



Rapid Testing Solutions for the Dairy Industry



Testing raw ingredients and final products is of significant importance in the dairy industry, both for regulatory and quality purposes. Guaranteeing the production of safe milk also remains of a top priority, whilst consumers demand quality dairy products with a reasonable shelf-life.



Contamination is a high risk in the dairy segment. Mycotoxin-contaminated feed given to lactating cows will result in mycotoxins in milk and its products, posing a serious health risk for consumers.

Additionally, there is a high risk of allergen cross-contamination between dairy products and non-dairy alternatives (vegan drinks, soy yogurt, etc.), as these are sometimes manufactured in the same factory.



Diagnostic solutions for food pathogens, aflatoxins, allergens and veterinary drug residues doesn't need to be expensive or time-consuming. Testing options include both in-house solutions and tests that can be carried out on site to reduce both costs and time to results.

Dairy industry value chain and applicable Gold Standard Diagnostics testing kits

1. Dairy Farm

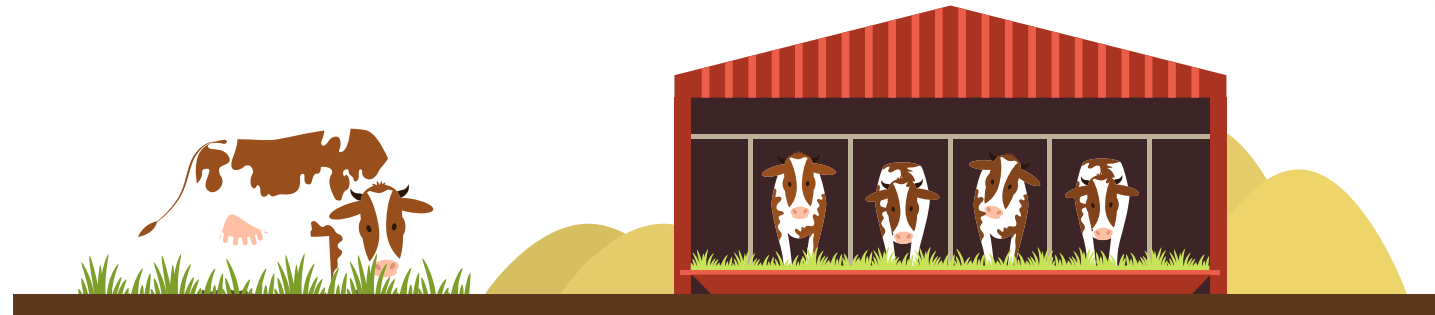


Control the quality of feed for more optimal milk processing, safety and quality

Dairy cattle feeds are extremely susceptible to mycotoxin infection and contamination during harvest, production, processing, and storage. Once cattle have been fed with aflatoxin B1 contaminated feed, liver enzymes transform it into aflatoxin M1.



Specific ELISA test kits for the rapid quantitative detection of aflatoxin B1 in cereals, high moisture corn, silage and mash, feed, nuts, dried fruits, cottonseed and soybean meal.



Monitor animal health to prevent outbreaks

In industrial livestock production, operating conditions are optimised to achieve the highest production output while minimising costs. The emergence of infectious diseases is a major risk, and therefore disease prevention and control measures are essential.



Detecting and monitoring epidemiological risks with the broadest range of ELISA, PCR and lateral flow test kits for cattle on the market.



4. Cheese production



Detect the presence of bacterial pathogens

From raw materials to tanks, presses, brushes and final products, cheese production is susceptible to the growth of bacterial pathogens, which can lead to outbreaks and product recalls resulting in severe public health concerns, as well as financial and reputational damage.



BACGene Salmonella, Listeria spp & Listeria monocytogenes and E.coli O157:H7 test kits are AFNOR certified PCR assays and provide PCR plates ready to use. The process includes an optional step to eliminate free DNA.



Check aflatoxin M1 level to avoid contamination in the finished product

Testing milk prior to cheese production supports the efficiency of the cheese making process and prevents aflatoxin M1 enrichment in the finished product. Even if the raw material, i.e. milk, is tested, it is strongly advised to also run in-house screening on cheese, firm-cheese, mozzarella cheese, sour cream, butter and yoghurt samples.



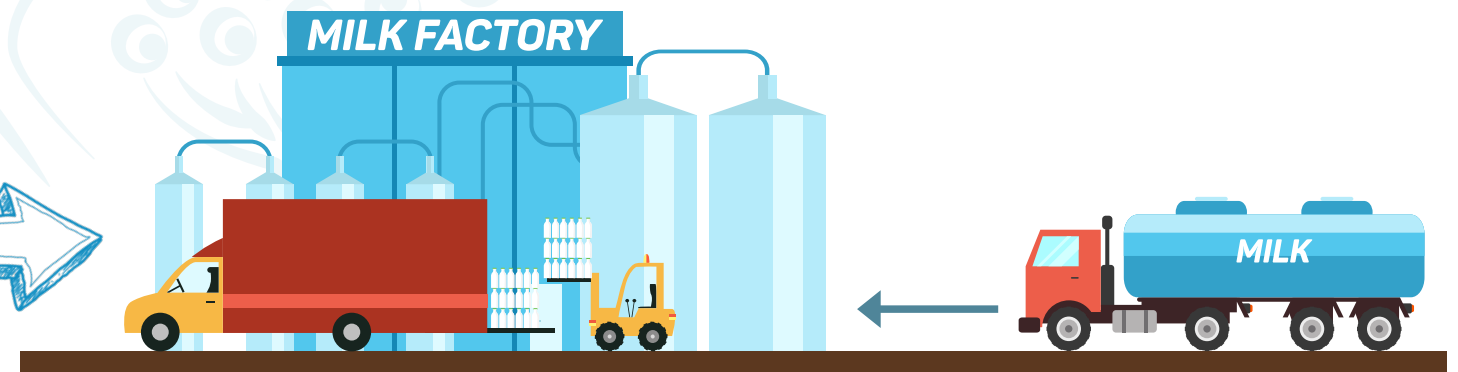
The higher the cheese value, the higher the benefit of testing in-house with the robust and reliable ELISA test kit I'screen AFLA M1.

2. Milk Collection Centre



Check the content of aflatoxin M1 in milk provided by individual farms

Although a batch of raw commingled milk might be compliant with regulation in terms of the concentration of aflatoxin M1, there can be significant benefits to testing the samples from individual farms, in order to monitor each level independently.



ELISA kits suited for different needs:

- Master-curve calibrated ELISA with no physical calibrators and no hidden costs
- The highest-performing most sensitive and most accurate system is I'screen AFLA M1 Milk, using the AOAC-RI PTM granted method for the quantitative analysis of aflatoxin M1 in raw bovine milk, skimmed milk and powdered milk.

The immunoassays can be run manually or with the support of a walk-away automatic analyser.

3. Dairy Factory



Detect the presence of pathogens, not only in the milk and milk products but also on surfaces to avoid cross-contamination risks

Listeria monocytogenes, with the highest mortality rate caused by pathogens, grows at low temperatures and can tolerate a higher salt environment. *Salmonella* spp. is of concern primarily in dry dairy powder production operations.



Complete toolset for pathogen detection, an important element of any food safety plan:

- **Microgen Path-Chek: Simple, fast and cost-effective.** Intended for on-site testing on work surfaces and processing environments.
- **BACGene PCR: Sensitive, fast and certified PCR assays.** Check our cheese section to learn more.
- **Microgen Listeria ID:** Confirm the presence of *Listeria monocytogenes* and *Listeria* spp. with a complete identification system.

5. Milk Alternatives



Prevent cross-contamination of vegan drinks with potential allergens

When manufacturing non-dairy, plant-based products in the same factory as dairy products, an efficient on-site allergen risk management is essential to detect any milk protein contamination.



SENSIStrip Allergen lateral flow devices, designed for screening or even quantifying allergens at any location of the production site, are perfect tools to detect potential contamination in a very quick and easy manner. The RapidScan ST5-W Lateral flow reader is a portable instrument used for fast and accurate LFD analysis.



Test kits, automation and services: a full solution



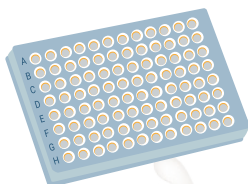
Obtain fast and reliable quantitative results for contamination analysis

Manual ELISA assay implementation is simple, however accidental mistakes may happen and the work pressure on laboratory personnel can be high in certain periods. Improving lab efficiency and minimising overall costs require automation solutions.



Fully automated walk-away instruments to simplify lab experience

The Bolt™ and ThunderBolt® ELISA analyzers are smart, compact, and highly precise open systems that are able to automatically manage all the steps of any plate-based assay, from premixing to final data handling - just load and walk away!



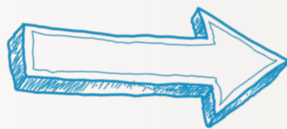
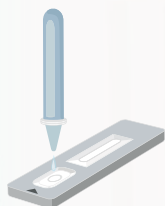
On-site contamination control at different stages of the manufacturing process

Fast on-site checking of potential cross-contamination with food allergens helps to avoid external analyses and enable quick intervention if needed. The quick testing process does not require trained staff, however visually interpreting the intensity of the test line on the strip can lead to potential errors.



Portable reader providing semi-quantitative results

The RapidScan ST5-W lateral flow reader is specifically designed for field and in-process testing applications requiring qualitative to semi-quantitative test results. This portable instrument is a highly flexible, easy to use and accurate imaging platform used for lateral flow assay analysis, compatible with Gold Standard Diagnostics' allergen lateral flow tests.



Contact Us Today!
We are happy to help

