How risk analysis keeps food and feed safe

Risk analysis is the process of assessing, managing and communicating food and animal feed safety risks. It's how we ensure high standards of food and feed safety and protect consumers.

How we keep food and feed safe

Food safety risks may need to be considered for many reasons, for example, if:

- bacteria (e.g. Campylobacter), contaminants (e.g. acrylamide), allergens (e.g. peanut) or radiological hazards are present in food
- food is not labelled correctly
- somebody wants to bring a new regulated product to market (e.g. a food or feed additive, flavouring or novel food)

Risk analysis is how we identify and assess the risks and provide guidance to reduce them.

How the risk analysis process works

Since leaving the European Union (EU), the FSA and Food Standards Scotland (FSS) have taken on responsibility for assessing food and animal feed safety in the UK.

Once the risk analysis process is triggered, a risk assessment is carried out to estimate the risk to human and/or animal health. This may be done in consultation with external experts from our independent Scientific Advisory Committees and Joint Expert Groups. Risk assessments will generally be carried out on a four-nation basis, with capacity for nation-specific risk assessments where required.

Risk managers then consider how we should control these risks. Alongside food safety, they take into consideration other factors such as animal welfare, environment, economic impact and any nation-specific factors that are relevant.

The risk manager's advice can be used to inform ministerial decisions on changes to legislation, or help to change guidance from us on issues affecting businesses and consumers.

There is often an element of uncertainty in both science and decision-making. In the interests of protecting public health from emerging food safety risks, the precautionary principle allows us to take action even if there isn't time or data to undertake a full risk assessment. When this happens, temporary risk management measures can be put in place provided they are proportionate, feasible and no more restrictive to trade than they need to be.

The advice that comes out of risk analysis is based on science and evidence. We will publish the advice we provide to others and the analysis and evidence on which that advice is based.

Our enhanced risk analysis process

Our increased responsibility for risk analysis in the UK has meant we've added some new elements to enhance our process. We have included:

- a clearer separation between our scientific analysis of risk (risk assessment) and the ways we control the risks (risk management)
- an expanded role for our independent Scientific Advisory Committees which we have strengthened by recruiting new experts and establishing three new Joint Expert Groups
- a new process to advise government ministers on authorising regulated food and feed products for sale in England, Wales and Scotland

Current food and feed safety rules haven't changed as European legislation has moved into UK law. However, when rules on food and feed marketed in Great Britain (GB) need to change we will use our own risk analysis process rather than the EU's process. The process is different for Northern Ireland (NI) where Annex 2 of the Northern Ireland Protocol means that if you wish to market food or feed in NI you need to continue to follow EU food and feed safety and hygiene regulations.

Who is involved?

We apply a four-nation approach throughout the risk analysis process. This sets out how the four nations will work together when changes to food and feed safety rules are needed. It guarantees regular discussion by the FSA and FSS on issues going through the risk analysis process, ensuring that advice is effective for the UK as a whole, or individual nations as needed.

Our risk assessors deliver the science behind our advice. They are responsible for identifying and characterising hazards, assessing levels of exposure and characterising risks to health. Their advice supports our risk managers in developing the right advice.

In addition, our economists, operational researchers, social researchers and statisticians contribute to the evidence base.

Our risk managers consider which approaches could be implemented to manage and control the risk. They consult with interested parties and take into account any factors relevant for the protection of consumers' health and their wider interests in relation to food.

Our Joint Expert Groups help us ensure that our advice to consumers is always based on the best and most recent scientific evidence.

Our Chief Scientific Adviser (CSA) is responsible for the integrity of our scientific evidence and ensuring expert advice is available to us.

The Board will not discuss routine technical issues going through the risk analysis process but may discuss and provide advice to ministers and others on significant, high-profile, or complex cases. Our Board meetings are held in public but there could be a small number of circumstances in which Board discussions would not be in the open, as set out in paragraph 2.7 of the FSA Code of Practice on Openness.