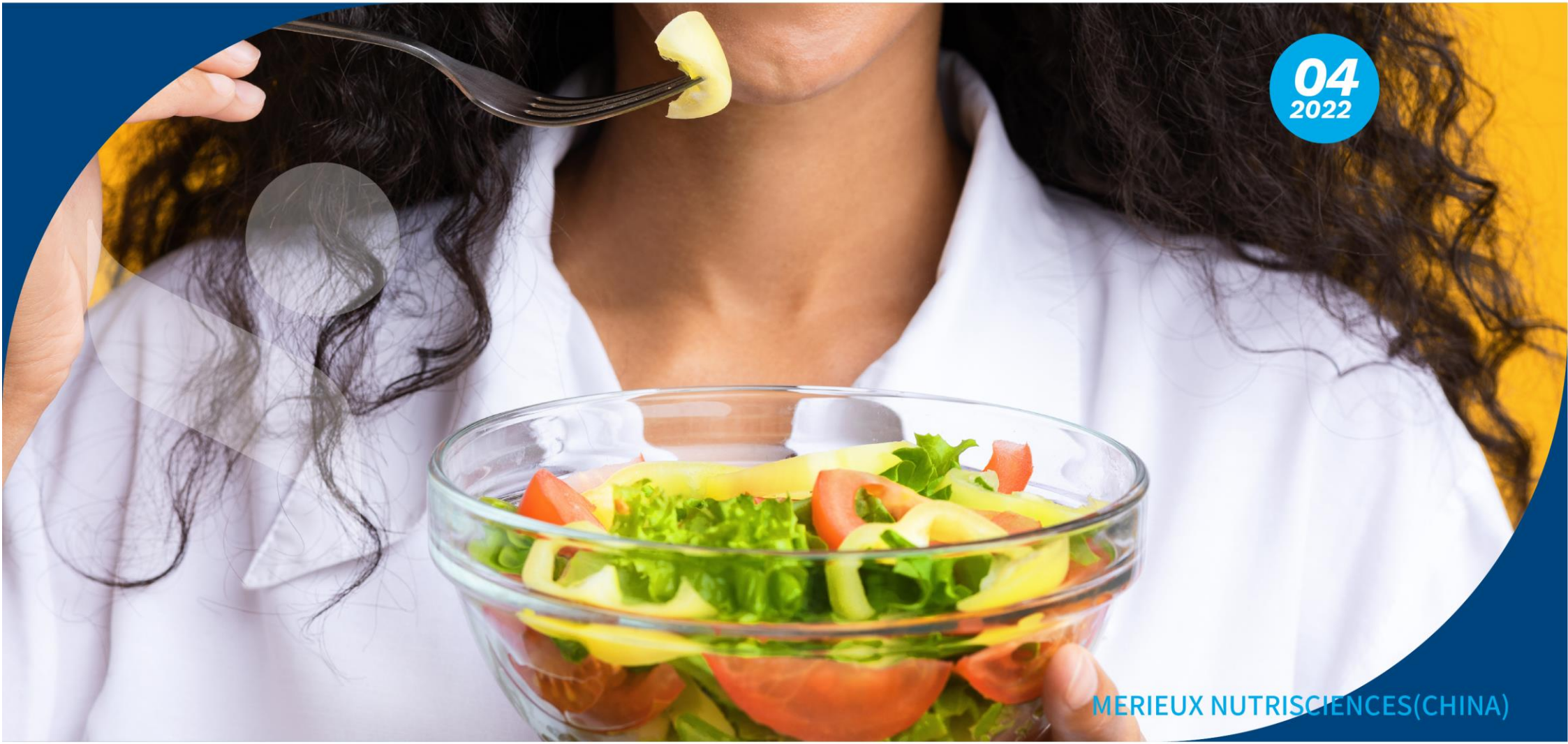
MARKET NEWS

April 2022

Mérieux NutriSciences

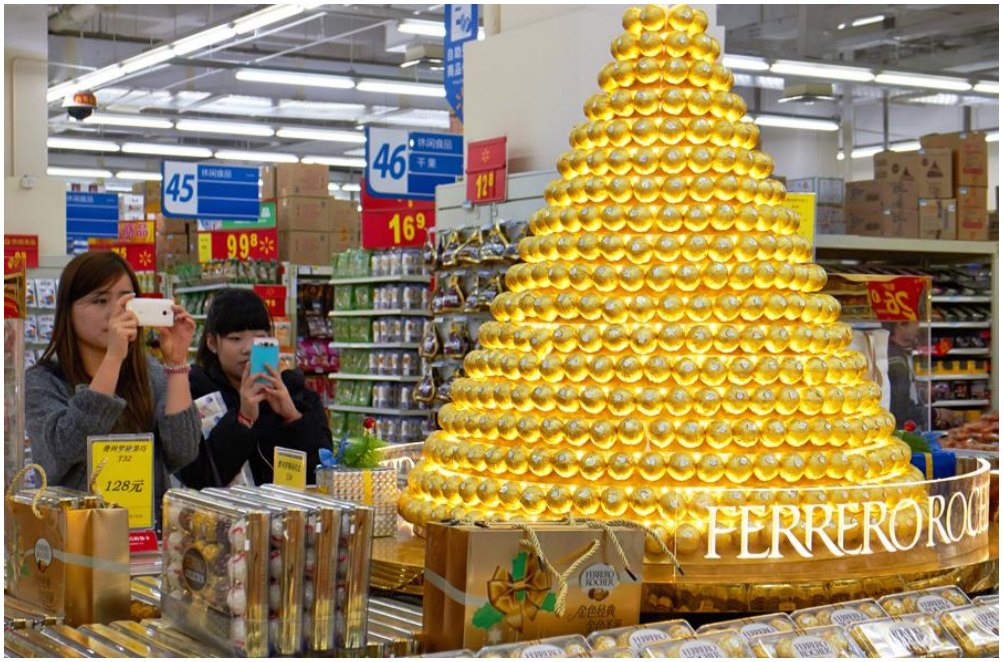


BETTER FOOD. BETTER HEALTH. BETTER WORLD.

CONTENTS

Focus on China

Ferrero Rocher: Salmonella infection has no link to Chinese mainland



All Kinder products produced in China or imported into the Chinese mainland (including products in transit and on sale via authorized channels) have no link to the Belgian factory involved in the salmonella infection, thus are not part of the recent recall, said Ferrero Rocher in a statement on Sina Weibo on Saturday night, China News Service reported.

Ferrero Rocher added in the statement that it has suspended production at the factory in Arlon of Belgium and is actively working with local food safety authorities to investigate the salmonella incident.

Oversight toughened on lockdown food supplies

Shanghai police, market watchdogs and discipline supervisors have vowed to strengthen oversight on food quality and distribution during the current COVID-19 outbreak in the city.

Since the citywide lockdown began on April 1, subdistrict governments have been distributing free food packages to guarantee food supplies for residents

under lockdown. Yet some residents have reported that they received poor quality foods or products from suspicious suppliers.

The administration for market regulation on Saturday said it will step up supervision and inspection. The administration has started investigating the producer of Longren bean vermicelli, whose business certificate was canceled in 2020, but products from that producer dated in 2022 were still included in the free food package for residents in Hongqiao township, Minhang district.

The commerce commission also urged its district-level branches to enhance reviews of the licenses and qualifications of suppliers of free gift packs.

"Companies will be removed from the list of suppliers and be investigated if their licenses or qualifications are found to fail requirements," the commission said.

District market watchdogs will beef up checks on free food packages being donated to subdistricts and deal with substandard products in a timely fashion, it said, adding that people and officials in dereliction of duty will face punishment, and as for cases of food safety, those responsible for misconduct will be handled by police.

On Monday, Zhangmiaojie subdistrict said in a notice that it had handled a case in which the person responsible for distributing 190 boxes of vegetables donated by Qujing city, Yunnan province, sold the supplies to another residential quarter in Shanghai. The person, surnamed Zhang, is now under police investigation, it said.

In a case involving a batch of pork with serious quality problems in Meilong township, police have taken criminal precautionary measures against the suspects, and prosecutors have participated to direct the investigation.

The city's commission for discipline inspection and the supervision commission said that they have noted the problems surrounding the free food supplies.

"As the city's fight against COVID-19 is still in a critical stage, the distribution of daily necessities and food supplies are fundamental to the success of control measures," they said in a notice published on Friday.

Researchers develop new fast, accurate testing tech

Chinese researchers said they have developed a new novel coronavirus test that can return accurate results in less than 20 minutes and that is as sensitive as the lab-based PCR test.

Researchers from Wuhan University's Medical Research Institute in Wuhan, capital of Hubei province, said the easy-to-use tests can be administered at airports, hospitals and in individual households.

However, they noted that some technological hurdles remain, such as clinical trials that will take several months, before the wide deployment of the tests.

For mass screening campaigns, China mostly relies on polymerase chain reaction tests—a gold standard testing method that must be processed by laboratory workers and that have a turnaround time of about six hours. Since mid-March, the country has also adopted rapid antigen tests that can be administered at

home but are less accurate.

In search of a new test that is fast, simple and accurate, the researchers designed a method named sPAMC, which is based on the classic CRISPR technology, according to Yin Hao, a professor from Wuhan University and a member of the research team.

"Essentially, what we did was to upgrade the conventional platform to shorten testing time, streamline procedures and make it available in more ways," he said.

Their findings were published in a study in Nature Biomedical Engineering, a peer-reviewed journal, in late March.

In an experiment involving 204 throat swabs, including 104 positive ones, the sPAMC technology correctly identified 98 of them as positive, according to the study.

The results suggested that the tool has a sensitivity of 94.2 percent and a specificity of 100 percent. A test's sensitivity is associated with the likelihood of giving false-negative results.

Compared to other new testing methods, such as integrated micro and nano technology, Yin said it is easier to scale up production of the test developed by his team because supply chains for making it are relatively mature and similar to the traditional method.

One caveat, Yin added, was that the new test has to be used at a temperature between 37 and 42 C.

"We are considering adding a small gadget to the test—about the size of a ballpoint pen—to control its temperatures," Yin said.

Clinical trials, approval process and production preparations will take at least nine months, he said.

International News

FDA Releases Draft Guidance on Enforcement Discretion for Certain NAC Products

The U.S. Food and Drug Administration (FDA) is announcing the availability of a draft guidance on FDA's policy regarding products labeled as dietary supplements that contain N-acetyl-L-cysteine (NAC). The draft guidance, when finalized, will explain our intent to exercise enforcement discretion with respect to the sale and distribution of certain NAC-containing products that are labeled as dietary supplements. This enforcement discretion policy would apply to products that would be lawfully marketed dietary supplements if NAC were not excluded from the definition of "dietary supplement" and are not otherwise in violation of the Federal Food, Drug, and Cosmetic Act (FD&C Act).

As we discussed in a recent response to two citizen petitions, the FDA has determined that NAC is excluded from the dietary supplement definition under the FD&C Act because NAC was approved as a new drug before it was marketed as a dietary supplement or as a food. However, we have not yet reached a final decision on one petitioner's request to issue a regulation to permit the use of

NAC in dietary supplements, and we are considering initiating rulemaking to provide by regulation that NAC is not excluded from the definition of dietary supplement. If, among other considerations, the FDA does not identify safety-related concerns as we continue our review of the available data and information, we are likely to propose a rule providing that NAC is not excluded from the definition of dietary supplement.

While our full safety review of NAC remains ongoing, our initial review has not revealed safety concerns with respect to the use of this ingredient in or as a dietary supplement. In addition, NAC-containing products represented as dietary supplements have been sold in the United States for over 30 years and consumers continue to seek access to such products. Accordingly, while the FDA continues its evaluation of the request to initiate rulemaking, the FDA issued this draft guidance to explain our policy regarding products labeled as dietary supplements that contain NAC.

Unless we identify safety-related concerns during our ongoing review, the FDA would intend to exercise enforcement discretion (as described in the draft guidance) until either of the following occurs: we complete notice-and-comment rulemaking to allow the use of NAC in or as a dietary supplement (if we move forward with such proceedings) or we deny the citizen petition's request for rulemaking. If the FDA determines that this enforcement discretion policy is no longer appropriate, we will notify stakeholders by withdrawing or revising the guidance.

FDA Releases Final Rule for Added Fluoride Levels in Bottled Water

The U.S. Food and Drug Administration issued its final rule for added fluoride levels in bottled water titled Beverages: Bottled Water. This final rule amends the allowable level for fluoride in domestically packaged and imported bottled water to which fluoride is added to 0.7 milligrams per liter (mg/L). The proposed rule published in April 2019.

The maximum added fluoride level in the final rule is consistent with the current recommendation by the U.S. Public Health Service (PHS) for the fluoride concentration in community water systems that add fluoride to their water. This maximum level will balance prevention of tooth decay and the risk of fluoride overexposure. This final rule does not affect bottled water that contains only naturally occurring fluoride (i.e., not added by a manufacturer). Added fluoride must be declared in the ingredient list, so consumers can examine bottled water labeling to determine whether fluoride has been added.

The final rule will become effective June 19, 2022, and the compliance date for industry is October 17, 2022.

FDA and USDA Scientists Research Seasonal Effects Linked to E.coli Outbreaks in Bagged Romaine

Scientists from the U.S. Food and Drug Administration's Center for Food Safety and Applied Nutrition and the U.S. Department of Agriculture's Agricultural Research Service (USDA ARS) have been working collaboratively to understand

the seasonal effects and other factors that may be contributing to outbreaks of E.coli O157:H7 linked to bagged romaine lettuce – and they are making significant progress. Leafy greens, including bagged romaine lettuce, have been implicated in outbreaks of foodborne illness caused by Shiga toxin-producing E. coli (STEC), the most common of which is E. coli O157:H7.

In a study recently published in the BMC Environmental MicrobiomeExternal Link Disclaimer, FDA and USDA scientists presented findings which reveal that season, and lettuce shelf life, can influence the bacterial communities and behavior of E. coli O157:H7 on cut lettuce stored in modified atmosphere packaging. The scientists found that E. coli O157:H7 survived significantly better in cold-stored packaged romaine harvested in the fall than on the same varieties harvested in late spring. The research team also demonstrated that the microbiome present on bagged romaine differed by season, lettuce deterioration state, and whether the survival of E. coli O157:H7 on the lettuce was high or low. For example, the team found that E.coli O157:H7 survived better in lettuce that was harvested in the fall than lettuce harvested in the spring during cold storage. The analysis demonstrated how trends in E. coli survival correlated with trends in microbiome composition.

A microbiome is a community of microorganisms (such as bacteria, fungi, and viruses) that inhabit a particular environment. To conduct this work, USDA ARS cultivated two romaine lettuce types with different shelf life in Salinas, CA. The lettuce was grown and harvested in the spring and fall and then processed as fresh cut product. The product was then inoculated with E. coli O157:H7 before all of it was packaged in modified atmospheric packaging (MAP) and stored at either cold or warm temperatures. The FDA then contributed cutting-edge genomic sequencing tools to characterize the microbiome composition present on the various lettuce samples.

This study provided insight into the relationship between the lettuce microbial ecology and the potential for E. coli O157:H7 survival during cold storage. This is a significant step toward closing the knowledge gaps identified in the FDA's Leafy Greens STEC Action Plan and helping the agency and its partners to reduce foodborne illness linked to the consumption of leafy greens.

FDA Issues Draft Guidance on Evaluating the Public Health Importance of Food Allergens Other Than the Major Food Allergens

The U.S. Food and Drug Administration (FDA) issued a draft guidance for FDA staff and other stakeholders titled Evaluating the Public Health Importance of Food Allergens Other Than the Major Food Allergens Listed in the Federal Food, Drug, and Cosmetic Act. The draft guidance, when finalized, will outline the FDA's current thinking on the approach we generally intend to take when we evaluate the public health importance of food allergens that are not one of the major food allergens identified by law in the U.S. The major food allergens are milk, eggs, fish, crustacean shellfish, tree nuts, peanuts, wheat, and soybeans. Sesame becomes the ninth major food allergen effective January 1, 2023. For the purposes of this draft guidance, we refer to food allergens that are not major food allergens as non-listed food allergens.

Food allergies and other types of food hypersensitivities affect millions of people living in the U.S. and there are more than 160 known food allergens. To protect those with food allergies and other food hypersensitivities, the FDA requires companies to list major food allergens or ingredients that are made from major food allergens in specific ways on the label of packaged foods. The FDA also enforces regulations that require food manufacturers to prevent allergen cross-contact (or, the unintentional incorporation of a major food allergen into a food).

This draft guidance is part of FDA's efforts to evaluate emerging evidence about non-listed food allergens in a consistent and transparent manner to inform potential future actions. The FDA's approach to non-listed food allergens focuses on immunoglobulin E antibody (IgE)-mediated food allergies, which are considered the most severe and immediately life-threatening food allergies. The draft guidance discusses the scientific evidence that establishes a food as a cause of IgE-mediated food allergy and the scientific factors, such as prevalence, severity, and allergenic potency, that the FDA intends to consider in its evaluations. The draft guidance also provides the FDA's recommendations for identifying and evaluating the relevant body of evidence to determine the public health importance of a non-listed food allergen.

The draft guidance also includes information on how stakeholders may submit requests to the FDA to evaluate the public health importance of a non-listed food allergen. We propose stakeholders submit data demonstrating that the food causes IgE-mediated allergy, together with data on prevalence of the food allergy, severity of the allergic reactions, and allergenic potency of the food allergen for the agency to consider in its review. We also propose that stakeholders provide other information, such as the information about the labeling and production of food containing the non-listed food allergen.

FDA Issues Final Guidance for Industry on Reconditioning Fish and Fishery Products by Segregation

The U.S. Food and Drug Administration issued a final guidance titled "Reconditioning Fish and Fishery Products by Segregation: Guidance for Industry."

The final guidance:

Clarifies the steps that owners of fish and fishery products, or their representatives, can take to segregate non-violative products from products adulterated with pathogens, unlawful animal drugs, scombrotoxin (histamine) or decomposition, to demonstrate compliance with the Federal Food, Drug, and Cosmetic Act.

Recommends information that industry should include in reconditioning by segregation proposals.

Provides uniform guidance and greater transparency to industry and stakeholders on how the FDA evaluates these proposals.

The final guidance does not apply to situations where reconditioning is proposed by means other than segregation, such as by cooking or conversion to animal

feed. This guidance finalizes the agency's draft guidance released in September 2019.

The public may submit electronic or written comments related to this final guidance at any time. Public comments can be submitted electronically to www.regulations.gov using Docket ID: FDA-2019-D-3324. Written comments can be submitted to the Dockets Management Staff (HFA-305), Food and Drug Administration, 5630 Fishers Lane, Rm.1061, Rockville, MD 20852.

EU sees increase in non-compliant pesticide in food samples

There has been a rise in findings of pesticides in food above legal limits, according to data published by the European Food Safety Authority (EFSA).

The rate of maximum residue level (MRL) exceedances in 2020 increased compared with 2019 and 2018. It remained high for unprocessed and processed grape leaves, unprocessed cumin seed and processed Brazil nuts that are not covered in random EU testing.

The report is based on data from national official controls by European Union member states, Iceland and Norway and includes figures from the EU-coordinated control program, which uses a randomized sampling strategy.

National control programs are risk-based, targeting products that likely contain pesticide residues or for which infringements have been identified in past years.

National targeted findings

The number of samples decreased by 9.3 percent compared to 2019 mainly because of the COVID-19 pandemic. Reporting countries analyzed 659 pesticides, with an average of 264 per sample.

For 2020, 94.9 percent of 88,141 samples analyzed fell below the MRL, 5.1 percent exceeded this level, of which 3.6 percent were non-compliant after taking measurement uncertainty into account. MRLs were exceeded in 3.9 percent of samples in 2019 and 2.3 percent triggered legal sanctions or enforcement actions.

The EU non-approved active substances with the highest MRL exceedance rate were ethylene oxide, chlorates, chlordecone, chlorpyrifos and anthraquinone.

For ethylene oxide, 49 of 230 samples were found to exceed the MRL and 46 were of sesame seeds. This issue was detected in Belgium in late 2020 in sesame seeds from India. No safe levels for this pesticide are established in the EU. Its use is linked to reducing Salmonella.

For chlorpyrifos, 327 samples of 73,874 exceeded the MRL. The substance is not approved for use in the EU since April 2020.

Multiple residues were reported in 24,057 samples. In one strawberry sample of unknown origin up to 35 different pesticides were found. Unprocessed sweet and bell peppers and wine had the highest frequency of multiple quantified residues.

EU random sampling

The EU program covered carrots, cauliflower, kiwi fruit, onions, oranges, pears,

potatoes, dried beans, brown rice, rye grain, bovine liver and poultry fat.

For the 12,077 samples analyzed as part of this program, 1.7 percent exceeded the MRL and 0.9 percent were non-compliant.

MRL exceedance rates rose from 2014 to 2017 and to 2020 in rice, oranges, pears and poultry fat. An increased trend from 2017 to 2020 was also observed in dried beans, kiwi fruit and cauliflower.

Oranges, followed by pears, carrots and rice had the highest number of samples with multiple residues. In one rice sample of unknown origin, 15 different pesticides were quantified.

One non-compliant result was mentioned for fipronil in potatoes. Detection of fipronil residues by Belgian authorities in 2017 led to millions of eggs being recalled in Europe.

From 4,632 samples flagged as organic, 87 were reported with residue levels above their corresponding MRLs, of which 36 samples were non-compliant.

Up to 30 different pesticides were found in honey, mainly thiacloprid. Substances with non-approved uses such as amitraz, chlorfenvinphos and coumaphos were detected.

Samples imported from non-EU countries were found to have a higher MRL exceedance rate and a higher non-compliance level compared to food produced within the EU.

An EFSA dietary risk assessment, as part of its analysis of results, suggests the sampled food commodities are unlikely to pose a concern for consumer health.

The U.S. Food & Drug Administration (FDA) and the National Egg Regulatory Officials (NERO) are announcing a new program for state egg and egg product regulators entitled the Egg Regulatory Program Standards (ERPS). The standards are designed to integrate the regulatory activities of partner agencies into an efficient and effective process for improving egg and egg product safety in the U.S.

The FDA Food Safety Modernization Act called for enhanced partnerships of government agencies and provides a legal mandate for developing an Integrated Food Safety System (IFSS). A key principle of an IFSS is the uniform application of model program standards so that regulatory agencies conduct inspections under the same set of standards. As the U.S. moves toward integrating food safety resources, uniform standards across egg and egg product regulatory programs are critical.

The program standards are for egg and egg product regulatory programs, not for manufacturers or growers of eggs. The ERPS are comprised of 10 individual standards: regulatory foundation, training program, inspection program, inspection audit program, egg-related illness, outbreak and emergency response, compliance and enforcement program, outreach activities, program resources, program assessment and laboratory support. The 10 standards, designed to strengthen the safety and integrity of the U.S. egg and egg product supply, are also the core elements of a state's regulatory program. The ERPS will provide a framework that every state can use to determine the strengths and challenges

of their program. The ERPS also provide the foundation for mutual reliance on inspections and other work conducted by federal and state agencies.

British agencies propose changes to import checks

Food agencies in Great Britain are looking at changing the rate of checks on certain products being imported into the region.

Separate comment periods have been launched by Food Standards Scotland (FSS) and the Food Standards Agency (FSA) for England and Wales, to cover high risk food and feed of non-animal origin.

Before the United Kingdom left the European Union, routine updates to EU imported food legislation, made by the European Commission, applied in the UK.

Authorities in Great Britain are now responsible for reviewing and amending the legislation. Ministers will make risk management decisions based on the FSA and FSS recommendations. Changes will not apply in Northern Ireland because of the Northern Ireland protocol.

Detail on proposed changes

Removal of three products from the scope of controls has been proposed in the first review since the UK exited the EU. The FSA said data indicates that the level of risk has reduced significantly. Checks on five products will be scaled back because there is increasing confidence that compliance is improving.

Fourteen products will be subjected to more enhanced controls because of concerns about the risk they pose to public health. Another four items will be added to the list for checks that include documentary, identity and physical examinations including sampling.

The three removed products are pistachios from the United States because of aflatoxin, goji berries from China because of pesticide residues and dried grapes from Turkey because of Ochratoxin A.

Reduced checks could be in place for groundnuts from Brazil and China and hazelnuts from Turkey and Georgia because of aflatoxins plus betel leaves from Bangladesh because of Salmonella.

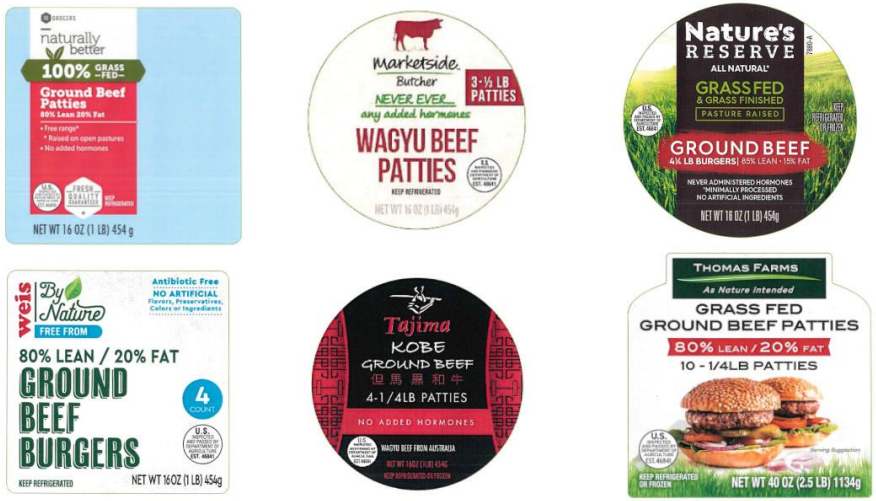
Increased controls may apply to black pepper from Brazil and sesame seeds from Sudan and Ethiopia because of Salmonella, groundnuts from the United States and India because of aflatoxin and pesticide residues on four products from Turkey.

The four potentially needing enhanced controls are lemons and peppers other than sweet from Turkey and groundnuts from Brazil because of pesticides and betel leaves from Thailand because of Salmonella.

The FSA comment period closes on July 7 while the FSS call for input ends on June 29. It is open to food and feed businesses, local and port health authorities, and other stakeholders with an interest in food safety.

Enterprise News

Nationwide ground beef recall after FSIS testing finds E. coli contamination



Lakeside Refrigerated Services of Swedesboro, NJ, is recalling 120,872 pounds of ground beef products because of possible E. coli O103 contamination.

The problem was discovered during routine FSIS testing of imported products.

According to the U.S. Department of Agriculture's Food Safety and Inspection Service (FSIS), the ground beef products were produced from Feb. 1 through April 8. The ground beef was shipped to retail locations nationwide, some of it under the Walmart brand of Marketside.

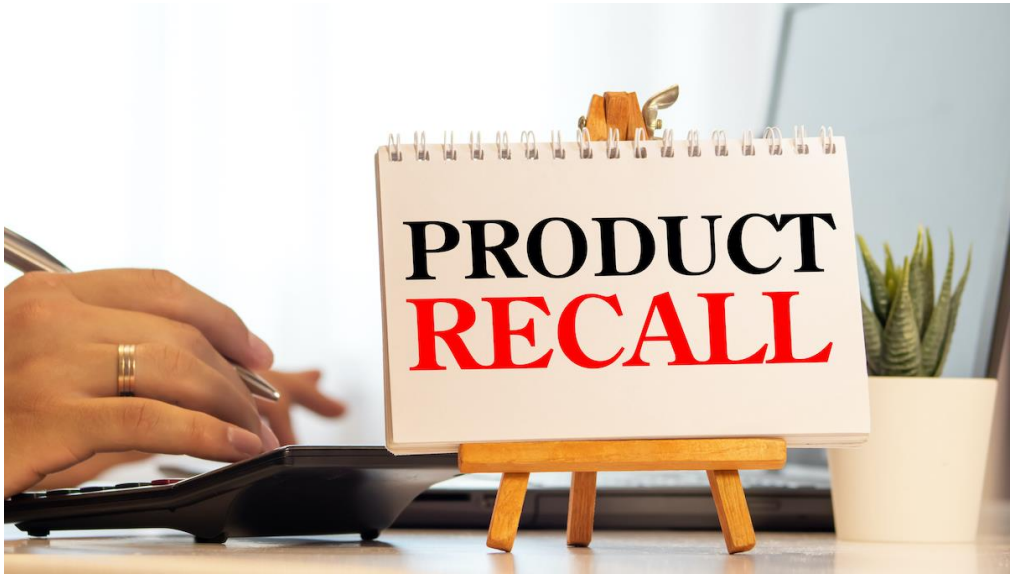
Recalled products:

- The complete list of products and product codes for the beef products that are subject to recall can be found here.
- Labels for the ground beef products can be found here.
- The products subject to recall bear establishment number "EST. 46841" inside the USDA mark of inspection.

As of the posting of this recall, there have been no confirmed reports of illness or adverse reactions due to the consumption of these products.

FSIS is concerned that some products may be in consumers' refrigerators or freezers. Consumers who have purchased these products are urged not to consume them. These products should be thrown away or returned to the place of purchase.

New England Beach Pizzas recalled over metal pieces



Beach Brand Foods LLC of Salem, NH, is recalling New England Beach Pizza Cheese and New England Beach Pizza Extra Cheese because of metal pieces in the products.

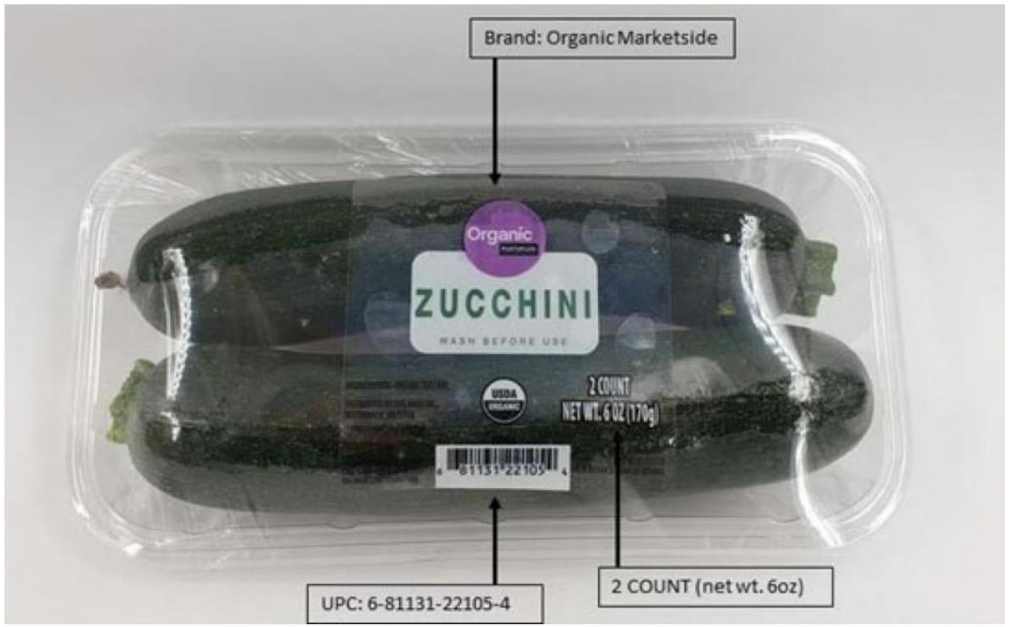
The products were distributed in New Hampshire and Massachusetts.

Recall products:

#	Product Description	Recall Number	Classification	Code Information	Product Quantity	Reason for Recall
1	New England Beach Pizza 1. Extra Cheese 2. Cheese	F-1007-2022	Class II	both printed with Lot 087 with bb 11/09/2022 UPC Extra cheese: 702730598849 UPC Cheese: 702730598832	90 cases (10 per case = 900 units)	May contain pieces of metal

Recalled products should be thrown out or returned to the location where they were purchased.

Salmonella test spurs recall of Marketside organic zucchini sold at Walmart stores



World Variety Produce Inc. of Los Angeles is recalling organic zucchini shipped to Walmart stores in 18 states after government testing revealed contamination with Salmonella.

"Consumers who have purchased the recalled organic Marketside zucchini are urged to destroy and dispose of recalled product," according to a company notice.

The Marketside brand organic zucchini was shipped to Walmart stores in Arizona, Arkansas, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Nebraska, North Dakota, Oklahoma, South Dakota, Texas and Wisconsin, according to the company's recall notice.

The contamination was discovered during routine testing by the Food and Drug Administration.

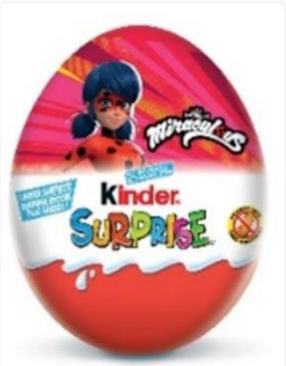
The recall zucchini can be identified by the following label information:

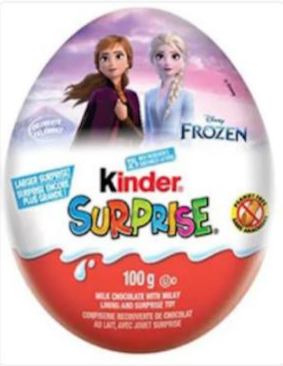
Brand	Organic Marketside
Packaging	Clear Overwrap Tray
Pack/Weight	2ct / Net Wt. 6oz (170g)
UPC Code	6-81131-22105-4
Case Lot Number	38706503

No illnesses had been reported in connection with the recalled organic zucchini as of the posting of the company's notice on April 19.

Consumers with questions may contact World Variety Produce Inc. at 800-588-0151.

Dozens of Kinder products now under recall in Canada including Disney licensed chocolate





More Kinder products are under recall in Canada. Some of the products have been linked to an outbreak of Salmonella infections in Europe that has sickened 150 children.

Ferrero Canada Ltd. announced the expanded recall today, listing more than a dozen new products, according to the Canadian Food Inspection Agency. As of the posting of the recall, no illnesses in Canada had been confirmed in relation to the chocolate.

There is great concern that consumers may have the products in their homes because of the coming Easter holiday and the long shelf life of the products. All of the recalled products should be discarded or returned to the place of purchase. Use this link to view product descriptions and photos of the 23 implicated products. The products include a variety of packaging designs, including eggs, boxes and bags.

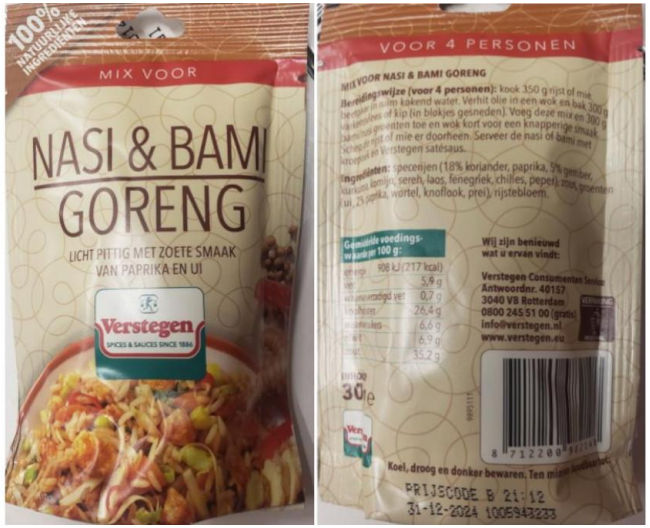
These and other Kinder products were manufactured in Arlon, Belgium, and sent to more than 60 countries. Ferrero revealed a genetic match between almost 150 Salmonella cases in Europe and this factory in Belgium.

Internal analysis by the company detected Salmonella at the plant in mid-December. After an investigation, the origin of contamination was identified to be a filter at the outlet of two raw material tanks. These materials and finished products were blocked and not released, according to the company.

Belgian authorities have shut down the production site in Arlon and Ferrero is recalling Kinder products made there. The Arlon plant makes up about 7 percent of the total Kinder products manufactured globally on a yearly basis.

The Federal Agency for the Safety of the Food Chain (FASFC) said the decision to suspend operations was made based on findings from an investigation, which is continuing, and because information provided by Ferrero was “incomplete.”

Verstegen brand "Mix Voor Nasi & Bami Goreng" recalled because of Salmonella



Global Reach Confections & More Inc. is recalling Verstegen brand "Mix Voor Nasi & Bami Goreng" because of possible Salmonella contamination.

This recall was triggered by a recall in another country.

The recalled product was sold from Co-op Food Store, 4705 49 St., Barrhead, Alberta, Canada.

Brand	Product	Size	UPC	Codes
Verstegen	"Mix Voor Nasi & Bami Goreng"	30 g	8 712200 982148	31-12-2024 1005943233

As of the posting of this recall, there have been no reported illnesses associated with the consumption of this product.

Consumers should not eat the recalled product. Recalled products should be thrown out or returned to the location where they were purchased.

MARKET NEWS - REPLY

If you have any views or comments on the articles in the marketing news please feel free to contact us on the following email address: sales.china@mxns.cn