regions, and the percentage of citizens in different age categories, with different levels of education, and in different community sizes.

A representative sample is a sample of the total population whose characteristics can be validly inferred to be the characteristics of the total population. In our case this means that respondents are selected in a way that allows us to ensure that the data we obtain on them can be generalised to apply to the population of the Czech Republic over the age of 15.

Data weighting: A technique used to increase a sample's representativeness for selected population characteristics by assigning weights to each respondent. The weights are created using the method of iterative proportional fitting/weighting and are always within the range of 0.333 and 3.

The Public Opinion Research Centre (CVVM) is a research department at the Institute of Sociology, Czech Academy of Sciences. It has a history that extends back to 1946, when the Czechoslovak Institute for Public Opinion Research began operating as part of the Ministry of Information. The current centre was founded in 2001 when its predecessor (the IVVM) was transferred from the Czech Statistical Office to the Institute of Sociology of the Czech Academy of Sciences. As part of a research institution the centre has a high-quality professional work environment at its disposal and is part of an institution with a reputation of excellence. As part of an academic setting the Public Opinion Research Centre must fulfil all the requirements for and maintain the highest professional standards. The main part of the centre's work is devoted to the "Our Society" research project, which conducts ten surveys each year. This public opinion research is conducted on a representative sample of the Czech population aged 15 and over and approximately 1.000 respondents take part in each survey. The omnibus form of the questionnaire means that the survey can cover a large range of subjects, which therefore regularly includes political, economic, and other generally socially topics. The survey includes both repeat questions, which can be used to observe the development of certain phenomena over time, and questions on new topics in response to current events. The long-term continuous nature of this public opinion research project makes this scientific project unique in the Czech Republic.

'This work was supported under AV21 Strategy of the Academy of Sciences as part of the 'Food for the Future' research programme' (<http://www.potravinav21.cz/>).