Pesticides in food

Pesticides are chemical or biological substances that are used to kill or control pests during the cultivation and storage of crops. We have oversight of pesticides and food safety in England, Northern Ireland and Wales.

Defra are responsible for policy on pesticides, for approval and enforcement visit the [Health and Safety Executive](https://www.hse.gov.uk). Pesticides are sometimes described as ‘plant protection products’ or PPPs.

They may include the following:

- herbicides to control weeds before and during growth
- insecticides to protect seeds and plants from damage by insects
- nematicides and molluscicides to control attack on growing plants by worms and slugs
- rodenticides to prevent damage and contamination by small mammals such as mice and rats during growth and storage
- fungicides to prevent mould forming on plants in the field and in store

Moulds can damage crops and reduce their nutritional value. They can also produce fungal toxins (mycotoxins) which can be harmful to health.

Pesticides almost always inhibit, damage or kill a live organism so their approval and use is tightly regulated to ensure they don’t cause harm to consumers, the environment, users, non-target organisms such as birds, mammals, fish or pollinating insects.

Legislation

Food businesses are responsible for ensuring that the food they produce or import is compliant with current legislation, including Maximum Residue Levels (MRLs).

**Regulation 1107/2009**

[Regulation 1107/2009](https://eur-lex.europa.eu) lays down the detailed requirements for placing plant protection products on the market, including the procedures for approval of

- active substances
- products and the establishment of the conditions for use (sometimes defined as Good Agricultural Practices or GAPs)

Most of the process for approval and control on use is harmonised across the EU. However, this Regulation also sets out the circumstances and conditions to be met for national derogations and emergency applications, for example, when there is an unexpected event leading to a serious risk to a crop.

**Regulation 396/2005**

[Regulation 396/2005](https://eur-lex.europa.eu) sets out Maximum Residue Levels (MRLs) for pesticides in food.

MRLs are the maximum levels of pesticide residue that may remain in a food following correct use of the pesticide product in accordance with Good Agricultural Practices. MRLs must
always be protective of health and they are normally well below a level of concern.

MRLs are established for every individual commodity for which there is an approved use (GAP). For foods where a pesticide use is not approved, a default MRL of 0.01 mg/kg applies to any residue which is found. Any food that fails to comply with MRLs must not be placed on the market.

**Imported food and pesticide testing**

Pesticide testing of imported food is carried out by Port Health Authorities on our behalf. If a recurring problem is found with a specific product or supplying country, this may become the subject of enhanced controls, which are set out in Commission Regulation 669/2009. Rapid Alerts System for Food and Feed (RASFF) MRLs are generally set well below a level that would represent a risk to health and non-compliances are usually not a food safety concern, although this must be verified by a risk assessment. Rapid Alerts are only issued when the risk assessment does indicate a possible risk to health.

**Expert Committees**

The Expert Committee on Pesticides (ECP) and the Expert Committee on Pesticide Residues in Food (PRiF) provide advice to government departments on use and approval of pesticides to protect food safety.