

# PHARMACEUTICAL AND VETERINARY MEDICINES

Pharmaceutical and veterinary medicines are essential for human and animal welfare, but their use can leave residues in both the food chain and the environment. As your trusted partner in combatting pharmaceutical and veterinary residues, we provide reference materials to help you test thousands of drug residues quickly and efficiently. Together reducing risk. Here we explore the numerous ways these compounds can enter our food and environment.

**Environmental impact** 

#### MEDICAL WASTE

Unused medicines disposed down sinks, toilets or into landfill, can accidentally pollute surrounding areas.



**Food impact** 

#### LIVESTOCK AND PRODUCE

Drug residues can be found when medication to treat infections in animals does not fully breakdown or has been converted into metabolites. Incorrect dosing and incorrect withdrawal periods can lead to traces being found in produce such as meat, fish and eggs.

Unconsumed medicated fish feed can remain in the aquatic system.



**Environmental impact** 

#### **BODY WASTE**

Excretion by humans can lead to pharmaceuticals entering the sewage and waste water system. This is more prevalent in medication "hot spots" such as hospital sewage.

Animal excrement can contain <u>antibiotic</u> and metabolite residues and these may persist in manure or slurry that is spread onto farmland.



Food impact

## PRODUCE

Pharmaceuticals leaching into soil and water can make their way into produce, which can leave residues behind and then be consumed by humans impacting their health.

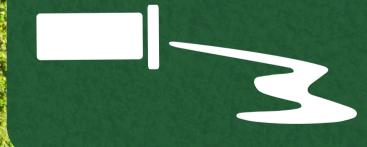


Environmental impact

### MANUFACTURING RESIDUE

Industrial effluent purposely released can make it's way into the ecosystem.

Accidental spills into the environment can contaminate water or soil.



Consumers expect their food, water, and the environment to be safe. As a result of the potential contamination described above, regional regulatory bodies have introduced legislation that sets Maximum Residue Limits for residues of drugs and their metabolites in food, feed, water, and the environment. In the absence of these, other countries apply the <u>Codex Alimentarius</u> of International Food Standards.

We offer the most comprehensive and up to date range of reference materials for residue testing, including the <u>parent compounds</u>, the <u>metabolites</u>, and a range of <u>Stable Isotope Labelled (SIL) materials</u>. Meaning you can find everything you need, manufactured to the most exacting specifications, giving you peace of mind that you can get the

Explore our range <u>here</u>.

results you need quickly and easily.