



Choose certainty.  
Add value.

## DNA specification analysis

Fast track the genetic identification in your supply chain.

### Your challenges

Food product safety remains a top priority for consumers, retailers, caterers and suppliers worldwide. Recent news headlines such as the horsemeat scandal and E. coli outbreak in Europe and China's melamine scare raise new questions about transparency and accountability in the global supply chain. Ethnic, religious and cultural factors also make it important to clearly identify or prohibit ingredients such as horse, dog, cow or pig meat, as well as genetically engineered organism (GMO) products. As food analyses become more sensitive and consumers demand more accurate testing, addressing these issues is increasingly expensive and difficult to accomplish within limited timeframes, especially when analyses and audits are divided between different parties.

### What is DNA specification analysis?

This analysis breaks down a product so that its components can be DNA-tested to determine their origins. As DNA is a rather stable molecule, a DNA-based method is suitable for testing processed food for the

presence of inappropriate ingredients. DNA analysis is the preferred method for testing in seeds, raw materials and ingredients. Recently developed DNA-based detection systems can be used to test for GMO ingredients and food-borne pathogens. DNA testing is also suitable for detecting plant and animal species, allergens and other contaminants. The polymerase chain reaction (PCR) is the method of choice for DNA specification analysis due to its high sensitivity, specificity and rapidity.

### Why is DNA specification analysis important for your business?

To maintain accurate labelling, manufacturers must be certain of the actual ingredients going into their food products. By taking additional action to test ingredients on top of ensuring food safety, your company can gain consumer confidence, a good reputation and improved brand perception. The service is also important when expanding into new markets that have specific dietary restrictions, such as detecting the presence of pork for products intended for Halal certification.



### How can we help you?

TÜV SÜD can act as your one-stop service provider for safeguarding your entire supply chain. We have the capabilities and latest technology infrastructure to detect and quantify various types of animal DNA in food products with real-time PCR. With results available in the shortest possible time, the PCR method is rapid, highly sensitive, and yields very precise and accurate results from very specific genetics-based detection. It is particularly useful in the detection of hidden meat mince in processed food.

### Our DNA specification analysis service

TÜV SÜD leverages a combination of product control (test analyses) and system control (audits) in providing DNA specification analysis. We can develop a customised analysis programme for you to meet the specific needs of your business. This can include additional analyses outside the common fields and special requirements for your raw materials suppliers. Our experts provide technical assistance to ensure a correct interpretation of the food testing results and help you to take corrective steps to eliminate the causes of negative test results.

### Your business benefits

- **Minimise risk** – with frequent checks and tests provided by TÜV SÜD. Our service helps you avoid product recalls, food scandals and other brand-damaging incidents.
- **Save time and money** – with a one-stop service provider for all of your food testing needs, leading to greater cost efficiency in testing and auditing as well as a shorter time to market.

- **Enjoy complete solutions** – by selecting from over 600 accredited tests offered by TÜV SÜD.
- **Benefit from global support** – through TÜV SÜD's global network of modern laboratories covering three continents and technical experts spread all over the world.

### Why choose TÜV SÜD?

With decades of experience in food testing, TÜV SÜD has the expertise and infrastructure to provide fast, cost-effective solutions for all of your food testing needs. Our laboratories and experts are found around the world in key markets, enabling us to support your operations globally.

TÜV SÜD is a trusted third-party certification body with a strong reputation for delivering holistic solutions in a timely manner. Our experts participate in international standards committees that formulate the next practices in international safety standards, giving them an important perspective on safety. We offer a complete, transparent and rapid food testing programme that covers more than 600 accredited tests at competitive prices.

### Choose certainty. Add value.

TÜV SÜD is a premium quality, safety and sustainability solutions provider that specialises in testing, inspection, auditing, certification, training and knowledge services. Represented in over 800 locations worldwide, we hold accreditations in Europe, the Americas, the Middle East and Asia. By delivering objective solutions to our customers, we add tangible value to businesses, consumers and the environment.

### Related services

TÜV SÜD provides the following related services:

- British Retail Consortium (BRC)
- Food System Safety Certification (FSSC) 22000
- Hazard analysis and critical control points (HACCP) certification system
- International Food Standard (IFS)
- Implementation of Food defence programmes (PAS 96)
- ISO 22000: Food safety management system
- Microbiological and other chemical testing
- Supplier audits