

A NÉBIH szakemberei megmérték az élelmiszer-biztonsági szempontból fontos paramétereket, mint a metanol-, a hidrogén-cianid-, az etil-karbamát- és a réz tartalom. Az ellenőrzött tételek – egy kivételével – megfelelőek voltak. Egy pálinka etil-karbamát tartalma azonban túllépte az ajánlott határértéket, ezért a hatóság megtiltotta a termék forgalmazását. Kilenc pálinkánál szűrőpróbaszerűen elvégezték a termék gyümölcseredetére vonatkozó izotópvizsgálatokat is.



A nyomon követhetőséget is ellenőrizték a NÉBIH munkatársai. Kiemelt figyelmet fordítottak arra, hogy a szilvapálinkák gyümölcseredete visszavezethető legyen magyarországi termőhelyekre. Megnyugtató, hogy a vizsgált pálinkák az előállítók részéről minden esetben nyomon követhetőek voltak, és a gyümölcseredetre vonatkozó izotópvizsgálatok is megfelelőnek bizonyultak. Szomorú tény viszont, hogy a kereskedelemben a forgalmazók 14 esetben nem tudták a jogszabályban előírt módon, a nyomon követhetőség megfelelő egyedi jelöléssel ellátott termékkísérő okmányokat bemutatni. Emiatt a kereskedelmi üzletlancok élelmiszerlánc felügyeleti bírságra számíthatnak, amelynek összege várhatóan 700 ezer forint lesz.

Összességében elmondható, hogy a tesztelt, hazai forgalomban kapható szilvapálinkák többsége élelmiszer-biztonsági szempontból megfelelő. A korábbi hatósági tapasztalatokhoz képest kedvezőbb eredményt mutatott a jelölések ellenőrzése is. 30 tételből csupán két terméknél kellett apróbb jelölési hiba miatt gyjelmeztetni az előállítókat.

Ha Szupermenta termékteszt, akkor nem maradhatt el a kedveltségi vizsgálat sem, amelynek során javarészt szakértő, kisebb számban laikus kóstolók bírálták a szilvapálinkákat. Az értékelők pontozták a termékek illat- és íz tisztaságát, illat- és íz karakterét, valamint harmóniáját.

A kóstolók kedvence az Agárdi Miraculum Szilva Pálinka lett. A Szupermenta rangsorban másodikként végzett a Rézangyal Barrique Szilva pálinka. A dobogósok sorát harmadik helyen a Nobilis Forte 55° Szilva Pálinka zárta.

További információk és a részletes vizsgálati eredmények elérhetők a NÉBIH Szupermenta termékteszt oldalán: <http://szupermenta.hu/kifoztuk-melyik-a-legjobb-szilvapalinka/>

## Food testing – Conference of UN member states

**At the CCMAS conference that took place in Budapest with the participation of representatives of more than fifty UN member states and leading experts of the FM and NÉBIH, decisions were made about crucial analytical methods, regarding the world's food trade and the laboratory testing of foods. Results of the conference were summarized to Laboratorium.hu by the chairman of the Hungarian Working Group...**

At the event that took place between May 8 and 12, Hungarian policy was represented by Dr. Márton Oravecz, president of the National Food Chain Safety Office (NÉBIH), and Dr. Lajos Bogárnár, Hungary's chief veterinary officer and deputy state secretary of the Ministry of Agriculture (FM) responsible for food chain supervision, who reminded participants of the Codex's role in public health, food chain safety and fair trade, and of the importance of the independent work of the organization.

“The methods and recommendations adopted at this conference will play a decisive role in the food trade of UN member states” - said to Laboratorium.hu Dr. Tamás János Szigeti of the independent laboratory WESSLING Hungary Kft., which has been performing food analyses in Hungary for twenty-five years, chairman of the Hungarian Working Group of the CCMAS.

### The significance of CCMAS conference

The food testing work related to the food trade among UN member states has to be based on methods that can be applied by all parties involved in the transactions. At the same time, the existence of appropriate performance characteristics is also required of commonly accepted methods. For example, it is extremely important for the analytical results of the accredited laboratories of the different countries to be similar, within mutually accepted measurement uncertainty limits, for a certain food ingredient, or for unwanted, contaminating infectious agents – explained Dr. Tamás János Szigeti, adding that a continuously revised method collection – Codex standards – is maintained by the Codex Alimentarius Committee for this work, and this collection is recommended for the laboratory analyses of the above-mentioned transactions.

At the CCMAS conferences, the revision and classification of these methods, available free of charge to everyone, are performed.

Although these documents are not binding, they serve as the basis for regional and national food regulations, and recommendations of the Codex Alimentarius are also of crucial importance when concluding commercial contracts – explained Tamás Szigeti, who has been coordinating the work of Hungarian participants of the event for eight years, regarding the methods and analytical principles to be discussed in the given year.

### **The Codex Alimentarius and its Hungarian aspects**

The Codex Alimentarius Commission and its Codex Committee on Methods of Analysis and Sampling (CCMAS) was established by the Food and Agriculture Organization of the United Nations and the World Health Organization (WHO), to develop international standards, directives and guidelines regulating the most important food ingredients and the maximum acceptable levels of foreign material in food.

Hungary has been an active participant of the work since 1963, and the prestigious international conference has been held in Budapest for several decades, this year's edition being the 38th. It has been a special honor for us that the chairman and deputy chairman of the conference has been continuously given by Hungary. Among the chairmen, Prof. Dr. Péter Biacs, Prof. Dr. Pál Molnár and Prof. Dr. Árpád Ambrus have been adding to the reputation of the Hungarian food testing profession. Starting from this year, chairing the conference has been taken over by Dr. Marót Hibbey.

Regulations of the Codex documents have been gradually incorporated into Hungarian food law. In 1972, Hungary was entrusted with the secretariat of one of the committees, the Committee on Methods of Analysis and Sampling, as well as the organization of the meetings of the committee. It is the organization of this, in which WESSLING Hungary Kft., as the only independent laboratory, has been participating for eight years – said Tamás Szigeti, who also pointed out that decisions at the CCMAS conference are not made by voting, but on a consensus basis, therefore, a successful conference has a special significance.

### **How is work performed and what happened in Budapest?**

The list of laboratory methods decided on at the Budapest conference determines the compositional and microbiological safety of foods, whether it is about fats, oils, quick-frozen fruits and vegetables, spices, dietetic foods or seaweeds

suitable for eating – to mention just a few of the foods discussed at the conference.

During the preparatory work for the conference series, recommendations are made by voluntarily formed international electronic working groups about the methods (standards) to be discussed at the upcoming conference. Since all UN member states are members of the conference, the cooperation of the experts of more than 160 countries has to be realized in the work of the Codex Alimentarius Committee – revealed Dr. Tamás János Szigeti. “This is one of the reasons why the adoption of a certain analytical method into the list of Codex standards or a decision about the modification of a procedure can take several years – added Tamás Szigeti.

For food safety reasons, during the analysis of the fatty acid sequence of the lipid content of foods, the appropriate method has to be used, for example, for the separation and quantification of cis and trans unsaturated fatty acids (this is particularly difficult in the case of trans-elaidic acid and trans-vaccenic acid). There is a limit value in force for trans-elaidic acid in EU member states, however, trans-vaccenic acid comes from fats of animal origin, therefore, its amount in foods cannot be restricted by law. Harmonization of the analytical methods of the two above-mentioned fatty acids is expected to continue in the future at the upcoming CCMAS conferences.

Another example was also mentioned by the laboratory expert: extremely costly LC/MS/MS systems are used during the instrumental analysis of marine biotoxins. However, there are laboratories in certain countries that cannot afford to purchase and operate such instruments. It was suggested by several people at this year's conference that the category IV biological method of the analytical methods of marine biotoxins should be moved by the CCMAS conference to the group of category III procedures, so that the testing performed using the biological method could be a decisive method when analyzing marine foods of disputed origin.

### **The closing document**

The closing document of this year's conference was drawn up at the Rome headquarters of the FAO, based on the memos of the recordkeepers continuously present at the meeting. The closing document was discussed on the last day of the event, May 12: each line of the text was read by the participants, and it was accepted by them paragraph by paragraph without voting, by consensus. The final closing document will be published on the Codex Alimentarius website.

## NÉBIH news

### *Five years in the service of public good*

**On March 15, it will be five years since the start of the work of the National Food Chain Safety Office (NÉBIH). Results of the organization, committed to the safety of the Hungarian people and the Hungarian food chain speak for themselves: prevention of VAT and tax evasion in the amount of 9.5 billion HUF, more than 12 million laboratory tests and half a dozen successful awareness-raising campaigns are on the balance sheet, among other things.**

It was five years ago that the government decided to establish an authority supervising the Hungarian food supply system in a complex way, from the land to the table. At the same time, the establishment of the new organization, in accordance with the principles of the Food Chain Safety Strategy, also meant a completely new concept in food control: all of the risks related to the food chain are supervised by NÉBIH, and it is capable of swift, uniform and effective action.

In the life of NÉBIH, not only the areas of expertise, but also the roles are diverse: it is a helping, advisory, knowledge-sharing center, as well as a strict decision-maker. Each customer, buyer or producer who complies with the regulations is considered a partner by the authority. With a host of trainings, lectures and awareness-raising programs, it tries to share the extensive knowledge which is at its disposal, in certain cases in areas of expertise that go back to more than one hundred years. The goal of this endeavor is to provide assistance in everyday life, whether it is about the interpretation of the law, preparation for an audit or the support of customer decisions.

In addition of businesses, of the utmost importance are the preparation of the people, broaden their knowledge, in order for them to be able to promote both their own and the environment's safety with their everyday decisions. NÉBIH sees customers as partners as well, and in this spirit, the general public is informed about major food chain safety events without delay, and the people can contact the authority free of charge through the green number of NÉBIH. Knowledge sharing is also served by the half dozen awareness raising campaigns of the authority, for example, the one named Food wisely, presenting food safety practices, another one named Find an owner, focusing on responsible pet-keeping, the campaign titled Without leftover, with the focus on food waste, or the program for the prevention of rabies. The Supermint program helps the people with complex product tests in the maze of the is-

sue of quality. Since the launch of the program in November 2014, roughly 15 thousand laboratory tests have been performed by the experts of NÉBIH on more than 800 products of 32 product categories.

When investigating the food chain, a distinction should be made between the occasional mistake of a law-abiding company and intentionally harmful and fraudulent behavior. In the past five years, those committing mistakes have been helped by the authority with advice instead of imposing fines, in order to correct problems quickly, however, in the case of those knowingly violating the laws and perpetrating unlawful activities, the role of the strict decision-maker was performed consistently. In the case of the latter group, NÉBIH acts with all the means at its disposal, because its objective is the elimination of the gray and black economies. Today, focus on this area has become particularly important, because in terms of illegal activities, food counterfeiting has become the second most significant area on an international level, behind drug-related activities.

In the fight against those in the wrong, a number of effective "tools" have been developed by NÉBIH in recent years. One of these is its unit called the Directorate of Priority Affairs, specializing expressly in fraud and counterfeiting, whose staff works with a success rate over 90%, and through their work tax evasion in the amount of 9.5 billion HUF has been prevented. Effective investigations are performed by NÉBIH through the State Fish Department in the area of fishing and angling, and through the EUTR in the timber trade segment. The office has also been conducting investigations of unfair trade practices for years. In the future, the effectiveness of the investigations will be assisted by the Intelligent Food Chain Safety Analysis System (INTEL) as well, making it possible to find those performing illegal activities more efficiently through data mining, using existing data.

The accuracy and efficiency of the professional work are ensured by the laboratory network of NÉBIH, whose staff performed more than 12 million tests over the past five years. Newer and newer methods in the fields of fraud and counterfeiting require constant renewal on behalf of the authority as well. The food chain supervision fee makes it possible for NÉBIH to develop its laboratory network continuously, in order for the experts to have state-of-the-art methodology at their disposal all the time.

Although, in terms of its age, NÉBIH is still considered a young organization, it leaves an exciting and active five-year period behind. The goal

of the office is, in the interest of the Hungarian people and fair stakeholders of the food chain, to continue to perform its important authority and knowledge sharing roles at the same, or possibly at even higher levels in the future.

Several interesting infographics are available on the NÉBIH website: [http://bit.ly/5\\_ev\\_szamok](http://bit.ly/5_ev_szamok)

### **Important change in the compulsory markings on food vending machines**

**Starting from April 1, 2017, on food vending machines selling non-prepackaged products, it is also mandatory to indicate allergenic substances. This modification does not affect machines that offer prepackaged foods (e.g., chocolate, sandwiches), in this case the information is still provided to customers on the packaging of the food.**

In the case of coffee, tea and other beverages sold from food vending machines, the names of the products could be read next to the buttons. In addition, if they contained sweeteners, this had to be indicated (for example, “Chocolate cappuccino with sweeteners” or “Lemon tea with sugar and sweeteners”), as well as the presence of azo dyes.

Starting from April 1, 2017, the list of substances and products present in the finished product, or causing allergies or intolerance, is added to the mandatory elements. The requirement can be met by listing the allergens next to the name of the product (e.g., “contains milk”), or by a code system, the explanation of which is clearly legible in a separate table placed on the machine.

In the case of food vending machines selling non-prepackaged products, the mandatory information is as follows:

- the name of the food,
- in the case of products manufactured with sweeteners: the expressions „with sweetener (sweeteners)” or „with sugar (sugars) and sweetener (sweeteners)”, and the marking “... name or E number of the dye(s): may have adverse effects on the activities and attention of children”, in the case of azo dyes [Sunset Yellow FCF (E 110), Quinoline Yellow WS (E 104), Azorubine (E 122), Allura Red AC (E 129), Tartrazine (E 102), Ponceau 4R or Cochineal Red A (E 124)],
- the list of substances that cause allergies or intolerance (e.g., „contains milk”).

Markings of prepackaged products sold from vending machines (e.g., chocolate, sandwiches) do not have to appear on the outside of the machines. Customers can read all the information directly on the product label, which should contain all required data.

### ***NÉBIH cooperation with the most prestigious research institutes of Europe***

**The National Food Chain Safety Office (NÉBIH) participated, as a major member of an international consortium, in a European Union Horizon 2020 R&D and Innovation Framework Program tender. The goal of the 100% EU funded, five-year-long project, which was launched in May, is to deepen the knowledge of the population about food chain safety, improve their risk awareness and to reduce the number of food-borne diseases, among other things. In the cooperation, as a recognition of its risk communication work and professional experience, a major role is played by the Hungarian food chain safety authority.**

Experts of the authority had been playing an active role in the preparation and writing of the two-round tender since the beginning, that is, since the end of 2015. There are universities, institutes, government organizations and companies from 14 countries, cooperating in the consortium. A multidisciplinary research group has emerged in which consumer science and microbiology, food technology and industrial design are combined. The complexity of the cooperation makes it possible to develop new solutions and possibilities in the field of food chain safety, with the participation of Hungarian experts, with the ultimate winners being the customers themselves.

The goal of the 100% EU-funded research project, which was launched in May, is to deepen the knowledge of the population about food chain safety, to improve their risk awareness, to improve household practices related to the purchase, storage and consumption of foods, and thus to reduce the number of food-borne diseases.

Consortium members will develop educational, policy and communication programs (for example, games and applications), but they are planning on developing kitchen utensils as well. The work will be carried out on the basis of the results of opinion polls taken in the first phase of the project.

In recognition of its risk communication performance in recent years, NÉBIH was selected as the leader of the working group on the development of policy models and authority risk communication. In addition to the authority role, project members also count on the work of the office as a research institute, as evidenced by its participation in other working groups as well. It is a major recognition that NÉBIH was also included in the governing body of the consortium. Taking all these into account, the Hungarian authority became one of the most important members of the 32-member cooperation.

Coordination of the consortium is performed by the Norwegian NOFIMA institute, who has a great deal of tender experience and who already successfully completed several tender programs.

### ***Supermint plum palinka ranking completed***

**30 plum palinkas were checked in its latest Supermint product test by the National Food Chain Safety Office (NÉBIH). In addition to sensory and preference tests, important safety parameters were also tested in the authority laboratories. In the end, the authority only had to act in the case of a single product.**

30 plum palinkas, easily available to consumers, were tested by the staff of NÉBIH. Aged and premium products were both included among the drinks tested.

Important food safety parameters were tested by the experts of NÉBIH, such as the methanol, hydrogen cyanide, ethyl carbamate and copper contents. All the lots checked were adequate, with only one exception. Unfortunately, the ethyl carbamate content of one palinka exceeded the recommended limit value, therefore, its distribution was prohibited by the authority. Isotope tests, related to the fruit origin of the product, were carried out on nine, randomly selected palinkas.

Traceability was also checked by the staff of NÉBIH. Special attention was paid to being able to trace the fruit origin of plum palinkas to Hungarian growing sites. It was reassuring that the palinkas tested were always traceable from the producers' end in all cases, and isotope test regarding the fruit origin proved to be satisfactory as well. However, it is a sad fact that in 14 cases, distributors could not produce the legally required product accompanying documents, adequate for tracing and bearing a unique marking,

in 14 cases. For this reason, retail chains can expect a food chain supervision fine, with an expected amount of 700,000 HUF.

Overall, it can be said that, from a food safety point of view, most of the plum palinkas tested, which are commercially available in Hungary, proved to be adequate. Compared to previous authority experience, checking of the labels also resulted in a better overall picture. Of the 30 lots, producers only had to be warned for minor labelling errors in the case of two products.

If there was a Supermint product test, the preference test could not be left out either, during which mainly experts, and a smaller number of lay judges evaluated the plum palinkas. The purity of smell and flavor, as well as the character of smell and flavor of the products, and also their harmony was scored by the judges.

The favorite of the tasters was the Agárdi Miraculum Plum Palinka. The Rézangyal Barrique Plum Palinka finished second in the Supermint ranking. The podium was completed by the Nobilis Forte 55° Plum Palinka.

Further information and detailed test results are available at the NÉBIH Supermint product test site:

<http://szupermenta.hu/kifoztuk-melyik-a-legjobb-szilvapalinka/>