With summer temperatures rising, we’ve been craving ice cream. It doesn’t matter if it is straight from the ice cream shop or from your own freezer, these products have gone through rigorous testing to ensure that it is safe to eat and of the highest quality possible.

Many tests are available for this purpose. Three tests that are commonly used are tests for coliforms, food allergens and Listeria.

Coliforms are a class of aerobic bacteria that is commonly found in the intestines of warm-blooded animals, including humans. While usually present in water, meat, poultry or other foods, it can also be found in raw milk. The bacteria are able to ferment lactose within 48 hours at 36°C/96.8°F. With the quality of your product in the balance, the bacteria (which can induce vomiting, diarrhea and abdominal pains, among other symptoms) is a key in the ice cream production industry.

Coliform detection can also be used as a general quality test of the product, as the presence of the bacteria may indicate fecal contamination.

With over 10 million people in the United States estimated to have a food allergy, testing for allergens is also a major component of processing. Many of the more than 160 allergens usually aren’t of concern to the ice cream industry—but many of those that are of concern, the FDA’s Big 8, can be deadly. Reactions can induce anything from mild hives to anaphylactic shock.

The Food Allergen Labeling and Consumer Protection Act of 2004 required a change in manufacturer labels. If there is any chance—intentional or not—that a product may contain a particular food allergen, the label must read that the product contains that allergen. Manufacturers must also change ingredient labels to be more consumer-friendly (i.e., using “wheat” instead of “semolina”). Even just a small amount of a protein can cause adverse reactions, so it is vital to test for any allergen that may be in your product.

Equally important to check for is Listeria. This bacteria is found in soil, water, some animals, raw milk and food made from raw milk. Unlike many other bacteria, Listeria can continue to grow in cold temperatures and with no oxygen; an ice cream plant is an ideal environment for these cold temperature-loving bugs.

A specific bacterium, Listeria monocytogenes, is a cause for concern, as it is the bacteria that causes listeriosis, a gastrointestinal infection that can cause muscle aches, diarrhea and fever.

Identifying these, and other potentially dangerous items in your product and manufacturing environment help to ensure the ice cream and additional dairy products we eat every day are safe and equally delicious.
A closer look gives you the latest scoop on our food safety solutions

The dairy industry, including ice cream manufacturers, has consistently executed phenomenal food quality and food safety programs. The use of rapid and accurate assays has allowed the industry to produce the most delicious frozen indulgences with peace of mind, knowing it is safe time and time again.

Neogen is part of the process for some of these products, giving support through various testing solutions. The added value Neogen brings comes from assurance for quality, safety and satisfaction. Among the company’s wide array of testing products includes three solutions for common concerns in an ice cream plant:

- Allergenic food proteins
- Coliforms
- *Listeria*

Allergenic food proteins can be a concern largely because of the role of inclusions. To help processing plants validate and verify their products, Neogen offers two options for testing. Qualitative tests, such as *Alert*, *Reveal* and 3-D assay selections, are also known as “screening” tests, detecting certain types of allergenic proteins at a threshold level. Quantitative tests, such as the *Veratox* assay line, determine the amount of allergenic proteins in a particular product.

Coliforms are sometimes seen as the last stop before release to customers. Speed is of the essence when testing for these bacteria, and many traditional methods can take days. That’s why many producers turn to Neogen’s AOAC-approved, 14-hour *Soleris* system, cutting back pauses in production dramatically—and getting to the customer quicker, too.

It is the temperature of the environment that is the main concern when testing for *Listeria*. Unlike many other types of bacteria, *Listeria* can continue to thrive in cold environments. Neogen offers two rapid screening assays: *Reveal 2.0* and *ANSR*. The AOAC-approved *Reveal 2.0* can detect *Listeria* within 20 minutes using Neogen’s lateral flow device setup, *ANSR*, short for amplified nucleic single temperature reaction. These AOAC-approved assays take organism detection to the DNA level. Using sophisticated molecular amplification chemistry, *ANSR* sets a new standard in time to results at just 10 minutes post enrichment.

Testing for potential contaminants in your products is a critical and necessary step towards quality, consistent products. Why not take that step with Neogen products?
Partnership opens thousands of doors

Thanks to a new partnership established in March, Neogen’s products are now more easily accessible to thousands of food safety professionals than ever before. The partnership connects Neogen to Quality Chek’d Purchasing, based out of Illinois. Quality Chek’d (QCS) is dedicated to providing companies “food safety services and guidelines that focus on providing customers with world-class dairy products,” according to the company’s website.

The partnership was established by Greg McNeil and Chuck McCann of Neogen and Vince Glaviano from QCS. Through it, QCS will make available a variety of Neogen’s products through their current relationships with dairy farmers and processing plants across the country.

Some of the products in the partnership include AccuPoint®, Reveal® 3-D, Veratox® kits and Acumedia® products. Members are eligible for incentives when purchasing Neogen products through QCS.

“This is big,” Megan Zallman, market development manager at Neogen, said. “[QCS’s] visibility and reach in the dairy market can help make Neogen products more accessible to customers.”

Special promotion: Food allergen diagnostic assays

Now through August 29

All new allergen customers get a free trial pack of three Reveal® 3-D tests. The innovative design of Reveal 3-D allows you to rapidly assess the risks posed by a major food allergen. By identifying cross-contamination of ingredient supplies or inadequate cleaning between production batches, Reveal 3-D can have a key role as part of a food allergen management system.

New customers can also get a 25% discount on Veratox® allergen kits, a fully-validated platform that allows users to test and then rest easy. Veratox provides quantitative analysis for undeclared allergenic proteins in environmental samples and difficult food matrices alike, and the robust system’s intuitive software package provides hassle-free record keeping.

Please contact your sales representative at 800/234-5333 to apply promotional pricing.

Time to get social!

Neogen is on social media! If you haven’t already, be sure to follow us on Facebook, Twitter and LinkedIn, and read our daily blog. We’re on Instagram, too! We post about food and animal safety—and we want to connect with you. Every Monday is Moo-day, so send in your best cow or dairy processing pics to be featured on our social media. Simply hashtag your post #MoodayNeogen.
Ice cream processing has advanced a long way. From its first recorded presence around the time of Nero Claudius Caesar in 54-86 A.D., to when the first American president, George Washington, spent $200 for ice cream in the summer of 1790, ice cream has not only spanned continents, but crossed centuries.

As the technological age advanced, so did the manufacturing of ice cream. In fact, it is estimated that in the United States alone, ice cream is an $8 billion industry.

You can probably tell we love ice cream around Neogen, but no ice cream is complete without the cone. In January 2011, the biggest ice cream cone ever made was created, reaching 9 feet, 2.63 inches. The internal part of the cone was made of wafer, then covered with a white chocolate cone, then decorated with wafer biscuits.

Neogen’s favorites

Jim Herbert, CEO and Chairman: Peach
Steve Snyder, President and COO: Chocolate
Steve Quinlan, CFO: Black Cherry
Ed Bradley, VP of Food Safety: Butter Pecan
Greg McNeil, National Sales Director: Chocolate Chip Cookie Dough
Carol Stauter, Territory Manager: Chocolate/Vanilla side by side with toppings
Steve Marvin, Territory Manager: Daiquiri Ice
Katie Odle, Inside Sales: Chocolate Chip Cookie Dough
Megan Zallman, Marketing, Dairy Solutions: Butter Pecan

Introducing: Katie Odle

Hailing from DeWitt, Michigan, Katie Odle is the newest member of the sales representative team. Katie began working with Neogen in late April as part of the dairy and food services team. Katie graduated from Grand Valley State University in April 2012 with a major in communications and a minor in advertising and public relations; since her graduation, she has been living and working in Grand Rapids, Michigan. Her daily duties include creating and maintaining relationships with customers in the United States. In her free time, Katie loves all things sports-related. A lifelong season ticket holder for Michigan State football (go green!), Katie also enjoys watching the Detroit Tigers and the Red Wings.

E-mail: kodle@neogen.com
Phone: 800/234-5333 or 517/372-9200 x2279