

Alternative Protein Quality Testing

In the rapidly evolving landscape of alternative proteins, ensuring the quality and safety of novel foods is paramount. Quality testing serves as the backbone of consumer trust and regulatory compliance, addressing critical parameters such as nutritional content, contamination levels, and overall product safety.

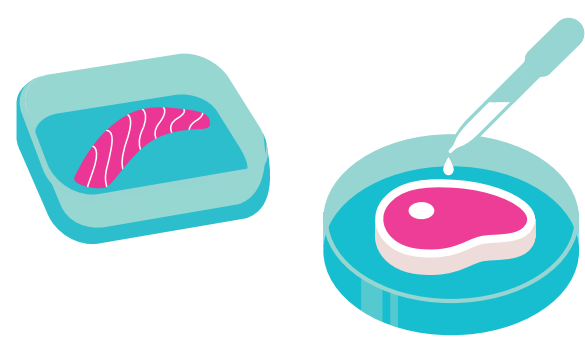
As the demand for sustainable and ethical food sources grows, the importance of rigorous testing protocols cannot be overstated. This infographic highlights the essential aspects of quality testing in the alternative protein industry, showcasing the various methodologies and standards that ensure the integrity of these innovative food products.

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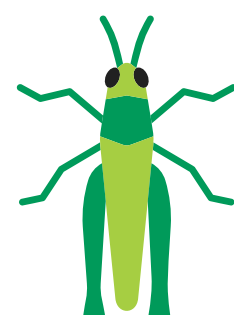
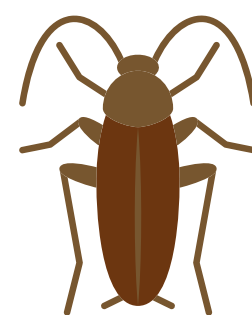
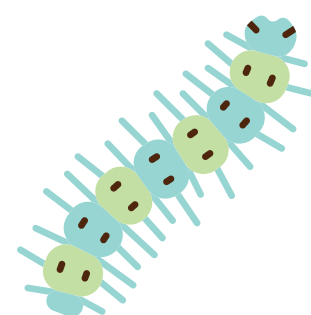
Compound Specific Monitoring

Novel foods, which are newly developed or significantly modified food products, require specific monitoring of certain compounds to ensure safety, nutritional value, and compliance with regulatory standards. This monitoring is crucial because novel foods may contain unique bioactive compounds or altered levels of existing ones that could impact health. Some relevant examples:

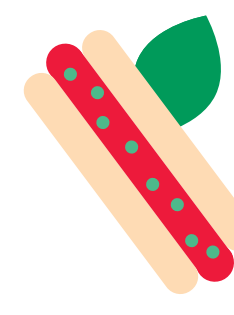
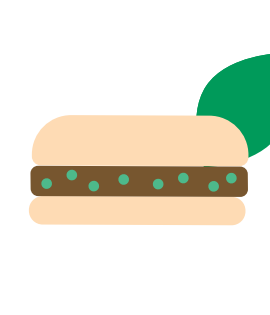
- Soy: Isoflavones, Tropane Alkaloids, Pyrrolizidine Alkaloids
- Almond: Hydrocyanic Acid
- Oat: Phytic Acids
- Cruciferous vegetables: Glucosinolates
- Algae: 3-MCPDE, 2-MCPDE



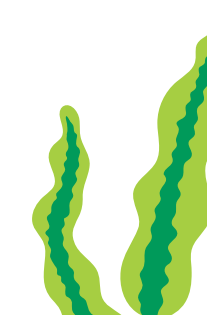
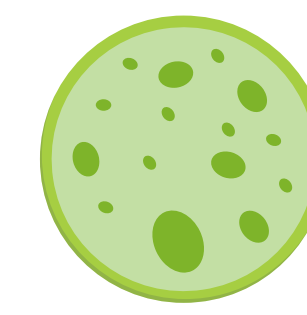
CellAg &
Precision
Fermentation



Insects



Meat & Dairy
Analogues



Algae

Hygiene & Environmental Testing

This type of testing evaluates the cleanliness of food processing environments and equipment. It includes microbiological testing to detect pathogens and assess the overall hygiene status to prevent contamination.

- Pathogen Detection
- Surface Monitoring
- Environmental Testing
- Yeast & Mold Testing
- Air Monitoring
- Adventitious agents testing

Chemical Contaminants

This involves testing for foreign substances that may contaminate food products, such as physical debris and chemical residues, to ensure consumer safety.

- Pesticides
- Heavy Metals
- Mycotoxins
- PFAS
- PCBs
- MOSH/MOA
- Veterinary Drugs
- Acrylamide
- Extractables & Leachables

Food Properties

This involves analyzing the physical and chemical properties of food products, such as texture, flavor, color, and pH levels, to ensure they meet quality standards and consumer expectations.

- Moisture
- pH
- Colour
- Density

Raw Material Testing

Assessing the quality and safety of raw ingredients before they are used in food production. Tests may include checking for contaminants, nutritional content, and compliance with regulatory standards.

Nutritional Value & Composition

This type of testing assesses the nutritional content of food products, including macronutrients (proteins, fats, carbohydrates) and micronutrients (vitamins, minerals), to provide accurate labeling and support dietary guidelines.

- Carbs
- Fiber
- Protein
- Fats
- Vitamins
- Additives
- Allergens
- Phytochemicals

Food Authenticity

This testing verifies the origin and identity of food products to prevent fraud. It includes methods to confirm that a product is what it claims to be, such as verifying geographical origin, ingredient sourcing and determination of the specific species of animal or plant in food products.

- GMO
- Species Identification
- Halal
- Kosher
- Naturalness

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To learn more about our solutions and how we can support your quality testing needs, visit our website to find our resources on cultured meat and alternative protein innovations.
We join you in shaping a sustainable food future.

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