

28 Annex - Consumer and health protection

216. FOOD SAFETY STRATEGY

GOVERNMENT OF MONTENEGRO

**MINISTRY OF HEALTH
MINISTRY OF AGRICULTURE, FORESTRY AND WATER
MANAGEMENT**

FOOD SAFETY STRATEGY



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Glossary

WHO	World Health Organisation
WTO	World Trade Organisation
FAO	Food and Agriculture Organisation
Codex Alimentarius	Subsidiary body of FAO and WHO for food standard program
OIE	International Office of Epizootics (for animal health protection)
IPPC	International Plant Protection Convention (for plant health protection)
«From farm-to-table » concept	includes all steps involved in production, storage, handling, distribution and preparation of a food product.
(GAP) Good Agriculture Practice	Practices of primary food producers.
(GHP) Good Hygienic Practice	Conformance with general and specific principles of hygienic measures.
(GMP) Good Manufacturing Practice	Conformance with codes of practice, industry standards, regulations and laws concerning production, processing, handling, labelling and sale of food.

GMO	Genetically modified organism
System HACCP	The Hazard Analysis Critical Control Point System (HACCP) is a scientific and systematic way of enhancing the safety of foods from primary production to final consumption through the identification and evaluation of specific hazards and measures for their control.
SSOP	Standard Sanitary Operative Procedures.
Hazard	Biological, chemical or physical agent in the food which pose a risk to human health and food safety
JECFA	Joint FAO/WHO Expert Committee on Food Additives
JMPR	Joint FAO/WHO Meeting on Pesticide Residues
Residues	The remains of substances
Risk Analysis	A process consisting of three components: risk assessment, risk management and risk communication.
RASFF	Rapid Alert System
Risk Management	Process of weighing alternatives in the light of results of risk assessment.
SPS	Sanitary and Phytosanitary Agreement of the WTO (World Trade Organisation)

I. INTRODUCTION

The reasons for establishing and strategy objectives

Assuring the safety and quality of food and proper nutrition represents one important issue which is related to the protection and improvement of the public health.

Supply of safe and pure food which protects and improves health represents the basic right of every individual.

Safe food represents not only the food of certain texture, but food which does not consist microbiological, physical, chemical, radiological or any other contaminants.

Contamination is possible at all stages of the food chain from primary producer through consumer: animal diseases, environment pollution, inadequate primary production practices,

improper agricultural practices, improper hygienic handling of food, inadequate storage conditions, transport, improper technological procedures and etc.

Any of the above stated hazards may occur at a variety of points in the food chain and cause long term or short term illness. Due to many potential food hazards, an integrated holistic approach, which includes control of all risks involved at all stages of the food chain from raw material to food consumption, is generally accepted.

The food safety must be introduced at national and international level, taking into consideration the international food trade and liberalization of food trade.

Beside many economic benefits for consumers – wider variety of accessible and affordable food, distribution over far distances, sale of authentic products, global food trade has placed considerable obligations on all countries, considering occurrence of any potential hazards in food which may cause harm to public health. The occasional incidents in the last decade, such as (“mad cow disease”, dioxine contaminated fodder) when contamination from a single source has found its way onto every continent causing the diseases, have raised anxiety among consumers. The serious threat at global level is new zoonoses called Avian Influenza which can be also transmitted by unsafe food.

The introduction of new technologies, including genetic engineering and the development of modern technological procedures, increases a demand for monitoring and caution measures related to a still unknown health effects.

Changed nutrition habits and urban lifestyle, more complex requirements for raws and final foodstuffs considering their production, storage, transport and distribution, development of collective nutrition, vulnerable groups of population, increased number of elderly and persons with weak immunity, request new approach toward food and nutrition.

On the other hand, health problems related to foodborne diseases and improper nutrition are growing and represent serious problem in our country and in the world. The consumption of sanitary unsafe food leads to outbreaks of food contamination with short or long term impact on health. Foodborne diseases are related indirectly or directly with the disease groups which are identified as a major causes of death – diseases of cardiovascular system, diabetes and other.

Improper nutrition, insufficient or excessive calorie intake and lack of vitamins represent growing concern in our country. Foodborne diseases outbreaks appear also more or less in our country. Recognising timely the growing incidence of foodborne diseases, as a very important issue, WHO has set activities to be carried out for improvement of the food safety system as a priority, in order to minimize the foodborne diseases. WHO has established the global strategy in the year 2001, which provides support to the activities of the State Members.

Ministry of Health has established according to WHO objectives, National Committee for Food Safety acting as an expert advisory body with the representatives of all competent bodies and institutions, as well as dominant experts in this area. In addition to this document, above stated Committee has drafted in the year 2005, document called “Country Profile” which presents detailed current situation in the area of the food safety in Montenegro.

Basic Strategy objective for the food safety and nutrition is protection and improvement of public health by minimizing health and social difficulties which have appeared as a consequence of the foodborne diseases.

Protection of health and improvement of the life quality is a major goal of the Government of Montenegro.

In accordance with it, the task of the Ministry of Health, Ministry of Agriculture and Water Management and other relevant institutions is to determine all activities and measures that improve food safety system and reduce the risk of foodborne diseases.

The improvement of the food safety system and proper nutrition with adequate food legislation which conforms to European and international standards, is the basic and essential part of this Strategy, drafted by the Ministry of Health and Ministry of Agriculture and Water Management

together with the expert assistance from the other relevant institutions according to the Program of the Government of Montenegro for the year 2006.

The incidence of the foodborne diseases should be minimized according to the following activities:

- defining and development of integrated, holistic and sustainable food safety system and building capacities
- implementation of GHP, GMP i HACCP-a measures along the entire »food chain«, from primary producer to consumption in order to prevent consumer exposure to unacceptable risk levels
- scientific based assessment, management and risk communication
- mutual cooperation with all subjects involved in the food chain,
- raising the awareness about the importance of the food safety and sanitary measures,
- epidemiological surveys related to the foodborne diseases

Building capacities of the effective food safety national system is an important goal because this system plays an important role in preparation and training of the countries which have to enter international trade trends. Countries are obliged to produce and provide safe and wholesome food and to ensure in the same time that the imported food conforms to their national requirements.

In accordance with the Directive 178/2002/EC of the European Council and Parliament of the date 28.01.2002, institutional solutions have been envisaged, that is, the establishment of National body, which integrates and coordinates all parts of the food safety system. This body should officially communicate with the European Commission and with other international bodies, organisations and agencies and would carry out important activities related to the public health protection, animal and plant protection and environmental protection.

According to Action Plan for European partnership, and Working Program of the Government of Montenegro, the draft of Law on Food Safety is envisaged. This Law has to set general rules and requirements related to hygiene, sanitary food safety, animal's fodder and the obligations of subjects dealing with food in the view of hygiene and sanitary food safety. The draft of this Law has to conform to the legal EU achievements and to represent a framework for further harmonization with other EU legislation.

II. FOOD SAFETY

(Basic factors of the surveillance food system)

1. ANALISIS OF THE CURRENT CONDITION AND STRATEGIC ACTIVITIES

1.1 . LAW REGULATION

Analysis of the current condition In the food safety area, regulations which are enacted at the Republic level are applied as well as previous Federal regulations. When the authority had changed from the Federal to the Republic level, during the period of 1998 -2000, Montenegro took over the complete control of foodstuffs in regard to the export / import foreign trade – food control.

Since Constitutional Chart has been set, all legal regulations as well as application of all regulations in the food safety area are in charge of the Government of Montenegro. The Standardization Law, the Law on Technical requirements for products and assessment of product compliance with the prescribed requirements, The Law on Accreditation and Quality Regulations are exceptions which according to Constitutional Chart of the State Community S&M are passed by the Ministry for Internal Economic Relation.

A great number of laws are applied in the food safety area, Codes of practice, Regulations, Directives, Guidelines and other regulations and general acts, which are set at republic and federal level and are as follows:

- The Law on inspection surveillance «Official Gazette of Montenegro, no. 39/03 – General Law for all inspections
- Law on Sanitary correctness of foodstuffs and Goods of General Use, Official Gazette of FRY, no. 53/91;
- Veterinary Law «Official Gazette of Montenegro, no. 11/04 (which was harmonised with the EU standards when passed)
- Law on Sanitary Surveillance of Foodstuffs and Goods of General Use, Official Gazette, no. 26/73, 4/88;
- Law on Sanitary Inspection « Official Gazette of Montenegro», no. 56/92;
- Law on Health Protection «Official Gazette of Montenegro», no. 39/04;
- Law on Health Protection of the population from the communicable diseases, Official Gazette of Montenegro, no. 32/05, harmonized with recommendations and WHO programs;
- Law on medical means, «Official Gazette of Montenegro» No.79/04;
- Law on drugs «Official Gazette of Montenegro» No.80/04;
- Law on market inspection «Official Gazette of Montenegro», No. 56/92;
- Law on quality control of agricultural products and foodstuffs in the foreign trade «Official Gazette of FRY» 12/95, 28/96;
- Law on Standardization«Official Gazette of Montenegro», No.44/05;
- Law on technical requirements for products and Conformity Assessment of these products with these requirements, «Official Gazette of Montenegro» No. 44/05;
- Law on Accreditation «Official Gazette of Montenegro» No. 44/05;
- Law on Waters «Official Gazette of Montenegro» No. 16/95;
- Law on Plant Protection «Official Gazette of FRY» No. 24/98, 26/98;
- Law on Plant Protection from diseases and pests «Official Gazette of Montenegro» No. 4/92, 59/92, 27/94;
- Law on Agricultural land «Official Gazette of Montenegro» 15/92, 59/92, 4/93;
- Law on Measures to promote Cattle-raising «Official Gazette of Montenegro» No. 4/92;
- Law on Protection of Agricultural and Forest Plants species «Official Gazette of FRY». 28/00;
- Law on seed and reproductive material, «Official Gazette of Montenegro» No. 39/92, 59/92;
- Law on Sea Fishing «Official Gazette of Montenegro» No. 55/03;
- Law on Fresh Water Fishery «Official Gazette of Montenegro» 39/76, 51/76, 34/88, 4/92;
- Law on Olive grove «Official Gazette of Montenegro» No. 55/03;
- Law on Wine and grapes and wine products «Official Gazette of Montenegro» No. 9/83, 15/83, 27/94;
- Law on Organic Agriculture, «Official Gazette of FRY» No. 28/00;
- Law on Genetically modified organisms «Official Gazette of FRY», No. 21/01;
- Law on Protection from the Ionizing Radiation, «Official Gazette of FRY» No. 46/96

Strategic activities Existing legislative framework of the food safety system represents a legal inheritance from the previous period, when regulations were based on traditional approach which

lacked preventive measures and responsibilities of producer. The surveillance and responsibilities were directed towards inspection services and to final product.

In accordance with the objectives of the Government of Montenegro to make all necessary efforts in order to realize free trade in the South Eastern Europe and to enter WTO membership, establishment of legislative infrastructure is one of the most important elements of the system which have to be harmonised with the EU system and international standards.

Strategic priority is establishment of the new legislative framework which will regulate all the aspects of the food safety system. Providing the conditions for holistic and integrated approach in order to set obligations, responsibilities, and the rights of all participants involved in the food and nutrition chain, should be the characteristic of this legislative framework. The draft of new regulations should include aspects related to the high level of health protection, clear definitions to strengthen the consistency and legal security, harmonisation with the EU standards and international standards as well as its updating, activities based on the scientific and transparent facts necessary for the risk assessment, and risk management, traceability of the food products, clear provisions which determine the responsibility of participants in the food chain, provisions which determine obligatory offer of the safe food products in the market place.

Apart from addressing all aspects of the food safety sector, it is necessary that new legal framework clearly define obligations, authorisations and responsibilities of official bodies involved in the food safety system.

In order to become rapidly integrated into global trends of the food production and trade, it is necessary that new law regulation is harmonised with the EU regulations and with the other international contracts as follows:

- Regulation 178/2002/ of the European Parliament which defines the general terms and conditions of the food, establishes National Body for the food safety and sets procedures related to the food safety;
- Regulation 851/2004 which regulates foundation of the European Centre for disease prevention and control, including also foodborne diseases;
- Regulation 852/2004 which relates to food hygiene;
- Regulation 853/2004 which determines specific hygienic rules and food hygiene;
- Regulation 854/2004 which determines specific control of the products of animal origin intended for nutrition;
- Regulation 882/2004, which refers to official controls carried out to ensure the compliance with the Law on Food, fodder, and rules for animal welfare;
- Regulation 258/97 which determines introduction of new food and new food ingredients;
- Decision 2119/98/ES of the European Parliament and Council of epidemiological surveillance of communicable diseases, with the accompanying Decisions of the European Commission 2000/57/ES, 2000/96/ES, 2002/253/ES, 2003/534/ES which regulate the surveillance of communicable diseases including also foodborne disease;
- Decision of the Commission 613/2004/EU, which refers to establishment of Advisory body for the food chain and animal and plant health;
- Directive 89/397/EES which refers to the inspection of food;
- Directive 93/99/ESS which refers to the additional measurements for food inspection;
- Directive 80/778/EEC (5) and 98/83/EC (6), which refers to the quality of drinking water;
- Directive 96/23/EC and Commission Decision 97/747, 2002/657, which refers to the monitoring of residues;
- Directive 79/700/EEC which refers to the sample testing methods of fruits and vegetables on pesticides residues;

- Directive 86/362/EEC which refers to the level of pesticide residues in cereals;
- Directive 86/363/EEC which refers to the level of pesticides in the foodstuffs of animal origin;
- Guideline 99/2002/EU which determines requirements for health protection of animals intended for production, processing, distribution and trade of products of animal origin used for nutrition;
- International Health Practice;
- Contract on foundation of the European Union;
- Codex Alimentarius Standards;
- Agreement on Sanitary and Phytosanitary measures WTO, OIE, and also WHO and FAO standards.
 - Directive 89/398/EC on diet food;
 - Directive 91/321/EEC which refers to infant's formula;
 - Directive 96/5/EEC which refers to the production of baby's food.

1.2. ORGANISATION OF THE SURVEILLANCE SYSTEM

Analysis of the current situation Ministry of Health, Ministry of Agriculture, Forestry and Water Management, Ministry of Economy, and Veterinary Institution are responsible for the food safety control. These ministries perform activities with the assistance of:

- Professional services in Ministries, which suggest the measures for the policy development, monitor the performance of the activities, analyze the results of the measures, create strategies, propose the law regulations and acts which refer to the food safety and working conditions in laboratories, enact the regulations in the area of sanitary – health, phyto-sanitary and veterinary - sanitary supervision, quality control and give professional opinions.
- Inspection services which carry out the surveillance in order to ensure the application of regulations.
- Professional institutions which carry out surveys, monitor the programs in the food safety area, (Institutes for Public Health, Biotechnical Institute, Special Veterinary laboratory)
- Authorized organizations for laboratory food control, drinking water, fodder and other

Application of the regulation in the food safety area is in charge of:

- Ministry of Health – Sanitary supervision sector, sanitary inspection (Law on sanitary inspection, Official Gazette of Montenegro, no. 56/92;
- Ministry of Agriculture, Forestry and Water Management, Phytosanitary inspection;
- Veterinary Directorate, Veterinary inspection (Veterinary Law, Official Gazette of Montenegro, no.11/04,
- Ministry of Economy – Republic Market Inspection (Law on Market inspection, Official gazette of Montenegro, no. 56/92). (in the attachment given 1, 2 and 3 organs)

Table No. 1 Structure of the authorities in charge for the food safety surveillance;

1. Ministry of Health	Sanitary Supervision Sector Institute for Public Health	Regulation procedures Carrying out the food control, testing of samples	Drinking water and food supply system, production facilities for trade and food sale, food serving, persons handling with food
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	Laboratories	Nutritional requirements Epidemiological service	
2. Ministry of Agriculture, Forestry and Water Management	1. Veterinary Directorate Professional veterinary department Veterinary inspection Veterinary ambulances 2. Specialized veterinary laboratory 3. Agricultural Sector Agricultural department supervision Inspection department	Registration procedure for manufacture of food of animal origin Permissions for import of the food of animal origin Supervision and control of food and raw of animal origin Monitor agriculture and agroindustry Supervision of law application in the area of agriculture	The food of animal origin, fodder, veterinary drugs Plants, fruits, vegetables, measures for plant protection in agriculture
3. Ministry of Economy	Market inspection department	Quality, trade and labeling	All kinds of products

Inspections

Inspection supervision as a specialized part of administrative surveillance in the food safety area controls the application of regulations, that is, maintenance of the law prescribed condition and also provides a professional assistance for the surveillance subjects.

In the area of food safety control, application of a great number of federal and republic laws is carried out, other regulations and general acts, among which Law on Inspection Surveillance, «Official Gazette, Republic of Montenegro » no. 39/03 is general law for all inspection services. By this law, general obligations and competencies of inspectors are modified and determined. Besides, all measures for the public protection and public interest have also been prescribed.

Short description of procedures for removal of drawbacks

If inspector during inspection process, production process, storage and distribution discovers some irregularities in practice, he writes inspection report and takes remedial actions in the case when confirmed irregularity can not lead to undesirable consequences according to risk assessment.

Remedial actions include:

Decreases (the mildest remedial action) – are enacted for observed irregularities which can not cause consequence, but have to be removed as soon as possible. For indicated irregularities repressive measures are not applied, that is, warning has the effect.

Decision on the removal of irregularity (stricter remedial action) – is enacted for confirmed irregularity which has to be removed in the term stated by inspector. If the party which is controlled doesn't follow the decision procedure, inspector takes the repressive measures - prescribes stated fine or institutes the legal proceedings against the party.

If determined irregularities in the premises are such that directly endanger sanitary correctness of the food product, stored goods or public health, inspector prescribes prohibition of work of

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premises, and institutes other legal measures. Inspectors are authorised to submit the reports for economic breaches, and breaches of law to legal entities.

Table no. 2 Inspection supervision: sanitary inspection

Organizational unit	Inspectors engaged on export	Inspectors in internal control	Total number of the sanitary inspectors
Podgorica	3	7	10
Berane	1	4	5
Bijelo Polje	1	4	5
Pljevlja	1	1	2
Nikšić	2	3	5
Bar	2	4	6
Budva	1	2	3
Herceg Novi	2	4	6
Total	13	29	42

Table no. 3 Inspection surveillance department: veterinary inspection

Organizational Unit	Inspectors - Foreign Trade	Inspectors - internal surveillance	Total number of the veterinary inspectors
Podgorica	1 rvi*	2 rvi + 4 avi*	3+4 avi
Berane	1 rvi	1 rvi+2 avi	2+2 avi
Pljevlja	1 rvi	1 rvi+1 avi	2+1 avi
Nikšić	1 rvi	1 rvi+2 avi	2+2 avi
Bar	1 rvi	2 rvi+2 avi	3+2 avi
Budva	-	1 rvi	1
Tivat	-	1 rvi	1 rvi+1 avi
Herceg Novi	1 rvi	1 rvi+1 avi	2+1 avi
Bijelo Polje	1 rvi	1 rvi+2 avi	2+2 avi
Rožaje	1 rvi	1 rvi+1 avi	2+1 avi
Total	8 rvi	12 rvi / 13 avi	20 rvi / 15 avi

* rvi – republic veterinary inspector

avi* – authorized veterinary inspector

Table no. 4 Inspection surveillance: Phytosanitary inspection

Municipality	Podgorica	Bar	H.Novi	Nikšić	Pljevlja	B.Polje	Rožaje	Total
Phytosanitary inspectors	2	1	1	2	3	3	2	14

Table no. 5 Inspection surveillance: Market inspection

Organizational unit	Inspectors – quality surveillance in foreign trade	Inspectors surveillance – internal trade	Total number of market inspectors
PJ I Podgorica /Podgorica,Cetinje, Danilovgrad, Nikšić (Šavnik,Plužine), Kolašin/	4	26	29
PJ II Budva /Budva, Tivat, Kotor, H.Novi, Bar, Ulcinj/	2	13	15
PJ III BijeloPolje /B.Polje, Mojkovac,			

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Berane, Plav (Andrijevića), Rožaje, Pljevlja (Žabljak)	2	13	15
Total	8	52	60

Implementation of food laws requires a qualified, trained and professional food inspection service. Until now, inspectors have had basic understanding of relevant regulations as well as a special professional training and education training.

In the area of regulations a holistic training was carried out, which refers to understanding and application of Law on inspection surveillance and Law on general administration procedure due to proper application of regulations in the area of the food inspection control. Certain number of seminars and consultations which relate to the various professional areas were held (HACCP, SSOP), but not all inspectors were involved since the number of the participants had been limited.

Registration of food premises Veterinary Directorate performs the registration of farms for breeding and slaughtering of animals, processing, storage of products, raws, products of animal origin, fodder, legal subjects who carry out veterinary activities, that is, implementation and control the food safety system. Conditions for these premises are prescribed according to special regulations. HACCP system is prescribed according to Veterinary Law, but is partly implemented in the praxis.

Also this body monitors regional, international and global epizootic situation upon which makes decisions for import of animals, animals from water, products, raws, foodstuffs, veterinary drugs and fodder to the Montenegro.

Ministry of Agriculture performs the registration of the facilities for production and trade of seed and reproductive material, facilities for storage of plants, subjects who perform the inspection and examinations of the plant health status, production facilities, trade and import of pesticides and fertilizers.

Sanitary inspection of the Ministry of Health, after assessment of fulfillment of sanitary and hygienic conditions, as well as technical conditions, issues the license of sanitary consent for all facilities in Montenegro, which deal with the production, manufacture, processing, storage, transportation and sale of food and drinking water. In the law on sanitary control of foodstuffs, general hygienic norms are prescribed and special regulations prescribe minimal technical conditions for these facilities

Table no. 6: Supervised premises by the inspection services*

Kind of Facilities	Number	Town Water supply	Own water facilities	Sewage system	Own disposal
Slaughter houses	44	17	/	/	/
Dairy and dairy industry	20	15	5	/	/
Meat industry	34	/	/	/	/
Fish industry	1		1	1	
Bakeries	144	141	3	115	29
Production of non alcoholic drinks	8	8	0	4	4
Facilities for production and salt processing	2	2	/	1	1
Facilities for olive oil industry	7	6	1	6	1
Plants for water bottling	3	1	2	1	2
Facilities for processing of fruits and vegetables	2	2	0	2	0

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Facilities for production of sweets, pastry, coffee	30	26	4	25	5
Green markets	35	32	3	31	4
Hotels, restaurants and other.*	2248	1947	301	1661	587
The places of collective food (kindergarten, factories)	123	111	12	95	28
Markets and supermarkets*	2132	1859	273	1586	546
Gut facilities	2	2		2	
Facilities for sea fish	3	3		3	

Source; Ministry of Health and Ministry of Agriculture, Forestry and Water Management

*during the tourist season the number of the facilities is increased for 30%.

Strategic activities

Building national institutional capacities which will ensure safe product throughout the food chain, in compliance with the Strategy, by organisation of all elements mentioned in this Strategy and as well as:

- coordinated implementation of measures in the food chain at all levels where there is a risk of microbiological, chemical and other kind of contamination;
- protecting consumers from unsafe, unwholesome, mislabelled food and building the consumer confidence in the surveillance system;
- determine the instruments for horizontal coordination of the competent authorities and inspector's activities who are involved in the system at all stages of the food chain;
- determine the vertical coordination mechanisms between the bodies at the central and local level;
- standardizing the official implementation system control;
- standardizing the licence procedure of the premises included in the food chain „from farm-to-table“;
- continuous and holistic education of food inspectors;
- standardizing criteria and approaches in the inspection procedure; except procedures prescribed by Law on inspection surveillance, standardized professional approach is necessary in the surveillance of the food chain and nutrition, so that draft of Guideline for inspectors is also one of the priorities;
- regulating the present overlap of competencies between the certain inspections, where criteria disparity problems would be solved out, kinds and scope of analytic surveys;
- adequately equipped inspection services in compliance with the modern requirements for the inspection control.

1.3. LABORATORIES

Analysis of the current condition Laboratories for food and drinking water testing are situated in the public health institutions: Biotechnical institute, Special Veterinary laboratory and Centre for

Ecotoxicological surveys (table no. 7). The conditions for resources, premises and equipment are prescribed by the Regulation on Conditions in terms of professional personnel, premises and equipment which has to be applied in health and other organizations for carrying out the analyses and super analyses «Official Gazette FRY, no.» 4/92, 7/01 and 60/02 and Regulation on Conditions which has to be applied in veterinary ambulances, veterinary ambulances for pets, veterinary clinics, special veterinary labs and national veterinary institute for veterinary practices, «Official Gazette of Montenegro» no. 73/05. Microbiological methods for the food products and water testing in these labs have also been prescribed – Regulation on methods of performing the microbiological analyses and super analyses of foodstuffs «Official Gazette of the FRY» no. 25/80 and Regulation on hygiene of drinking water « Official Gazette of the FRY» 42/98 and 4/99.

Some factories have their own internal laboratories where analyses are carried out for their purposes. (Attachment no 4) The work of these laboratories in the terms of conditions for carrying out of activities is regulated according to Regulation on Conditions and manner of testing the foodstuffs and the goods of general use during their production and manner of keeping records of the performed surveys. «Official Gazette of FRY, no. 8/75.

Table no.7 Name of the institution and kind of surveys performed in it

The name of the institution	Microbiological surveys		Physical-chemical surveys	
	foodstuff	water	foodstuff	water
Institute for the public health of Montenegro	+	+	+	+
Health Home Bar	+	+	+	+
Health Home Cetinje	-	+	-	+
Health Home Herceg Novi	-	+	-	-
Health Home Pljevlja	-	+	-	-
Biotechnical Institute	-	-	+	-
Special-veterinary laboratory	+	-	-	-
Centre for Ecotoxicological surveys	-	-	+	+

During the preparation of the documents Country Profile and Food Safety Strategy, Ministry of Health has carried out the assessment of laboratories (human resources, equipment and condition of premises) for microbiological and physical-chemical survey together with the assistance of the expert teams in the field in the period of October- December 2005. It was estimated that the number of personnel in the microbiological labs is satisfying, in comparison with the equipment which does not completely meet the requirements of the modern diagnostic in the food microbiology. The exception is Special Veterinary Laboratory, which possesses the modern equipment necessary in this area.

In the microbiological laboratories, quality control system has not been established yet according to ISO 17 025 standard. This control quality system is under development in the certain labs which are in the process of accreditation (laboratory of the Institute for Public Health and Special Veterinary Lab).

In the terms of premises standards, labs which are carrying out physical-chemical surveys of foodstuffs and water fulfil the conditions. Concerning the equipment degree, not all are equally equipped, what have impact on efficiency of carrying out of certain laboratory surveys or some specific kinds of analyses and scope of examined parameters. The number of human resources in some laboratories is not completely satisfying, what has impact on the scope and the kind of laboratory surveys and quality of work.

At the moment there is no possibility for testing the presence of bacterial toxins, plant toxins, as well as testing of GMO and GMO products.

Labs for microbiological and chemical testing of food and water are not in the same phases of accreditation procedure at the moment.

Special veterinary laboratory is in the preparation for the process of accreditation, laboratories of the Institute for public health are in the process of accreditation, while the laboratory of the Centre for Ecotoxicological surveys is accredited according to:

ISO/ IEC 17 025 (YUAT). The scope of accreditation for water and foodstuffs is: physical – chemical surveys of drinking water and ice are (61 parameter), sampling of drinking water (8 methods), the quality testing and sanitary correctness of fish and fish products (15 parameters) and preparation of fish samples for analysis (2 methods), radiological surveys of food and water.

ISO 9001: 2000, Certified by TUV SUD Bayer Sav – Germany. The scope of certification in the water and foodstuffs area: quality control and sanitary control of foodstuffs and POU, fodder, attesting foodstuffs of animal origin in export/import, radioactivity control of products and goods in the export/import, water control.

Other labs are not in the accreditation process.

All labs have adequate equipment for taking and collecting of samples. Taken samples are kept according to the prescribed rule. Routine analyses of the drinking water and foodstuffs are carried out according to the contracts with the interested parties – the owners of the samples. Periodic examinations are carried out in accordance with the regulations, on inspection services request. Logistic system for sampling and giving the results does not exist.

Centre for medical statistics of the Institute for Public Health performs the statistical data processing.

Strategic activities:

- rationalisation of the laboratory network on the basis of existing facilities and estimated needs for provision of unique approach and overlap avoidance.
- improvement of working conditions and analyses performance according to the modern diagnostic requirements and European standards
- implementation of the quality control system (inter - laboratory testing at the national level, external and internal checking and other)
- carrying out the accreditation procedures of labs in accordance with ISO 17025 standard, possibilities and necessities
- legislation harmonization which prescribes methods and tested parameters with the legislation of the European Union and providing the conditions for such harmonised legislation
- providing the flexible form of the legislation which prescribes requests for methods and working conditions of labs, in order to implement and enforce necessary amendments in accordance with the new scientific ideas and technological achievements.
- providing logistic system for taking samples and giving the results of performed analyses.
- providing continuous education of the personnel in laboratories.

1.4. SANITARY SURVEILLANCE OF FOODBORNE DISEASES

/Epidemiological data/

According to communicable disease groups and statistical data, the number of recorded cases of intestinal diseases is 27, 63% and is on the second position just after the communicable respiratory diseases, out of which 15, 54 % referred to acute enter colitis, 4, 21 % refers to salmonellas, 3, 0 % referred to toxoinfectio alimentary, and other diseases related to food 4, 78 %.

Sanitary surveillance system is performed in accordance with the regulations of the health protection of the population from the communicable diseases which are adopted during the year 2004/2005.

Foodborne diseases are recorded as specific cases or like alimentary_epidemic. According to the legal obligation, medicals are obliged to register communicable diseases from the communicable disease list in the certain blank form. Communicable disease list comprises of 75 communicable diseases, and among these 75 diseases, foodborne diseases are also present. Official records related to the incidence of foodborne diseases are submitted to the Institute for Public Health – Epidemiological Centre, by every health institution where clinically or in lab foodborne disease is confirmed.

According to the registration of single cases and foodborne diseases outbreaks, a large number of enterocolitis accuta is noticed – a diagnosis which medicals confirm according to blood tests basis without lab identification; this diagnosis represents a great number of entities, so the fact that the most foodborne diseases are registered in this way implies insufficient / incomplete diagnostic capacities. This especially happens during the summer months, in high temperature period, when these diseases most frequently occur especially the single cases. Relatively high occurrence of bacteria *toxoinfectio alimentarius*, and also salmonellas refers to the conditions of food production, handling conditions and storage, that is, hygienic and other circumstances which contribute to the appearance of these diseases.

Considerable occurrence of outbreaks caused by easily spoiled food (creams, mayonnaise, season salads), refer to unflavored conditions where food is prepared and conserved. Registered cases of botulism and trichinellosis imply the constant consuming of inadequately prepared food or food conserved in unhygienic conditions.

Table no 8. Registered cases of foodborne diseases (2000– 2004)

Disease	2000	2001	2002	2003	2004
Salmonellosis	357	166	204	321	321
Paratyphus B			2	6	1
Staphylococcosis	-		19		22
Botulisam	4	5	4	4	
Shigellosis	48	23	17	28	
Listeriosis	-	-	-	-	
Brucellosis	1	-	-		
Toxiinfectio alimentaris	458	479	223	229	283
Echinococcosis	3	3	3	2	1
Trichinellosis	51	-	37	23	9
Infectious Enteritis of unknown origin – Enterocolitis accuta	1832	2 323	1555	1 184	1074

Source: Institute for Public Health

Table no 9. Registered cases of foodborne diseases outbreaks 2000 – 2004

Year	Number of epidemics	Number of affected
2000	6	417
2001	10	801
2002	8	342
2003	4	60
2004	9	121
Total	36	1741

Source: Institute for Public Health

1.5. FOOD CONSUMPTION AND PRODUCTION

One of the characteristics of the agricultural production in the last five year period is its growth especially in the certain sectors, as well as the variety of the agricultural products. Montenegro has 1 381 059 ha of land area, out of which 518 067 ha or 37, 5 % is agricultural land. Pastures occupy 325 671 ha (or 63%) of the total agricultural land, meadows occupy 131 483 ha (25%), plough fields and gardens occupy 44 818 ha, orchards occupy 9 580 ha and vineyards occupy 3 864 ha. These indicators show that Montenegro does not have significant resources of cultivable agricultural land, and as a result, commercial production is not present, while on the other hand, significant pastures areas represent potential for cattle breeding production. Due to smallness of individual land many households are dealing with the agriculture. There is a great variety of tropical fruits, olive grove at the coast; vegetables, fruits, grapes, meat, milk in the central area, while in the north dominate potato production, horticulture and extensive cattle breeding.

The main sector of the agriculture production is cattle breeding, especially sheep breeding, poultry farming, pig breeding and goat breeding. Estimating the cattle breeding production as a whole, domestic meat production provides about 63 % of expenditure, and milk about 85 %. Suitable climate conditions favor the development of the horticulture; production amounts up to 35 000 tons per year while fruit production varies from year to year. Vegetable growing is an important branch of the production – occupies significant number of households. In the last five years the vegetable production has significantly increased, especially potatoes, which makes a half of the total vegetable production. Wine-growing is very intensive branch of the production which is connected with the manufacture industry - production of wine and brandy. Grape grows in the area of about 4000 ha.

Food manufacture sector is growing lately: meat and milk industry, drink production and bakery. During the past years some of the smaller factories for production of milk products have been built although direct sale on the green markets represents better provision of milk products. Positive movements are noticed in the meat production sector, where some major facilities increase its production by offering wide range of products. The supply of primary rows is specific – a significant percentage of pork is imported from EU countries, beef and lamb meat are domestic products, including also poultry meat with limited domestic production. Factories which prepare fresh fish have started to export it, although the export degree is still very low. Disposable capacities of bakery production completely meet the domestic needs. Lately, plants for fruit and vegetable production have been renewed, although production has not significantly increased. The production of fodder is based on the imported raw, and two bigger producers have been registered. Wine production marks the most suitable trends in the production of beverages. Beer and brandy production also mark moderate positive trends.

In the period of 2001 – 2004, the total agricultural production has increased by 12, 7 %, especially in the certain sectors, like production of poultry meat, potatoes, and vegetables in the protective area (green houses). In the final value of the primary production, the cattle breeding makes more than 60%, and together with fish and bee's products makes 65 %. Meat and milk, as a single products are mostly present. It is important to emphasize that a significant part of the products is not present in the market place, but is used in households for nutrition or manufactured in the domestic products.

It is important to emphasize that in Montenegro production of additives does not exist, so necessary quantities and sorts have to be imported for manufacture industry. Additives make 0, 66 % of the total import and additive import is liberalized.

It is important to emphasize complete import dependency in the terms of agricultural supplies for agricultural production like veterinary drugs, additional medical stuffs, mineral fertilizers and pesticides.

Table 10: Total industrial food production and procession in the year of 2004

1. fruits and vegetables - jam	44 000 kg
2. sterilized tinned fish	228 000 kg
3. fresh meat	699 000 kg
4. dry-cured meat	250 000 kg

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5. bacon	132 000 kg
6. sausages	159 000 kg
7. pasteurized milk	48 746 hl
8. butter	23 000 kg
9. cheese	86 000 kg
10. ice-cream	1 156 000 kg
11. cream	193 000 kg
12. yoghurt	4 009 tons
13. refined edible oil	44 tons

Source; Statistics of the Montenegro- Monstat

Import – Export

Although increased related to earlier years, export is very low compared to import and amounts 28%, while in the year 2000 import ratio compared to export was 8, 3%, and in the year 2002 - 12, 9%.

Beverages and alcoholic drinks are the first in exportation; out of which beer and wine make 39 % of the total export, and then ice – cream and mushrooms. For the products produced in factories for exportation, competent authorities issue certificates on product's wholesomeness and quality. The greatest quantity and number of the foodstuffs are imported from the EU countries and neighboring countries (Croatia, Macedonia, and Bosnia and Herzegovina)

The trade of the foodstuffs between Serbia and Montenegro is not subject to the foreign trade procedures and is treated as inner trade, according to valid regulations.

Food consumption

Table 11. The average quantity of the items consumed (bought and from the own production) according to the member of the households

- 2004-

FRESH AND PROCESSED MEAT	Measurement kg / l
1. beef – with or without bones	0,2
2. baby beef- ----#-----	6,8
3. veal meat -----#-----	9,6
4. pork meat -----#-----	4,5
5. pork	0,8
6. sheep and goat meat	0,8
7. lamb and kid's goat meat	4,3
8. poultry meat	11,7
9. other meat and innards	0,9
10. tinned and processed meat	0,5
11. dried and cooked bacon	2,3
12. dried meat without bones	2,5
13. dried meat with bones	5,6
14. salami and all kinds of sausages	3,7
15. hot dogs, knockwurst	1,5
16. other sausages products	0,1

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FRESH AND MANUFACTURED FISH	
1. fresh and frozen river and lake fish	5,0
2. fresh and frozen sea fish	3,3
3. fish products	0,4
MILK AND MILK PRODUCTS	
1. milk	127,2
2. yoghurt	12,7
3. domestic cheese (all kinds)	16,6
4. other kinds of cheese	0,4
5. cream, sour cream	2,3
EGGS (chicken and other)	
	186,9
FRESH AND PROCESSED VEGETABLES	
1. potato	78,9
2. beans, dry pea, lentil, and broad-bean	5,0
3. onion and garlic	10,3
4. carrot	5,8
5. cabbage and kale	19,0
6. spinach – fresh and frozen	2,2
7. tomato – fresh	10,4
8. pepper – fresh and frozen	10,5
9. green salad	2,1
10. French bean and string bean- fresh and frozen	5,1
11. other fresh vegetables	8,3
12. pickled vegetables	2,8
13. tinned and processed vegetables	1,3
FRESH AND PROCESSED FRUITS	
1. apples	21,8
2. pears	7,6
3. cherries and sour cherries	2,2
4. apricot s and peaches	2,9
5. plums	5,0
6. melons and muskmelons	9,9
7. grapes	2,7
8. other fresh fruits	2,8
9. agrums	10,3
10. other tropical fruits – bananas, pomegranates, ananas	10,2
11. walnut, almond, hazelnut	2,4
12. dry fruit – plums, figs, grapes	0,3
13. jam, tinned fruit, dessert, marmalade	3,7
14. fruit juices, natural, with or without sugar	8,5

Source; Statistics of the Montenegro- Monstat

1.6. MARKING

Marking and labeling of foodstuffs are regulated by the Regulation on Marking and Labeling of the packed foodstuffs, Official Gazette of Montenegro, no. 4/03, 12/03, Regulation on conditions of sanitary control of diet foodstuffs in trade Official Gazette of FRY, no. 4/85, 70/86, 69/91 and mentioned Law on Sanitary Control of Food, according to which foodstuff is regarded as unhygienic if the label is missing, the term of use is unclear, damaged, illegible, or in some other way incomprehensible for the consumer. Beside mentioned, the label must have written nutritional values.

1.7. DRINKING WATER

Hygienically pure water is the first condition of the hygienic standard and health protection of the population, including all other measurements used against contamination of underground water and surface water. Although Montenegro has relatively high quantities of qualitative water, with lot of precipitations, problem of the regular water supply to the population as a whole exists due to geological conditions, especially during drought period. The data indicate high degree of households equipped with water supply, especially in towns, while villages are not sufficiently equipped with the water supplies. In villages water is provided in a different ways – organized, by city's water supply (suburbs); by separate public water supply; by own or individual supplies (wells).

The growth and development of the water supply system has fallen behind the development of the suburbs. The construction of new and reconstruction of the existing water supply systems and capacities was significantly slow in the development process compared to development of the suburbs. This caused water supply systems with their infrastructure and equipment to fall behind the needs of certain suburb or region. In many towns, the water supply network is worn out and the amount of lost water in the system is significant. Drinking water is chlorinated. Most water supplies use automatic gas chlorination system. In accordance with the prescribed regulation on hygienic correctness of drinking water, the quantity of the chlorine amounts up to 0, 5 mg/l. Water restrictions during the drought period in summer are risky from epidemiological point of view, especially those water supply systems which have worn out network due to secondary contamination. The water springs have to be safe and protected by protective zones, what is also legal obligation.

However, local springs, wells in villages and other water facilities do not meet necessary hygienic requirements, nor in protection of drinking water quality.

Montenegro has three registered plants for water bottling, out of which one bottles mineral water (municipality Bijelo Polje), while other two bottle natural mineral water in the municipalities Kolasin and Savnik. The samples are periodically tested, as well as packaging.

Sample analyses of drinking water performs labs, and the number of the analyses as well as the number of water supply distribution network points are determined according to the number of inhabitants and in compliance with the -Regulation on hygienic quality of drinking water.

Table 12: Total number of tested samples and percentage of irregular drinking water samples

Year	The number of tested samples of drinking water	Percentage of irregular samples	
		Microbiologically	Hygienically
2000	3031	13 %	15,31%
2001	5001	9,72 %	8,06 %
2002	4 494	14,2%	10,40%
2003	4 476	16,3%	15,1%

2004	3097	17,11%	14,27%
------	------	--------	--------

Microbiological irregularity is related mostly to the increased total number of all germs. Beside regular disinfection, frequent failures of worn out distribution network have impact on high percentage of microbiological irregularity of some water supplies.

The most frequent incorrectness of analyzed samples refer to insufficient residual chlorine, increased chlorides in summer period in the coastal zone municipalities Kotor and Tivat and iron and nitrites. (Municipality of Ulcinj).

2. THE MOST COMMON HAZARDS

2.1. MICROBIOLOGICAL HAZARDS

Although we speak more and more about the food safety lately, the fact is that every year the number of people affected by contaminated food is very high, especially in the developing countries including our country. Among these agents are pathogen micro organisms of Salmonellas type, E.Coli, Staphylococcus, Trichinellae spiralis and other. Together with the increase of the micro organisms resistant to antibiotics, the danger of microbiologically contaminated food is higher. The food habits are changing, the percentage of consumed food out of the house is increasing. The food patterns are changing, especially among people who live in cities and eat uncooked food, fruits and vegetables. Also, fast food is offered in the cities, especially during tourist season. In the individual farms, farmers produce different sorts of agricultural plants and breed the cattle, individually producing milk and meat products, in the traditional way. The traditional way of selling foodstuffs is on the greenmarkets, where usually producers sell some different sorts of food. Very high temperatures in the summer period increase the incidence of microbiological hazards on greenmarkets, due to bad storage. The preparation of food without heat treatment, like eggs, creams, mayonnaise, souses resulted in microbiological contamination of salmonella's type as shown in the book «Epidemiological data» in the last five years. The registrated cases of trihinellosis were only small family epidemics, contaminated by consuming the prepared meat, without previous veterinary inspection of the domestic animal. Insufficient quantities of pure drinking water which is used in food production might represent microbiological danger, as well as people who are handling with food and who lack the elementary knowledge of food hygiene. Beside, microbiological test of foodstuff, usual controlling procedure is examing the cleanness degree of the working surfaces where food is prepared, equipment, employee's hands and devices.

Due to insufficient material for sanitary supervision of food, planned monitoring programmes are not being performed at the moment and results of microbiological analyses which are given in the document completely refer to the food samples submitted to the labs by inspection organs or by owners of the facilities. In the last five years period, inspectors gave priority to microbiological control of easily spoilt foodstuffs like ice-creams, milk, milk products, meat products, salads, and creams and other. The control refers to the foodstuffs in the industrial production, trade and import. Inspectors determine the samples according to the method of random sample or according to the epidemiological indications.

Table 13: Results of microbiological foodstuffs testing

	Sample origin	Import	Industrial production	Trade	Manufacture production	Total of samples
2000	Number of samples	2927	1 342	702	883	5 854
	incorrect	1,20%	20,94%	15,24%	12,91 %	9,17 %
2001	Number of samples	3 685	670	1 036	1 189	6 580
	incorrect	1,25%	9,10 %	16, 02%	13,29%	6,55%

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2002	Number of samples	3 419	418	677	82	4 596
	incorrect	0,41%	5,74%	32,35	15,85%	5,87%
2003	Number of samples	2 555	587	445	143	3 730
	incorrect	0,16%	6,47%	25,39%	27,97%	5,23%
2004	Number of samples	1 946	1 949	2 123	1 063	7 081
	incorrect	0,61%	3, 28%	20,82%	19,56%	10,25%

Source: Institute for public health

It is obvious that the greatest percentage of incorrectness exists in the manufacture production and the lowest percentage of incorrectness exists in the imported food (table 13). These results and the opinions of authorities prove that distribution and trade are not performed in the safe and proper way, what leads to the secondary contamination of the final products and raws by microbiological agents.

2.2. CHEMICAL HAZARDS

Physical – chemical contamination of food can endanger the health after being exposed once, which happens rarely or exposed longer to some other chemical agents in one or in the other kinds of food, what happens more frequently. The food can be chemically contaminated due to toxins of natural origin, (alkaloids, micro toxins, and radionuclides) as well as chemical contaminants of the artificial origin (additives, pesticides, heavy metals, veterinary drugs, other antibiotics, polychlorinated biphenyls, dioxine, artificial radionuclides and other).

Table: Pphysical and chemical testing results of foodstuffs

Year	Number of samples	Import	Industrial production	Trade	Trade production	Total of samples
2000	samples	4 202	276	261	372	5 111
	incorrect	1,55%	10,51%	16,86%	11,56 %	3,54%
2001	samples	6 082	224	504	311	7 121
	incorrect	0,62%	2,23%	18,25%	18,01%	2,68%
2002	samples	5 806	249	227	102	6 384
	incorrect	0,31%	6,43%	3, 08%	---	0,64%
2003	samples	4 245	443	101	69	4 858
	incorrect	0,94%	0,45%	5,94%	1,45%	1,01%
2004	samples	4 278	623	377	370	5 648
	incorrect	0,96%	1,6%	9,0%	5,1	1,84%

Source: Institute for public health

The most frequent physical- chemical incorrectness referred to the increased content of water and fat, changed senses of the processed meat products from the domestic production and inadequate level of iodine in salt for human use. Incorrect samples also referred to the group of non- alcoholic drinks, cereals and legumes, vegetables and vegetables products, meat and meat products due to changed physical senses, inappropriate texture, inadequate presence or quantity of additives or heavy metals above allowed limit.

2.3. REZIDUE

Residues / pesticides, heavy metals, non-metals, veterinary drugs and other toxic substances There is a great possibility of the food contamination by chemical contaminants, (pesticides, heavy metals, and other toxic substances, polychlorinated biphenyls, dioxine and others), from land, water and air, through processing to packaging on the table.

In our Republic residues control is regulated by Law on Sanitary control of the foodstuffs and goods of general use according to which the Regulation on quantities of pesticides, metals, metalloids, and other toxic substances, chemotherapeutics and anabolic, as well as other substances which may be found in foodstuffs, is passed "Official Gazette of FRY, no. 5/92, 11/92, 32/02. By this Regulation the definition of pesticides, toxic substances, residues of some drugs, hormones, microtoxins and other is given.

By the Code of Practice on veterinary – sanitary examination and control of animals before slaughtering and products of animal origin "Official Gazette of FRY, no. 68/89, biological remains, obligatory systematic examination, taking the samples, the animal breeding issue, the estimation of obtained results and undertaking the measures for alive animals, raws and the products of animals

The readiness of some individual producers to work with chemicals is unsatisfactory and without sufficient professional control. They are using the instructions as a source of information which does not correspond to their knowledge and possibilities. To say it simple, sufficient attention is not paid to education of individual agricultural producers.

Having in mind mentioned offer of the foodstuffs from various households which deal with the food production, it is not possible to have adequate and complete control which would eliminate chemical and other hazards (pesticides residues, veterinary drugs, heavy metals and other).

At the moment planned and systematic monitoring of residues of animals in water is being conducted (fresh sea fish from the Adriatic Sea), under the supervision of Veterinary Directorate, and the analyses are carried out in the Centre for Ecotoxicological surveys of Montenegro.

Planned and systematic monitoring of veterinary drugs residues, pesticides, heavy metals and other toxic substances of other animals, raws, foodstuffs, and also animal's fodder which may represent chemical hazard, is not being performed at the moment, though samples are mostly examined sporadically.

For the draft of new legislation for the residues control system, emphasis is placed from the final products on fodder or some of its components and on all animal breeding procedures and plant production.

2.4. ADITTIVES

The most modern technological requirements for the foodstuffs are to make product more durable, to improve its appearance, colour, consistency, and in the same time, represent a challenge which requires and stimulates further surveys.

The health aspects of additive application in the foodstuffs production are regulated according to the different regulations. The basic is Law on Sanitary Food which refers to the raws for food production, as well as for spices and substances added to food in order to achieve certain characteristics. By this Law, Sanitary unsafe foodstuffs are those which have quantity of additives not allowed nor appropriately and technologically used. In order to comply with the international recommendations (Codex alimentarius, WHO, FAO), Regulation on Quality and conditions of additive use in foodstuffs and other requirements for additives and its mixtures, Official Gazette of Montenegro, 56/03 5/04, is enacted.

More than 5000 of additives which are used in technological processing procedures in production represent chemical hazard, especially when control of technological procedures is partial or incomplete. Additives and other supplements beside long term consequences on health may provoke an allergic reaction of sensitive groups – pregnant women, little children, elderly persons, persons with chronic diseases. As a result, special attention is drawn to the control of the products intended for those groups, so-called diet products.

The existing problem of possible harm of additives is very complex, especially if we have in mind possible synergy effect due to permanent use of different additives.

Although new Regulation is enacted, control of additives is obstructed by lack of methods for their determination and existing laboratories without equipment. Amendments to the legislation should refer to the draft of a new unique methodology for the quality confirmation before use as well as confirmation of quantity of additives used in the foodstuffs.

2.5. RADIOACTIVITY

Contamination of food by radioactive substances is one of the modern civilization problems. It is ever growing problem considering its nature and development trend. Natural radionuclides have been present in the food and in humans long ago, and are specific for certain territory or population. In this area no further surveys were carried out.

It is evident that the application of radioactive substances and work of nuclear facilities are processes which are nowadays performed according to rigorous safety measures. However, these processes have certain radiation risk. That risk is transmitted from the source of contamination mostly through the food chain.

Food protection from radioactive contamination in normal conditions is carried out by air protection, land, precipitations and waters and is realised before the beginning of contamination, from the production and processing to the consumption.

The area of foodstuffs radioactivity is controlled in compliance with the regulations passed on the basis of the Law on Protection from the Ionizing Radiation, Official Gazette of FRY 46/96 and also Regulation on maximum levels of radioactive contamination of the environment and decontamination procedures, Official Gazette of FRY, no 9/99.

Analysis of drinking water radioactivity is obligatory during inclusion of new water supply system, drinking water bottling and in all other cases when competent health authorities estimate as necessary. There were no positive samples of drinking water on radioactivity. Radioactivity analyses are carried out in the Centre for Ecotoxicological surveys in Montenegro.

Results of the control of some samples were taken separately from the environment of their origin, isolated from their processing technology are not sufficient base for integral food safety system. It is necessary to build the system for protection at earlier stage of production circuit or before the beginning of that circuit.

3. STRENGTHENING ELEMENTS OF THE FOOD SAFETY SYSTEM

3.1. INTEGRATED SURVEILLANCE SYSTEM IN THE FOOD CHAIN – «FARM- TO – TABLE CONCEPT»

Having in mind the current situation, there is no sufficient coordination and communication between various state institutions in our country, scientific institutions, non-government organisations and other services in the area of the food safety “from farm- to table” system.

This is the reason for establishing the National Body for the food safety, with the aim to develop integrated system of food control “from farm - to table” and avoiding the duplication of efforts, unnecessary limitations and expenditures; that is, achievement of the complete effectiveness and efficiency in the food chain.

3.2. GOOD AGRICULTURAL HYGIENIC AND MANUFACTURE PRACTICE; STANDARD SANITARY OPERATIVE PROCEDURES; HACCP

Lack of prescribed procedures for «Good agriculture practice» – GAP; Good hygienic practice» - GHP; « Good manufacture practice» - GMP, «Standard sanitary operative procedures» SSOP; «Hazard analyses critical control point» - HACCP; for all kind of productions as well as risk

assessment system and risk management, are slowing down the effects of surveillance food safety system.

Food safety is a result of several factors: legislation should prescribe minimal hygienic requirements, official control should check fulfilment of hygienic conditions, and companies should implement and perform the programmes and procedures of the food safety based on HACCP principles. They have to be flexible enough to be applied in all situations, including also small companies.

In cases where it is not possible to identify critical control points, or to implement HACCP system, good hygienic practice can serve as a solution.

3.3. RISK ANALYSIS, RISK MANAGEMENT AND RISK COMMUNICATION

It is necessary to implement the Risk analysis as a new scientific method which will remove or avoid the health risk. Risk analysis is a process composed of three components:

- Risk Assessment;
- Risk Management;
- Risk Information

Total process of risk assessment will be based on confirmed scientific information and application of accepted scientific procedures from a various sources:

- Institutions which are dealing with the food safety;
- Expert Committees;
- Regional /International sources of scientific data
- Agency for food safety EU – Scientific Committee.
- In the area of risk assessment, The Republic of Montenegro will always strengthen and improve cooperation and information exchange with the international organisations - EFA, FAO, WHO, JEMRA, JECFA, JMPR and OIE.

3.4. RAPID ALERT SYSTEM (RASFF)

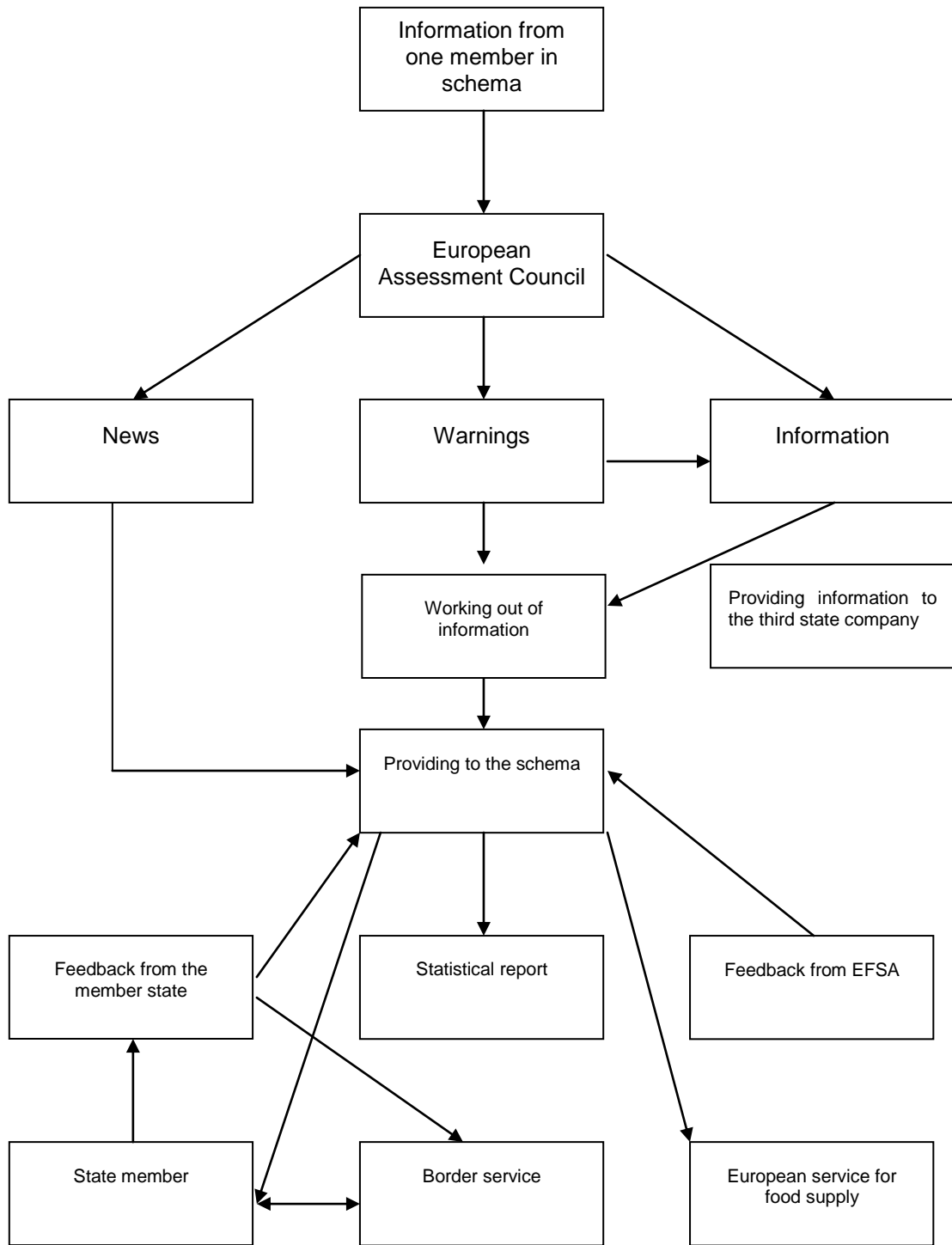
Rapid alert system (RASFF) enables official control for information exchange and measures which are undertaken in order to ensure the food safety. Current situation in our country is such that unless there is a suspicion that foodstuff or the good of general use could pose a risk on the market, or endanger human health, no rapid alert system is organised. (RASFF) Information – warning is sporadic, information is released to the media, without determined procedures during obtaining of information. No communication infrastructure has been build to obtain and collect such information and provide it further within the state, to other states or to competent international organisations

It is necessary to form a network system which would issue releases about direct or indirect risk for human health. Legal base for RASFF is regulation of the European Commission 178/2002. Information is divided into two groups:

- Warning information (information about danger)
- Information (information for information)
- Information about danger is provided when food represents a risk on the market, so necessary measures have to be undertaken. Such information is provided in all countries which have recognised the problem and are initiating the relevant measures like product withdrawal. According to this, information should be provided to all network members in order to check the presence of problem on their markets, so that necessary measures could be undertaken. Consumers have to be convinced that the product is withdrawn from the market.

- Information for information which refers to the food is provided when the risk has been identified, but members are not obliged to undertake urgent actions because product has not entered on their market. Such information mostly refers to the food which has been controlled and returned from the outermost EU borders. Consumers have to be convinced that risky product has not entered on the market and that all necessary measures have been undertaken.

European Commission issues weekly the information reviews about the risk and information for information. This is necessary in order to establish the balance between the notification and protection of commercial information, since trade names and the name of individual company are not issued. There is no harm for consumer protection since RASFF information implies that the measures have been undertaken or that are in ongoing process.



3.5. TRANSPARENCY

A food control system must be developed and implemented in a transparent manner. The confidence of the consumers in the safety and quality of the food supply depend on their perception of the integrity and effectiveness of the food control activities.

It is important to ensure that the consumers, other concerned parties and all stakeholders in the food chain have confidence in the decision making process and participate in the formulation of the regulations for the food safety. Confidence in the scientific institutions and other independent institutions which protect human health will attribute to more efficient food safety system.

This will encourage cooperation between all concerned parties and improve the efficiency and rate of compliance.

PARTIPATION AND COOPERATION WITH THE INTERNATIONAL BODIES

- WHO (World Health Organization)

The major objective of the WHO is achievement of very high level of health protection for all world population. It monitors, supervises and avoids the appearance of communicable diseases and provides help to state members on the activities of preservation and improvement of health of the population.

Our country successfully cooperates with WHO and many projects have been realised so far, and at the moment the Project on «Improvement of the Food Safety System is realising in the South Eastern Europe.

-Codex Alimentarius

Strategic need of Montenegro is direct communication and participation in Codex, by its representative, as well as the foundation of National Body in the following period. This will enable transposition and implementation of standards and recommendations of Codex Alimentarius into the national regulations related to food safety and quality.

- OIE (Office International des Epizooties)

The membership in OIE has been regulated at the state union level so far. OIR is present at all meetings and is treated as equal member and representative of the Montenegro. Our country applies all standards and recommendations of this organisation, with the aim to provide health safety of the animals in the international trade and products of animal origin. The Agreement on application of the sanitary and phytosanitary measures (SPS Agreement) is entrusted to this organisation within the International Law to define the internationally accepted standards which relate to animal health and zoonoses in the terms of standards, guidelines and recommendations in order to protect the public health and to place safe food on the international market.

-IPPC (International Plant Protection Convention)

The membership in the International Plant Protection Convention has been regulated at the state union level. IPPC is an international agreement which provides common and efficient operation of the state members in order to prevent the expansion and consumption of organisms harmful for plants and plant products.

3.7. CONSUMER PROTECTION

Both governmental and non-governmental sector deal with the consumer protection, within their competency, mutually cooperating and realizing the cooperation with producers, distributors and trade.

Direct collaboration of consumers is especially important, or collaboration with the Centre for Consumer Protection, competent inspection services through open telephone lines in order to protect their rights when buying a product.

The area of consumer protection is formulated by the range of legal acts especially pointing out those which provide safe and fit products for human life and health, or which comply with sanitary, hygienic and ecologic conditions and fulfil prescribed quality parameters, as well as the conditions of labelling and marking. Beside already mentioned laws in the part 2.1 of this Strategy, Law on Consumer Protection came into force in the year 2002, as well as a great number of other unmentioned technical regulations on quality and requirements for foodstuffs.

In Montenegro the proposal of new Law on Consumer Protection have been prepared and harmonised with EU legislative. The incumbent of this Law project is Ministry of Economy with the participation of other competent state organs and the Centre for Consumer Protection.

The law proposal will, together with other regulations which regulate the area of production and trade as well as the supervision of foodstuffs, make the aspect of life and health of the consumers during foodstuffs supply and consumption safer. Provisions of this law oblige the responsible subjects in the food production and trade, so this aspect becomes especially important.

Beside fulfilment of already mention conditions, the obligation of proper storage and packaging of the products is set by this law, as well as the ban on hygienically /sanitary unsafe products sale, adulteration and improperly labelled products. Also, it is obligatory that competent state organs warn the consumers about the risk of consumption of certain products which are unsafe and also to recall and withdraw such products from the market. Misleading advertisements of the product's features are forbidden. This law specially prescribes inspector's competencies to impose temporary ban on trade of the products in all cases when safety provisions have not been respected. Also, these irregularities are qualified as the breaches of law and are severely fined.

The importance of the consumer protection is pointed out in this Law by the obligation of The Government of the Republic of Montenegro to enact the National Program for consumer protection and to monitor its realisation through the competent ministry.

III NUTRITION

1. Current condition

- ***Characteristics of the nutrition of the population in Montenegro***

In the mentality and habits of the population in Montenegro during centuries, special attention had been drawn to the quality of family nutrition, especially children nutrition. Nutrition is the last link of chain affected by low standard.

The average energy intake is energetically nutritious, but besides, in the structure dominates so called risk food. The nutritious food, as the source of high quality proteins, minerals and vitamins is not sufficiently present. As a result, only 8% of total energy value of one meal is albumens, and 33 % are fats. Important fact is that fats of animal origin are significantly present.

Surveys of nutritional habits of scholars and young people show that:

- About 80 % of school children eat only white bread,
- Frequent consuming of so called «fast food» which contains high energy density
- Insufficient daily consumption of fruits
- Potatoes dominate, most frequently used as chips, while other sorts of vegetables are insufficiently present in daily nutrition
- Large quantities of sweets are consumed, which often substitute some of the main meals.

In the Institute for Public Health, Advisory for adequate nutrition has been organized in 2003. The most frequent patients are fat or grossly obese persons, people who suffer from chronic diseases and who have to change diet in order to improve their health.

Special attention is drawn to diet education through the cooperation with media and teams who organize communal nutrition of younger population groups (kindergartens, schools, pupil's homes and other).

- ***The prevention of disorders due to iodine deficiency in nutrition***

The health problems caused by insufficient iodine consumption in many countries are significant health and social problem. It is estimated that more than one quarter of the total number of population on our planet lives in the iodine deficiency area. They are faced with the risk of the numerous health disorders caused by insufficient iodine intake.

Balkan Peninsula was known as especially sheer area according to written data and art. In Montenegro goitre mostly appeared in the north of the Republic, in the valley of the river Lim. The area of the municipality Bijelo Polje has been known as endemic and early inhabitants and immigrants from other regions had goitre.

In SFRY goitre was estimated to be a public health problem, when the Decision on obligatory iodine prophylaxis of the populations of endemic regions through the consumption of the iodized salt was passed, and in 1953 the Regulation on obligatory salt iodization intended for the human and animal nutrition was passed. Undertaken activities resulted in the significant decrease of the goitre prevalence. From then, all activities for the sustainable elimination of disorders caused by iodine deficiency were undertaken.

In Montenegro, from the year of 2000, with the support of UNICEF, Program for sustainable elimination of disorders caused by insufficient iodine consumption is carried out, in order to prevent, or minimize the risk of disease appearance, early discovering and timely treating the disease caused by insufficient iodine consumption. Activities have been overtaken at the level of Federal Commission in 2004, when Ministry of Health had formed Republic Commission for prevention of iodine disorders caused by iodine deficiency.

2. Objectives

- The basic objective of nutrition policy is prevention of chronic non-communicable diseases, in the first place cardiovascular diseases, whose risk factor is improper nutrition.
- Promotion of healthy lifestyles
- Carrying out of special Programs in order to prevent the appearance of health consequences related to micronutrients deficiency.

3. Strategic activities

For achievement of basic objective as well as specific aspirations, following strategic principles are proposed:

- Information and education of population in the area of nutrition
- Promotion of breast – breeding and healthy way of nutrition of infants and little children
- Continuous monitoring of nutrition in preschoolers institutions in order to prevent deficiency and develop proper habits in nutrition
- Perform special programs for prevention of obesity and chronic non- communicable diseases
- Draft of information system for special programs with data base
- Carrying out of special programs

- prevention and control of deficiency of micronutrients
- sustainable elimination of disorders caused by iodine deficiency;
- Prevention of nutritive anaemia of vulnerable population groups;
- Prevention of calcium and phosphorous deficiency of vulnerable population groups;