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**PERCEPCIJA O HACCP  
 NORMAMA I RAZINA  
 KVALITETE IMPLEMENTACIJE  
 HACCP-A U STRUCI**

**PERCEPTION OF HACCP  
 STANDARDS AND THE  
 QUALITY OF HACCP  
 IMPLEMENTATION IN THE  
 PROFESSION**

**SAŽETAK:** U okviru obrazovnog programa VPŠ Utilus provode se obavezne studentske radionice istraživanja pojava i fenomena u struci, koje imaju za cilj istražiti i ukazati na trendove u stručnom okruženju, a koji su u direktnoj ili neposrednoj povezanosti s razinom kvalitete usluge. Prezentiranje rezultata istraživanja studentima podiže kvalitetu obrazovnog programa, a može biti od velike koristi nadležnim institucijama države u svrhu donošenja adekvatnih mjera i odluka. Istraživanje koje je provedeno na reprezentativnom uzorku od 53 poslovna subjekta koji se bave ugostiteljsko-turističkom djelatnošću pokušava dobiti odgovore na pitanja:

- ➲ Koji problemi u poslovnoj praksi otežavaju proces implementacije HACCP normi u RH?
- ➲ Kako se stručno osoblje odnosi prema poštivanju zakonskih odredaba u svezi primjene HACCP-a?
- ➲ Odnos poslovnih subjekata prema upravljanju rizicima u poslovanju s hranom prema modelu ISO 22000.

Kvaliteta primjene normi ISO 22000 kao okvira za usklađivanje različitih normi (ISO 9001 i ISO

**ABSTRACT:** As part of the curriculum of Utilus Business School, there are compulsory student workshops where events and phenomena in the profession are investigated with the aim of researching and identifying trends in the professional environment which are directly or indirectly linked to the quality level of services. The presentation of the results of such research helps students by improving the curriculum, and can be quite useful to the competent state institutions for the purpose of adopting suitable measures and decisions. The conducted research, which was carried out on a representative sample of 53 economic operators engaged in hospitality and tourism activities, focuses on finding answers to the following questions:

- ➲ Which problems in business practice make the process of implementing HACCP standards difficult in the Republic of Croatia?
- ➲ How far do professional staff comply with the legal provisions regarding the implementation of HACCP?
- ➲ How do economic operators relate to risk management in activities involving food under the ISO 22000 model?

14001) i standarda u jednu globalnu normu koja je primjenjiva na sve izravne i neizravne sudionike u lancu prehrane, pa stoga i u ugostiteljsko-turističkim objektima, jedan je od ključnih preduvjeta koji osiguravaju visoku kvalitetu usluge.

Norma ISO 22000 obuhvaća sljedeće:

- ❖ Zahtjeve za preduvjetne programe, kao što su dobra proizvođačka i higijenska praksu;
- ❖ Zahtjev za primjenu HACCP plana;
- ❖ Zahtjev za implementaciju sustava upravljanja rizicima prema HACCP normama.

Ova će norma tvrtkama koje žele dobrovoljno prihvatići i certificirati svoje operacije u skladu s njezinim odredbama omogućiti učinkovito uklapanje HACCP koncepta u usklađen sustav upravljanja sigurnošću hrane.

**KLJUČNE RIJEČI:** ISO 22000, HACCP (analiza i kontrola kritičnih točaka u poslovanju), upravljanje rizicima, edukacija, CCP (kritična kontrolna točka), ocjena razine kvalitete

The high-quality implementation of the ISO 22000 standards as a framework for the alignment of various standards (ISO 9001 and ISO 14001) into a single global standard applicable to all direct and indirect participants in the food chain, including hospitality and tourism facilities, is one of the key preconditions for high-quality service.

The ISO 22000 standard includes the following:

- ❖ Requirements for prerequisite programmes, such as good manufacturing and hygiene practice;
- ❖ Requirements for the implementation of the HACCP plan;
- ❖ Requirements for the implementation of a risk management system under HACCP standards.

This standard will enable companies that desire to voluntarily accept and certify their operations in accordance with its provisions to effectively incorporate the HACCP concept into a harmonised food safety management system.

**KEY WORDS:** ISO 22000, HACCP (Hazard Analysis and Critical Control Point), risk management, education, CCP (Critical Control Point), level assessment

## UVOD

U RH je prema Zakonu o hrani<sup>1</sup> jasno određena obaveza za sve poslovne subjekte koji posluju s prehrambenim proizvodima: "uspostaviti i provoditi redovite kontrole higijenskih uvjeta i proizvodnje u svakom objektu provedbom preventivnog postupka SAMOKONTROLE razvijenog u skladu sa sljedećim načelima sustava analize opasnosti i kritičnih kontrolnih točaka (u dalnjem tekstu HACCP)".

Zakon je u punoj primjeni od 1. kolovoza 2006.godine.

### *Ciljevi istraživanja*

Na reprezentativnom uzorku pokušati spoznati u kojoj mjeri je danas, nekoliko godina od početka implementacije u RH, HACCP kao najpoznatiji sustav za upravljanje rizicima u poslovanju s hranom zaživio u ugostiteljsko-turističkoj djelatnosti.

### *Predmet istraživanja*

Percepcija o HACCP normama, razina i kvalitetu implementacije HACCP normi u struci.

### *Način istraživanja*

Terensko intervjuiranje odgovornih osoba u poslovnim subjektima.

### *Područje istraživanja*

Hotelsko ugostiteljski poslovni subjekti RH.

### *Metode istraživanja*

Induktivna metoda – sistemski i dosljedna primjena induktivnog načina zaključivanja, u kojem se na temelju pojedinačnih ili posebnih činjenica dolazi do zaključka o općem sudu, od zapažanja konkretnih pojedinačnih slučajeva i fakata dolazi se do općih zaključaka, od poznatih pojedinačnih slučajeva polazi se nepoznatom općem, od izučenog neizučenom, od većeg broja pojedinačnih pojava vrše se uopćavanja.<sup>2</sup>

Deduktivna metoda – metodom dedukcije provest će se klasifikacija i operacionalizacija indikatora deduciranih iz teorijskih pojmovi putem postupka teorijske dedukcije.<sup>3</sup>

## INTRODUCTION

In the Republic of Croatia, the Food Act<sup>1</sup> clearly stipulates obligations which bind all economic operators engaged in the business of food "to establish and carry out regular controls of the hygienic conditions and production in every facility through the preventive procedure of SELF-CONTROL developed in accordance with the following principles of the Hazard Analysis and Critical Control Point system (hereinafter: HACCP)".

The Act has been applied from 1 August 2006.

### *Aims of the research*

Based on a representative sample, to make an attempt to find out to what extent HACCP, as the best known system for risk management in the food business, has come to life in the hospitality and tourism business today, several years after the commencement of its implementation in the Republic of Croatia.

### *Subject matter of research*

The perception of HACCP standards and the level and quality of implementation of HACCP standards in the profession.

### *Research method*

Field interviews with responsible persons in economic operators.

### *Area of research*

Hotel and hospitality economic operators in the Republic of Croatia.

### *Research methods*

Inductive method - Systematic and consistent use of the inductive method of reasoning where conclusions about a general principle are made based on individual or special facts, where general conclusions are derived from specific individual cases and facts, where known individual cases lead to the unknown general, from the studied to unstudied, from a larger number of individual phenomena to generalisations.<sup>2</sup>

Operacionalizacija kao premošćivanje jaza između različitih nivoa općenitosti, teorijskog pojma i varijabli koje razumijevamo kao indikatore deducirane iz teorijskog pojma, izravno nas suočava s problemom valjanosti, ili problemom određenja kriterija za valjanost provedenog postupka logičke dedukcije.

Mjerenje je usavršavanje i preciziranje klasifikacija. Da bi se pojam mogao neposredno opažati – mjeriti on mora biti jasan, razgovijetan i kvantificiran. Svaka razvijena klasifikacija polazi od najopćenitijeg pojma, koji svojim opsegom obuhvaća čitav iskustveni skup pojava na koji se klasifikacija odnosi. Taj najopćenitiji pojam od kojega počinje dijeljenje (dedukcija) naziva se u logici najviši rod (*summum genus*).

#### *Vremenski okvir istraživanja*

Istraživanje je provedeno u vremenskom prostoru od 15.01.2010. do 01.07.2010. godine.

#### *Reprezentativni uzorak*

53 (pedeset i tri) poslovna subjekta.

## **REZULTATI ISTRAŽIVANJA**

### **Anketno pitanje broj 1**

#### *Naziv hotelskog ili ugostiteljskog objekta*

Nije obrađeno radi diskrecije poslovnih subjekata.

### **Anketno pitanje broj 2**

#### *Vrsta turističko-ugostiteljskog objekta*

Cilj postavljenog pitanja je dobiti uvid u strukturu anketiranih poslovnih subjekata kako bi se dobila realna saznanja o predmetu istraživanja: "Upravljanje rizicima u poslovanju s prehrambenim proizvodima u malim ugostiteljsko-turističkim objektima".

Evidentiranjem i analizom poslovnih subjekata po strukturi (vrsti djelatnosti i poslovanja objekta) – može se utvrditi način upravljanja rizicima u poslovanju s hranom prema namjeni i

Deductive method - The deduction method is used to carry out the classification and operationalisation of indicators deduced from theoretical terms through the theory deduction procedure.<sup>3</sup>

By operationalisation, we mean bridging the gap between various levels of the general, the theory term and variables which we understand as indicators deduced from the theory term, and in this way we directly confront the problem of validity or the problem of determining the criteria for the validity of the conducted logical deduction procedure.

Measurement is the act of perfecting and making classification more precise. In order to be able to directly observe or measure a term, it must be clear, comprehensible and quantified. Any classification begins with the most general term, which includes a whole experiential set of phenomena to which the classification refers. The most general term from which the deduction begins is referred to in logic as the highest genus (*summum genus*).

#### *Time frame of research*

Research was carried out in the period from 15 January 2010 to 1 July 2010.

#### *Representative sample*

53 (fifty-three) economic operators.

## **RESEARCH RESULTS**

### **Question 1**

#### *Name of the hotel or hospitality facility*

Question 1 was not processed in view of the need for discretion regarding economic operators.

### **Question 2**

#### *Type of tourism and hospitality facility*

The aim of the question is to gain an insight into the structure of economic operators in order to derive realistic observations about the subject matter of the research: "Risk Management in Operations with Food in Small Tourism Hospitality Facilities".

## OGLEDNI PRIMJERAK LISTE ZA INTERVJUIRANJE

VISOKA POSLOVNA ŠKOLA UTILUS  
Za hotelski i turistički menadžment, s pravom javnosti  
Zagreb, Ivana Trnskog br. 3

Datum \_\_\_\_\_

Ime i prezime studenta koji provodi anketu \_\_\_\_\_  
Metoda anketiranja \_\_\_\_\_

### ANKETNI LIST

1. Naziv hotelskog ili ugostiteljskog objekta \_\_\_\_\_
2. Vrsta ugostiteljskog objekta \_\_\_\_\_
3. Funkcija anketirane osobe \_\_\_\_\_
4. Stručna spremam anketiranog \_\_\_\_\_
5. Da li ste započeli s primjenom HACCP normi u svome poslovanju? \_\_\_\_\_
6. Koja su vaša saznanja o HACCP-u struci?  
\_\_\_\_\_
7. Ukoliko nisu, koji su razlozi nepokretanja postupka HACCP-a?  
\_\_\_\_\_
8. Jeste li pohađali ili proveli bilo kakvu edukaciju osoblja u svezi HACCP-a?  
\_\_\_\_\_
9. Koje su, po vama, najveće poteškoće u poslovanju danas?  
\_\_\_\_\_
10. Da li ste imali pojave kvarenja namirnica u Vašem poslovanju?  
\_\_\_\_\_
11. Koji dio procesa u vašem poslovanju predstavlja najkritičniju točku u smislu nadzora rizika?  
\_\_\_\_\_
12. Koliko imate pomoći, u svezi implementacije HACCP-a, od nadležnih Ministarstava?  
\_\_\_\_\_
13. Koji je Vaš stav o HACCP-u, mislite li da je neophodna primjena HACCP-a u struci?  
\_\_\_\_\_

Napomena: VPŠ UTILUS GARANTIRA DISKRECIJU I ZAŠTITU SVIH PODATAKA IZ ANKETE KOJI SE ODNOSE NA POSLOVANJE ANKETIRANOG POSLOVNOG SUBJEKTA!

Potpis studenta  
\_\_\_\_\_

## SAMPLE QUESTIONNAIRE

UTILUS BUSINESS SCHOOL  
for Tourism and Hotel Management (Accredited)  
Zagreb, Ivana Trnskog, 3

Date \_\_\_\_\_

First and last name of the student conducting the survey \_\_\_\_\_

Survey method \_\_\_\_\_

## QUESTIONNAIRE

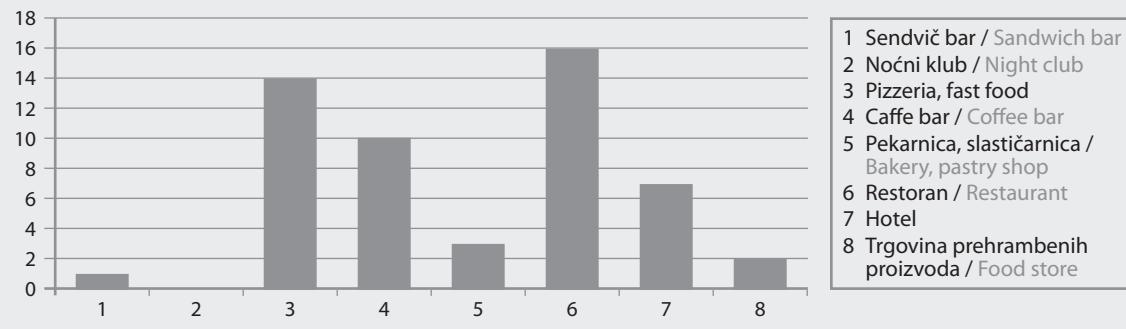
1. Name of the hotel or hospitality facility \_\_\_\_\_
2. Type of hospitality facility \_\_\_\_\_
3. Function of the interviewee \_\_\_\_\_
4. Professional qualifications of the interviewee \_\_\_\_\_
5. Have you begun to implement HACCP standards in your business? \_\_\_\_\_
6. What do you know about HACCP in the profession?  
\_\_\_\_\_
7. If you have not launched HACCP, what are the reasons for this?  
\_\_\_\_\_
8. Have you attended or conducted any staff training regarding HACCP?  
\_\_\_\_\_
9. In your opinion, what are the greatest difficulties in business today?  
\_\_\_\_\_
10. Have you had any incidents with spoilt food in your business?  
\_\_\_\_\_
11. Which part of the process in your business is the most critical point in terms of risk control?  
\_\_\_\_\_
12. How much help do you receive from the line ministries for the implementation of HACCP?  
\_\_\_\_\_
13. What is your standpoint on HACCP and, in your opinion, is the implementation of HACCP in the profession necessary? \_\_\_\_\_

Note: UTILUS BUSINESS SCHOOL GUARANTEES DISCRETION AND THE PROTECTION OF ALL INFORMATION IN THE SURVEY RELATING TO THE BUSINESS OF THE ECONOMIC OPERATOR INTERVIEWED

Student's signature  
\_\_\_\_\_

**GRAFIKON 1. VRSTA TURISTIČKO-UGOSTITELJSKOG OBJEKTA**

**GRAPH 1. TYPE OF TOURISM-HOSPITALITY FACILITY**



vrsti ugostiteljsko-turističkog objekta, odnosno mogu se analizirati poteškoće u odnosu na vrstu i opseg poslovanja.

Anketom (istraživanjem) je obuhvaćeno 7 vrsta objekata (prema opisu djelatnosti) prema vrijednostima prikazanim u Grafikonu 1. Na uzorku od 53 poslovna subjekta može se zaključiti da su anketom obuhvaćeni objekti "brze hrane" (*fast food*) sa 26,41%, a minimalan broj objekata nalazi se u grupi "sendvič bar" – 1 od 53, tj. 1,88%. Obuhvaćeno je 7 hotela (13,2%) i 16 restorana (30,1%).

Analizirajući šaroliku strukturu anketom obuhvaćenih poslovnih subjekata, bit će zanimljivo istražiti način primjene i saznanja o upravljanju rizicima u poslovanju. Caffe barovi, kao najmanje rizična skupina objekata, zastupljeni su u anketi s 18,8%.

### Anketno pitanje broj 3

#### Funkcija anketirane osobe (osoblja)

Svrha navedenog pitanja u okviru istraživanja jest utvrditi korelaciju između stope obrazovanja, znanja i vještina u svezi upravljanja rizicima u poslovanju osoblja kroz edukaciju i usavršavanje u struci.

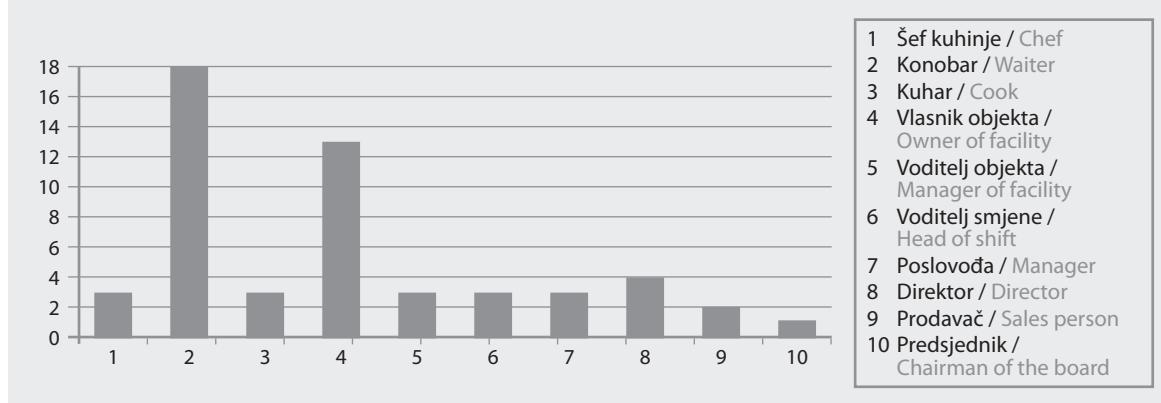
Struktura osoblja prema nazivu radnog mjesta, ovlastima u okviru posla i školskoj spremi može

By recording and analysing economic operators based on their structure (type of activity and business of the operator), it is possible to determine the method of risk management in operations with food based on the purpose and type of tourism hospitality facility, that is, to analyse difficulties in relation to the type and scope of business.

The survey included 7 types of facilities (based on the description of activity). According to the data shown in Graph 1 and based on a sample of 53 economic operators, it is evident that fast food facilities account for 26.41%, and that the smallest number of facilities (1 out of 53) pertains to the group sandwich bar 1,88%. Hotels account for 13.2% of the total (7 out of 53) and restaurants – 30.1% (16 out of 53).

By analysing the varied structure of economic operators covered by the survey, it will be interesting to research the method of application and knowledge of risk management in their businesses. Coffee bars, as the least risk-exposed group of facilities represented in the survey, account for 18.8% of the total.

**GRAFIKON 2. FUNKCIJA ANKETIRANOG OSOBLJA – OSOBE NA RADNOM MJESTU**  
**GRAPH 2. FUNCTION OF THE STAFF INTERVIEWED – PERSONS IN THEIR WORK POST**



voditi do različitih zaključaka u odnosu na konačne rezultate istraživanja. Posebice (npr.) opća ocjena upravljanja rizicima u poslovanju u odnosu na dio rukovodećeg osoblja i anketiranog stručnog osoblja.

Analizom anketiranog osoblja zaključuje se (Grafikon 2) da je na uzorku od 53 anketirane osobe najviše zastupljen broj uslužnog osoblja – 18 od 53, odnosno 33,96%, što se može logično objasniti vrstom posla, jer je jasno da uslužno osoblje dočekuje gosta, a u ovom slučaju je gost osoba koja provodi intervjuiranje. Također je zanimljiv podatak da je istraživanjem obuhvaćeno 13 vlasnika objekata, odnosno 24,52%. Ovaj podatak upućuje na zaključak visokog postotka prisutnosti vlasnika u objektu, što se može dovesti u usku vezu s nedostatkom kvalitetnog osoblja na tržištu rada. Broj rukovodećeg osoblja obuhvaćenog istraživanjem je 12 od ukupno 53 osobe, odnosno 22,60%. Postotak anketiranih iz rukovodstva – top menadžmenta je 5, odnosno 9,43%, što će eventualno imati utjecaja na opći stav o primjeni HACCP-a u okviru poslovanja s prehrambenim proizvodima.

### Question 3

#### *Function of the interviewee (member of staff)*

The purpose of the given question is to establish the relationship between the level of education, knowledge and skills in risk management in the operations of the staff through education and training in the profession.

The staff structure based on the title of the work post, the authority of the staff in their job, and their academic level may lead to conclusions which are different in relation to the final results of the research. In particular, what might be shown, for example, is the general appraisal of risk management by part of the management staff and by the professional staff surveyed.

Following an analysis of the staff surveyed, it can be concluded (Graph 2) that in the sample of 53 persons surveyed, service staff account for the greatest share (18 out of 53 or 33.96%) which can be logically explained by the type of business, because it is clear that service staff welcome guests, and in this case the person conducting the interview is a guest. Furthermore, it is also interesting that in the research 13 respondents were owners of

## Anketno pitanje broj 4

### Stručna školska sprema anketiranog osoblja

Cilj navedenog pitanja (br. 4) je na osnovu stručne školske spreme (stope obrazovanja) pokušati doći do zaključka postoji li i u kojoj mjeri povezanost:

- a) strukture i stope obrazovanja i saznanja o načinu upravljanja rizicima u poslovanju s prehrambenim proizvodima u struci;
- b) niže razine obrazovanja i lošeg nadzora rizika u poslovanju s prehrambenim proizvodima.

Prema Grafikonu 3 možemo zaključiti ono što se prema trendovima u struci koji ukazuju na nedovoljno kvalificiranog osoblja moglo i predvidjeti: najviše anketiranog osoblja je priučeno, sa srednjom stručnom spremom, njih 43 od 53, odnosno 81%. Logično, imajući u vidu strukturu radnih mjesta (Grafikon 2), zastupljenost visoke školske spreme (VSS) je vrlo niska – 3 od 53, odnosno 5,66%, dakle malo je anketiranih iz "top menadžmenta" hotela. Viša školska sprema u ukupnom broju anketiranih zastupljena je s 11,3%, tj. među anketiranim ih je bilo 6 od 53.

Može se pretpostaviti da je postotak savladanih znanja (edukacija) u svezi HACCP-a u struci

facilities, that is, 24.52%. This piece of information points to the conclusion that there is a high ratio of owners, which can be closely connected to the lack of quality staff on the labour market. The number of management staff covered by the research is 12, or 22.60%. The number of top management surveyed is 5, that is, 9.43%, which might have an effect on answers to the question on the general standpoint on the implementation of the HACCP in businesses using food products.

## Question 4

### Professional qualifications of the staff surveyed

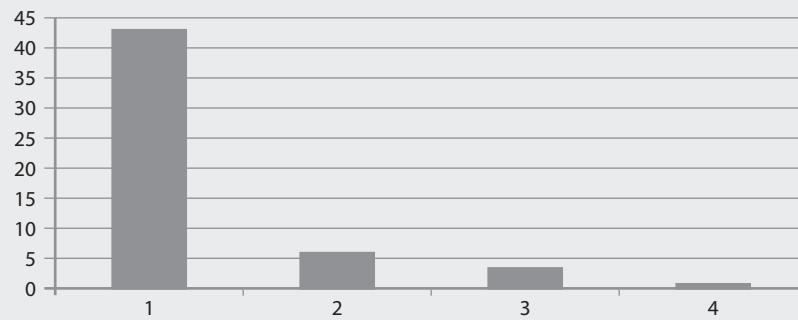
The aim of this question is to draw conclusions based on professional qualifications (level of education) on whether any connection exists, and the extent of such connection, between the following:

- a) The structure and level of education and knowledge related to risk management in businesses using food products.
- b) The lower level of education and its connection with poorer risk control in businesses using food products.

Based on Graph No. 3, it can be concluded, and the conclusion was foreseeable in view of the trends

**GRAFIKON 3. STRUČNA (ŠKOLSKA) SPREMA ANKETIRANE OSOBE-OSOBLJA**

**GRAPH 3. PROFESSIONAL (ACADEMIC) QUALIFICATIONS OF THE INTERVIEWED PERSON – MEMBER OF STAFF**



- 1 Srednja (SSS) / Secondary
- 2 Viša stručna sprema (VŠS) / Post-secondary
- 3 Visoka (VSS) / College
- 4 Mr. sc. / University

u uskoj vezi s obrazovanjem najvećeg dijela anketiranog stručnog osoblja.

### Anketno pitanje broj 5

*Da li ste započeli s primjenom HACCP normi u svome poslovanju?*

Navedeno anketno pitanje ima za cilj utvrditi u kojoj su mjeri poslovni subjekti u okviru hotelsko-ugostiteljske struke implementirali ili pokrenuli primjenu HACCP normi u okviru svoga poslovanja.

Važno je napomenuti zakonsku obvezu uvođenja sustava samokontrole u poslovanju (NN, br. 117/03).

Rezultati (odgovori – indikatori) na navedeno pitanje (Grafikon 4) upućuju na zaključak da ih je 33 od 53, odnosno 62,26%, započelo s primjenom HACCP-a (najpriznatiji alat u svijetu za nadzor i upravljanje rizicima u poslovanju s prehrambenim proizvodima) u okviru svoga radnog mjesta – poslovanja.

Znakovito je da nitko od anketiranih nije pozitivno odgovorio na pitanje "pune primjene HACCP-a u okviru poslovanja" prema Zakonu o hrani RH. Treba napomenuti da su moguća mala odstupanja u smislu točnosti i preciznosti odgovora na pitanje koje se može shvatiti relativno široko. Jedan od anketiranih nije dao nikakav odgovor, što predstavlja 1,88%.

in the profession which indicate insufficiently qualified staff, that the majority of staff surveyed are self-taught, with secondary school qualifications, viz.: 43 out of 53 or 81%. It is logical, bearing in mind the structure of work posts (Graph 2), that the presence of university qualifications is very low (3/53 or 5.66%) as the number of persons surveyed from hotel top management is low. Post-secondary school qualifications in the total number of surveyed persons stand at 6/53 or 11.3%.

It may be assumed that the amount of knowledge gained (education) regarding HACCP in the profession is closely related to the education of the greatest part of the professional staff surveyed.

### Question 5

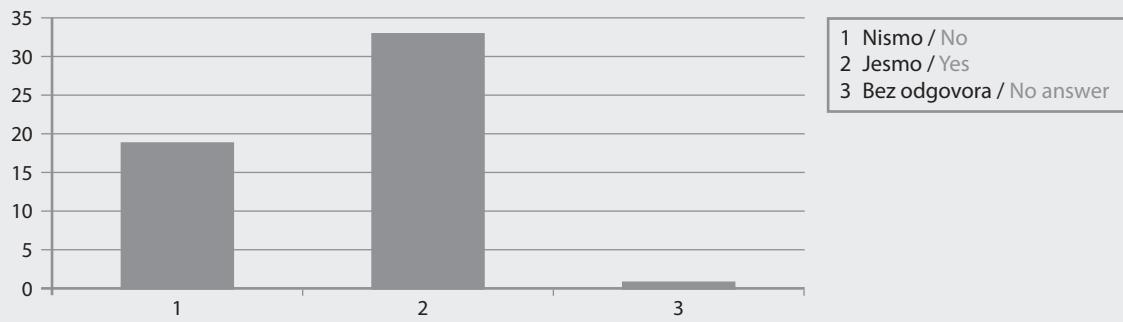
*Have you begun to implement HACCP standards in your business?*

This survey question aims to establish the extent to which economic operators in the hotel and hospitality profession have implemented or begun to implement HACCP standards in their businesses.

It is important to point out the legal obligation to introduce a self-control system in businesses (Official Gazette 117/03).

**GRAFIKON 4. DA LI STE ZAPOČELI S PRIMJENOM HACCP NORMI U SVOME POSLOVANJU?**

**GRAPH 4. HAVE YOU BEGUN TO IMPLEMENT HACCP STANDARDS IN YOUR BUSINESS?**



Prema utvrđenim odgovorima, broj poslovnih subjekata koji uopće nisu pokrenuli nikakve aktivnosti u svome poslovanju u smislu implementacije samokontrole prema HACCP sustavu iznosi 19 od 53, odnosno 35,8%.

Imajući u vidu zakonske odredbe u RH (NN, br. 117/03 čl. 29), može se zaključiti da je ozbiljan postotak poslovnih subjekata ignorirao primjenu zakonskih odredbi. Razlozi izbjegavanja primjene HACCP sustava kao metode samokontrole rizika u poslovanju su višestruke i zaslužuju dodatnu analizu. Olakotna okolnost u tumačenju ovakvih negativnih trendova jest činjenica što mali dio anketiranih poslovnih subjekata spada u objekte "nižeg rizika". Primjerice, u caffé barovima se od prehrambenih artikala najčešće poslužuju mlijeko i vrhnje za kavu, te stoga spadaju u objekte niskog rizika u smislu nadzora prema HACCP-u.

### Anketno pitanje broj 6

#### Koja su vaša saznanja o HACCP-u?

Formulacija pitanja postavljena je s ciljem da se utvrdi razina znanja anketiranog osoblja u odnosu na HACCP, odnosno kvaliteta provedenih programa edukacije stručnog osoblja u svezi HACCP-a. Ukoliko testiramo/usporedimo broj odgovora iz ankete (Grafikon 5) koji glase "da su znanja o HACCP-u nikakva", a takvih je 8 od 53, odnosno 15%, dok je istovremeno iz Grafikona 4 vidljivo da je postotak onih koji nisu pokrenuli HACCP u svome poslovanju 19 od 53, odnosno 35,8%, možemo zaključiti da u struci postoje relativna saznanja i u objektima koji ne posluju prema HACCP normama.

U Grafikonu možemo vidjeti da velik postotak (26 od 53, odnosno 49%) anketiranih ima vrlo mala ili nikakva saznanja o pojmu HACCP-a, a 8 (15%) je onih koji su upoznati sa zakonskom obavezom primjene HACCP-a u struci. Treba imati u vidu da onih 15% koji znaju za zakonsku obvezu ne moraju biti u grupi onih koji su "započeli" primjenu HACCP-a u svome poslovanju.

The results (answers – indicators) to the said question (Graph 4) show that 33 out of 53 businesses, or 62,26%, have begun to implement HACCP (the most widely recognised tool in the world for supervision and risk management in operations with food products) as part of their job or business.

It is significant that no interviewee responded affirmatively to the question "full implementation of HACCP in business" pursuant to the Food Act of the Republic of Croatia. It should be noted that there might be minor deviations in terms of the accuracy and precision of answers to the question, which can be taken to cover a relatively wide area.

The number of economic operators, based on the answers collected, which have not launched any activities in their operation within the meaning of the implementation of self-control under the HACCP system is 19 out of 53, or 35.8%.

Bearing in mind the legal provisions laid down in Article 29 of the Food Act of the Republic of Croatia (Official Gazette 117/03), it can be concluded that there is a considerable percentage of economic operators who have failed to implement the legal provisions. The reasons for not implementing the HACCP system as a risk self-control method in business are multifold, and require additional analysis. One circumstance which makes it easier to interpret such negative trends is the fact that a small portion of the economic operators surveyed are "low risk" facilities. For example, in coffee bars, only milk and coffee cream are served in terms of food products, and these are therefore low risk facilities within the meaning of supervision under HACCP.

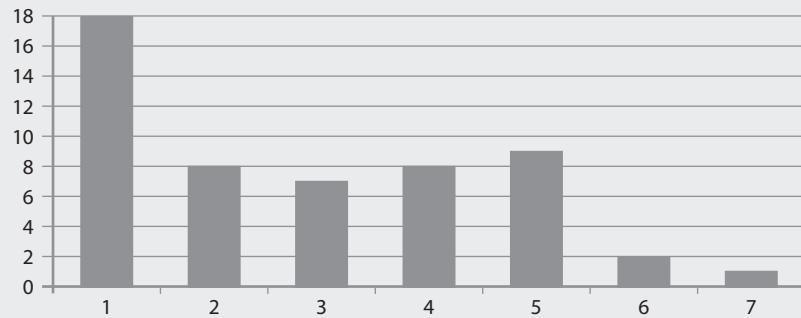
### Question 6

#### What do you know about HACCP?

The question was formulated in a way to establish the level of knowledge of the staff surveyed about HACCP, that is, the quality of training programmes conducted for professional staff regarding HACCP.

### GRAFIKON 5. KOJA SU VAŠA SAZNANJA O HACCP-U?

#### GRAPH 5. WHAT DO YOU KNOW ABOUT HACCP?



- 1 Mala / Little
- 2 Nikakva / Nothing
- 3 Upoznati sa zakonskom obavezom / I am aware of the legal obligation
- 4 Higijena prostora i aparata / Hygienic conditions of the premises and appliances
- 5 Uspostava i nadzor CCP-a / Establishment and supervision of CCP
- 6 Pohađali seminar o HACCP-u / Have attended a seminar on HACCP
- 7 Bez odgovora / No answer

Ako se detaljnije razmotre vrijednosti iz Grafikona 5, može se izvući zaključak da 17 od 53, odnosno 32% anketiranih poslovnih subjekata uistinu znaju što je HACCP i kako se u praksi primjenjuje. Ukoliko usporedimo statistiku iz Grafikona 4 s Grafikonom 5, možemo primijetiti disproportcije i mala odstupanja, što može biti znakovito u smislu točnosti odgovora anketiranih.

#### Anketno pitanje broj 7

*Ukoliko niste pokrenuli HACCP, koji su razlozi nepokretanja HACCP-a?*

Ovakvim pitanjem pokušava se doći do informacija koje će pomoći u utvrđivanju razloga i poteškoća s kojima se poslovni subjekti susreću kada je HACCP u pitanju. Prepoznavanje problema poslovnih subjekata u smislu nadzora rizika u poslovanju s hranom može osigurati kvalitetnije rješavanje poteškoća oko poštivanja zakonskih obveza u svezi navedenih problema u struci.

Potrebno je naglasiti da je 33 od 53, odnosno 62,2% anketiranih, prema nalazima ankete, primijenilo HACCP u okviru svog poslovanja (Grafikon 4), što potvrđuje podatke iz Grafikona 6, odnosno u okviru ovoga pitanja testirana je i

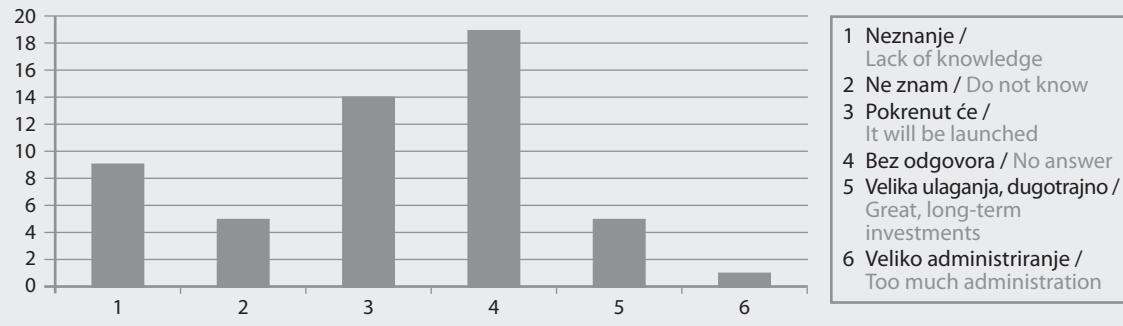
If we test and compare the number of answers in the survey (Graph 5) stating that “knowledge about HACCP is non-existent”, and given that the number of such answers is 8 out of 53, that is, 15%, and at the same time if we consider that Graph 4 shows that the percentage of those who have not launched HACCP in their business is 19, or 35.8%, it can be concluded that in the profession there is a fair amount of knowledge even in facilities that do not operate according to HACCP standards.

In this graph, it is clear that there is a high number (26 out of 53 or 49%) of interviewees with very little or no knowledge of HACCP, and 8 out of 53 or 15% are aware of the legal obligation to apply HACCP in the profession. One should bear in mind that the 15% who are aware of the legal obligation do not necessarily have to be in the group which has “begun” to implement HACCP in its business.

If one reviews the data shown in Graph 5 in greater detail, it can be concluded that 17 out of 53 or 32% of the economic operators interviewed truly know what HACCP is and how it is implemented in practice. If we compare the statistics from Graph 4 with Graph 5, a disproportion and minor deviations are evident, which might be significant in terms of the accuracy of the answers provided by the persons interviewed.

**GRAFIKON 6. UKOLIKO NISTE POKRENULI HACCP, KOJI SU RAZLOZI NEPOKRETANJA HACCP-A?**

**GRAPH 6. IF YOU HAVE NOT LAUNCHED HACCP, WHAT ARE THE REASONS FOR THIS?**



potvrđena točnost onih poslovnih subjekata koji su odgovorili da su pokrenuli implementaciju HACCP-a. Zanimljiv je odgovor iz grupe subjekata koji nisu primijenili HACCP da je uzrok zbog kojeg ga nisu primijenili – neznanje!

Potretna ulaganja u moderniju opremu (osnovna sredstva za rad), odnosno nedostatak finansijskih sredstava, kao razlog je navelo njih 5 od 53, odnosno 9,4%. Stručno osoblje u svojim krugovima, a posebice osoblje koje nema razvijenu svijest o kontroli rizika u poslovanju, HACCP komentira kao "bespotrebno administriranje koje dodatno otežava naporan rad"!

### Anketno pitanje broj 8

*Jeste li počinjali ili proveli edukaciju osoblja o HACCP-u?*

Navedeno anketno pitanje ima za cilj utvrditi trendove prema kojima se poslovni subjekti ponašaju u smislu stručnog ospozobljavanja osoblja o HACCP normama.

Prema utvrđenim odgovorima iz prethodnih pitanja (Grafikoni 4, 5 i 6) pokušava se doći do zaključka koja je kvaliteta i razina savladanih znanja o nadzoru rizika u poslovanju.

### Question 7

*If you have not launched HACCP, what are the reasons for this?*

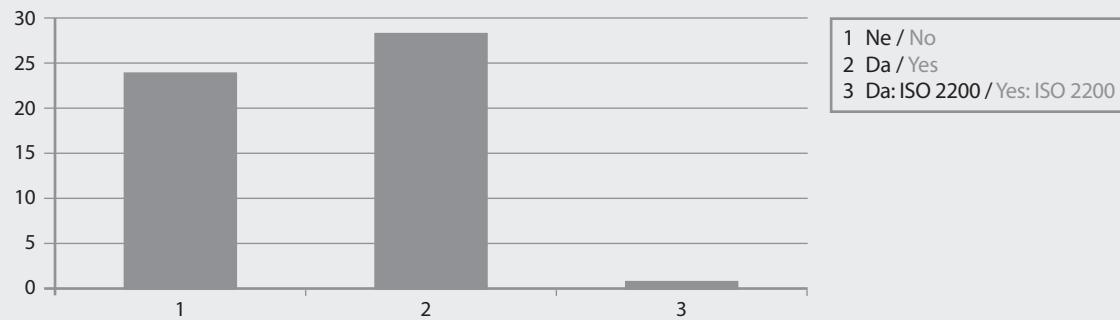
This question attempts to gain information which will help in determining the reasons and difficulties encountered by economic operators in terms of HACCP. Recognising the problems of economic operators in relation to risk control in the food business may ensure the high-quality resolution of difficulties regarding compliance with the legal obligations connected with the said problems in the profession.

It is necessary to point out that the number of interviewed persons who have applied HACCP in their business (Graph 4) is 33 out of 53 or 62.2%, which confirms the data in Graph 6, that is, the accuracy of those economic operators who responded that they had launched HACCP was tested and confirmed within the framework of this question. It is interesting to single out the answer of the group of operators who stated that they had not implemented HACCP according to the Act, because of "lack of knowledge"!

Investments in more modern equipment (the basic tools of operation) are needed by 5 of the 53 economic operators questioned, or 9.4%, that is,

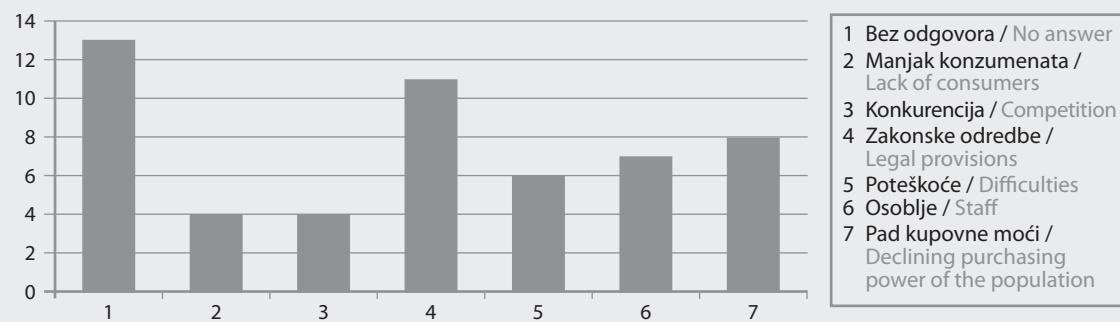
**GRAFIKON 7. JESTE LI POHAĐALI ILI PROVELI EDUKACIJU OSOBLJA O HACCP-U?**

GRAPH 7. HAVE YOU ATTENDED OR CARRIED OUT STAFF TRAINING REGARDING HACCP?



**GRAFIKON 8. KOJE SU, PO VAMA, NAJVEĆE POTEŠKOĆE U POSLOVANJU DANAS?**

GRAPH 8. IN YOUR OPINION, WHAT ARE THE GREATEST DIFFICULTIES IN BUSINESS TODAY?



Utvrđene su dvije grupe odgovora na postavljeno pitanje broj 8, prikazane u Grafikonu 7. Ako ih usporedimo s odgovorima u Grafikonu 4 (u kojem je konstatirano da je 33 od 53, odnosno 62,2% anketiranih poslovnih subjekata pokrenulo HACCP), što se može dovesti u vezu s provedenom edukacijom (odgovori iz grupe 2 u Grafikonu 7), nameće se zaključak da su u postupku pokretanja HACCP-a provedene edukacije stručnog osoblja.

Ova saznanja možemo testirati i usporedbom s podacima iz Grafikona 5 ("Koja su vaša saznanja

there is lack of financial means. Professional staff, and in particular staff who do not have a developed awareness of the self-control of risk in business, refer to HACCP as "unnecessary administration which makes strenuous work even harder"!

### Question 8

*Have you attended or conducted any staff training regarding HACCP?*

The said question aims to establish trends based on which economic operators behave in terms

o HACCP-u?"), prema kojima možemo zaključiti da su saznanja "skromna". Iz navedenih odgovora moglo bi se utvrditi da je kvaliteta provedene edukacije stručnog osoblja u svezi implementacije HACCP-a u struci nezadovoljavajuća. Također je znakovito da je vrlo visok postotak u odnosu na uzorak anketiranih (24 od 53, odnosno 45,2%) onih poslovnih subjekata koji nisu pokrenuli minimalan oblik edukacije osoblja kao osnove u postupku pripreme osoblja za poslovanje prema HACCP normama u struci!

### Anketno pitanje broj 9

*Koje su, po vama, najteže poteškoće u poslovanju danas?*

Pitanje je postavljeno na način da se, kroz odgovore anketiranih, pokuša dobiti informacije o problemima u poslovanju koji najviše opterećuju poslovne subjekte. Pokušava se odgovore na navedeno anketno pitanje dovesti u svezu s kvalitetom/razinom nadzora rizika u poslovanju s prehrambenim proizvodima.

Dio anketiranih (Grafikon 8) postavljeno su pitanje shvatili kao "probleme u svezi primjene HACCP-a" u svome poslovanju – 11 od 53, odnosno 20,7%. Drugi odgovori mogu se svrstati prema svojim vrijednostima na poteškoće u poslovanju u širem smislu riječi kao što su:

- ➲ manjak konzumenata (4/53, odnosno 7,5%),
- ➲ pad kupovne moći stanovništva/konzumenata (8/53, odnosno 15,09%),
- ➲ poteškoće s osobljem (7/53, odnosno 13,2%),
- ➲ financijske poteškoće (5/53, odnosno 9,4%).

Zanimljiv je podatak da 10 od 53, odnosno 18,8% anketiranih nisu uopće odgovorili na navedeno pitanje. Ovakav pristup može se objasniti činjenicom da je u vrijeme provođenja ankete radilo, tj. anketirano je osobljje niže razine, koje nije kompetentno odgovarati na takva pitanja. Saznanja o problemima u poslovanju imaju prvenstveno vlasnici objekata, koji su također obuhvaćeni navedenom anketom. Uočljiv je

of the professional training of staff concerning HACCP standards.

On the basis of the answers to the previous questions (Graphs 4, 5, 6), a conclusion should be drawn on the quality and level of knowledge gained in connection with risk control in business.

Two groups of answers to Question 8 shown in Graph 7 are identified. If we compare Graph 4 (in which it is stated that 33 out of 53 or 62.2% of the economic operators interviewed have launched HACCP), which can be related to the training conducted (answers shown in bar 2 in this graph), it can be concluded that in the procedure of launching HACCP, professional staff have been trained in this area.

This knowledge can also be tested by way of comparison with Graph 5 (What do you know about HACCP?), and it can be concluded that the knowledge is "modest". Based on the given answers, it might be established that the quality of the training of professional staff conducted regarding the implementation of HACCP in the profession is unsatisfactory. It is also significant that there is a very high percentage of economic operators, in relation to the interviewed sample (24 out of 53 or 45.2%), who have not launched a minimum form of staff training as a basis for preparing the staff for business under HACCP standards in the profession!

### Question 9

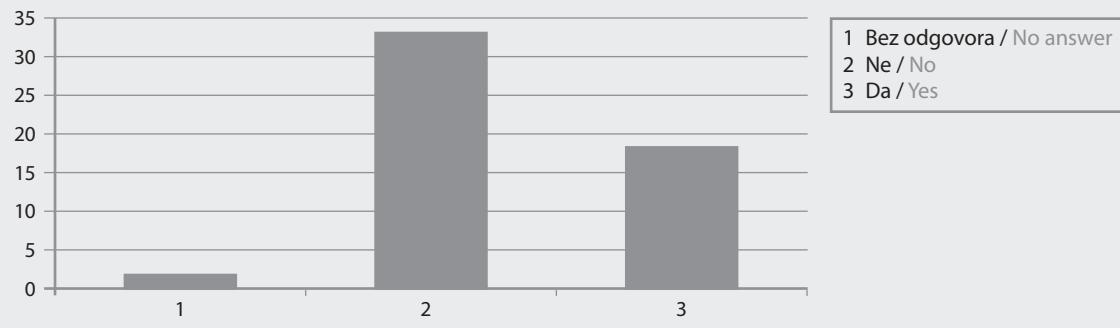
*In your opinion, what are the greatest difficulties in business today?*

The question was asked in a way that, based on the answers collected, an attempt could be made to obtain information concerning business problems which are regarded as the most difficult by the economic operators concerned. An attempt is made to relate the answers to the quality of risk control in the food business.

Some of the interviewed persons (Graph 8), that is, 11 out of 53 or 20.7%, understood the question as "problems regarding the implementation of

### GRAFIKON 9. DA LI STE IMALI POJAVA KVARENJA NAMIRNICA U VAŠEM POSLOVANJU?

GRAPH 9. HAVE YOU HAD ANY INCIDENTS WITH SPOILT FOOD IN YOUR BUSINESS?



podatak da je 4 od 53 anketiranih, odnosno 7,5%, odgovorilo da je "prevelika konkurenca" problem u poslovanju, što svakako može biti u korist podizanja kvalitete usluge, jer je zdrava konkurenca potrebna i poželjna.

### Anketno pitanje broj 10

*Da li ste imali pojave kvarenja namirnica u vašem poslovanju?*

Navedeno pitanje ciljano je postavljeno u jednostavnijem obliku, odnosno pokušava se testirati iskrenost/točnost odgovora utvrđenih navedenim istraživanjem. Naravno, jasno je da je svaki poslovni subjekt u okviru svoga poslovanja imao "susret" s namirnicom koja je "pokvarena", odnosno kojoj je istekao rok valjanosti. Zanimljivo je analizirati postotak onih koji će eventualno tvrditi da se "nikada" nisu u svome poslu susreli s takvom pojmom. U pitanje je ciljano ugrađen izraz "pokvarena namirnica", koji se u stručnim krugovima najčešće koristi!

Indikativan je pokazatelj 33 od 53, odnosno 62,2% poslovnih subjekata u kojima su odgovorili da nikada u okviru svoga poslovanja nisu imali neispravnu/pokvarenu namirnicu (Grafikon 9). Izraz "pokvarena" namirnica, koji se u struci vrlo često koristi, podrazumijeva

HACCP" in their business. Other answers can be classified, based on the number of responses, into difficulties in business in the wider sense of the word, such as:

- ⌚ lack of consumers (4/53 or 7.5%);
- ⌚ fall of purchasing power of the population/consumers (8/53 or 15.09 %);
- ⌚ difficulties with staff (7/53 or 13.2%);
- ⌚ financial difficulties (5/53 or 9.4%).

It is interesting that 10 out of 53 or 18.8% of the interviewed persons did not respond to this question. An explanation for this might be that at the time of the survey the working staff (those interviewed) were of a lower status and not competent to answer such questions. It is primarily the owners who are aware of the problems they encounter in their business, and who were also included in the graphs as part of the survey. It is evident that 4 out of 53 or 7.5% responded that "too much competition" was a problem in business, which can certainly act as an incentive to raise the quality of service, because healthy competition is necessary and desirable.

### Question 10

*Have you had any incidents with spoilt food in your business?*

izraz "namirnica higijenski neispravna", što u praksi znači da je Zakonom zabranjeno istu upotrijebiti u ljudskoj prehrani. Vrlo visok navedeni postotak u okviru uzorka (62,2%) može se pripisati i strahu od davanja podataka koji ne idu u prilog "dobrog imidža" poslovnog subjekta. Činjenica je da postoji praksa da o "svome poslovanju" iznosimo samo "lijepe stvari", ali to je ovom slučaju kontraproduktivno. Ne postoji idealna slika u okviru poslovanja s prehrambenim proizvodima, posebice ako imamo u vidu činjenicu da su mnoge bakterije (u određenim količinama, prema Zakonu o hrani RH) dopuštene u prehrambenim proizvodima.

### Anketno pitanje broj 11

*Koji dio procesa u vašem poslovanju predstavlja najkritičniju točku u smislu nadzora rizika?*

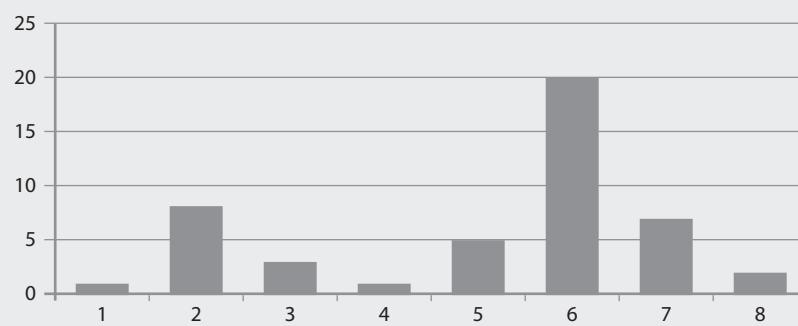
Pitanje je postavljeno s ciljem da saznamo koja je percepcija u struci općenito nadzora rizika u poslu, koji su sveprisutni. Zaključci koji će se iz odgovora eventualno moći izvući približit će opću sliku načina poslovanja s prehrambenim

The said question was deliberately formulated in a simple form, that is, it is an attempt to test the truthfulness-accuracy of the answers in the survey. Naturally, it is clear that all economic operators have had an "encounter" in their business with a "spoilt" product, that is, whose expiration date had passed. It is interesting to analyse the percentage of those who might claim that they have "never" had such an occurrence in their business. The question includes the expression "spoilt food", which is the most frequently used term in professional circles.

It is indicative that 33 out of 53 or 62.2% of economic operators answered that they had never had an improper-spoilt item in their business (Graph 9). The term "spoilt" item, which is very often used in the profession, means "an item which is hygienically improper", which in practice means that the Act prohibits its use for human consumption. The said very high percentage in the sample of 33 out of 53 or 62.2% may be attributed to fear of offering information which might harm the "good image" of an economic operator. It is a fact that in practice we present only "nice things" about our business, although in this case it is

**GRAFIKON 10. KOJI DIO PROCESA U VAŠEM POSLOVANJU PREDSTAVLJA NAJKRITIČNIJU TOČKU U SMISLU NADZORA RIZIKA?**

**GRAPH 10. WHICH PART OF THE PROCESS IN YOUR BUSINESS IS THE MOST CRITICAL POINT IN TERMS OF RISK CONTROL?**



- 1 Odlaganje otpada / Waste disposal
- 2 Ne znam – bez odgovora / Do not know – no answer
- 3 Tehnička obrada namirnica / Technical processing of foodstuffs
- 4 Sterilizacija pribora za jelo i piće / Sterilisation of eating utensils
- 5 Održavanje temperature namirnica / Maintaining the temperature of foodstuffs
- 6 Nabava robe / Procurement of goods
- 7 Održavanje svježine namirnica / Maintaining the freshness of foodstuffs
- 8 Rokovi trajanja namirnica / Expiration dates of foodstuffs

proizvodima i pomoći u donošenju konkretnih preporuka nadležnim državnim institucijama koje su zadužene za navedene djelatnosti.

Uočljive su vrijednosti iz Grafikona 10, stupac 6. Njih 20 od ukupno 53, odnosno 37,73%, navodi da su najveći rizici "skladište i nabava robe". Navedeni pokazatelji – pojave u poslovanju mogu se obrazložiti činjenicom da je nedostatak skladišnog prostora kronični problem u struci, posebice kod manjih poslovnih subjekata. Nedostatak prostora u kojem se planira obavljati djelatnost vrlo često ide na štetu skladišnog prostora, sanitarnih čvorova i prostorija za osoblje.

Nedostatak kvalitete rashladne tehnike (hladnjaci, rashladne vitrine) također zauzima visok postotak, a "održavanje svežebine namirnica" pojavljuje se kao problem za njih 7 od 53, odnosno 13,20%. Prethodno navedeni pokazatelji (u Grafikonu 10) mogli bi se dovesti u vezu s kvalitetom planiranja nabave namirnica, odnosno koordiniranjem dinamike nabave s mogućnostima skladišnog prostora i rashladnom tehnikom, sinkronizirano s "planiranim" brojem konzumenata.

U stupcu 5 iz ovoga Grafikona, 5 od 53, odnosno 9,43%, kao problem je navelo "održavanje temperature namirnica", što možemo prihvati kao pojavu direktno povezanu s prosječnom godinom proizvodnje rashladne tehnike. Podatak iz stupca broj 2 (8 od 53, odnosno 15,09%) govori o ovlastima i znanjima anketiranog osoblja, jer su odgovori "ne znam" zastupljeni u zabrinjavajućem omjeru. Ostali odgovori iz ankete su u minimalnim vrijednostima u odnosu na uzorak.

### Anketno pitanje broj 12

*Koliko imate pomoći u svezi implementacije HACCP-a od nadležnih ministarstava?*

Navedeno pitanje pokušava kroz odgovore doći do saznanja u kojoj mjeri državne nadležne institucije pomažu poslovnim subjektima u primjeni (implementaciji) HACCP-a.

counter-productive. There is no such thing as an ideal picture in a food business, especially if we bear in mind that many bacteria (within certain limits, according to the Food Act of the Republic of Croatia) are permitted in food products.

### Question 11

*Which part of the process in your business is the most critical point in terms of risk control?*

The question was posed with the aim of finding out how the profession in general perceives risk control in this ever-present type of business. Conclusions which might be derived from the answers will form a general picture of businesses using food and help competent state institutions in charge of the said activities adopt specific recommendations.

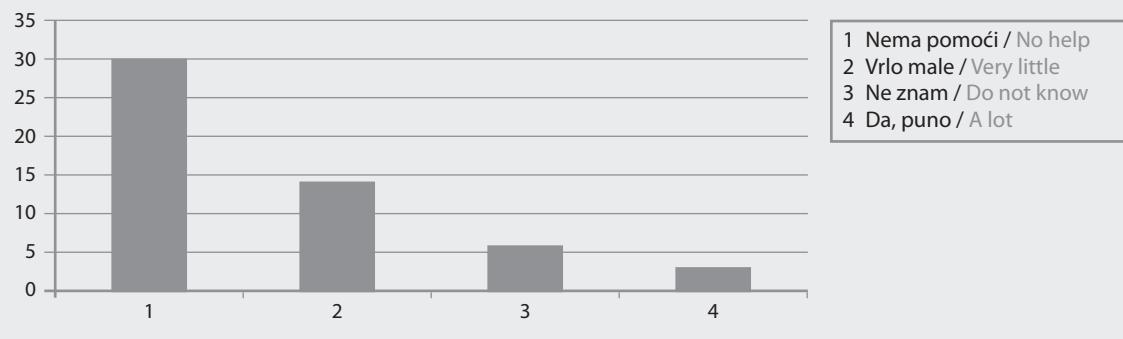
Bar 6 of Graph 10 shows that 20 out of 53 or 37.73% of the interviewees believe that the greatest risks are "storage and supply". The said indicators - phenomena in business can be explained by the fact that the lack of storage space is a chronic problem in the profession, especially in the case of small economic operators. In the case of lack of space for the planned performance of an activity, this relates very frequently to storage space, sanitary restrooms and staff rooms.

The lack of good quality cooling appliances (such as refrigerators and cooling stands) is also very frequently mentioned, and as a problem it appears in the form of "maintaining the freshness of foodstuffs" (7/53 or 13.20%). The above indicators in Graph 10 might be related to the quality of planning the procurement of foodstuffs, that is, coordinating the scheduling of procurement with the storage capacities and the capacity of the cooling appliances, synchronised with the "planned" number of consumers.

In bar 5 in this graph, 5 out of 53 or 9.43% of the interviewees mention "maintaining the temperature of foodstuffs" which can be accepted as something directly linked to the average production year of

**GRAFIKON 11. KOLIKO IMATE POMOĆI U SVEZI IMPLEMENTACIJE HACCP-A OD NADLEŽNIH MINISTARSTAVA?**

**GRAPH 11. HOW MUCH HELP DO YOU RECEIVE FROM THE LINE MINISTRIES REGARDING THE IMPLEMENTATION OF HACCP?**



Iz odgovora na postavljeno anketno pitanje pokušat će se donijeti zaključak o mišljenju poslovnih subjekata o pomoći koju nadležna ministarstva pružaju turističko-ugostiteljskim objektima u RH.

Podatak u stupcu 1 Grafikona 11 strši u odnosu na druge odgovore, tj. 30 od 53, odnosno 56,6% anketiranih odgovorili su da uopće nemaju nikakve pomoći od strane nadležnih državnih institucija.

U stupcu broj 2, 14 od 53 anketiranih, odnosno 26,4%, odgovorili su da imaju "vrlo malo" pomoći od nadležnih državnih institucija. Zanimljivo je da ih je samo 3 od 53, odnosno 5,6% (stupac 4), zadovoljno pomoći koju dobiju od nadležnih državnih tijela, tj. odgovorili su da imaju "puno" pomoći od nadležnih ministarstava. Navedeni podatak (stupac 4) može se dovesti u vezu sa stupcem broj 7 Grafikona 1 (hoteli), jer je činjenica da država u svezi implementacije HACCP-a kroz poticaje više pomaže (stimulira) veće hotele nego male ugostiteljske objekte.

Nadalje, 11,3% anketiranih odgovorilo je da "ne zna" u kojoj mjeri država – ministarstva pomažu u implementaciji HACCP-a.

the cooling appliances. The data showing 8 out of 53 or 15.09% indicates the capacity and knowledge of the staff interviewed, because the answers "I don't know" are present in a disturbingly high ratio. Other answers from the survey have minimal values in relation to the sample.

#### Question 12

*How much help do you receive from the line ministries regarding the implementation of HACCP?*

The said question attempts to find out to what extent the competent state institutions help economic operators in the implementation of HACCP.

Based on the answers to this question, an attempt will be made to draw a conclusion concerning the opinion of economic operators in relation to assistance which the competent ministries provide to tourism and hospitality facilities in the Republic of Croatia.

It must be pointed out, as is evident from bar 1 in Graph 11, that 30 out of 53 or 56.6% of interviewees stated that they received no help from the competent state institutions.

In bar 2, 14 out of 53 or 26.4% of the interviewees stated that they received "very little" help from

### Anketno pitanje broj 13

*Koji je vaš stav o HACCP-u i mislite li da je namjena HACCP-a u struci neophodna?*

U RH, prema Zakonu o hrani (NN, br. 117/2003) od 27. ožujka 2003. godine, određuje se da je "svaki subjekt u poslovanju s hranom dužan implementirati HACCP u svome poslovanju". Zakon (čl. 29) je stupio na snagu 1. kolovoza 2006. godine. Na osnovu postavljenog pitanja pokušava se saznati koja je percepcija o HACCP-u danas, nakon 4 godine "obavezne primjene" u struci!

Utvrđeni su sljedeći postotci odgovora u odnosu na uzorak (53): 69,8% anketiranih odgovorili su da "misle da je HACCP potreban" u struci (stupac 2), 9,43% od ukupno anketiranih smatraju da "nisu stvorenni preduvjeti za implementaciju HACCP-a" u struci (stupac 4), a isti postotak, 9,43% (stupac 5), smatraju da je HACCP nepotreban. Također je 9,43% anketiranih odgovorilo da "ne znaju" je li HACCP u struci uopće potreban (Grafikon 12).

Zakon o hrani Europske zajednice, okvirom za propise o sigurnosti hrane u Europskoj zajednici,

the competent state institutions. It is interesting that only 3 out of 53 or 5.6% of interviewees (bar 4) were satisfied with the help received from the competent state institutions, because their answer was that they received "a lot" of help from the competent ministries. The said piece of information (in bar 4) can be connected to Graph 1, bar 7 (hotels), because it is a fact that through incentives the state helps (stimulates) large hotels to a greater extent than small hospitality facilities concerning the implementation of HACCP. Furthermore, 11.3% of interviewees responded that they "did not know" to what extent the state or its ministries helped in the implementation of HACCP.

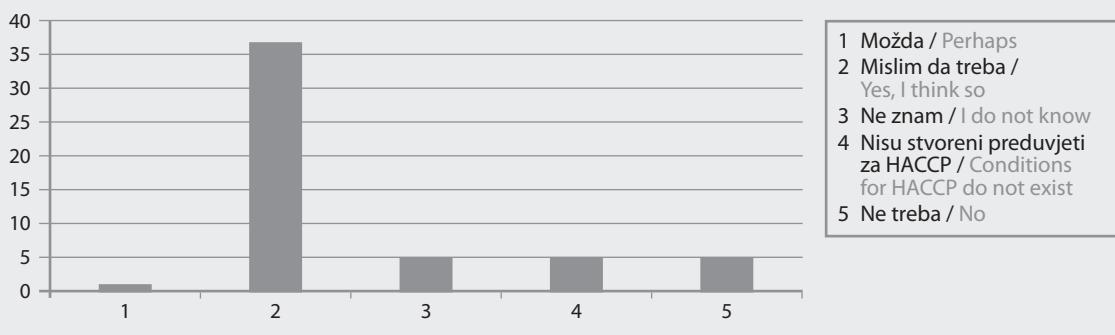
### Question 13

*What is your standpoint on HACCP and, in your view, is the implementation of HACCP in the profession necessary?*

In the Republic of Croatia, the Food Act (Official Gazette 117/2003) of 27 March 2003 stipulates that "any entity in the food business shall implement HACCP in its business". The Act entered into force (Article 29) on 1 August 2006. Based on the said question, an attempt is made to find out

**GRAFIKON 12. KOJI JE VAŠ STAV O HACCP-U I MISLITE LI DA JE PRIMJENA HACCP-A U STRUCI NEOPHODNA?**

**GRAPH 12. WHAT IS YOUR STANDPOINT ON HACCP AND, IN YOUR VIEW, IS THE IMPLEMENTATION OF HACCP IN THE PROFESSION NECESSARY?**



zadan je člankom 3. Rimskog ugovora (1957), kojim se osigurava *slobodno kretanje proizvoda na zajedničkom tržištu*. Na temelju toga, opći ciljevi zakona o hrani su:<sup>4</sup>

- ➲ zaštитiti javno zdravlje (ljudi, životinja i biljaka),
- ➲ osigurati potrošačima informacije koje će im omogućiti da se njihov odabir temelji na dobroj informiranosti koja će zaštитiti interes potrošača,
- ➲ osigurati pravedno trgovanje i konkurentne uvjete za subjekte u prehrabrenom sektoru,
- ➲ osigurati odgovarajuće i potrebne službene kontrole namirnica.

Opći zakon o hrani<sup>5</sup> *utvrđuje zajednička načela i definicije za nacionalne zakone o brani za ljude i životinje i zakone Europske zajednice koji uređuju to područje*. Slobodno kretanje hrane za ljude i životinje unutar zajednice može se postići samo ako se uvjeti za sigurnost hrane za ljude i životinje ne razlikuju značajno od države članice do države članice.

## OPĆI ZAKON O HRANI<sup>6</sup>

### Definicija hrane za ljude i životinje

Hrana za ljude (namirnice) je "bilo koja tvar ili proizvod, bez obzira da li je obrađen, djelomično obrađen ili neobrađen, namijenjen ljudima za konzumiranje ili za koji se opravdano očekuje da će ga ljudi konzumirati". To obuhvaća i pića, žvakače gume, odnosno bilo koje tvari, uključujući vodu, koje se namjerno unose u hranu tijekom njezine proizvodnje, pripreme ili obrade te pitku vodu nakon točke usuglašenosti s uvjetima za pitku vodu.<sup>7</sup>

Hrana ne obuhvaća:

- ➲ hranu za životinje;
- ➲ biljke prije berbe;
- ➲ medicinske proizvode,<sup>8</sup>

how HACCP is perceived today, 4 years after its "obligatory implementation" in the profession!

The following percentages of answers in relation to the sample (53) were established: 69.8% of interviewees responded that they thought "HACCP is necessary" in the profession (bar 2), 9.43% of the total number of interviewees believed that "preconditions for the implementation of the HACCP in the profession had not been created" (bar 4), and the same percentage 9.43% (bar 5) believed that HACCP was unnecessary. In addition, 9.43% of interviewees responded that they did not know whether HACCP was necessary in the profession (Graph 12).

The General Food Law of the European Community, in terms of the framework for food safety regulations in the European Community, is based on Article 3 of the Treaty of Rome (1957), which ensures the *free movement of goods on the common market*. Further to the foregoing, the general goals of the Food Act are the following:<sup>4</sup>

- ➲ To protect public health (of human beings, animals and plants).
- ➲ To provide consumers with information to enable them to make choices based on solid information which will protect their interests.
- ➲ To ensure fair trade and competitive conditions for entities in the food sector.
- ➲ To ensure adequate and necessary official controls of foodstuffs.

The General Food Act<sup>5</sup> *establishes common principles and definitions for national laws on food for human and animal consumption, and for European Community laws regulating the field in question*. The free movement of food for human and animal consumption within the Community can be achieved only if the conditions for food safety for human beings and animals do not significantly differ from one state to the other.

- ❖ kozmetiku;<sup>9</sup>
- ❖ duhan i duhanske proizvode;<sup>10</sup>
- ❖ opojne psihotropne supstance.<sup>11</sup>

Uredba (EC) 178/2002 u članku 14. navodi da se hrana neće plasirati na tržište ako nije sigurna. Plasiranje na tržište znači više od same prodaje ili predstavljanja prehrambenog proizvoda potrošaču. To znači "čuvanje hrane za ljude ili životinje u svrhu prodaje, uključujući i nudjenje na prodaju ili bilo koji drugi oblik transfera, bez obzira da li je besplatan ili ne, te prodaju, distribuciju i druge oblike samog transfera".

## ZAKLJUČAK

U odnosu na ciljeve i predmet istraživanja, temeljem statističke obrade i klasifikacije svih evidentiranih odgovora (indikatora) na postavljena pitanja, može se konstatirati sljedeće trendove u struci:

- ❖ Pokazatelji koji se mogu prepoznati iz prezentiranih grafikona upućuju na zaključak da je u struci prepoznatljiva pozitivna percepcija o HACCP-u, jer znakovit postotak (69,8%) anketiranih smatra da je HACCP u struci neophodan.
- ❖ Uvidom u Grafikon 11, stupac 1 i 2, može se zaključiti da je pomoć nadležnih ministarstava poslovnim subjektima pri implementaciji HACCP-a nedovoljna. Direktne negativne posljedice nedovoljnog angažiranja državnih tijela prepoznatljive su kroz nisku razinu sustava samokontrole, posebice u malim ugostiteljsko-turističkim poslovnim subjektima.
- ❖ Razina kvalitete implementacije HACCP-a u onim poslovnim subjektima koji su "pokrenuli" upravljanje rizicima u poslovanju upitna je, posebice u pogledu znanja savladanih kroz provedene programe edukacije stručnog osoblja.
- ❖ Trend nedostatka finansijskih sredstava za obnovu zastarjele termike i rashladnih uređaja vrlo je prepoznatljiv.

## THE GENERAL FOOD LAW<sup>6</sup>

### Definition of Food for Human Beings and Animals

Food (foodstuff) means "any substance or product, whether processed, partially processed or unprocessed, intended to be, or reasonably expected to be ingested by humans". It includes drinks, chewing gum and any substance, including water, intentionally incorporated into food during its manufacture, preparation or treatment, and drinking water after the point of compliance for drinking water.<sup>7</sup>

Food does not include:

- ❖ feed;
- ❖ plants prior to harvesting;
- ❖ medicinal products;<sup>8</sup>
- ❖ cosmetics;<sup>9</sup>
- ❖ tobacco and tobacco products;<sup>10</sup>
- ❖ narcotic or psychotropic substances.<sup>11</sup>

Regulation (EC) 178/2002 states in its Article 14 that food must not be placed on the market if it is unsafe. Placing on the market means more than the act of sale or presentation of the foodstuff to the consumer. It means the "holding of food for human beings or animals for the purpose of sale, including offering for sale or any other form of transfer, whether free of charge or not, distribution and other forms of transfer".

## CONCLUSION

In relation to the goals and the subject matter of research, based on the statistics and classification of all answers (indicators) recorded, it can be stated that the following trends prevail in the profession:

- ❖ The indicators which can be recognised based on the presented charts indicate that HACCP

➲ Zabrinjavajući je podatak da u okviru prikupljenih odgovora (indikatora) na anketna pitanja nije evidentiran ni jedan poslovni subjekt koji ima certificirani HACCP. Činjenica je da u RH nije obavezno certificiranje HACCP-a, ali podatak je ozbiljan indikator koji upućuje na negativne trendove u smislu kvalitetnog nadzora rizika u poslovanju s hranom.

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<sup>1</sup> Zakon o hrani RH, *Narodne novine*, br. 117/03, čl. 29.

<sup>2</sup> Zelenika, R. (1998), *Metodologija i tehnologija izrade znanstvenog i stručnog djela*, str. 323. Rijeka: Ekonomski fakultet u Rijeci

<sup>3</sup> M. M. & A. Blalock, 1971, str. 6

<sup>4</sup> Direktiva vijeća 93/94/EEC

<sup>5</sup> Uredba EC, br. 178/2002

<sup>6</sup> Uredba (EC) br. 178/2002 Europskog Parlamenta i Vijeća od 28. siječnja 2002, kojom se utvrđuju opća načela i uvjeti zakona o hrani, kojom se osniva Europska agencija za sigurnost hrane (EFSA) i utvrđuju postupci u pitanjima sigurnosti hrane. Službeno glasilo Europske Unije L31 od 1. veljače 2002, str. 1-24

<sup>7</sup> Članak 6. Direktive 98/93/EEC

<sup>8</sup> Direktiva Vijeća 65/65/EEC i Direktiva Vijeća 92/73/EEC

<sup>9</sup> Direktiva Vijeća 76/768/EEC

<sup>10</sup> Direktiva Vijeća 76/768/EEC

<sup>11</sup> Jedinstvena konvencije Ujedinjenih naroda o opojnim drogama (1961) i Konvencija Ujedinjenih naroda o psihotropnim tvarima (1971)

is perceived positively in the profession, since a considerable percentage (69.8%) of interviewees hold that HACCP is indispensable in the profession.

➲ Based on Graph 11, bars 1 and 2, it can be concluded that the assistance provided to economic operators by the line ministries for the purpose of implementing HACCP is insufficient. Direct negative consequences of the insufficient involvement of the state bodies are seen in the low level of the self-control system, especially with regard to small tourism and hospitality economic operators.

➲ The level of quality in the implementation of HACCP in the economic operators that have launched risk management in their business is questionable, especially in terms of the knowledge gained through the professional staff training programmes conducted.

➲ The lack of finance for the reconstruction of old heating and cooling appliances is very clear.

➲ It is worrying that as part of the answers (indicators) collected, no economic operator was seen to be HACCP certified. In the Republic of Croatia, it is not compulsory to acquire HACCP certification. This fact is indicative of trends which are negative in terms of quality supervision of risks in the food business.

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<sup>1</sup> Food Act of the Republic of Croatia (Official Gazette 117/03), Article 29.

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<sup>3</sup> M. M. & A. Blalock, 1971, p. 6.

<sup>4</sup> Directive 93/94/EC.

<sup>5</sup> Regulation EC No. 178/2002.

<sup>6</sup> Regulation (EC) No. 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety, Official Journal of the

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<sup>7</sup> Directive 98/93/EC, Article 6.

<sup>8</sup> Council Directive 65/65/EEC and Council Directive 92/73/EEC.

<sup>9</sup> Council Directive 76/768/EEC.

<sup>10</sup> Council Directive 76/768/EEC.

<sup>11</sup> United Nations Single Convention on Narcotic Drugs (1961) and the United Nations Convention on Psychotropic Substances (1971).