

Statement by Mouvement Ecologique on the reactions of the Ministry of Agriculture and the National Association of Fruit Growers to recent analyses on pesticide contamination of apples

Public health must take priority!

Downplaying the problem is not a solution

By way of reminder: last Thursday, Mouvement Ecologique published a Europe-wide analysis by Pesticide Action Network Europe (PAN Europe) on pesticide contamination in apples. Mouvement Ecologique participated in this study by providing samples from Luxembourg. In total, 59 samples of 500 g of conventionally produced apples were analysed, three of which originated from Luxembourg. Only 7% of all apples analysed contained no detectable pesticides; the Luxembourg samples were in some cases contaminated above the EU average.

Various reactions to the analytical results prompt Mouvement Ecologique to issue the following clarifications:

1. Calling things by their name – the apples analysed are contaminated:

The Ministry of Agriculture emphasises that the apples are not contaminated, as the residues measured are below the legally permitted maximum residue levels for individual substances. Mouvement Ecologique strongly disagrees. Pesticides do not belong in food: even at very low doses, each pesticide constitutes a contamination. Compliance with individual maximum residue limits cannot be equated with harmlessness.

2. Acknowledge pesticide “cocktails” as a major problem:

It is true that the currently applicable limits for individual pesticide active substances were not exceeded in the analyses carried out. However, the Luxembourg samples contained an average of five different pesticides (one sample even contained seven). At present, there are no adequate assessment procedures for such chemical cocktails, despite studies clearly showing that cumulative and synergistic effects of these mixtures pose risks to human health and the environment. A debate focused solely on individual limit values therefore misses the core of the problem.

Neither the European nor the Luxembourg food safety authorities currently assess the combined toxicity of pesticides with different modes of action, even though this issue has long been acknowledged by all stakeholders and political decisions have already been taken to close this significant gap — decisions that have yet to be implemented in practice.

3. The precautionary principle must take precedence:

In addition, the maximum residue limits currently applied in food controls for individual pesticides are highly controversial. It is often the case that legally permitted limits are significantly tightened retrospectively once new scientific evidence of harmful health effects becomes available.

Moreover, several of the pesticides detected in the study are already considered harmful to human health and should therefore no longer be used. Some are suspected of being carcinogenic, such as captan, while others are associated with adverse effects such as developmental neurotoxicity, as in the case of acetamiprid (which is also toxic to bees).

These proven health risks, combined with the dangers associated with pesticide cocktails, should lead the Ministries of Agriculture, Environment and Health to apply the precautionary principle — in other words, to aim for pesticide contamination levels as close to zero as possible.

4. PAN Europe analyses meet scientific standards:

The PAN Europe analysis and the related statements by Mouvement Ecologique are scientifically sound, even though they are based on a subset of apples. Scientific studies are generally conducted using subsets and should not be confused with market-wide analyses. It is certainly necessary for public authorities to analyse foodstuffs (and not only apples) in a far more systematic and consistent manner. However, it is not the role of an environmental organisation to replace the state in this responsibility, but rather to urge a hitherto overly passive public sector to finally take action.

It is noteworthy that the most recent available analyses by the Luxembourg Veterinary and Food Administration (ALVA) from 2023 led to the same results for conventionally produced apples (also based on only three samples): Luxembourg apples contained residues of an average of five different pesticides, with a maximum of eight substances detected in a single sample — even more than in the PAN Europe study. Nevertheless, the Ministry of Agriculture considers such apples unproblematic as long as the (often disputed) limits for individual substances are not exceeded.

5. PAN Europe results confirm previous analyses – yet public authorities remain inactive:

The pesticide analyses of apples are part of a long series of studies demonstrating a general exposure of the Luxembourg population to pesticides: hair analyses showed that all children in Luxembourg are contaminated with pesticides (study commissioned by the Ministry of Health), dust analyses revealed widespread contamination, among others. How many more analyses are needed before the Ministries of Agriculture, Health and Environment respond adequately?

6. The protection of young children must take priority:

The first 1,000 days of a child's life — beginning as a foetus in the womb — are decisive for lifelong health, as emphasised by international scientific bodies, a fact also recognised by the Luxembourg Ministry of Health¹. Healthy nutrition during this period is of particular importance. Unfortunately, the current legal situation is unsatisfactory: specific residue limits exist for processed foods intended for infants (e.g. baby food), but not for fresh apples. While the Ministry of Agriculture concludes that there is no cause for concern, Mouvement Ecologique takes a different view: the child's organism does not distinguish whether a food product has specific limit values or not — the exposure remains the same. For this reason, Mouvement Ecologique applies the existing limits for processed infant foods

¹ <https://gimb.public.lu/dam-assets/publications/2025/1000-premiers-jours-wi-eng-roll-spillt-dernhrung-danielle-krier.pdf>

to fresh apples. The Ministry of Health is therefore called upon to assume its responsibilities without delay, to take a clear position and to ensure proper public information. Proactive risk communication and precautionary measures are essential — young children must be afforded maximum protection.

7. Expand existing programmes to reduce pesticide use:

The Ministry points out that the use of plant protection products in Luxembourg agriculture has been reduced by more than 50% since 2016 — a development that is explicitly welcomed. However, the figures from this and previous studies (pesticide contamination in hair samples, “forever chemicals” in water and food) clearly demonstrate that exposure levels remain too high and that further substantial reductions are necessary. It is also encouraging that nearly half of the fruit-growing area was already cultivated without fungicides or insecticides in 2024. Yet what prevents the other half — from which the study samples evidently originated — from following the same path? From a consumer perspective, it would also be important to know whether areas cultivated without such chemicals are primarily privately managed, while more intensive practices are associated with commercial operations. Overall, one fact remains: despite positive developments, pesticide use is still far too high and stronger measures are required. One missed opportunity lies, for example, in the school fruit programme, which for years has failed to create a stable market for organic apples from Luxembourg.

8. Make data on pesticide use publicly available:

European legislation requires professional pesticide users to keep detailed records of pesticide use and grants third parties² — including residents and other affected groups — access to this information via the competent authorities. A factual and transparent debate would greatly benefit if Luxembourg fully complied with this obligation and made regional pesticide-use registers publicly accessible. There is also nothing to prevent professional users from granting their customers access to their spraying records.

9. Choose untreated (organic) apples:

There is no intention to discourage fruit consumption. However, consumers are encouraged to choose organic apples — for their own health and for the environment. If apples from conventional production are consumed, they should be washed thoroughly (washing does not remove all pesticides, but it helps) and peeled — even though this, too, does not eliminate all residues.

The Ministry of Agriculture — as well as the Ministries of Health and Environment — must take action. While pesticide use and its reduction fall primarily within the remit of the Ministry of Agriculture, the negative impacts on health, biodiversity, soil and water require an interministerial approach. Such voices are currently missing from the debate.

Conclusion by Mouvement Ecologique:

The reactions from official bodies convey the impression that the situation is acceptable as long as controversial and inadequate limit values are not exceeded. This is precisely where the problem lies. For many years, the government has downplayed the fundamental issue of pesticide contamination. Even though recent apple analyses have triggered public debate,

² Art. 67 VO (EG) Nr. 1107/2009

they are merely symptomatic of a broader structural problem within current agricultural policy. This is neither the responsibility of a single producer nor of a single product — it is systemic.

Ignoring this core issue will only lead to increased polarisation between stakeholders and greater uncertainty among consumers, clearly contradicts the precautionary principle and ultimately harms everyone: public health, the environment and the affected producers alike.

The recent analyses of pesticide-contaminated apples are part of a long series of previous studies. The conclusion is unequivocal: a change of course is urgently needed, along with a reform of the current agricultural system — moving away from pesticides towards organic farming and an optimised system of integrated production. This is in the interest of producers, the environment, public health, and above all the most vulnerable members of society: children.

Mouvement Ecologique is available for a structured dialogue on this issue, involving all stakeholders under the leadership of the Ministries of Agriculture, Environment and Health.

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