The MRL myth

Skip your socials, not your salads

Food is more than mere sustenance; It's a way we express ourselves, find comfort, social connection and nourishment. However, a shadow of fear and mistrust looms over our plates when concerns about food safety arise, fueled by activist rhetoric and disinformation discouraging consumption of vital fruits, vegetables and wholegrains.

Pesticide residues, commonly incorrectly asserted as harmful, are frequently wielded as ammunition by fear-mongering activists. The truth is far from these sensationalised claims, that ignore the central, crucial point – the presence of a pesticide residue doesn't tell us anything about safety. It's like saying we shouldn't eat apples because the seeds contain cyanide. Rather, Maximum Residue Limits (MRLs) serve as regulatory tools, that ensure adherence to best farming practices to manage damaging, toxic or invasive pests, in accordance with product labels.

MRLs are set to ensure that the minimum necessary amount of pesticide is used to combat pests, thus minimising residue levels. The MRL then becomes the highest amount of residue that would be present from this application. This is why MRLs vary from country to country – different pests and diseases in different environmental contexts require different treatments.

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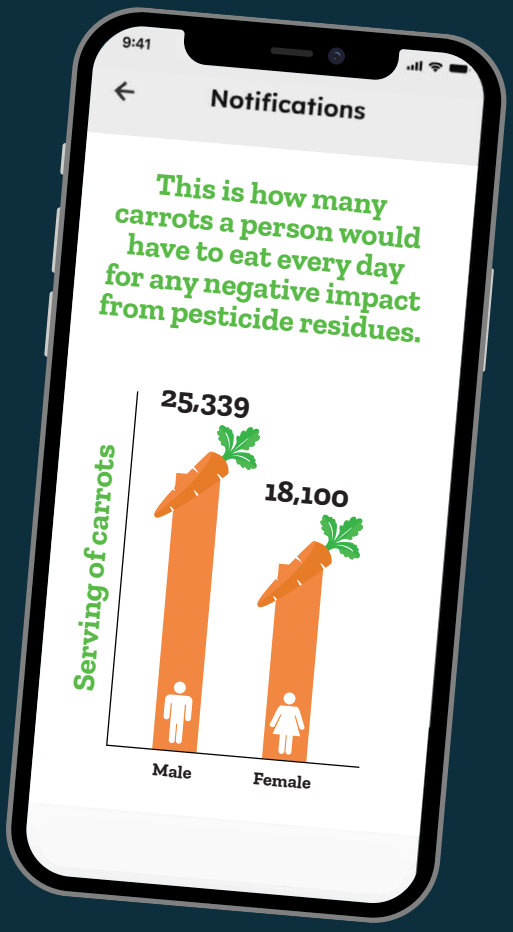
These limits are set far below any conceivable health risk, meticulously evaluated by expert public scientists, and calibrated to be hundreds or thousands of times lower than the Acceptable Daily Intake (ADI). The ADI is determined by rigorous safety studies and is set at a level where no harm could be measured, if that amount were consumed every day, forever.

This safety margin is a testament to the exhaustive scrutiny and precautionary measures undertaken to ensure a safe, affordable and reliable food supply chain.

Australia's agricultural sector has a global reputation for high food safety standards and responsible use of advanced crop protection technologies. Continuous monitoring shows that the use of these highly regulated products continues to safely minimise dangerous toxins caused by fungus and insect damage.

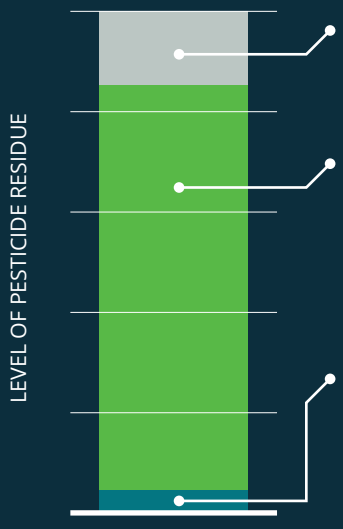
Most reported food borne illness cases in Australia are due to bacterial contamination or poor food hygiene practices. Around 4.7 million cases occur each year.

The best thing consumers can do for their health is to clean out their social media feeds and put down the guilt. Let's focus on what really matters, which is eating plenty of fresh fruit, vegetables and grains prepared using proper hygiene practices.



MRL vs ADI

The MRL is used to monitor minimum product use according to the label not as an indicator of safety



NO OBSERVED ADVERSE EFFECT LEVEL (NOAL)

The highest level of pesticide residue that does not cause any negative effects in test animals.

ACCEPTABLE DAILY INTAKE (ADI)

The amount of pesticide residue a person could eat every day without any negative health effects. The ADI is set well below the level at which there would be any safety concern. Often at least 100x lower than the adverse effect level.

MAXIMUM RESIDUE LIMIT (MRL)

The highest level of pesticide residue that could be found in a food product when a pesticide is used according to label directions. MRLs are not a safety limit.