

EFA's response to the roadmap on Farm to Fork Strategy (Directorate General for Health and Food Safety)

The European Federation of Allergy and Airways Diseases Patients' Associations (EFA) is the voice of 200 million people living with allergy, asthma, and chronic obstructive pulmonary disease (COPD) in Europe. We bring together 43 national associations from 25 countries and channel their knowledge and demands to the European institutions. We connect European stakeholders to ignite change and bridge the policy gaps on allergy and airways diseases so that patients live uncompromised lives, have the right and access to the best quality care and a safe environment.

EFA welcomes the Farm to Fork Strategy presented by the European Commission, and its key role within the European Green Deal. We consider this strategy has the potential to inspire encompassing actions to address food issues aiming at a sustainable, environment- and climate-friendly food system. We find highly encouraging for people living with allergies the food path approach the strategy proposes: from primary production and processing to healthy consumption and sustainable food waste.

At EFA we think the Farm to Fork Strategy should cover two health-oriented dimensions of food. On the one hand, accurate information on food is a fundamental right of consumers with allergies and intolerances to make informed choices and keep safe and healthy. On the other hand, the composition and the quality of the food we eat underpins the onset of non-communicable chronic diseases.

Today, 150 million Europeans live with chronic allergic disease, and it is predicted that by 2025 more than 50% of all Europeans will suffer from at least one type of allergy¹. Meanwhile, about 30 million of children and adults under 45 years old have asthma in Europe², and 5–10% of adults aged over 40 years have COPD³. Here below we submit the needs and actions that the European Commission should include in the Farm to Fork Strategy not to leave these people behind. Our submission has five blocks:

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1. Establish a more comprehensive approach to allergen information

More than 17 million of people in Europe suffer from food allergy, of which 3,5 million are under the age of 25. What's more, the prevalence of food allergy is increasing, disproportionately so among

¹ European Academy of Allergy and Clinical Immunology, *Advocacy Manifesto: Tackling the Allergy Crisis in Europe - Concerted Policy Action Needed*, 2015

https://www.eaaci.org/documents/EAACI_Advocacy_Manifesto.pdf

² European Respiratory Society White Book, <https://www.erswhitebook.org/chapters/adult-asthma/>

³ European Respiratory Society White Book, <https://www.erswhitebook.org/chapters/chronic-obstructive-pulmonary-disease/>



children⁴ and recent research shows a 7-fold increase in emergency hospitalisations for severe allergic reactions in the last years⁵. It is worth noting that the eight most common foods and food substances that trigger allergic reactions are mostly everyday ingredients: cow's milk, egg, wheat, soy, peanut, tree nuts, fish and shellfish⁶.

We are delighted to see the prominent role the European Commission gives to food information, considering it as an enabler of healthy consumption and food safety. For people with food allergies, eating a food that contains an allergenic substance can literally be a matter of life and death, with symptoms ranging from mild/topical to systemic, life-threatening events (e.g. anaphylactic shocks).

At EFA we fully understand the importance of accurate information on the origin and nutritional value of foods. However, we believe that actions on better food information should not be limited to these two elements, but rather also improve *the management of food allergens in the food chain as well as the information on allergens* in prepacked and non-prepacked food. This is a safety issue. In this respect, we call the European Commission to consider the following aspects:

- **Upgrade Precautionary Allergen Labelling**

EFA's new report on ['Quality of Life for people with food allergies in Europe: A menu for improvement'](#) highlights that access to clear and accurate allergen information is of utmost importance for people living with food allergies. After all, the only available treatment to date is the avoidance of the allergenic product.

Today in the European Union, the Regulation 1169/2011 on the Food Information to Consumers (FIC) defines the way information on 14 food allergens is provided to people with food allergies. The Regulation has been a major step informing people about ingredients and has been of outmost importance to raise awareness among food operators the fact that food needs to be handled with care as it can be fatal for patients. The fact can make some patients, whose disease covers all kind of foods, whether prepacked or non-prepacked.

Unfortunately, food allergen information is not always easy to find or understand. It is the case of Precautionary Allergen Labelling (PAL) in prepacked food, a voluntary information method under FIC used by manufacturers to indicate the possibility of unintended presence of allergens in food. Firstly, this type of labelling adopts different forms today: *'may contain...'*, *'may contain traces of...'*, *'not suitable for [x allergen] allergy sufferers'*, or *'produced in a factory that also uses...'*. Secondly, there is a lack of commonly agreed risk management practices among food operators. Finally, research on allergen thresholds is not yet sufficient to define the safe allergen doses for patients and, therefore, when and how manufacturers should use PAL.

The consequence is that the current scheme of PAL, with its inconsistencies and insufficient risk assessment shifts the burden from food operators to consumers, putting patients in the difficult position of making food choices based on insufficient information, either limiting their food choices or taking the risk of a potential allergic reaction.

⁴ European Academy of Allergy and Clinical Immunology, *Food Allergy and Anaphylaxis Public Declaration*
<https://www.eaaci.org/attachments/FoodAllergy&AnaphylaxisPublicDeclarationCombined.pdf>

⁵ Paul J. Turner, M. Hazel Gowland, and Robert J. Boyle, Increase in anaphylaxis-related hospitalizations but no increase in fatalities: An analysis of United Kingdom national anaphylaxis data, 1992-2012, 2015
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4382330/>

⁶ Nwaru BI1, Hickstein L, Panesar SS, Roberts G, Muraro A, Sheikh A; EAACI Food Allergy and Anaphylaxis Guidelines Group, Prevalence of common food allergies in Europe: a systematic review and meta-analysis, 2014
<https://www.ncbi.nlm.nih.gov/pubmed/24816523>

At EFA we hold that chronic life-threatening events should not depend on voluntary corporate transparency and call on the European Commission to:

- propose EU-wide rules towards a **harmonised use of PAL statement** through an implementing act on the FIC Regulation (on the basis of Article 36.3), in light of the high priority assigned to better food information in the Farm to Fork Roadmap
 - encourage and fund **scientific and clinical research towards the establishment of reference doses for each** of the 14 food allergens listed in the FIC Regulation, below which they do not cause reactions to most food allergic patients, with the view to harmonise PAL based on an appropriate quantitative risk assessment from reference doses for safe levels of allergens
 - harmonise the approach to **risk assessment**, based on finding results from the EU ImpARAS COST Action 1402, and beyond
 - harmonise the **EU recall system for foods**, based on a common definition of health risk
- **New allergens and novel foods**

There are currently 14 food ingredients that need to be labelled as allergens in food products commercialised in the European Union. However, more than 120 foods have been described as causing food allergies⁷ and given the current innovation trend and the introduction of novel foods have tripled in the last years, we can assume there will be more foods to be reported as allergenic in the coming years.

Whether known or unknown, some of these ingredients are or contain allergens e.g. insects, a novel food foreseen and encouraged to be massively introduced in our diets in the upcoming years⁸. At EFA, we recommend the European Commission to take steps in two parallel directions.

On one side, the European Food Safety Authority (EFSA) should continue conducting risk assessments for novel foods including an allergenicity assessment, as it has done with novel foods made of already known allergens, such as [egg membrane hydrolysate](#) and [shrimp peptide concentrate](#).

On the other side, EFSA should systematically include allergenicity assessments in all authorisation procedures for novel foods to include the allergen perspective into the safety considerations of any novel food. It is the case of insects. EFSA has already assessed the risk of the [house cricket](#), an arthropod with similar characteristics as certain seafood that could therefore trigger allergic reactions among people with allergy to shellfish, lobsters or shrimps. However, given that insects are not required to be labelled as allergens by FIC Regulation, EFSA has concluded that house cricket and other crickets should be labelled as another harmless ingredient, not as allergens. This bears potential risks to consumers allergic to the proteins contained in this or other novel foods.

The Farm to Fork strategy provides with an excellent and timely occasion to look at the safety of novel foods and EFA invites the European Commission to take the following action to ensure that consumers have access to accurate and harmonised information on all types of novel foods:

⁷ European Academy of Allergy and Clinical Immunology, Food Allergy and Anaphylaxis Public Declaration <https://www.eaaci.org/attachments/FoodAllergy&AnaphylaxisPublicDeclarationCombined.pdf>

⁸ Food and Agriculture Organisation of the United Nations, *Edible insects: Future prospects for food and feed security*, 2013 <http://www.fao.org/3/i3253e/i3253e00.htm>

- Rapidly integrate new scientific evidence on the allergenicity of novel foods from EFSA, **updating the allergen list in Annex 2 of the FIC regulation** with new allergens

2. Tackle air pollution and climate change from the agricultural sector

As the Farm to Fork Roadmap notes, food systems have a significant contribution to the pollution of air and climate change. In fact, over 90% of ammonia and 80% of methane emissions are coming from agricultural activities, according to the European Environmental Agency⁹. This means that continuing business as usual in the agricultural sector would put further pressure on the environment and human health, with a disproportionate share of the burden borne by people with chronic respiratory diseases, such as asthma and chronic obstructive pulmonary disease (COPD).

EFA takes note of the various parallel EU initiatives to tackle air pollution, exemplified by the ongoing review of the Common Agriculture Policy, the evaluation of the Industrial Emissions Directive, and the upcoming Zero Air Pollution Action Plan. On the occasion of the Farm to Fork Strategy, we urge the Commission to act decisively by curbing down the emissions from the agricultural sector, adopting a cohesive approach towards air quality, putting human health at the center of its considerations.

Furthermore, EFA would like to draw the Commission's attention to **pollen emissions**, which are intimately linked with the onset of respiratory allergy. Despite pollens are from natural sources, they are very much affected and exacerbated by human industrial processes.

Researchers within the EU Funded project Atopica have found that air concentrations of allergenic ragweed pollen could quadruple in Europe by 2050. Climate change would be responsible for two thirds of this increase, the remaining third would be due to the colonization of the plant as a result of human activities¹⁰.

At EFA, we are calling the European Commission for action on pollen issues and we believe the Farm to Fork strategy, because of its all-encompassing nature, is a perfect occasion to start. As patients, we are affected by pollen as human pollutants in two ways.

On the one hand there is the effect climate change, increase temperature, is doing to plants and trees. In fact, current research shows that independently of the species planted for food, climate change is contributing to extended seasonal duration and increased pollen load for multiple aeroallergenic pollen, heavily impacting human health^{11,12}.

On the other hand, the production of allergenic pollen is also very much affected by the planting of highly allergenic trees and plants in urban settings. These include allergenic species indigenous in Europe, such as birch trees, olive trees, oilseed rapes, which are found at a wide scale in monocultures, as well as new or non-indigenous plants such as ragweed, which were brought in Europe by human and have spread across the continent.

⁹ European Environment Agency, *Air Pollution Sources*, 2019 <https://www.eea.europa.eu/themes/air/air-pollution-sources-1/air-pollution-sources>

¹⁰ Hamaoui-Laguel L., Vautard R., Liu L., Solmon F., Viovy N., Khvorostyanov D., Essl F., Chuine I., Colette A., Semenov M.A., Schaffhauser A., Storkey J., Thibaudon M. & Epstein M.M., Effects of climate change and seed dispersal on airborne ragweed pollen loads in Europe, 2015 <https://www.nature.com/articles/nclimate2652>

¹¹ Ziska L. et al., Temperature-related changes in airborne allergenic pollen abundance and seasonality across the northern hemisphere: a retrospective data analysis, 2019, [https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196\(19\)30015-4/fulltext](https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196(19)30015-4/fulltext)

¹² Damialis A., Traindl-Hoffmann C., Treudler R. "Climate Change and Pollen Allergies" https://link.springer.com/chapter/10.1007/978-3-030-02318-8_3

In light of the above, EFA holds that our longstanding ask **for a real-time monitoring of pollen remains urgent as ever**, as it would ensure the timely dissemination of and access to information to citizens with pollen allergies.

3. Beware of ultra-processed food and its association with asthma

There is growing scientific evidence in recent years on the association between ultra-processed foods (UPF) with diet-related non-communicable diseases. While most of the focus has been given to health outcomes related to obesity, there are two recent studies examining the link between UPF and asthma/wheeze.

The first one, conducted among Brazilian adolescents, found a positive association between the consumption of UPF and the development of asthma and wheezing¹³. The second, based on a study also in Brazil, investigated whether UPF consumption during childhood was associated with wheeze, asthma, and severe asthma in adolescence. The evidence showed no association of UPF consumption during childhood or adolescence with the development of asthma or wheeze in adolescents¹⁴.

The ambivalent scientific conclusions, but mostly the rather novel nature of this particular research field, point towards the need for further investment into research in the context of large-scale cohort studies. Given the prevalence of asthma in children and adolescents, more evidence on the links between UPF and asthma/ wheeze can contribute to greater public understanding on the sources of the diseases, thus informing potential preventive measures and behaviors.

4. Health concerns over fertilisers, pesticides and antibiotics on food

There is only scarce research assessing the impact the use of fertilisers and pesticides on food have on allergies and airways diseases, and this research is more looking into the health assessment of workers than of consumers. However, the evidence from agricultural studies is actually rather alarming: recent research has shown that allergic conditions and asthma are most common among children exposed to fertilisers and chemicals in Sri Lanka and the United States^{15,16}; that fertilisers can decrease pulmonary capacity¹⁷; and lead to asthma¹⁸.

At EFA, we hope more attention is given not only to the respiratory health and onset of allergies within the agriculture works, but also to the residual fertilisers and chemicals we intake in foods, and that interact with our respiratory and immune system. Unfortunately, and due to lack of research, we

¹³ B. Melo L. Rezende P. Machado N. Gouveia R. Levy, Associations of ultra-processed food and drink products with asthma and wheezing among Brazilian adolescents, *Pediatric Allergy and Immunology*, 2018 <https://onlinelibrary.wiley.com/doi/abs/10.1111/pai.12911>

¹⁴ Catarina Machado Azeredo, Marianna Cortese, Caroline dos Santos Costa, Kjetil Bjornevik, Aluisio J. D. Barros, Fernando C. Barros, Iná S Santos, Alicia Matijasevich, Ultra-processed food consumption during childhood and asthma in adolescence: Data from the 2004 Pelotas birth cohort study, 2019 <https://onlinelibrary.wiley.com/doi/full/10.1111/pai.13126>

¹⁵ Kudagammana ST, Mohotti K, Environmental exposure to agrochemicals and allergic diseases in preschool children in high grown tea plantations of Sri Lanka, 2018 <https://www.ncbi.nlm.nih.gov/pubmed/30534163>

¹⁶ Wande O. Benka-Coker, Christine Loftus, [...], and Sheryl Magzamen, Characterizing the joint effects of pesticide exposure and criteria ambient air pollutants on pediatric asthma morbidity in an agricultural community, 2019 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6571181/>

¹⁷ K. H. Hovland, M. Skogstad, B. Bakke, Ø. Skare, K. Skyberg, Longitudinal decline in pulmonary diffusing capacity among nitrate fertilizer workers, 2014 <https://academic.oup.com/occmed/article/64/3/181/1438069>

¹⁸ Cherry N, Beach J, Senthilselvan A, Burstyn I, Pesticide Use and Asthma in Alberta Grain Farmers, 2018 <https://www.ncbi.nlm.nih.gov/pubmed/29543740>

cannot present you today with robust findings looking at the **causality food production substances have in the development of allergy, asthma and chronic respiratory conditions**. We hope the Food to Fork Strategy will take this concern on board.

5. Food beyond fork: address the presence of food allergens in non-food products

Nowadays, industry is moving towards plastic-less production cycles. This entails producing less waste, but also looking for innovative ways to use well known, natural, products. For example, milk and milk proteins can be present in a wide array of products typically found in households, such as cosmetics, personal hygiene items, clothing (including buttons), fibers, and industrial material (biopolymers)¹⁹. Moreover, one can find products such as toys, coatings, and baking papers containing soy, paints made of egg, and play dough containing wheat.

Although these materials are in most cases replacing chemicals and synthetics in the respective products, they still retain their allergenic capacity. In fact, some are typically used in a way that brings them in prolonged contact with our skin and face, and in ways we can breathe in, bearing the risk of reaction for users allergic to these food products.

Therefore EFA would like to emphasize on the **need for proper labelling and risk assessment of these food allergens independently of the product they are used for**, in a way that ensures the provision of visible, articulate information to consumers.

¹⁹ European Commission, *Making clothes from milk*, <https://cordis.europa.eu/article/id/135536-making-clothes-from-milk>