

Like a
PRO

Acceptance of Alternative Proteins Among European Consumers. CSOs Brief.

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LIKE-A-PRO Project

Acceptance of Alternative Proteins Among European Consumers

Target Group

Civil Society Organisations (CSOs)

Introduction

High-quality protein is crucial for health, weight management, metabolism, and healthy aging. Yet, the more traditional sources of protein, namely meat and dairy production raise significant socio-economic and environmental concerns.¹ Hence there's a need for alternative proteins such as plant-, fungus-/mushroom-, and/or insect-based proteins which hold manifold sustainability benefits. Despite the recognised positive impacts, the widespread adoption of alternative proteins among European consumers is not quick nor large enough in scale to meet the needed sustainability transition. Understanding the factors at play – both at the individual and food system environment level – that limit or enable the prevalence of alternative proteins is crucial in catalysing (mitigate the limiting and exploit the enabling) the much-needed shift.

The following summary illustrates the key insights of a series of studies conducted as part of the LIKE-A-PRO project. These studies address different factors, both enabling and limiting, that influence the uptake and acceptance of alternative protein sources in our diets. The factors are clustered using the COM-B model² which covers both factors close to the individual (capability and motivation) as well as those external to individuals (opportunity). Insights are also clustered by demographic factors such as age, gender, education, income, and geographical location. On the basis of the compiled insights, this summary concludes with some key recommendations to industry players on how to promote and mainstream the consumption, and by default, the production of alternative proteins in Europe, as well as foster the transition towards a sustainable and good life for all.

Enablers and Barriers of the Acceptance of Alternative Proteins

The table below summarises the findings on the enablers and barriers to the uptake and acceptance of various alternative protein sources and products. The insights stem from a review of existing literature conducted as part of the LIKE-A-PRO project^{3,4}. A determinant has been linked to an alternative protein source where and when information was found in the reviewed literature. This is not exhaustive due to the specific approaches in our research process. For more information on the methodological approaches, please have a look at the original reports listed in the footnote section (3 & 4).

	Enablers	Barriers
Capability	<ul style="list-style-type: none">• Familiarity with alternative protein products (<i>applicable to general, plant, fungus/mushroom and insect-based proteins</i>) as well as cooking skills (<i>applicable to general and plant-based proteins</i>)	<ul style="list-style-type: none">• Lack of cooking skills (<i>applicable to general and plant-based proteins</i>)

¹ EAT. (2022). Healthy diets from sustainable food systems. Food planet health. Summary report of the EAT-Lancet Commission. EAT.

² Michie, S., van Stralen, M. M., & West, R. (2011). The behaviour change wheel: a new method for characterising and designing behaviour change interventions. *Implementation science*, 6, Article 42. <https://doi.org/10.1186/1748-5908-6-42>

³ Zaleskiewicz, H., Luszczynska, A., Kulis, E., Siwa, M., Szczuka, Z., Banik, A., Grossi, F., Nystrand, B.T., Samoggia, A., Chrysochou, P., Perrea, T., Krystallis, A. (2023). D1.1. Alternative protein integration in EU diets. LIKE A PRO project.

⁴ Zaleskiewicz, H., Luszczynska, A., Kulis, E., Siwa, M., Szczuka, Z., Banik, A., Grossi, F., Xhelili, A., Nystrand, B.T., Samoggia, A., Chrysochou, P., Perrea, T. (2023). D1.2 Built food environment typology. LIKE A PRO project. See also <https://doi.org/10.1186/s12966-024-01606-6>.

	<ul style="list-style-type: none"> • Easiness to replace conventional food products with alternative ones (<i>applicable to general, plant, fungus/mushroom and insect-based proteins</i>) • Labels and information indicating ingredients and origin (clean and local / regional sources) (<i>applicable to general proteins</i>) 	
	<ul style="list-style-type: none"> • Increased health literacy as well as general knowledge about the environmental impact of conventional products have moderate and volatile impact on people's acceptance of other sources of protein (<i>applicable to general, plant-based, fungus/mushroom as well as insect-based proteins</i>) 	
Opportunity	<ul style="list-style-type: none"> • Increased availability and accessibility of alternative products in food environments (<i>applicable to general, plant, fungus/mushroom and insect-based proteins</i>) • Casual and non-routine food environment situations which are linked to curiosity and feeling of adventure (e.g., festivals, restaurants, food markets) (<i>applicable to plant and insect-based proteins</i>) • If insects are invisible in the meal, the name of the insect-based product is ambiguous or deliberately beautified consumers are more likely to eat insect-based proteins (<i>applicable to insect-based protein products</i>) • Positive social and cultural norms, including increased acceptance of alternative protein products among immediate social circles (<i>applicable to general, plant, fungus/mushroom and insect-based proteins</i>) 	<ul style="list-style-type: none"> • Difficulty to recognize alternative protein products and/or find them in food environments (<i>applicable to general and plant-based proteins</i>) • Isolated and/or segregated placement of alternative protein products in food environments (<i>applicable to general and plant-based proteins</i>) • Selling insect-based proteins solely via e-commerce • Perceived incompatibility with local food and/or people's preference for regional / local food, including sources/ingredients (<i>applicable to general alternative sources of proteins</i>) • Labelling plant-based proteins as vegetarian or vegan • Social norms among men and masculinity and related identity built around meat (<i>applicable to general proteins</i>)
Motivation	<ul style="list-style-type: none"> • Perceived nutritional and health value (<i>applicable to general, plant and insect-based proteins</i>) • Good and matching taste, flavour and texture with conventional meat and dairy products (<i>applicable to general and plant-based proteins</i>) • Lower and/or equal prices to conventional products (<i>applicable to general and plant-based proteins</i>) • Presential pro-environmental and generally pro-sustainability attitudes (<i>applicable to general, plant, fungus/mushroom and insect-based proteins</i>) • Pro-animal welfare attitudes (<i>applicable to general, plant and insect-based proteins</i>) 	<ul style="list-style-type: none"> • Simultaneously, off flavour and unpleasant texture can inhibit the uptake products based on alternative sources of protein • Neophobia as well as unbalanced nutritional profiles and health risk aversiveness (<i>applicable to general, plant and insect-based proteins</i>) • Attachment, positive emotions and routine food behaviours, especially towards meat (<i>applicable to general, plant and insect-based proteins</i>) • Perceived unsafety of food production and handling (storing, maintenance) at the upper part of the value chain (<i>applicable to general, plant and insect-based proteins</i>) • Distrust towards high technologically processed food (<i>applicable to general and insect-based proteins</i>)

	<ul style="list-style-type: none"> • Feeling adventurous, daring, excitement accompanying sensation-seeking as well as curiosity (<i>applicable to general, fungus/mushroom and insect-based proteins</i>) 	
Other demographic factors (e.g., age, gender, education, income, geographical location)	<ul style="list-style-type: none"> • Women, people of younger ages as well as those with higher income levels showcase more positive attitudes towards <i>general and plant-based proteins</i> • Higher education level is correlated with positive attitudes towards <i>general and plant-based proteins</i> • Older consumers are more likely to buy <i>insect-based proteins</i> if they are sourced locally while as younger ages and people with higher income seem to be more accepting of <i>insect-based proteins</i>, regardless of their source • Men have a tendency to be more accepting of <i>insect-based proteins</i> • People living in urban areas exhibit increased curiosity towards <i>general and plant-based</i> alternative sources of protein. 	<ul style="list-style-type: none"> • Simultaneously, men most likely to avoid alternative sources of protein, especially if among peer (as seen above due to social pressure)

Recommendations for Action

Initiate and implement consumer engagement activities to further improve their understanding of alternative proteins. Engage consumers through various activities aimed at increasing awareness and understanding of alternative protein sources. This can include development of educational materials and campaigns to debunk surrounding myths with factual, science-based information, and emphasis on the health and environmental benefits of incorporating these proteins into our diets. Customizing these efforts to different consumer groups could lead to increased relevance and resonance. Additionally, providing training and capacity building activities to integrate such products into one’s diets (such as cooking trainings, enticing recipes etc.) can encourage the adoption of alternative protein products. Incorporating behavioural insights in such efforts can enhance their effectiveness and could lead to better engaged consumers and more accepted solutions.

Further drive impartial research and evidence generation on alternative proteins. Evidence and ongoing research are vital in all sectors, including alternative proteins, to drive innovation and deepen our understanding of their diverse benefits—spanning health, environmental sustainability, and socio-economic factors. CSOs are an instrumental stakeholder, advocating for and conducting crucial research in this realm. Your impartiality amidst stakeholders lends credibility to the insights one can provide. Acting as gatekeepers for transparency and accountability, you could ensure accurate data collection reflecting both opportunities and challenges of alternative proteins. By promoting robust research practices and transparent data sharing, one could contribute to informed decision-making, fostering the development and adoption of sustainable solutions for society and the environment.

Fostering partnerships and multi-stakeholder engagement initiatives. Capitalizing on their impartiality, CSOs are positioned to play a crucial role in fostering partnerships and multi-stakeholder engagement initiatives covering the entire alternative protein supply chain, from production to consumption. Such collaborative efforts could provide excellent platforms for exchanging insights, addressing challenges, and seizing opportunities in advancing alternative protein sources and products. In the novel field of alternative proteins, these platforms can contribute to laying down good foundations for this ecosystem and leveraging collective knowledge from other food ecosystems as a means to avoid pitfalls and accelerate progress. Practice has shown that such initiatives serve as catalysts for experience sharing, collective problem-solving, and innovation, especially when coordinated by impartial, trustworthy actors that enjoy widespread credibility, such as CSOs.

Engage in advocacy and policy development. CSOs are also well-positioned to engage in advocacy and influence the improvement of existing policies and regulations, as well as advocate for the introduction of new ones prioritizing alternative protein development and adoption. This could encompass calling for subsidies for research, tax incentives for sustainable farming, and other financial benefits for supporting local producers of alternative proteins, particularly smallholders. Additionally, advocating for regulations on labeling requirements and those promoting food security, increased social welfare and health, and environmental sustainability is crucial. CSOs can play a significant role in shaping public discourse and policy agendas to drive forward the transition to alternative protein sources, ensuring a more sustainable and equitable food system for all.

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