

A Szupermenta legutóbbi nyári terméktesztjén a NÉBIH szakemberei 14 nem csípős és 6 csípős ízesítésű debreceni készítményt ellenőriztek. A húskészítmények 8 hazai üzletlánc polcáról – hatósági mintavételt követően – kerültek a hivatal akkreditált laboratóriumába. Itt megvizsgálták a termékek mikrobiológiai megfelelőségét, továbbá megmérték fehérje-, víz-, zsír-, nátrium-klorid-, és kalciumtartalmukat. Sor került a debrecenik MSM (Mechanical Separated Meat - csontokról mechanikusan lefejtett hús) tartalmának vizsgálatára, valamint, az élelmiszerhamisítás gyanújának kizárása érdekében, az idegen fajfehérjék kiszűrésére is.

Hét termék csomagolásán szerepelt laktóz-, szója, és/ vagy gluténmentes felirat, így esetükben a vizsgálat ezekre a paraméterekre is kiterjedt. Megnyugtató, hogy a „mentes” felirattal ellátott debrecenik valóban nem tartalmaztak kimutatható mennyiségű allergén összetevőket, így biztonsággal fogyaszthatták az azokra érzékeny egyének is.

Két debreceninél, bár a csomagoláson feltüntetett összetevők között nem szerepelt, a laboratóriumi vizsgálatok azonban kimutatták az MSM és a baromfifehérje jelenlétét. A NÉBIH szakemberei helyszíni ellenőrzést tartottak az érintett előállítónál, ahol megállapították, hogy a berendezések nem megfelelő gyártásközi takarítása miatt keveredhetett baromfifehérje a sertéshúskészítményekbe.

A szakemberek több húskészítmény esetében megállapították, hogy azok nem felelnek meg a Magyar Élelmiszerkönyv „csemege debrecenire” vonatkozó speciális előírásainak. Az érintett gyártókat a hatóság kötelezte, hogy vagy változtassanak a receptúrán vagy módosítsák a készítmények elnevezését. Két termékénél olyan jelentős volt az összetételi előírásoktól való eltérés, hogy a NÉBIH munkatársai azokat a verseny további részéből is kizárták.

Összesítve, amíg mikrobiológiai szempontból minden termék megfelelt az előírásoknak, addig minőségi hibák miatt összesen 11 esetben kellett intézkedni.

A termékek jelölésének vizsgálata több hiányosságot tárt fel. A 20 húskészítmény közül a szakemberek 17 esetben találtak hibát. A tápértékjelölést például nem táblázatos formában tüntették fel, bizonyos összetevők kimaradtak a felsorolásból, vagy indokolatlanul szerepeltek a csomagoláson. Az érintett vállalkozókat a hivatal figyelmeztetésben részesítette és kötelezte a hibák javítására.

A kedveltségi teszten szakértő, laikus, valamint a gyártói és a kereskedelmi oldalt egyaránt képviselő kóstolók vizsgálták vak kóstolásos módszerrel a debreceniket. Az értékelés a termékkörre jellemző 6 szempont – alak-méret, burkolat, állomány-metszésalap, szín, illat és íz– szerint történt.

További információk, érdekességek és a részletes vizsgálati eredmények elérhetők a NÉBIH Szupermenta termékteszt oldalán.

Szerkesztette: Frum Zsuzsa

They made it from the lake to the table: the excellent Hungarian fish!

The first comprehensive research project in Hungary, investigating the contamination level of fish ponds, inorganic and organic pollutant content of fish, the impact of processing and transportation as well as microbiological risks provided promising results.

“Aquaculture is very low in feed requirements, it is a resource sparing way of fish management” – highlighted Péter Lengyel, on staff at the Ministry of Agriculture at the conference organised on 3 October with the title “Environmental and food safety findings of the HappyFish project on the carp product line” in the Knowledge Transfer Centre of the Szent István University in a Gödöllő.

“No comprehensive analysis existed up to date which would have tested the quality of fish meat, although standard, permanent high quality is an important prerequisite if we are to increase the amount of fish consumption” – said Dr. Béla Urbányi, Professor and Head of Department at the Szent István University. “In the course of the research project based on the cooperation between private business and the universities, funded by nearly 1.5 billion Hungarian forint from research and development funds, extremely reassuring, positive findings were established in all areas, and the trajectory of the project itself plotted the route on which fish gets to our dining table” – emphasised Dr. László Palkovics, President of the Szent István University (SZIE) and Dr. László Zanathy, Managing Director of the independent laboratory WESSING Hungary Kft., the leader of the consortium.

“Fish habitats were surveyed and in the course of examining fish pond water and sediments in ponds nearly 700 chemicals were tested for as well as microbiological identification tests carried out” – said Dr. Sándor Szoboszlai, associate professor at SZIE. Aggregate contamination level of pharmaceuticals and pesticides in fish ponds did not even exceed the limits set for drinking water, and eco-toxicity tests assessing adverse biological effects have also been concluded with favourable results, Wessling experts measured the lowest level of microplastic values in fish ponds of all surface waters.

“Test results from fresh water fish in Hungary fall a long way short of the limit values in terms of heavy metals when compared with the European

context” – told Dr. Adrienn Micsinai, project leader of HappyFish, on staff at WESSLING Hungary Kft. Merely 21 kinds of the 420 pesticides tested in fish altogether could be detected, and only one of the pharmaceutical residues could be found in the course of the tests and this also close to the detection level. From the microbiological perspective, all fish were free of pathogen agents.

Dr. László Friedrich, Dean at the SZIE Food Science Faculty, assistant professor highlighted that while they found arsenic way below the limit values determined for other food items intended to human consumption, carp was found rich in selenium, which is absolutely good news, considering the fact that this element has an extremely positive impact on the nervous system! One person in Hungary eats 2.5 kg carp annually in average, but based on the answers it can be concluded that there are reasons to believe that this figure could be raised hadn't it been for the fish bones in the meat – turned out from the representative consumer survey presented by Dr. Gyula Kasza, honorary professor of the Szent István University. The findings of the HappyFish project, covering a number of areas, provide extremely promising news: the consumption of domestic fresh water fish is safe and healthy in all aspects!

Innovation laboratory prizes awarded in Budapest

Rubber wear testing, 3D emission measurement, vacuum based filtering system: the WESSLING group honoured the forward looking ideas of its staff members useful for customers as well for the twelfth occasion, this time in the Budapest WESSLING Knowledge Centre.

This was the 12th time that WESSLING honoured pioneering ideas of its employees. The four ideas, of which the jury maintained that were worth to receive the WESSLING Innovation Prize, awarded in the Budapest Knowledge Centre of WESSLING, came from France and Germany, respectively.

Diana Weßling, spokesperson of the owners and Dr. László Zanathy, Managing Director of WESSLING Hungary Kft. handed over the prizes, three of which went to Germany and one to France.

Measuring the wear and tear of rubber tyres

One coveted award went to chemist Siema Lange and chemical laboratory technician Jonas Holtgreve for their outstanding work on measuring

microplastics caused by tyre abrasion. With laboratory analyses and expertise in microplastics, WESSLING is one of Europe's leading companies in the field, but Hungary is also at the cutting edge in microplastics research.

3D printers deployed in emission measurements

André Schmitz, also a chemist, has pioneered new methods for the laboratory measurement of emissions using 3D printers, this is why he has also been among the winners of the WESSLING Innovation Award for this development. WESSLING is one of the few laboratories working in this sector. Based on the knowledge received from this innovative method, customers receive comprehensive advice and can optimise 3D printers for their business and customers.

New vacuum type filtering system for soil sampling

Another idea was honoured during the ceremony in Budapest: Francis Bourdon, Fabienne Loisel, Sabrina Slimani and Audrey Goutagnieux (on staff at the Lyon site of WESSLING France) designed a new vacuum filter system for preparing soil samples. New funnels were made by a glass manufacturer and they built the system themselves. This innovation considerably accelerates sample preparation time and facilitates work in the laboratory, where heavy equipment no longer has to be converted for cleaning. Compared to the former results, fifty additional samples can be filtered daily, and as a consequence, customers will get faster results.

Thoughtfully load your cart! – a series of laboratory articles for food safety

The intention of the Thoughtfully load your cart! campaign is to assist consumers to buy as safe products as possible. In the series of articles posted on the website entitled Laboratorium.hu specialists working for the independent laboratory WESSLING Hungary Kft. report their experiences gained by testing millions of food samples.

The series of articles, announced at the Hungalimentaria conference and launched on the occasion of the National Agricultural and Food Industry Exhibition (OMÉK) touched upon a number of fields which might be equally important for both the operators of the food industry market and the consumers.

After pesticides and mycotoxins, experts wrote about the microbes on our food, shelf life, food additives, as well as about chemicals dissolving into our food from their packaging and the laboratory staff members even provided advice in choosing the appropriate deodorants in the article series of *Laboratorium.hu* entitled Thoughtfully load your cart!

The main objective of the campaign lasting up to Christmas is: to assist consumers in purchasing as safe products as possible, and to show to food industry operators what they need to pay attention in order to be able to produce and market the better quality and more competitive products the better.

Experts collected figures, statistics, test methods, chemical explanations and useful hints in the *Laboratorium.hu* articles. The materials with a diverse thematic can be read in the column Thoughtfully load your cart! from September until Christmas: <https://laboratorium.hu/%C3%89sszel-a-kos%C3%A1rba>

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NFSO News



Food safety status in the European Union: 2018 RASFF report released

Only 1% of the nearly four thousand notifications published in 2018 in the Rapid Alert System for Food and Feed (RASFF) of the European Union concerned products manufactured in Hungary – reveals the annual summary of the European Commission. The 162 domestic cases mainly concern dietary supplements and other special foods, fruits and vegetables, as well as cereals and bakery products.

The objective of RASFF, which has been in operation for 40 years, is to ensure the rapid flow of information between the authorities of EU member states. Thanks to this alert system, a number of food safety risks were prevented before the objectionable product could harm the health of consumers.

According to the recently published 2018 summary prepared by the European commission, nearly 3,700 original notifications (including 1,188

alerts) were published last year in the RASFF, 86% of which were food related. The number of new notifications decreased slightly compared to the previous year.

In the case of most of the objectionable products manufactured in the European Union, alerts were issued this time because of the presence of pathogenic microorganisms (mainly in poultry and meat products), the lack of labeling of allergenic ingredients (primarily milk, gluten and nuts), and the presence of foreign substances in the products (mainly plastics, metals or glass).

The 162 RASFF cases with Hungarian aspects were related to foods in 146 cases, to feeds in 10 cases and to food contact materials in 6 cases. In Hungary, objectionable products were most often dietary supplements and other special foods, cereal and bakery products; eggs and egg products and meat and meat products.

In 43 cases, food safety concerns have been raised regarding products manufactured in Hungary. In 28 cases, notifications were initiated by Hungary.

Starting from the end of last year, the Administrative Assistance and Cooperation System (AAC-AA) of the European Union, focusing on non-conformities, joined the RASFF. Non-conformities in the system were reported in 2018 in the case of dietary supplements and other special foods, meat and meat products and fruits and vegetables. Notifications were, in most cases, due to incorrect labeling, unauthorized handling of products or unauthorized procedures, and other documentation deficiencies. The annual report of the Food Fraud Network of the AAC system (AAC-FFN) is also available now.

Cases concerning the domestic population are published by **NÉBIH with priority in order to inform the widest possible circle of consumers in a timely fashion about the causes of the objections. All alarms received through the RASFF system can be found on the NÉBIH website.**

High Quality Food trademark awarded for the first time

The High Quality Food (KMÉ) trademark was awarded for the first time in Budapest, at the 79th National Agriculture and Food Exhibition and Fair (OMÉK). The gold degree illustrated with a magical deer was given to seven sour cream producing companies.

At the awards ceremony, it was emphasized by Minister of Agriculture István Nagy that the KMÉ value-creating quality system is a real guarantee and provides customers with credible information on high-quality, safe Hungarian products.

The head of ministry said that manufacturers can apply for the gold degree of the KMÉ trademark with products that are among the best in the product inspections organized by the National Food Chain Safety Office (NÉBIH). Examining products in this framework creates a kind of competitive situation, in the sense that it encourages manufacturers to continually improve.

The decision on which products could obtain the right to use the trademark was preceded by the chemical, microbiological and organoleptic testing of nearly one hundred products. Food safety and nutrition, taste and sophisticated packaging are all outstanding in the case of the products with the gold degree trademark, added the minister.

István Nagy emphasized that only 2 percent of food businesses are active in the manufacture of dairy products, however, the significance of the sector is more than 7 percent in employment and its turnover is 8 percent of the industry. He added that the manufacture of dairy products is one of the most innovative sectors in the food industry, with continuous improvement in terms of both products and packaging, and consumer demand is monitored constantly.

He also pointed out that during the 2014-2020 funding period, the Hungarian dairy industry received significant support from both domestic and EU sources: more than HUF 25 billion has already flowed into the sector from the Rural Development Program, the Economic Development and Innovation Operational Programme (Ginop), the large enterprise investment support and the investment promotion fund of the Ministry of Foreign Affairs and Trade (KKM).

More information on the High Quality Food (KMÉ) trademark system can be found on the kme.hu website.

Supermint test of ketchups highlights wrong labeling practice

Ketchups were tested by the experts of the National Food Chain Safety Office (NÉBIH) in the Supermint test. A total of 38 products were checked by the authority's staff, 19 of which were manufactured with preservatives and 19 without preservatives. Minor or major labeling deficiencies were found in the case of 25 ketchups.

Tests by the authority laboratory were carried out based on a selected set of criteria. The amount and presence of pesticide residues, gluten, celery, water-soluble solids, 15 types of dyes, preservatives and certain organic acids, as well as sugar and sweeteners were analyzed by the experts, among other things. As usual, the investigation also included the checking of the legal conformity of the product labels.

During the comprehensive analysis, it has become apparent that the amount of concentrated tomato in indicated among the ingredients in various ways, in most cases only by giving the percentage of concentrated tomato, with its dry matter content not known, therefore, the true tomato content of the product will not be clear to consumers. This incorrect labeling practice was detected by the authority inspection in the case of 20 products.

Safety or compositional defects were not revealed during the investigation, but the markings on the product labels did not meet the requirements in several respects. Occasionally, a product was labeled additive-free, when in fact it contained several additives, but there were also errors with the marking „light” and with the amount of sugar in the nutrition declaration.

Official proceedings were initiated in the case of 25 of the 38 products. For minor labeling errors, food business operators were issued warnings, while in the case of major labeling errors, food inspection fines were imposed, totaling around HUF 300,000.

Once again, products were rated in the popularity test of the Supermint products test by expert and lay judges using the “blind tasting” method. As a result of this, two types of popularity rankings were established, one for the products with preservatives and one for the preservative-free products.

Further information and detailed test results are available on the NÉBIH Supermint product test website.

A new awareness-raising program and website launched to combat antibiotic resistance

The threat of antibiotic resistance is a growing concern worldwide, both in human and animal health. Recognizing the severity of the problem, an informative and awareness-raising program titled “How long does it work?” and a related thematic website were launched by the National Food Chain Safety Office (NÉBIH), in collaboration with the Ministry of Agriculture.

The purpose of the new initiative is to provide lay people with credible professional information on the dangers of antibiotic resistance to all of us.

As a result of the unjustified or improper use of antibiotics, bacteria are becoming more and more resistant to them, which means that antibiotic-containing agents are becoming less effective in treating a disease. Similarly to some international organizations, it is also a priority for the European Union to address this global public health threat.

According to the latest report of the European Medicines Agency, Hungary is ranked 4th in antibiotic use per unit of animal product. The results of the monitoring analyses of NÉBIH also showed that resistance is most widespread in Hungary in the case of many bacterial species and antibiotics.

Recognizing the seriousness of the phenomenon, in September 2019, a new informative and awareness-raising program, as well as a website titled "How long does it work?" that works in harmony with the objectives of the program, were launched by NÉBIH, in collaboration with the Ministry of Agriculture.

The website which can be reached at <http://meddighat.hu/> illustrates the subject of antibiotic resistance in many ways. The target audience of the website are primarily interested lay people, to whom we strive to convey a wide range of knowledge related to the subject from professional and credible sources.

The articles, studies, research results and infographics published on the website give an overview of animal health, as NÉBIH is also responsible for the management of this area. With the program and the web interface it also aims to highlight the close link between animal health and human health, and how each individual can contribute to the successful fight against antibiotic resistance.

One of the main pillars of the knowledge published is the new animated short film, made by dr. Zoltán Simanovszky, a veterinarian publishing on YouTube, at the request of NÉBIH.

The video presents easy-to-digest information on this global health issue in a professional but entertaining form.

The new initiative will be promoted during the autumn on NÉBIH's Facebook page, as well as the Facebook page of the Responsible owners animal protection program and, in addition, a series of educational quizzes has been launched to help

people better understand how antimicrobial resistance works and how it develops.

Lots of quality and labeling errors in the Supermint test of debreceners

The popular food products of the summer barbecue season, debrecener sausages were examined by the National Food Chain Safety Office (NÉBIH) in the Supermint program. Each of the 20 different products were satisfactory from a food safety point of view, but warnings were issued to the manufacturers for quality or labeling errors in 18 cases.

In the latest, summer product test of Supermint, 14 non-spicy and 6 spicy flavored debrecener products were analyzed by the experts of NÉBIH. Following authority sampling, the meat products were shipped to the accredited laboratory of the office from the shelves of 8 domestic chains. There, the microbiological suitability of the products was tested, and their protein, water, fat, sodium chloride and calcium contents were measured as well. The MSM (Mechanically Separated Meat) content of debreceners was examined and, in order to exclude the possibility of food counterfeiting, foreign species proteins were screened.

The packagings of seven products indicated that they were lactose-, soy- and/or gluten-free, so in their case these parameters were also examined. It is reassuring that the debreceners labeled „free” did not contain detectable amounts of allergenic ingredients, so they could be safely consumed by people sensitive to these.

In the case of two debreceners, although they were not listed among the ingredients on the packaging, laboratory tests showed the presence of MSM and poultry protein. On-site inspections were carried out by the experts of NÉBIH at the manufacturers involved, and it was found that poultry protein could have found its way into pork products because of the inadequate in-process cleaning of the equipment.

Experts have found that several meat products did not meet the special requirements of the Hungarian Food Codex for „non-spicy debrecener”. The manufacturers concerned were required by the authority to either change the formulation or change the name of the products. In the case of two products, the deviation from the compositional requirements was so significant that they were excluded from the rest of the competition by the staff of NÉBIH.

Overall, while all products complied with the requirements from a microbiological point of view, quality defects had to be addressed in a total of 11 cases.

Examination of the product labels has revealed several shortcomings. Mistakes were found by the experts in the case of 17 of the 20 meat products. For example, the nutrition declaration was not in a tabular form, certain ingredients were not included in the list or were unjustifiably indicated on the packaging. The companies concerned were issued warnings by the authority and they were obliged to correct the errors.

In the popularity test, debreceners were tasted by expert and lay judges, as well as judges representing the manufacturing and commercial sectors, using the blind tasting method. Ratings were based 6 aspects characteristic of the product range, shape-size, casing, texture-cut surface, color, smell and taste.

Further information, interesting facts and detailed test results are available on the Supermint product test page of NÉBIH.

Edited by Zsuzsa Frum