FAQ | Testing Answers for New Businesses

DYAD LABS

WHY DO I NEED TO TEST MY FINISHED GOODS FOR MICROBES/PATHOGENS?

Microorganisms, including pathogenic and spoilage microorganisms, are always present in food processing/handling environments. Food safety regulations require that you clearly identify the hazards (microbiological, chemical, etc) associated with your products and the preventive measures taken to eliminate them. In addition, you should monitor and verify the effectiveness of these measures. If microbiological hazards represent a significant risk for your product, then finished product testing is required to ensure that your food safety management systems are functioning as intended and your products are safe for consumption.

DO I NEED TO DO ENVIRONMENTAL TESTING?

For ready-to-eat products, environmental testing is required if the products are exposed to the environment before packaging and receive no further treatment to minimize contamination. Under these circumstances, environmental testing is compulsory and should be carried out routinely to ensure microbiological control of the production environment. For other products, you still need to test for relevant hygiene indicator microorganisms, such as Listeria. Dyad Labs can help you develop a suitable testing plan for your various products and identify appropriate sampling areas within your facility.

WHAT MICROORGANISMS DO I NEED TO TEST FOR?

The specific microorganisms to test for depends on the type of food product, the processing and storage conditions and product use. For FDA-regulated products, the main targets are Salmonella and Listeria monocytogenes. Other common microorganisms tested for are Escherichia coli, Coliform and Staphylococcus aureus. At Dyad Labs, we work with you to establish the microorganisms of interest to your food products.

DO I NEED TO TEST EVERY BATCH FOR MICROBIALS?

The appropriate frequency of testing depends on your company's unique needs. If your business deals with significant microbiological hazards, batch-by-batch microbial testing will usually be required. However, not all microbiological parameters may be analysed for every batch. The key thing is to ensure that results are statistically valid and provide a high degree of assurance with respect to product safety.

HOW DO I START MY FOOD SAFETY TESTING PROGRAM?

The first step is to familiarize yourself with the rules which apply specifically to your business. While there are many rules enforced by regulatory agencies to ensure the safety of consumers, not all may apply to your business or products. Next, you should set up a food safety plan, which should be developed by a qualified food safety professional. The safety plan will determine what needs be tested and how much testing needs to be done.

Setting up a food safety testing program for your business can seem like a daunting task. This need not be so. Here at Dyad Labs, we partner with you to develop a customized testing plan based on the unique needs of your business. The Dyad Labs microbiology lab is ISO 17025 accredited and we bring over 20 years of combined experience in the field of microbiology to ensure that your products are safe and in compliance with the regulations.

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FAQ | Allergens / Gluten

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DO I NEED TO TEST FOR ALLERGENS?

Proper allergen labeling protects millions of people, especially children, who suffer from allergies each year. If your products contain any of the allergens identified under The Food Allergen Labeling and Consumer Protection Act (FALCPA) of 2004, then they must be labeled accordingly. Undeclared allergens may also be introduced through cross-contact between foods produced in the same facility or from chemicals used in cleaning. In such instances, allergens are identified as hazards and require preventive controls. Therefore, you need to test for allergens to ensure that the allergen control measures are working correctly.

MUST ALL ALLERGENS BE LABELED?

Although there are over 160 allergens identified by the FDA, only eight, termed “major food allergens” must be clearly labeled if they are present in a food product. These major food allergens account for more than 90 percent of all documented food allergy cases in the U.S. They are milk, eggs, fish, Crustacean shellfish, tree nuts, peanuts, wheat, and soybeans. The type of fish, Crustacean shellfish and tree nut must be specified.

HOW DO I TEST FOR ALLERGENS?

The most common analytical method for allergen testing is enzyme-linked immunosorbent assays (ELISA) which test for specific allergen residues. Other methods include general protein detection, polymerase chain reaction (PCR) and mass spectrometry. Here at Dyad labs, we work with you to establish the most suitable testing method based on your product types and allergen load.

HOW DO I LABEL ALLERGENS IN MY FOOD PRODUCT?

You can label allergens in either of two ways:

- Declaring the allergens using “contains” followed by the specific allergens: Contains eggs, peanuts.
- Referencing the allergen in parenthesis after the common name of the ingredient: Whey (milk), lecithin (soy).

DO I NEED TO DECLARE MY PRODUCTS GLUTEN-FREE?

Gluten declaration protects consumers with celiac disease. Products labeled “gluten-free” must comply with FDA requirements, in that they must be inherently gluten-free, contain ingredients that have no gluten or must have been processed to remove gluten. Indicating whether your products contain gluten or not is completely voluntary. If you do, however, you must provide evidence to back up the claim.

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FAQ | International Supply Chain

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WHAT IS FSMA?

The Food Safety Modernization Act (FSMA) is a set of food safety regulations signed into law in 2011. The law places responsibilities on the FDA, farmers, and processors to prevent contamination and contains new regulations on how food is grown and processed. It also gives the FDA new authorities to issue mandatory recalls for contaminated, adulterated, or misbranded products. Under the FSMA, affected businesses are required to establish preventive controls for significant safety threats and have documented food safety and recall plans.

DOES THE FSMA APPLY TO DIETARY SUPPLEMENTS?

Yes, the FSMA applies to all foods, including ingredients and raw materials used in dietary supplements. However, dietary supplements are exempted from some parts of the rules if certain conditions are met. The rules require careful interpretation for different product categories and you should work with qualified professionals to determine if there are any exemptions for your products.

HOW CAN I MAKE MY PRODUCTS FSMA COMPLIANT?

Making your products FSMA compliant requires a thorough understanding of how you are affected by the rules. Primarily, you are required to identify the hazards for your product categories and develop preventive controls for each hazard. All these should be documented in your food safety and recall plans. In addition, you need to routinely test and verify that your preventive processes are functioning as intended. We understand that the process can be complicated. That is why we partner with you to develop suitable testing plans to ensure FSMA compliance.

WHAT IS AN FSVP?

The Foreign Supplier Verification Program is part of the FSMA and applies to food businesses that import ingredients. Under the final rule, importers are required to perform certain activities to verify that imported foods are produced in accordance with U.S. safety standards and are not adulterated or misbranded. If you source ingredients abroad, then you need to have a written program that explains your supplier verification process. This program must be developed by a qualified individual who may or may not be an employee.

WHICH SUPPLIER VERIFICATION ACTIVITIES DO I NEED TO CONDUCT?

If the imported ingredient is known to contain a hazard that requires preventive control, you must perform an on-site audit as well as sampling and testing before use. Thereafter, these activities should be performed routinely and regularly to ensure compliance. However, for ingredients that pose no serious threat or if a production step will eliminate the hazard, you can document the other steps that take care of the hazard. Dyad Labs can help you set up a testing plan and determine the appropriate tests for different product types.

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FAQ | Naturals / Organic / Non-GMO / Kosher

WHAT DO THE TERMS: 'NATURAL' AND 'ORGANIC' MEAN ON LABELS?

From a regulatory standpoint, there is no legal definition of the term "natural". Conventionally, however, "natural" implies that a product contains no artificial ingredients and is only minimally processed. In other words, the product was not fundamentally altered through processing. The FDA requires that products labeled as "natural" must include a statement explaining the meaning of the term; for example, "no artificial ingredients." The United States Department of Agriculture (USDA) regulates the use of the term "organic" in food products. Under the National Organic Program, the USDA defines organic food as food that is produced without the use of conventional pesticides, synthetic fertilizers, bioengineering or ionizing radiation. Animals reared for the production of organic foods (meat, poultry, eggs, and dairy products) also receive no antibiotics or growth hormones.

FOOD PRODUCTS ARE LABELED TO INDICATE THE PERCENTAGE OF ORGANICALLY PRODUCED INGREDIENTS THEY CONTAIN IN THE FOLLOWING THREE WAYS:

- "100 percent organic" if the product contains 100 percent organically produced ingredients;
- "Organic" indicates at least 95 percent organically produced ingredients;
- "Made with organic (specific product(s))" indicates at least 70 percent organically produce ingredients.

DO I NEED TO PERFORM SPECIAL TESTS FOR ORGANIC PRODUCTS?

Yes. Organic products must be certified under the National Organic Program. This means that before you can label your products as organic, a third-party certifier must verify that your sanitation, chemical, pest control, and packaging methods comply with the USDA organic standards. Once certification is approved, you need to ensure compliance by regularly testing your raw materials for glyphosates or other agrochemicals used in conventional farming. This ensures you continue to meet organic production standards.

WHAT DOES NON-GMO MEAN?

Non-GMO or GMO-free foods do not contain ingredients whose DNA have been genetically modified or altered. GMO stands for genetically modified organism and refers to any organism whose DNA has been altered in an unnatural way through the use of genetic engineering, modern biotechnology or recombinant DNA technology. Non-GMO foods do not contain ingredients (from plant or animal sources) whose genetic materials have been altered in this way.

Indicating whether a product contains GMO or not is voluntary according to FDA regulations. If you wish to label your products as non-GMO, then third-party audit and verification is required before you can put the claim on your label. Common tests for GMO are strip test and PCR.

WHAT IS KOSHER?

Kosher is a Jewish word that means "fit" or "correct". Foods labeled as kosher are produced in accordance with the Jewish dietary law called kashrut. Under this law, certain animals and cooking practices are prohibited. For example, only animals that chew cord may be labeled as kosher (therefore, pigs are excluded) and eggs may not contain any blood spots. For food products to be certified as kosher, the ingredients, as well as the production process, must meet kosher requirements.

There are several third-party certifiers available for kosher certification.

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