

Edible insects: statement of purpose

1.1 Background

Human consumption of insects and insect products can be considered a growing trend in the Western World. In the UK, various insect species have been available on the market to consumers for several years. The Novel Food legislation covering edible insects was updated in 2018 to reflect the need for all companies placing insects on the market, that did not have a history of consumption in the EU, to submit an application for authorisation of their products. Under the current regulation, products already present in the EU market needed to submit their application before the 1 of January 2019 to be able to continue to market their products, pending a decision on their application.

The UK has received several applications for validation from the Commission under the traditional foods route, and many more have been submitted to the EU under the full authorisation route. The two most relevant species to this end are larvae of *Tenebrio molitor* (mealworm) and adults of *Acheta domesticus* (house crickets), but other relevant species were also considered in this report.

The Novel Foods authorisation process requires that anyone wishing to commercialise a product with less than 25 years of proven consumption in the region must present an application for authorisation for that product. This application must contain all the relevant information as detailed in the relevant guidance by EFSA, including the identification, safety, and usage of the food to be authorised. There are two routes through which an applicant can seek authorisation:

- the full authorisation process for foods for which there is not sufficient evidence of safety of consumption in other countries
- the traditional foods authorisation process for those foods for which a long history of safe consumption can be proven

Within the authorisation process in the EU, EFSA carries out one initial validation stage, in which the dossier is evaluated on the basis of scientific information completeness, and a risk assessment stage, in which a group of experts in the field evaluate and assess the dossier before formalising an opinion on its safety. The FSA currently mirror this process in GB

FSA risk managers commissioned the production of a risk profile that would look to identify the hazards to humans from consumption of insects as food. In addition, it is recognised that edible insects pose additional questions in relation to wider regulatory frameworks, namely hygiene requirements and their use as feedingstuffs for food producing animals. Work is ongoing towards updating the hygiene regulations to establish the principles that should be applied to insects, and this risk profile is intended to assist in the next phase of this work.

1.2 Risk question

This risk profile aims to identify hazards to human health following consumption of edible insects using the report by EFSA in 2015 as a basis.

The Scope section describes what was included as an objective of study in the review and what was excluded. The Methodology section describes the species of insect chosen for the literature

review and the reasoning behind this selection, as well as the systematic search methodology followed for the identification of the relevant literature. The Risk profile section summarises the information found through the literature review, some of which has also been compiled in the form of tables in the Appendices section.

1.3 Legislation

Edible insects do not currently fall under their own specific EU legislation. Instead, a series of regulations apply:

- Principle of General Food Law: [Reg. 178/2002](#)
- Food Hygiene Regulation: [Reg. 852/2004](#)
- Food of Animal Origin: [Reg. 853/2004](#)
- Official Controls Regulation: [Reg. 2017/625](#)
- Novel Food Regulation: [Reg. 2015/2283](#)
- [Commission Implementing Regulation \(EU\) 2017/2468](#)
- [Commission Implementing Regulation \(EU\) 2017/2469](#)
- [Commission Implementing Regulation \(EU\) 2017/2470](#)
- [Commission Implementing Regulation \(EU\) 2018/456](#)
- General requirements for feed hygiene and animal health: [Reg. 183/2005](#)
- Animal by-products and Derived Products: [Reg. 1069/2009](#)
- Animal Welfare Directive [98/58/EC](#)
- Placing on the Market and Use of Feed: [Reg. 767/2009](#)
- Transmissible Spongiform Encephalopathies Regulation: [Reg. 999/2001](#)
- Processed Animal Protein Amendments: [Reg. 2017/893](#)
- Undesirable Substances in Animal Feed: [Directive 2002/32/EC](#)

1.4 Previous reports and reviews

Several reports from other competent authorities have been previously produced identifying the available evidence to evaluate the risk to consumers from eating edible insects.

- [EU](#)
- [France](#)
- [Belgium](#)

The literature review performed as part of this risk profile identified several previous comprehensive reviews covering some of the areas within the scope of this document:

- Microbiology and AMR – Garofalo et al. 2019
- Toxicology – Schrögel et al. 2019
- Allergenicity – De Gier et al. 2018
- Edible insects in general - Van der Fels-Klerx et al. 2018, Ferri et al. 2019