

Dietary Risk Assessment – Opportunity to Improve Consumer Safety.

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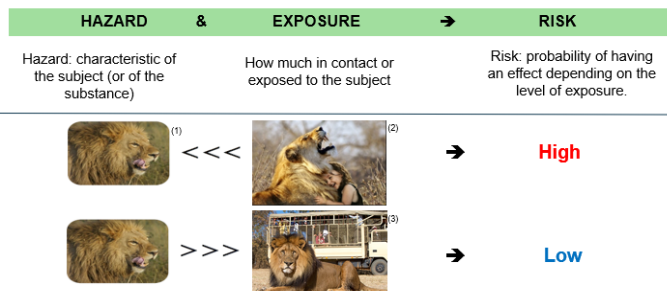


Introduction

- The purpose of the Dietary Risk Assessment is to ensure that the intended uses of a plant protection product are safe for consumers (i.e., that the residues resulting from these uses are unlikely to harm the health of consumers).
- A plant protection product can only be approved if its intended uses are safe for consumers.
- Dietary Risk Assessment is a key part of the dossier, and it is the goal of all metabolism and residue studies.

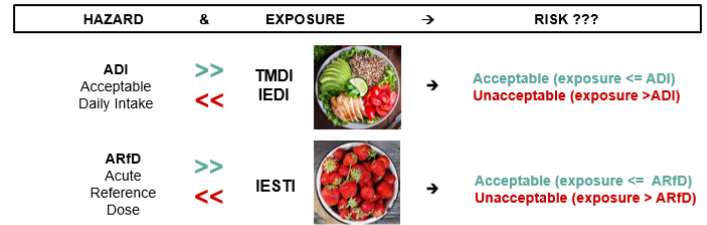
Principles and Concepts

Risk Assessment is a result of hazard and exposure



Source pictures: (1) africantraveldesk.com (2) epuzzle.info (3) SafariNow

Chronic and Acute Dietary Risk Assessment

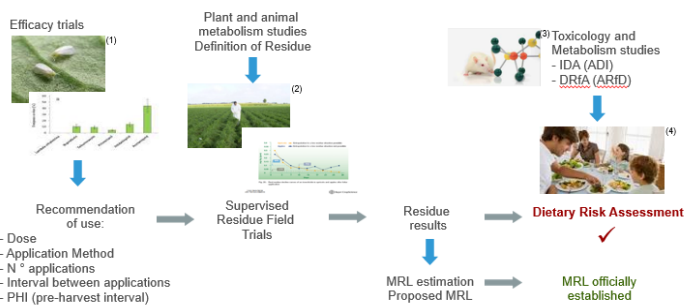


The long-term dietary exposure to pesticides, can be estimated by: **TMDI**: Theoretical Maximum Daily Intake or the **IEDI**: International Estimated Daily Intake.
The short-term dietary exposure to pesticides, can be estimated by the **IESTI** equations: International Estimated Short Term Intake

(Source pictures: hogarmania.com, jumboalacarta.com.ar)

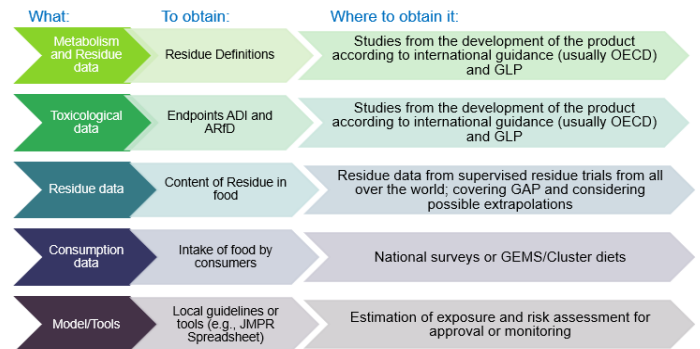
General Process

Dietary Risk Assessment, Maximum Residue Limits and Good Agricultural Practice (GAP)



Source pictures: (1) es.wikipedia.org (2) fr-fr-trials.com (3) cic ugr.es (4) tomesmariano.com

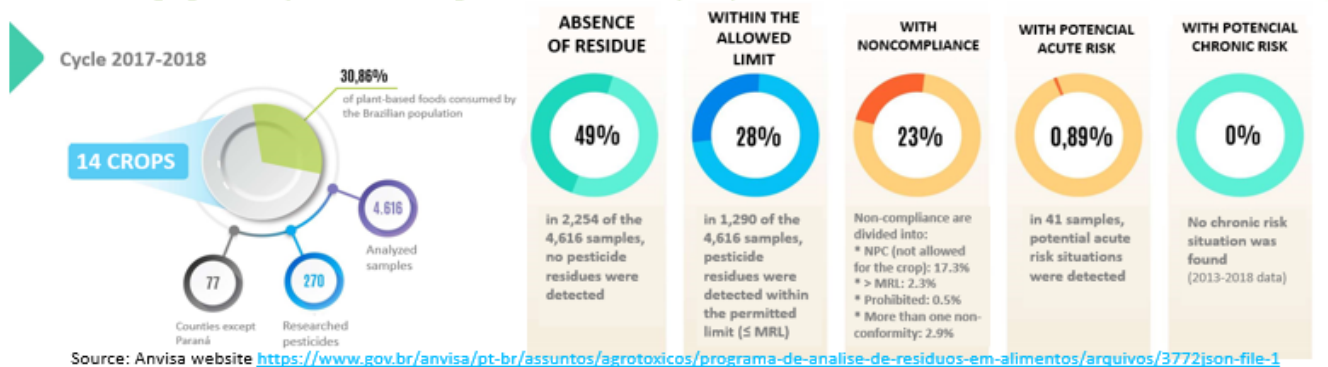
What do we basically need for a Dietary Risk Assessment



PARA was created by ANVISA, as a project in Brazil, in 2001 with the objective of structuring a service to evaluate and promote food safety in relation to pesticide residues.

PARA contributes to food security, guiding production chains on existing non compliances and encouraging the adoption of Good Agricultural Practices (GAP).

MAIN RESULTS



Final Comments

- Dietary Risk Assessment is the base for establishment of Maximum Residue Limits (MRLs) and the approval of uses. Also, it is useful in assessing monitoring data after approvals and safety of its findings.
- Some Latin America countries like Brazil and Argentina establish their own National MRLs supported by the corresponding Dietary Risk Assessment. Meanwhile others adopt MRLs that have been established by other agencies; like Codex MRLs that have been established after a Dietary Risk Assessment conducted by JMPR. In the absence of Codex MRLs for some specific crops or products, the local implementation of Dietary Risk Assessment allows to support uses and establish local MRLs when representative data is available.
- Dietary Risk Assessment is the base for the introduction of innovation and new solutions to growers by providing appropriate safety evaluations when there is no reference to MRLs like the ones from Codex. International criteria based on science should be considered to avoid double or unnecessary data generation. Latin America countries are advancing at different levels. It is possible to adopt simple or more pragmatic but conservative approaches, meanwhile others can decide for more complex assessments, depending on the level of information available; always by considering relevant margins of safety. This allows implementation by steps to improve knowledge and expertise.