#### How will future foods look like?

#### HUNGALIMENTARIA 2019

Adequate information of consumers was highlighted by prominent stakeholders of domestic food safety at the Hungalimentaria conference and exhibition, organized for the twelfth time this year.

At the immense event, the topic of food discussed from analytical, microbiological, legal, sensory and technological pints of view by authority and laboratory experts, as well as university researchers, and such priority areas are also touched upon as communication, regulatory aspects or the foods of the future.

The issue of food contact materials, the genetic background of organoleptic tests, the quality of domestic fish meat, the risk of toxins produced by microscopic fungi on crops, consumer satisfaction surveys, the safety of dietary supplements, authority inspections, the hygiene of food production plants and distribution sites, public catering – these few "arbitrarily" highlighted topics are only a fraction of the many areas discussed by the most prominent experts of domestic food safety at this year's two-day Hungalimentaria conference and exhibition.

The significance of the event is illustrated by the fact that it was held under the auspices of Róbert Zsigó, state secretary for food chain supervision, whose greeting was delivered by Dr. Márton Oravecz, president of the National Food Chain Safety Office (NFCSO), at the conference organized by the authority and WESSLING Hungary Kft., a laboratory performing independent analyses.

As he said, in addition to laboratory analyses (several millions of tests are carried out each year from the testing of seeds for GMOs through pesticide residue analysis to animal health investigations), informing the public is a major task of the authority. This double task is also expressed by the motto of the conference: Think before you buy – what does the lab say?

After drug trafficking, food counterfeiting is the second most profitable illegal activity in the world. Therefore, the food safety system must identify hazards more and more rapidly. Thanks to continuous development and 21st century analytical techniques, the authority meets this challenge, whether talking about counterfeiting, origin testing, tracking or labeling – said Dr. Márton Oravecz, who believes that the authority should be a credible agency striving to share knowledge. The

fact that they are on the right track is confirmed by the latest surveys, according to which the Hungarian people trust NFCSO.

- Thanks to the abundance of food, we can choose from a number of products, so we have a real chance to think before we buy – emphasized Dr. László Zanathy, managing director of WESSLING Hungary Kft., who believes that the knowledge accumulated in the laboratory and the experience of the scientists working there should be made public and, together with responsible manufacturers, distributors and the authority, as much as possible should be done in order for the professional knowledge to develop into a real trust on the part of consumers.

At the two-day meeting that took place with the participation of nearly four hundred people, authority aspects, laboratory analyses and legal regulation were presented in eleven sections, while also discussed were the most important food testing issues of our time, from packaging materials through microbiological challenges to dietary supplements, pesticide residues or communication – said Dr. Tamás János Szigeti, director of business development of WESSLING Hungary Kft., the main organizer of the conference.

"Foods produced and marketed in Europe have never been safer than they are today. However, due to environmental factors, such as climate change, the appearance of new pathogens (pathogenic microorganisms) and new toxins (e.g., previously not typical mycotoxins) can be expected" – said Prof. Dr. Diána Bánáti (University of Debrecen) in her presentation titled *Foods of the future*.

We can already produce meat in a laboratory, and we are able to create from it a product that resembles a real pork chop, for example, using a 3D printer. With the exhaustion of resources, with them being finite, and with the globalization of the food supply chain/network, cultural boundaries that had been thought to be carved in stone: insects are already used as a source of protein in Europe as well, the structure of foods is manipulated by mimicking naturally occurring structures, certain micronutrients are delivered into the body in a targeted way using microcapsules.

With the help of new technologies, such as microsensors (handheld microspectrometers), the amount and composition of the foods consumed can be recorded more accurately. With the design of a personalized diet, through precision nutrition science we do not only want to cure but also to prevent the development of nutrition related diseases.

In the 21st century, we are expected to witness the biggest technological change so far and the

fastest development in the areas of food science and technology, as well as nutrition science, emphasized the professor.

The information explosion experienced after the turn of the century and the increasing complexity of the convoluted system of the economy and society bring about revolutionary changes in the production, distribution and in ensuring the chemical/microbiological safety of foods – emphasized Prof. Dr. József Baranyi as well (Imperial College London, University of Debrecen), who believes that food experts of our time should not only be proficient in IT and computational methods, but they should also understand the everyday effects of globalization. To answer the questions of food safety and security, network research can provide effective help.

Dr. Zoltán Gombos (Ministry of Agriculture, Department of Food Chain Supervision) presented the structural changes of the supervisory organization (government office modifications, AKR, effects of the introduction of KIT, amendment of the food law) in his presentation titled New directions in the food chain supervision. He spoke about the IT bases of risk-based control (EÜER), the planning of analysis and control, about expected changes in authorization, about new tools to be used in the fight against food crime, the extension of the sanction system, and about the importance of awareness-raising and the promotion of conscious consumer behavior, an important part of which is the national trademark system.

Regarding European regulation, Prof. Dr. DDr.h.c. Árpád Somogyi (Gesellschaft für Natur- und Heilkunde, Berlin) emphasized that its most important objective is to ensure the smooth flow of goods, as well as the protection of the health and the financial interests of consumers.

During the conference, the speakers in the four food analytical sections discussed in detail the problem of substances possibly released from plastic items coming into contact with foods, among other things. We have heard about forward-looking product development trends and technological solutions in the food technology section, and the Communication in the Food Chain section focused on the practical experiences gained in relationship with the use of different communication tools.

In the other sections, technological issues, product development trends, the issues of functional foods and food products that could be incorporated into special diets, sensory examinations, with particular regard to neural aspects and the genetic background of perception, the issue of conscious nutrition, mechanisms for managing the flow of

information, consumer satisfaction surveys, dietary supplements and the physiological effects of foods were discussed. The presence and significance of mycotoxins, quality assurance, authority inspections, the hygiene of food production plants and distribution sites, public catering and the information system of organic farming were also mentioned.

# Food safety: growing trust, lack of knowledge

The food safety authority is increasingly trusted by the population, but the Knowledge Test of NFCSO also revealed that there is still plenty of room for further information. What has the authority done to inform the public about food safety and what is an independent laboratory doing for the same purpose?

The launch of the campaign titled Think before you buy was announced at the 12th Hungalimentaria conference campaign, held at the end of April by WESSLING Hungary Kft., an operator of independent laboratories, and the National Food Chain Safety Office (NFCSO), during which they want to help consumers through the media. Its topics are varied: Which dietary supplements are safe? What should we know about food labeling and E-numbers? What is leached from packaging? What is the situation with sugar substitutes and lactose? In addition to useful authority advice, the different areas are also looked at from a laboratory point of view, and so this way the Think before you buy campaign that starts at the end of summer is completely unique in Hungary.

In the communication section of the Hungalimentaria conference, the expert of NFCSO made it clear that, in addition to the tests, one of the most important tasks of the authority is to share the available information as widely as possible.

In order to succeed in risk communication, all channels are now being used to reach consumers, and a number of awareness-raising programs have been launched – said Dr. Sarolta Barna, vice president of NFCSO also responsible for risk management, in her section opening presentation.

Good press relations, quick responses, proactive press releases, information sharing on our official and thematic websites, dialogues on our social media platforms and through our customer service, sharing pictures and videos: these tools are complemented in our long-term risk communication with events, round-table discussions, publications, information materials and on-site training – added Dr. Sarolta Barna.

The Rapid Alert System for Food and Feed (RASFF) system, which has been in operation in Europe for 40 years now, plays an important role in all of this – said Edit Tóthné Lippai (NFCSO). The Hungarian employees of the alert chain are also on standby 24 hours a day, with an average of 150 cases per year handled in Hungary. The efficiency of their work is characterized by the fact that last year, in connection with metal pieces found in a snack, 6.5 million people were reached and their warning was transmitted by 104 online media entities.

As for the press work of NFCSO, last year, 221 materials were published (69 of which were press releases, the others were website news), and it was in large part due to this that we managed to have the media and public life focus on certain topics – said Zsuzsa Frum press agent.

Further statistical data: in 2018-ban the name of NFCSO was mentioned in more than 14,800 articles, research measured 370 million hits, which means that each Hungarian citizen could meet NFCSO in the press roughly 37 times per year.

As part of NFCSO's product test program, the Supermint, test results and other background materials such as infographics that form a complex communication system appear monthly on the campaign website, said Brigitta Sidó, head of department.

So far, 127,000 parameters have been measured in their laboratories within the framework of the program. 1,340 products have been tested in 60 product groups, 470 of which were found to be objectionable for some reason. Up until April 2018, a total of 30 logos have been issued – products with podium finishes in the product tests are awarded the Supermint logo, which can be used on the products themselves or online by manufacturers and distributors.

In addition to communication, NFCSO's tasks also include the conducting of public surveys, the objective of which is to find out what people think about food safety, how they perceive risks and how they try to reduce them, explained Dr. Gyula Kasza, head of department at NFCSO. Generally speaking, food safety is considered to be the second most important area of authority after health care. According to the majority of respondents, the situation in Hungary has improved a lot in recent years.

As for the perception of the authority, while in 2013 only one third of the population had already heard about NFCSO, the value increased to 86 percent of consumers by 2018. Trust in the authority is also extremely high, with 78 percent of those interviewed trusting the activity of NFCSO. This has been confirmed by an international report,

since according to a survey of the European Food Safety Authority (EFSA), Hungarian people has the highest confidence in the national authority in all of Europe, said Dr. Gyula Kasza proudly. However, people's knowledge of food safety still shows a mixed picture, with just 57% of the answers given to simple, knowledge-based questions being right.

In the knowledge test of NFCSO, the cutting board question finished first. 90 percent of the respondents answered correctly: separate cutting boards should be used for slicing meat and vegetables. A high proportion of people also knew well that expired food can still be sold in stores for two more days, and that microbes survive freezing.

Respondents were much more uncertain as to how many degrees the refrigerator should be set to (the correct answer being between 0 and 5 degrees Celsius), and whether eggs should be washed before storage (not necessary), or whether traditional foods are free of genes (only 46% answered the latter question correctly – of course, each food contains genes).

The fewest correct answers (only 15%) were given to the question whether there are preservatives in canned foods (no).

In addition to the activity of NFCSO, the risk communication of an independent laboratory was also introduced. As was said by Gábor Szunyogh, head of marketing of WESSLING Hungary Kft., a laboratory living off the market moves in different dimensions than the authority, but it can still do a lot in the field of scientific information about food safety with its own tools: from the research laboratory for college students maintained with ELTE through the publication of the scientific magazine called Journal of Food Investigation to the scientific news portal Laboratorium.hu, which has published more than 300 articles so far. The six years of the online chemistry competition and interactive laboratory day called Lab adventure was a great success, as well as the Tiny Plastic Puzzle project, during which the microplastic contamination of the surface waters of Hungary was measured in several places.

The next campaign of the independent laboratory starts in the fall and is titled Think before you buy, and it will again count on the professional support of the authorities.

#### There is no insoluble packaging material

Substances that leach from packaging materials can be dangerous to human health, and significant amounts of harmful compounds are consumed during our lifetime. Plasticizers, heavy metals, dyes: we eat all of them – this was revealed at the most important event of the printing and packaging industry.

"Insoluble behavior is a relative concept. No completely insoluble material exists and the statement that a plastic object is completely insoluble is simply not true" - Arnold J. Lehman, a pioneer of American toxicology was quoted by Dr. Tamás János Szigeti, an expert of WESSLING Hungary Kft., a laboratory also performing packaging material analysis, and editor-in-chief of the *Journal of Food Investigation* in his presentation given at the PPDExpo (Print, Packaging & Digital) held in April.

Compounds that leach from packaging materials can damage organs that regulate human metabolism and hormonal balance. In the case of prolonged exposure, they may cause kidney and liver failure, may be carcinogenic through the distortion of the structure of hereditary material, may interfere with the normal development of sexual characteristics in childhood, they are dangerous to the nervous and immune system, and may indicate the development of breast, testicular and prostate cancer.

According to some estimates, a person consumes up to 300 to 403 g of substances leached from packaging materials (monomers, oligomers, stabilizers, antioxidants, plasticizers, blowing agents, heavy metals, dyes, processing aids) during their lifetime, this is why the analysis of this product group is important.

Packaging materials are not characterized by occasional high-dose exposure, since leaching from these materials usually takes place in very small quantities over a long period of time. The physiological effect of the harmful substances thus absorbed may accumulate over time, and may cause lifelong diseases.

How does leaching take place?

Material transfer processes take place in accordance with the laws of nature, the basic phenomenon is diffusion, which was described by the physician and inventor Eugene Frick, together with the differential equations that describe leaching processes in general in the XIX. century.

It is important to know, emphasized Dr. Tamás Szigeti, that leaching becomes more intense as a function of temperature, therefore, it is not

recommended to drink soft drinks left in a car parked in the sun, even after they cooled down. Petroleum fractions that contaminate our food and food contact materials can be classified into two groups: MOAH (Mineral Oil Aromatic Hydrocabons) and MOSH (Mineral Oil Saturated Hydrocarbons). For warm-blooded organisms (such as humans and farm animals), hydrocarbons containing aromatic moieties are more dangerous, because they can cause disturbances in the body's genetic system due to their genotoxicity.

Dr. Tamás Szigeti also drew attention to the fact that contact between the inner and outer surfaces of packaging materials printed on their outer surfaces and stored in a rolled up state can also cause contamination, if the product is rolled up before the printed surface is completely dry.

As food contact materials and machines can cause the mineral oil contamination of foods, Commission Recommendation (EU) 2017/84 of 16 January 2017 regulates the monitoring of mineral oil hydrocarbons in food and in materials and articles intended to come into contact with food.

Another important group of contaminants is fluorinated hydrocarbons, which, like other substances migrating from plastics, are also toxic: they can damage the kidneys, liver, thyroid, testicles and prostate, may cause high blood pressure during pregnancy, and may have immunotoxic effects in children. Perfluorinated hydrocarbons mainly occur in heat-resistant packaging and paper packaging materials non-permeable to fats. In a scientific paper it was reported that fluorinated hydrocarbons were detected in 33% of 407 samples.

A variety of methods are used for the testing of substances released from packaging materials in the laboratories for this type of analysis. The metal content of the samples is analyzed by spectroscopic techniques, while contaminants and components consisting of organic molecules are analyzed on the basis of a separation technique, mainly using some kind of chromatographic method.

Since the taste and smell of the packaged products can be altered unfavorably in the case of non-compliance of food and cosmetics packaging materials, therefore, in most cases, analytical laboratories begin the testing procedure using organoleptic methods.

Leaching processes are simulated using socalled food simulants and, in the case of volatile migratory components, using an adsorbent with the brand name TENAX. The analysis of migratory compounds is carried out from these food simulants in accordance with the relevant professional prescriptions and standards. In the case of children's toys, artificial saliva or sometimes natural, collected saliva is used for extraction.

The total amount of compounds leached is determined by mass measurement (gravimetric method), while for qualitative determination the abovementioned metal and organic analytical methods are used. Occasionally, the individual plastic polymers may also be identified by infrared spectroscopy.

In the laboratories, most often plasticizers, antioxidants, photostabilizers, banned dyes, monomers, oligomers, petroleum derivatives, bacteriostatic agents, heavy metals or fluorinated substances are measured, as mentioned at the beginning of the article.

In the case of paper and cardboard packaging, the focus is usually on primary aromatic amines, phthalates, metals, bisphenol A and MOSH/MOAH compounds, among other things.

#### NFCSO news



# Spelt flour mixed with wheat flour recalled by NFCSO

100% spelt flours were tested by the National Food Chain Safety Office (NFCSO) on the basis of a whistleblower's report. The authority inspection has shown that the products contained large quantities of common wheat flour. NFCSO ordered the distributor to recall the products named spelt flour, regardless of their date of minimum durability.

Presumably, certain spelt flours were mixed with common wheat flour, a citizen informed NFCSO. Four random samples were taken by the inspectors of the office from the products indicated by the whistleblower's report. Laboratory tests confirmed the suspicion: instead of 100% spelt flour, the sampled products contained approximately 50% wheat flour.

On-site inspections at the manufacturers of the flours were also carried out by the experts of NFCSO. Based on their experience and the laboratory results, the distributor was ordered by NFCSO to recall foods with names identical to those of the products tested that had been placed on the market up to the date of the inspection (March 14, 2019) until further authority action, regardless of their date of minimum durability.

Recalling of the products shipped before March 14, 2019, was initiated immediately by the food business operator. The procedure is currently under way, details of the company concerned and a thorough description of the infringement (including the values measured in the laboratory) are available on the infringement list: http://portal.nebih.gov.hu/jogsertesek.

Comprehensive inspection of the product range with further sampling was also initiated by NFCSO, the results of which will be available to interested parties later on the office's website.

## Information website on product recalls launched by NFCSO

From now on, information on product recalls in the food chain can be found on a new, thematic website. In the searchable database available on the website of the National Food Chain Safety Office (NFCSO) recalls from consumers indicated by businesses, as well as incidents on RASFF can be found.

It was emphasized by Róbert Zsigó, state secretary for food chain supervision, that Hungarian people are becoming increasingly aware of food safety issues. As a result, there is a growing need for quick and easily accessible information on various product recalls. Naturally, producers and distributors are also interested in and affected by the topic itself, as was highlighted by the round table discussion of NFCSO held last June with representatives of some 40 organizations.

For an effective product recall, a responsible enterprise, a supporting authority and a conscious customer are all indispensable. As the first milestone in this process, starting from this January, it is prescribed by Act no. XLVI on food chain and its control for enterprises to report product recalls resulting from self-monitoring to the food chain supervision organization. RASFF alarms make up another group of cases. To share this information quickly and efficiently, a subpage was created by NFCSO, containing the product recalls of the last six months. In addition, businesses will be able to submit their notifications to the office via a thematic e-mail address in the future.

The objective of the new interface is to provide credible and effective information. It is important for consumers to understand that, in most cases, the recall of a product by the manufacturer is a

positive and responsible business decision that is in the interest of the buyer. This is particularly true for voluntary product recalls as a result of the selfmonitoring of businesses.

In addition to the product recall subpage, probably in the second half of the year, data will also be available in the office's free cell phone application called the NFCSO Navigator. In addition, users will be notified of new cases by the app.

The product recall subpage is available at the following link: https://portal.nebih.gov.hu/termekvisszahivas

## A number of faults revealed by the Supermint oatmeal test

Of the favorite breakfast products, the complex examination of 17 oatmeals was carried out this time in the Supermint program by the experts of the National Food Chain Safety Office (NFCSO). The "authority basket" included chocolate, chocolate-flavored and unflavored oatmeals. Among other things, the presence of mycotoxins and pesticides, as well as the sugar, protein and allergen contents of the products were inspected by the experts. Two oatmeals had to be eliminated already at the beginning of the test because of DON toxin contamination, an authority proceedings because of labeling errors were initiated in a total of 14 cases.

Complex inspections of a total of 17 oatmeals (12 chocolate and chocolate flavored and 5 unflavored ones) were carried out by the staff of NFCSO in the latest Supermint product test. The products have been tested by the experts both in terms of safety and quality.

Already at the beginning of the test, in November, last year, two oatmeals failed the safety tests due to DON mycotoxin contamination. The necessary authority measures were immediately taken by the experts of NFCSO in the case of these products. The responsible companies, in cooperation with the authority, have fully complied with the required actions.

In the tradition of the Supermint tests, in addition to safety measurements, oatmeals were subjected to several other tests by the staff of NFCSO. Besides microbiological tests and testing for the presence of pesticide residues, the checking of various allergens could not be left out either. In addition, carbohydrate, fat, protein, sweetener and mineral contents were measured as well. The products complied with the specifications and the allergen

statements on their packaging.

Although the protein avenin of oat does not cause health problems in most people sensitive to gluten, it is important to note that it can easily be contaminated with wheat, barley or rye during production, as confirmed by our laboratory tests in the case of products labeled gluten-free. The packaging of three products advertised them as gluten-free, and they were indeed gluten-free based on the laboratory results, and so consumers sensitive to gluten should look for such oatmeals, declared to be free of gluten.

Once again, there were several labeling problems. Objections were raised by the experts because of the improper indication of energy content and nutritional values, as well as misleading or incorrect listing of the ingredients. In the case of one oatmeal, the nutritional values indicated on the Hungarian label were different from those in the so-called product specification and the German label.

Due to labeling problems, authority proceeding were initiated in the case of 14 of the 17 products. Food business operators are issued warnings by NFCSO for minor labeling errors and they are ordered to submit an action plan and correct the mistakes. In the case of more serious labeling problems, food inspection fines were imposed by the experts in the case of 6 oatmeals.

This time again, expert and lay judges could score the products in the popularity test of the Supermint product test using the "blind tasting" method. With the elimination of the products containing toxins, 15 oatmeals could be evaluated. In the case of both the chocolate and chocolate-flavored, as well as the unflavored products, the ranking was based on the combined assessment of external appearance, texture, smell and taste.

Of the 12 chocolate and chocolate-flavored oatmeals, testers liked the *Tesco Instant dark chocolate oatmeal* the most. Second was the product of *BonaVita*, while the *Crownfield dark chocolate oatmeal* finished third.

Of the 3 unflavored oatmeals still standing, Tesco instant oatmeal finished on top of the podium, second was the Dr. Oetker Vitalis oatmeal, while the Alnatura Basis breakfast oatmeal finished third.

Further information, interesting tidbits and detailed test results are available on the NFCSO Supermint product test site: http://szupermenta.hu/zabkasakat-teszteltunk/

### Banana test: 14 products were investigated by Supermint

Complex analysis of one of the most popular tropical fruits, bananas, was carried out by the experts of the National Food Chain Safety Office (NFCSO) in the Supermint program. A total of 14, including 3 organic fruits were checked for mold and pesticide residues, but their calcium, potassium and total sugar contents were measured as well.

In the latest Supermint product test, 1 "baby", 3 organic and 10 conventional bananas for a total of 14 tropical fruits from the shelves of 10 stores were selected for the "authority basket". During the complex inspection, the products have been tested by the staff of the office both in terms of safety and quality. Traceability documentation, as well as the labeling of the bananas, have already been checked by the plant protection inspectors of NFCSO at the commercial sampling, but nothing objectionable was found.

In the laboratories of the office, testing for mold was carried out by the experts on both the banana tip and the fruit pulp, and each banana was tested for the possible presence of more than 350 pesticide residues. In the case of both tests, the bananas complied with the prescriptions. No pesticide residues could be detected in the 3 fruits sold as organic. While the other 11 bananas contained pesticide residues, their quantities were always below the permissible limit value.

The calcium, potassium and total sugar contents of the fruits were also analyzed. Surprisingly, the potassium content of the bananas proved to be very high, they contained 3,450 mg/kg on average. According to NIPN (the National Institute of Pharmacy and Nutrition), the recommended Hungarian daily intake value for adults is 3,500 mg, so it is not an exaggeration to say that bananas are abundant in potassium.

This time again, expert and lay judges could score the products in the popularity test of the Supermint product test using the "blind tasting" method. The ranking was based on the assessment of texture, color, smell and taste. Of the 14 test subjects, the *Excelban* banana finished first, second was the *Natur aktiv bio* banana, while the *SCB Prémium* finished third.

Further information, interesting tidbits and detailed test results are available on the NFCSO Supermint product test site: http://szupermenta.hu/bananokat-teszteltunk/

### Radioanalytical work of NFCSO inspected by the European Commission

The emission and environmental control system for monitoring the peaceful use of nuclear energy was examined by the experts of the European Commission's Directorate-General for Energy between April 2 and 5, 2019, in Hungary. Among other things, inspectors could get acquainted with the sampling and analytical methods of the radioanalytical laboratory of NFCSO.

The inspection was carried out under Article 35 of the Euratom Treaty. According to this, the Commission may examine in member states the operation and effectiveness of the systems necessary for the continuous monitoring and protection of air, water and soil radioactivity.

In addition to the work of the relevant environmental protection, public health and nuclear energy supervision organizations, the activities of NFCSO were also inspected by the experts of the Commission, which was preceded by the presentation of the authority supervision system of the agricultural sector by the Ministry of Agriculture.

In the Radioanalytical Reference Laboratory of the Food Chain Safety Laboratory Directorate of NFCSO, the inspectors were informed of the annual sampling plan covering the entire food chain, in addition to the agri-environmental inspections. The sampling and analytical methods used were also presented by the laboratory experts of the office. A preliminary assessment was provided by the inspectors, with the final report expected by the end of 2019, and no shortcomings were found in the sampling plan or the work of the laboratory.

EU inspectors highlighted the importance of the certified material sample production activity related to the analytical activity. In this area, work of international importance is carried out by the reference laboratory of NFCSO, in cooperation with the International Atomic Energy Agency.

Next reassessment of glyphosate to be carried out jointly by France, the Netherlands, Hungary and Sweden

EU member states have agreed that France, the Netherlands, Hungary and Sweden will jointly be responsible for the next assessment of the glyphosate pesticide residue According to the regulations, authorization of the active substances used in pesticides have to be reviewed at regular intervals. In general, the assessment of such an application is made by a singlemember state, called the Rapporteur Member State (RMS). However, because of the extensive authorization documentation of glyphosate, it was recommended by the European Commission that a group of member states together be RMS for the next assessment of this active substance.

This proposal of the EU Commission was accepted by EU member states at the meeting of the Standing Committee on Plants, Animals, Food and Feed (SCoPAFF). At the same time, the Standing Committee accepted the amendment of Implementing Regulation (EU) 844/2012, to allow such a cooperation. The relevant authorities of France, the Netherlands, Hungary and Sweden have all agreed to be members of the Assessment Group on Glyphosate (AGG).

In the EU, the next assessment of glyphosate will start on December 15, 2019, when the pesticide manufacturing company(s) concerned must submit an application for license renewal. The complete dossier on which the reassessment is based shall then be submitted by the applicant(s) within the next six months. The AGG will submit the draft reassessment report to the European Food Safety Authority (EFSA) by June 2021. The report is then reviewed by other member states and is made public for comments by stakeholders. Based on the expert assessment and general data, EFSA prepares a summary of the compliance of the glyphosate active substance with the authorization conditions laid down in the EU pesticide regulation. Finally, the EU Commission proposes the renewal or non-renewal of glyphosate approval, which is then submitted to the SCoPAFF for voting.

The decision has to be made by December 2022 the latest, because that is the expiration date of the current authorization for glyphosate.

Further particulars and information on the process can be found on the Commission's website.

# Intelligent Food Chain Safety Analysis System successfully created

The National Food Chain Safety Office (NFCSO) has successfully completed its two-year project titled "Creation of an intelligent food chain safety analysis system" (INTEL), enabling the modernization of the food chain safety analysis system of the office and the simplification of the electronic administration of customer

affairs. The 3.805 billion HUF investment was part of the Széchenyi 2020 program, and was realized with the 100% non-refundable support of the European Union.

The primary objective of the Public Administration and Public Service Development Operational Program is to reduce the administrative burden related to the administration of customer affairs in the offices. In line with these EU objectives and the Food Chain Safety Strategy of the Hungarian Government, NFCSO's INTEL project was launched in 2017. The two-year innovative program ended on February 28, 2019. Its project delivery event, open to the press, was held by the project host on March 21, 2019, where the results of the development were summarized by dr. Péter Zarka, department head of NFCSO.

One of the priority objectives of the INTEL project was to optimize and modernize the existing data analysis systems of the authority. As a result of the development, through more and better quality food chain information flowing into the system, the analyzability of the data, the exploration of the relationship between them and the efficiency of the risk analysis systems of NFCSO improved.

INTEL has made a major contribution to the simplification of authority tasks. Reorganization of customer-side processes and making them electronic have reduced the administrative time, the administrative burden on food chain operators has been significantly reduced, and NFCSO has also been connected to several centralized electronic administrative services.

The unified data model and information management of the food chain has been developed, which mainly improves the management of animal health master data, but also supports the onsite inspections of NFCSO, as well as activity registration processes. The systematically created IT architecture can be further expanded by element later, and can be extended to other areas of food safety.

The INTEL system development was another important step towards the faster and more efficient handling of risk arising in the domestic food chain and current problems.

More information on the project with code no. KÖFOP-1.0.0-VEKOP-15-2016-00016 can be found on the website of NFCSO.