RIKILT

food safety research
Food fraud and composition

- Is Tuscan olive oil really from Tuscany?
- Are organic eggs really organic?
- Does this hamburger contain horsemeat?
- Is this product really halal?
- Does this product contain allergens?

These questions are examples of the authenticity and composition issues RIKILT deals with on a regular basis. RIKILT studies relevant indicators, develops methods, and applies these methods to authenticate foodstuffs, animal feed and fertilisers. We investigate e.g. compositional authenticity, processing characteristics, geographical origin, production methods and typical characteristics of artisan products.
Measuring and detecting substances

RIKILT develops and applies a wide range of analyses and measurement methods for examining food products. We determine the presence of specific substances that may have an effect on food safety.

These include:
- Dioxins
- Hormones
- Antibiotics
- Other veterinary drugs
- Marine toxins
- Plant toxins
- Mycotoxins
- Pesticides
- Radio-nuclides
- GMOs
- Animal proteins
- Allergens
- Heavy metals
- Nano particles
- And more!

RIKILT has the appropriate know-how and infrastructure for the (forensic) detection and identification of novel hazardous substances. Next to very advanced chemical analytical methods, we use bioassays to detect the presence of bioactive or toxic components in food and feed.

Effects of substances on humans and animals

RIKILT studies the possible toxicological effects of substances and food ingredients to assess whether they are safe. We use various techniques to measure the absorption, digestion and physiological effects of food and feed components and products.

Fewer tests on animals

Our aim is to develop *in-vitro* methods that are able to improve the assessment of toxicological effects. This way we can help to reduce the need for animal testing.
Safe food production

Primary production, transport, storage, packaging, processing, and preparation of food and feed products is rapidly evolving. RIKILT is keeping a close eye on these developments and trends. We constantly develop and apply new analytical concepts, models and tools for prediction and monitoring that helps improve the safety in the food production chain.

Training & Consultancy

RIKILT can provide you with advice and expert training regarding laboratory, fraud and food chain aspects related to the safety and the reliability of food and feed. We have extensive experience in tailored training courses and can respond to the specific needs of our clients (on site or in Wageningen). Our training courses will help you to improve the performance of your laboratory and the analytical methods you employ. We can offer training in:

- setting up new and/or improving analytical methods for food quality and safety;
- laboratory management, quality insurance and laboratory safety;
- setting up national (reference) laboratory systems;
- fraud prevention and detection;
- safety assessment of food chains.

‘Our customers come from over 25 countries’
24/7 support

In order to be able to swiftly respond to food safety and environmental incidents, RIKILT has a 24/7 response team. We can rapidly increase our analytical capacity, start sample analysis within 2 hours and immediate start-up forensic research. RIKILT experts participate in various national emergency teams.

RIKILT Laboratory Quality Service

As a National and a European Reference Laboratory, RIKILT has extensive experience in assuring laboratory quality. Our activities concern external quality assurance of analytical food and feed laboratories and the organisation of collaborative studies and proficiency tests. Our Training & Consultancy group is an essential part of this service.

Reference laboratory

RIKILT is the Dutch National Reference Laboratory (NRL) for monitoring residues, toxins, contaminants, and all other (bio)chemical tasks in food and feed. Additionally, RIKILT is the European Union Reference Laboratory for residues of growth promoters, sedatives, and mycotoxins in animal products.

‘Your partner in top research’
Facts and Figures

- **Reports (annually)**: ~ 50
- **Scientific publications (annually)**: > 80
- **Activities (annually)**: ~ 400 for over 50 countries
- **Employees**: ± 200
- **PhD's**: ± 50
- **Samples (annually)**: ± 40,000 (and ± 60,000 analysis)

**Facilities**
The largest and most broadly equipped (bio)chemical analytical laboratory in the Netherlands

Contact us

What are your challenges?
We look forward to hearing from you and working together to improve food safety and authenticity.

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To explore the potential of nature to improve the quality of life