

Field2Fork | crop protection products and the food on your plate: one link in the chain

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■ The risks in perspective

The crop protection industry is only one of many links in the food chain. As such, we accept and welcome the scrutiny we are subject to. We believe that we have a responsibility to work closely with other stakeholders in the food chain, listening carefully and responding openly to consumer concerns about residues.



■ It's natural: we all want our food to be safe

Crop protection products can leave very small traces of chemicals, called residues, on crops. The crop protection industry understands that this worries many consumers, even though the very strict regulations that control the manufacturing, marketing and use of crop protection products ensure that consumers are not exposed to residues at levels that might threaten their health. Residues have been the subject of much public scrutiny and media attention — keeping the risks in perspective is a real challenge, not only for the crop protection industry but for the food chain as a whole.

■ It's official: low levels of residues are safe

Annual EU monitoring confirms that low levels of residues in food are safe for consumers. Year on year, the results of the EU residues monitoring programme show that no consumers, whatever their age or gender, are exposed to residues at levels that threaten their health. While the crop protection industry is committed to working with all relevant stakeholders to minimise residues as far as possible, it's important to remember that the European Commission has repeatedly confirmed that low levels of residues in food are safe for consumers.

■ It makes sense: minimising residues is a team effort

The crop protection industry continually strives to reduce residues as far as possible and ensure that its products are used correctly. The industry collaborates with farmers, food traders and the wider food industry to develop protocols that encourage the correct use of crop protection products, which can help to minimise residues in food. Initiatives such as these aim to raise the standards of agricultural production and reflect the industry's commitment to tackling the challenges posed by residues, together with other partners in the food chain. Farmers are encouraged to ensure that the doses of the product are accurately calculated and the applications are highly targeted. The crop protection industry itself is also a key resource in farming communities, providing farmers with training, guidelines and literature — all of which can help to prevent or at least minimise any residues left on their crops. Many farmers will also take specialist advice from crop protection experts in extension services and local authorities. This is an added safety measure, not unlike the advice that consumers themselves might seek from their pharmacist to ensure that they are using the right medicine, at the right time, in the right way.

■ Maximum Residue Levels explained

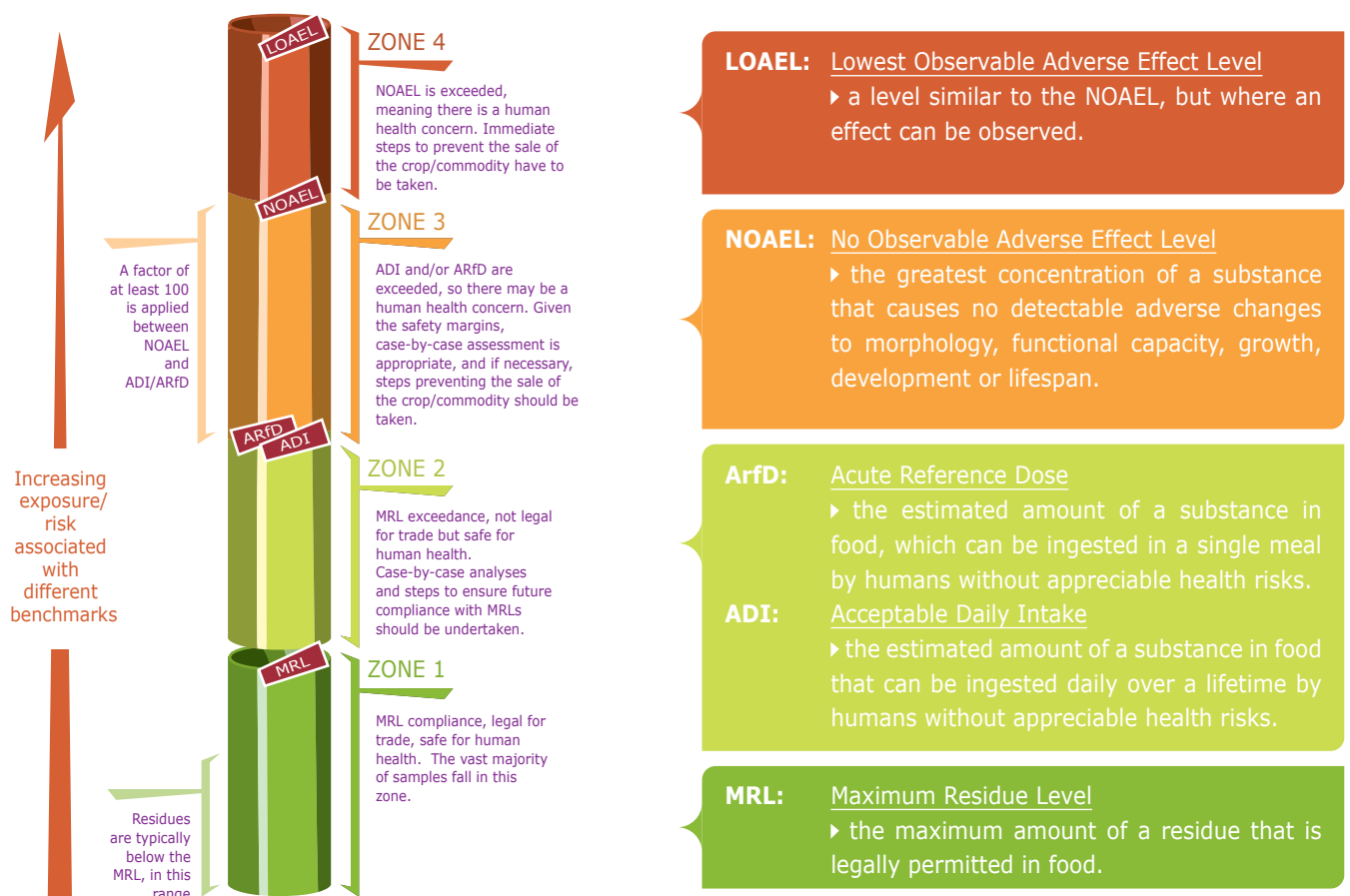


A Maximum Residue Level, or an MRL, is the maximum amount of a residue that is legally permitted in food. MRLs are set by independent authorities, using very wide safety margins. In the vast majority of cases there is no risk to human health when MRLs are occasionally exceeded, since they are set far below safety limits.

■ How do MRLs work?

MRLs are set on the basis of what is achievable using Good Agricultural Practice (GAP) and taking into account toxicological benchmarks. There is a considerable margin between the exposure that would be acceptable from a toxicological standpoint and the much lower exposure that is permitted according to the legally required MRLs. Therefore, although MRLs may occasionally be exceeded, this very rarely implies any risk to human health. In fact, of the several hundred thousand residue samples analysed under the EU monitoring programme since 1996, an extremely conservative risk assessment identified a theoretical concern in only a handful. Take a look at the barometer below, which shows how MRLs are set and how very wide the safety margins are.

■ Barometer showing the wide safety margins used in the MRL setting process



■ The safeguards at a glance



Crop protection products are only approved for sale in the EU if the residue levels they may leave in food are deemed to be safe for all consumers, whatever their age or gender — including unborn babies, infants and children. The crop protection industry works closely with institutions, governments and authorities to ensure that its products are safe for everyone.

■ Testing, testing, testing

Crop protection products are among the most highly regulated of all man-made chemicals and undergo testing similar to that of medicines. Any potential health concerns associated with dietary exposure to residues are assessed on the basis of rigorous experimental studies. These studies follow internationally recognised guidelines and strictly regulated protocols.

■ Legal and regulatory safeguards

A stringent EU approvals process ensures that crop protection products are safe for consumers. The industry fully supports this very demanding process, which not only testifies to the safety of crop protection products, but is also completely independent and open to public scrutiny. All crop protection products must undergo a rigorous approval process before they are authorised for marketing and use. Any risks are thoroughly assessed on the basis of extensive data, covering product efficacy, product chemistry, human health and environmental impact. Following a wide range of mandatory tests, crop protection products are approved only if they are effective at controlling weeds, pests and diseases — and their use is safe for humans and the environment.

■ An apple a day

To understand the risks that residues may pose to human health, we need to understand the difference between hazard and exposure. The presence of residues on apples, for example, constitutes a hazard, which is determined by the toxicity of the product used. If consumers do not eat any apples containing residues, there is no exposure to the hazard and therefore no risk. It is only when consumers expose themselves to the hazard by eating a very large amount of apples containing a very high level of residues that they may be at risk. Clearly, a residue does not mean a risk — the risk depends both on the level of the residue present in the food and the amount of the food actually eaten by the consumer.

In order for you to be at **risk** of something harmful, you would need to be **exposed** to a **hazard**, which is simply something that has the **potential** to harm you. If you have not been exposed to a hazard, there is no risk that it will harm you.

The level of exposure that is shown to cause no harmful effects is called the No Observable Adverse Effect Level (NOAEL). A safety factor of at least 100-fold is applied to the lowest experimental NOAEL to determine the maximum permissible exposure to humans. The 100-fold safety factor has been proven to be extremely effective in protecting consumers from residues.



■ Remembering the benefits



The very small risks associated with crop protection products need to be balanced against the many economic, environmental and social benefits that they bring. Crop protection products protect crops from dangerous pests and diseases and make food more affordable to consumers.

■ Food free of pests and diseases

The potential risks associated with residues need to be balanced against the health benefits that crop protection products can bring. There are many dangerous pests and diseases that attack crops and contaminate our food. Crop protection products help to prevent and control the moulds, mites and insects that would otherwise infect and infest our food.

■ Food affordability and consumer choice

The risks associated with residues need to be balanced against the economic benefits that crop protection products can bring. By helping farmers grow consistently high yields of fresh produce, crop protection products help keep the cost of fresh produce down. This ensures that everyone, regardless of their income, can afford a wide variety of the fresh fruits and vegetables that are key to a healthy diet.

■ Intelligent, informed debate

The crop protection industry believes in intelligent, informed debate with its partners in the food chain. Consumers and those who represent them have a right to arrive at their own conclusions about the benefits and risks associated with crop protection products. The crop protection industry supports this right by providing information and encouraging debate. Find out more about the benefits and risks associated with crop protection products on the Field2Fork web site: www.ecpa.be/Field2Fork.



Field2Fork is a pan-European campaign run by the European Crop Protection Association (ECPA) and its national associations. Crop protection products can leave very small traces of chemicals, called residues, on crops. The crop protection industry understands that this worries many consumers, even though the very strict regulations that control the manufacturing, marketing and use of crop protection products ensure that consumers are not exposed to residues at levels that threaten their health. The Field2Fork Campaign addresses EU food chain stakeholders and seeks to promote a more accurate understanding of residues-related risks in the context of the many benefits that crop protection products bring.



www.ecpa.be/Field2Fork