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Food deconsumption as part of a sustainable lifestyle: A study of Polish deconsumers

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Abstract

Deconsumption, defined as a wide spectrum of voluntary activities aimed at reducing consumption levels, is a multidimensional and multidisciplinary phenomenon, which concerns the reduction of goods and resources purchased, consumed, and used by consumers. The phenomenon could be manifested in a partial resignation from the purchase of products or possession of goods, reducing the consumption of resources or changing the current way of meeting needs. Deconsumption has numerous links with the concept of sustainable development, a trend that has gained importance in recent years as a response to excessive and unsustainable consumption and production. The purpose of this article is to examine and characterize the importance and interactions between food deconsumption — its forms (such as limiting consumption levels, eliminating food categories, etc.) and subjects (different food categories) — and the sustainable lifestyles of consumers. Empirical research was conducted in order to recognize consumer opinions and behaviors in the context of selected manifestations of deconsumption. The quantitative study was conducted in November 2021 on a sample of $N = 516$ Polish respondents using the CAWI technique and the authors' own questionnaire. The respondents were asked about, among other things, the reduction of food consumption. The main hypothesis of the study was that deconsumption practices among Polish respondents are manifestations of their aspirations to live a sustainable lifestyle — for this purpose, a statistical hypothesis of no correlation between belonging to one of the groups of respondents (incidental, fragmentary, or lifestyle deconsumers) and food deconsumption practices was formulated and tested in a quantitative study. One in two respondents declared a reduction of food consumption in the twelve months preceding the survey. Health concerns were the second most common reason for food deconsumption, preceded by rising food prices, which highlighted the importance of motives of an economic and health nature over the others covered in the survey, and could therefore

be attributed to sustainable practices relating to consumers' lifestyles. The respondents gave up or limited the consumption of salty snacks, sweets, and ready meals to the highest degree. A relatively high percentage of respondents declared limiting the consumption of meat and cold cuts as well. The reduction of fish and seafood and dairy products consumption was observed to a slightly lesser extent. The results of the study revealed a relatively high consumer awareness of healthy eating, as well as care for health and a slim figure. This observation coincides with current consumer trends (care for health, conscious consumer, well-being, "health again"). Deconsumption in the researched study sample took also the form of dietary trends such as flexitarianism, vegetarianism, and veganism, which are gaining popularity nowadays.

1. Introduction

Deconsumption as an economic phenomenon and a consumer trend is gaining considerable scientific interest, especially in recent years amid a lively public debate on sustainability (Lee, Ortega Egea and García de Frutos, 2020, 174). Despite interdisciplinary efforts, a clear conceptualization and definition of the phenomenon are still lacking (Makri, Schlegelmilch, Mai and Dinhof, 2020, 178). The prevailing approach in the Polish-language literature is a holistic view of deconsumption in the context of life categories. Duliniec (1986, 303) characterizes lifestyle as patterns of consumption that depend on the preferred forms of leisure activities and spendings by a social class or group of consumers and emphasizes that in economic approach it refers to ways of spending money and the type of goods and services purchased. Solomon (2006) defines lifestyle as "patterns of consumption reflecting what a person likes to do and what he or she spends money on. The term refers to the way consumers dispose of their income, both in terms of general allocation of money to various products and services and more specific decisions to spend it on specific products within a specific category."

Deconsumption as a lifestyle refers to the entire range of voluntary activities aimed at reducing consumption — reducing the goods (food, industrial goods) and resources (water, energy) purchased, consumed, and used by consumers. This phenomenon manifests itself, among other things, in the partial abandonment of the purchase of products (limiting the volume of purchases, eliminating certain categories of products) or possession of goods (their redistribution — giving them to people in need or selling items that are no longer used by them), the reduction of the resource consumption (saving water, energy) or a change in the current way of satisfying needs (use of services, such as lending). In the definition of Patrzałek (2019, 111), deconsumption is "a lifestyle based on the purchase of necessities, associated with the reduction of excess storage. It represents an orientation that reevaluates the previous approach to the way of satisfying needs by striving for balance in consumption, respect for the well-being of all living beings and harmony with nature." In view of the definitions cited, this phenomenon should be considered multidimensional, multifaceted, and multidisciplinary in nature.

Deconsumption is consistent with new lifestyles observed in recent years, such as LOHAS (Zalega, 2013, 66), minimalism (Zalewska and Cober-Tokarska, 2014, 495) or the voluntary simplicity movement (Ross, 2015, 20), aimed at reducing the volume of consumption in favor of the quality of the products consumed and a reorientation to non-material values in life. Moreover, this phenomenon in itself is recognized by some authors as a lifestyle based on the purchase of necessities, linked to the reduction of excess inventory (e.g., Patrzałek, 2019). Deconsumption also has numerous similarities with the concept of sustainable development, a trend that has been gaining popularity, especially in recent years, being a response to excessive and unsustainable consumption and production not justified by real demand (Zalega, 2013, 4–5). Excessive consumption undoubtedly promotes the waste of produced resources, especially food. Moreover, its effect — primarily in the context of highly processed food — is the observed epidemic of obesity and other civilization diseases, associated with an abnormal lifestyle. Therefore, the restriction of food consumption is a desirable phenomenon and aims at increasing the quality of life.

2. The importance of deconsumption for sustainable diet patterns in the view of literature

The literature review provides evidence of the fact, that diets and eating habits constitute an integral part of consumers' lifestyles also with regard to sustainable lifestyles. Food consumption, in addition to its utilitarian function, serves the function of expression of consumers' self-concept, beliefs, and values, e.g., support for the concept of sustainable development and is a manifestation of a responsible, environmentally sensitive, social, and ethical approach to consumption (Lubowiecki-Vikuk, Dąbrowska and Machnik, 2021, 93). Consuming certain food groups and rejecting others is a form of articulation of consumers' identity, according to the concept proposed by Hall (Iwański, 2015, 163). Thus, through the meals consumed, the consumer satisfies not only basic needs, but also those on the higher levels in Maslow's pyramid — self-actualization, living in harmony with oneself and the world (so-called surrounding needs).

The interest in diet as a component of a sustainable lifestyle is justified by the current state of knowledge and science indicating the undeniable impact of dietary choices not only on health, but also on the natural environment — including soil degradation, climate change, biodiversity loss, water and energy consumption (Macdiarmid, 2013, 13–15), and the social environment (Nestorowicz, 2015, 488).

A sustainable diet is a well-established concept in the literature and is defined as a diet that protects and respects biodiversity and ecosystems, is culturally acceptable, accessible, economically fair and affordable, nutritionally adequate, safe and healthy, and allows for the simultaneous optimization of natural and human resources" (Jones, Hoey, Blesh, Miller, Green and Shapiro, 2016, 641). In this con-

text, the so-called Planetary Health Diet is also being referred to in the literature (Prescott and Logan, 2019, 98).

Deconsumption in the area of food is an important element of a sustainable diet oriented towards increasing the quality of life while respecting the natural environment, workers' rights and animal welfare, and can materialize, among other things, in limiting, giving up or boycotting products with harmful effects on human health (highly processed, high-calorie, high-sugar, salt or artificial preservatives and so-called "flavor enhancers," e.g., MSG), food products with a so-called high "ecological backpack" — with a particular burden on the natural environment and particular resource intensity, or goods produced in countries with low wages and/or using child labor (Patrzałek, 2019, 65–67). It is necessary to point out a distinguishing feature of deconsumption in the area of food, which is the very frequent simultaneous occurrence of the phenomenon of substitution — for example, high-calorie products with low-calorie (reduced-calorie) products, cereal products with gluten-free baked goods, or the recent fashionable trend occurring on a mass scale, which is the substitution of meat and dairy products with their plant-based alternatives (Patrzałek, 2015, 52).

A thriving dietary trend is the deconsumption of animal products, which manifests itself in the adoption of vegetarian, vegan or flexitarian diets (Salehi, Díaz and Redondo, 2023, 1). Vegetarianism and its stricter form — veganism — is a lifestyle that rejects the consumption of meat and animal products (e.g., such as whey, lard, gelatine) (Badora, Kud, Celińska, Drążek, Klimkiewicz, Majewska, Pasek and Snopek, 2020, 31) or dairy, eggs and honey in the case of veganism. In addition to dietary modifications, it also includes the rejection of product categories such as furniture, clothing, leather goods or those using other animal-derived materials, as well as any other form of commercially profiting from animals, whether in the form of testing products on animals, using them as a form of attraction in circuses or as traction power in carriages, wagons (Miguel, 2021, 5). These initiatives, in addition to the obvious connection to ethical and moral issues (Patrzałek, 2015, 51), are also linked to ecological consumption — a close link between the abandonment of meat and animal products and environmental protection is being pointed out in the literature, which has to do with the high ecological footprint of animal husbandry (Salehi et. al., 2023, 2). Researchers agree in their views that due to the huge impact of animal farming on GHG emissions (Rippin, Cade, Berrang-Ford, Benton, Hancock and Greenwood, 2021, 7), the spread of a sustainable plant-based diet is necessary to achieve the Sustainable Development Goals (SDGs) and meet the Paris Agreement (Pradhan, Sapkota and Kropp, 2021, 11).

Deconsumption is also aimed at not wasting food by rationalizing the size of grocery purchases and sharing them with people in need, or so-called food-sharing, sometimes taking the form of freeganism. Zalega (2013, 66) defines freeganism as an anti-consumption lifestyle that boils down to limiting participation in the economy, including both searching for food in trash containers and asking for

excess and unnecessary products before they are discarded by vendors at neighborhood markets, restaurants or large retail chains. Food waste, which is a consequence of imprudent consumer decisions and excessive food purchases in relation to real demand, is both an ethical and social problem, as well as one with economic and environmental characteristics (Czernyszewicz, Komor, Białoskurski, Wróblewska, Pawlak and Goliszek, 2022, 58).

The food products most often thrown away by Polish consumers are bread, fresh fruit, and so-called non-perishable vegetables, such as lettuce, radishes, tomatoes, cucumbers, meat, and dairy drinks. Polish households also waste unconsumed meal components, mainly cooked potatoes, rice, pasta, vegetables. Among the main reasons for wastage are: a lack of ideas about the use of products for preparing meals (10.3%), purchasing low-quality products (10.8%), improper storage (14.2%), too much packaging (17.0%), impulsive purchases (19.7%), buying too much food (22.5%), preparing too much food (26.5%), overlooking the expiration date (42.0%), and food spoilage (65.2%) (Czernyszewicz et. al., 2022, 58).

Czernyszewicz et al. (2022, 59) consider the deconsumption of food through the prism of the "6Rs" principle — "Rethink, Refuse, Reduce, Reuse, Recycle, Recover," which materializes in several activities in the context of nutrition and meeting nutritional needs undertaken by consumers:

— making conscious purchases;

— planning consumption and purchasing goods with a short shelf life to reduce the discarding of spoiled and unconsumed goods;

— purchasing food directly from local producers, for example as part of food co-op activities;

— reusing items, e.g., glass preserving jars for storing durable, loose products;

— sharing excess products (food-sharing).

3. Research methodology

Empirical research was carried out to recognize consumer opinions and behaviors in the context of selected manifestations of deconsumption including food deconsumption as well as its motives and determinants. The aim of the research was also to examine whether food deconsumption plays a significant role in the sustainable lifestyle of respondents. The study was conducted using the CAWI technique from November 17, 2021, to November 20, 2021, on a sample of $N = 516$ respondents, who were classified as deconsumers based on qualifying questions with an accepted definition of deconsumption, which referred to the application of deconsumption practices in the last twelve month preceding the study:

Q1. Has your level of consumption changed (significantly, noticeably) in the last 12 months compared to previous years? Think of all categories of products and services (by consumption we mean not only eating, consuming, but also using,

utilizing the goods of various types of goods, services and resources including water, electricity, gas, etc.).

A) It has decreased
B) It has increased
C) Has not changed

Q2. What was the nature of the reduction in the level of consumption in the last 12 months?

A) Involuntary/forced
B) Voluntary

The survey was continued only by the respondents who declared that the level of their consumption has decreased in the last twelve months (Q1) and those whose consumption decline was of a voluntary nature (Q2).

The survey considered the following socio-demographic characteristics of respondents: gender, age, place of residence, and household size. The research sample included 272 women (53%), 243 men (47%,) which is broadly in line with the entire Polish population (women — 52%; men — 48%). Regarding the variable "age," the largest percentages were respondents in the age groups 25–34 and 35–44 (26% and 27%, respectively). This is almost double that of the general population. In contrast, the least represented groups were those in the 18–24 and 65–80 age groups (10% and 2%). The distribution of responses shows that deconsumers reside almost equally in large and small towns but are primarily residents of the Mazowieckie (16%) and Silesian (13%) provinces, living in two- to four-person households, with no offspring or 1–2 children. The sample was by far dominated by interviewees with a high school (43%) or higher education (46%), working full time (68%), assessing their financial situation as average (53%) or as good (32%). For the relative majority of deconsumers, the economic situation over the past two years has either not changed (37%) or "rather worsened" (35%). In addition to that, three groups (types) of respondents were distinguished and characterized in primary research: incidental deconsumers (interviewees who declared 1 or 2 deconsumption practices in twelve months preceding the study); fragmentary deconsumers (3–5 practices) and respondents with deconsumption lifestyles (respectively 5–8 practices).

The survey, using an interview questionnaire developed by the article's author, was conducted by an external research institute, using the CAWI technique. The collected responses were subjected to scrutiny in accordance with ESOMAR and PTBRIO standards. The timing of the interview and the consistency and logicality of the answers were verified, among other things. Interviews conducted too fast and those filled out carelessly were rejected. The interview questionnaire also used control questions, i.e., respondents were asked about the device on which they were filling out the survey. The questionnaires of respondents who gave contradictory answers were deleted. In addition, a qualitative assessment of the responses was made based on the answers to open and semi-open questions, among others.

The null hypothesis about no association between belonging to one of the respondents groups (incidental, fragmentary, lifestyle deconsumers) and food deconsumption practices was tested in statistical testing procedure — non-parametric statistical tests were used to assess the significance of the effects: Chi-square (χ^2) statistic (on the significance level $\alpha = 0.05$) and Cramér's V, justified in the case of variables treated as a metric scale.

4. Deconsumption in the area of food: Empirical research results

In the sample of 516 respondents taking part in the survey, 184 (35.66%) declared that they had reduced their consumption of food products in the last 12 months preceding the survey. Most often, respondents gave up or reduced consumption of salty snacks — chips, sticks, nuts (74.46%), sweets — chocolates, candies, wafers, bars, cookies, etc. (73.37%) and ready-made meals (66.34%). A relatively high percentage of respondents also reported limiting their consumption of meat and cured meat (52.72%). To a slightly lesser extent, respondents limited their consumption of fish and seafood (30.98%) and dairy products (23.91%). On the other hand, respondents on a low scale limited their consumption of oil, vinegar, sauces and dressings (30.43%), bread (28.81%), breakfast products (26.63%), as well as bulk products (16.85%). Baby food and fruit and vegetables were the food categories where consumers were least likely to declare limiting consumption — 11.96% and 7.71%, respectively.

Respondents who declared a reduction in food consumption were simultaneously those who manifested numerous deconsumption practices in general, applied in daily behaviors (such as consumer boycotts, use of sharing economy services, donation of unused goods, restrictions on resource use, etc.) and their lifestyles compared to respondents whose deconsumption practices were incidental or fragmented, indi-

Table 1. Deconsumption in the food area — distribution of responses (in %)

Food category	%	Food category	%
Salty snacks	74.46	Bread	28.81
Sweets	73.37	Breakfast products	26.63
Ready-made meals	66.34	Dairy	23.91
Meat and cured meat	52.72	Bulk products	16.85
Frozen food and ice cream	51.09	Baby food	11.96
Fish and seafood	30.98	Fruit and vegetables	7.61
Oil, vinegar, sauces and dressings	30.43	Others	0.54

Note: responses do not summarize to 100% — respondents could choose multiple answers.

Source: authors' own study, 2021.

cating the complementary nature of deconsumption in the food area to deconsumptive lifestyles ($\chi^2_{cal} = 60.73959$; $df = 2$; $\chi^2_{df,\alpha} = 5.9915$; $p = 0.0000$, null hypothesis about no correlation was rejected), nevertheless the strength of the influence was relatively weak (V-Cramer's = 0.343). Respondents assigned to the lifestyle deconsumers group were the ones who relatively most often declared a reduction of food consumption in comparison to incidental deconsumers and fragmentary deconsumers who didn't declare food deconsumption as often (see Table 2). The socio-demographic characteristics of respondents considered in the study did not determine the application of deconsumption practices in the area of food products (for each socio-demographic factor the calculated value of χ^2 was lower than $\chi^2_{df,\alpha}$ value).

Table 2. Application of food deconsumption practices considering the types of respondents in the survey ($N = 516$)

Respondents' group (type)	"Yes"		"No"		Sum in a row
	q_{yi}	% of q_{yi}	q_{ni}	% of q_{ni}	
Incidental deconsumers	14	10.45	120	89.55	134
Fragmentary deconsumers	119	40.20	177	59.80	296
Lifestyle deconsumers	51	57.95	35	40.25	88
Sum in column	184	100.00	332	100.00	516

Source: authors' own study, 2021.

The group of lifestyle deconsumers was distinguished by the following characteristics:

— mainly aged 24–35 and male;

— respondents had higher (university) education;

— self-assessment of the financial situation in the group was good or average;

— respondents followed a circular consumption model and exhibited consumer activism;

— they were definitely planning further deconsumption;

— deconsumption was accompanied by a definite reorientation toward intangible values in the sphere of attitudes;

— deconsumption was conditioned decidedly by a pro-environmental and dematerialization motive and to a significant extent social motive.

On the other hand, the largest group in terms of food deconsumption practices was fragmentary deconsumers, who could be characterized as follows:

— mainly aged 24–44 and female;

— self-assessment of financial situation: average, but has worsened over the past 2 years;

— apparent tendencies to decrease and reduce consumption overall;

— they rather plan further deconsumption;

— deconsumption is accompanied by a clear reorientation toward intangible values in the sphere of attitudes;

— deconsumption is conditioned to a definite extent by the dematerialization motive, as well as to a large extent by an environmental motive.

Among the motives for deconsumption of food, a kind of dualism could be observed. It can be considered that the indicated motives were mainly either of an assurance or pro-quality nature. The first one is related to the economic rationalization of consumption (also lowering the expenses in the household budget). Also, a common ground is deconsumption resulting from physiological needs (health improvement through a better diet, etc.), which can be considered deconsumption of a pro-quality nature that can be afforded by consumers with a better material and financial situation. Overall, the most common reasons for deconsumption of food were those of an economic nature: rising food prices (69.57%), the desire to save money on purchases (65.22%), as well as health-related: taking care of health (66.85%) and the desire to eat healthier (61.96%). To a lesser extent, respondents cited such deconsumption motives as: greater awareness and knowledge of ingredients, product characteristics and their impact on health (34.78%), cooking more often (29.35%) and environmental issues (27.72%). Although the environmental and social motive was declared by a relatively low percentage of respondents, it should be pointed out that some manifestations of such deconsumption among Polish respondents are discernible (see Table 3). Nevertheless, active consumer education is needed in the context of the impact of their dietary choices not only on health, but also on other areas of society's functioning, in order to support responsible attitudes and market behavior.

Table 3. Motives for food deconsumption in the study — distribution of responses (in %)

Motive	%
Rising food prices	69.57
Taking care of health	66.85
Desire to save money on purchases	65.22
Willingness to eat healthier	61.96
Food waste reduction	53.80
Increased awareness and knowledge of ingredients, product features and their impact on health	34.78
Cooking more often	29,35
Environmental concerns	27.72
Deterioration of the material situation	23.37
Going on diet	18.48
Ethical and social concerns	17.93
Allergies and food intolerance	9.24
Others	1.00

Note: responses do not summarize to 100% — respondents could choose multiple answers.

Source: authors' own study, 2021.

The motives of deconsumption varied among different food categories (see Table 4), especially reduction of meat and cured meat consumption was more often connected to environmental issues (76.47%) and higher awareness of prod-

Table 4. Top three deconsumption motives per food category in the study

Food category	Motives (% of responses)
Meat and cured meat	1. Environmental concerns (76.47%) 2. Increased awareness and knowledge of ingredients, product features and their impact on health (69.70%) 3. Ethical and social concerns (61.76%)
Fish and seafood	1. Cooking more often (42.59%) 2. Deterioration of the material situation (41.86%) 3. Desire to save money on purchases (33.33%)
Dairy products	1. Allergies and food intolerance (58.82%) 2. Willingness to eat healthier (36.36%) 3. Ethical and social concerns (35.29%)
Bulk products	1. Ethical and social concerns (27.91%) 2. Increased awareness and knowledge of ingredients, product features and their impact on health (26.47%) 3. Environmental concerns (25.93%)
Sweets	1. Allergies and food intolerance (94.12%) 2. Increased awareness and knowledge of ingredients, product features and their impact on health (86.36%) 3. Ethical and social concerns (85.29%)
Salty snacks	1. Deterioration of the material situation (88.37%) 2. Ethical and social concerns (85.29%) 3. Cooking more often (83.33%)
Ready-made meals	1. Cooking more often (87.04%) 2. Ethical and social concerns (79.41%) 3. Environmental concerns (78.43%)
Oil, vinegar, sauces, and dressings	1. Deterioration of the material situation (44.19%) 2. Desire to save money on purchases (36.67%) 3. Increased awareness and knowledge of ingredients, product features and their impact on health (36.36%)
Breakfast products	1. Allergies and food intolerance (47.06%) 2. Deterioration of the material situation (41.86%) 3. Ethical and social concerns (41.18%)
Frozen food and ice cream	1. Allergies and food intolerance (76.47%) 2. Food waste reduction (63.64%) 3. Cooking more often (62.96%)
Baby food	1. Allergies and food intolerance (29.41%) 2. Ethical and social concerns (23.53%) 3. Going on a diet

Note: responses do not summarize to 100% — respondents could choose multiple answers.

Source: authors' own study, 2021.

uct ingredients (69.70%) in comparison to other motivations covered in the study, as well as reduction of dairy products was connected to allergies and/or food intolerance (58.82%).

Respondents were also asked about sharing surpluses of food products, with 69% of them declaring participation in food-sharing, which should be viewed positively, as it indicates a high degree of sensitivity to social and environmental issues. According to the cyclical survey of the Consumer Social Responsibility Barometer, carried out by the Institute of Management at the Warsaw School of Economics in cooperation with the ABR Sesta Research Institute, Polish consumers in particular became active in this regard in connection with the outbreak of war in Ukraine and the influx of a large Ukrainian population into Poland. To an almost equally high degree (66%), respondents also declared themselves to be guided by the zero or less waste principle.

5. Conclusions

Eating choices, including decisions on reduction, minimization, or resignation of consumption of certain food categories (food deconsumption) play a significant and complementary role in consumer efforts towards living sustainable lifestyles. In contrast to the prevailing approach to date, in which food intake decline was assessed in terms of an undesirable phenomenon in society, there is quite a new, but yet well-established stream in the literature indicating positive aspects of food deconsumption. Those could be assigned to the economical optimization of the decision process (for example in order to eliminate food waste in households), health concerns (giving up certain products that are considered not healthy), awareness of environmental issues (avoiding consumption of products which cultivation is unsustainable) or societal/moral issues (for example avoiding meat consumption).

Results of the authorial study seem to corroborate this thesis — deconsumption of food primarily concerned respondents who are highly involved in sustainable lifestyles, and this involvement manifests itself in the simultaneous undertaking of multiple activities in this area and the cultivation of a deconsumptive (minimalistic, non-materialistic) lifestyle. Respondents assigned to the group "Lifestyle deconsumers" were more likely to declare deconsumption of food in comparison to respondents for whom deconsumption was of a fragmentary or incidental nature.

Among four components of sustainable lifestyles (economic, social, environmental, and health-related), those of economic and health nature were the major motivations for the respondents — health concern was the second most common reason for deconsumption of food, right after rising food prices. Respondents were most likely to give up or reduce consumption of salty snacks — chips, sticks, nuts, sweets, and convenience food, which may indicate a high level of consumer aware-

ness of healthy eating and their health competences, as well as their concern for health and slim figure. This observation coincides with current consumer trends (caring for health, conscious consumer, well-being, "health from scratch").

It was also relatively common for respondents to declare deconsumption of animal products, which were driven by environmental concerns (in the case of meat) and health-related trends (in the case of dairy products). It is noteworthy that the health benefits of plant-based diets are increasingly being pointed out, both in terms of physical and mental health. Converging observations also result from studies by Adamczyk et al. (2022, 6). At the same time, the authors indicate that the environmental and social motives of vegetarian and vegan diets become more apparent, especially for consumers in Germany (Adamczyk et. al., 2022, 7). Nowadays, a close link is pointed out between giving up meat and animal products and environmental protection, which has to do with the high ecological footprint of animal farming. Also, consumers are increasingly aware of the negative effects of animal production. In view of such, it can be assumed that reducing or abandoning the consumption of animal products in some cases will be environmentally friendly.

In the sample, deconsumption of food could be assessed positively as it was related to caring for health, as well as the society and the environment. The significant participation of respondents in food-sharing activities and post-consumer waste prevention, related to the zero-waste concept, and can be evaluated favorably as well.

It is worth noting that the surveyed population were consumers with a high level of competences including environmental, health and societal awareness, who can serve as role models, or so-called trendsetters, however for the spread of sustainable consumption patterns in the area of food, it is necessary to undertake educational activities aimed at raising awareness and sensitizing the entire society. An overview of a representative sample would be beneficial for the proper formation of communication and educational campaigns on sustainable food choices and deconsumption addressed to different consumer groups. Future research should also focus on practices aimed at food waste reduction and food sharing and its motives, so that the society would be able to meet the commitments expressed in Goal 12 of the SDGs.

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