

Hazard Analysis Critical Control Points

Introduction and Conversation

The hygiene standard in the Federal Republic of Germany is predominant satisfactory.

Already in the past, the country was requesting high quality standards of foodstuff for the consumer. The quality measure was not always checked systematically. The realisation of the European domestic market, the target was and is, trade barriers according §§ 30 and 36 from the European basic elements contract, to remove or to harmonised.

The EU tries to remove these handicaps by vertical and horizontal regulations. By the horizontal regulations we have product and branch overlapping regulations.

Here we have, for example, the guideline to foodstuff observance (93/43/ EWG) For the vertical product based regulations we have guidelines (GL) like for meat or for poultry. Guidelines are obligatory for each member state and must be confirmed in national law. For this, its up to the each country, how to realise the regulations and laws.

With the GL 93/43/EWG about the food hygiene (No.175/1 from 29.07.1993) be to Europe uniform hygiene standards and safety measures enter the law.

The realising of the GL in german law according the instructions from the EU must be done until the 31.12.1995. A plan is not yet fixed. Due to the bills from the EU all intends must take over to german law; we can already say how the content of the new regulations will look like. The Federal minister for health and hygiene give already the first instruction on 15.01.1996 and inform that the GL will be fixed for all federal lands in a uniform foodstuff hygiene order and therefore the federal or commune Law will be cancelled from the day of introduction.

The suspicions, that also this chance will be lost, to give federal uniform regulations should be out of question with this.

H A C C P

The structure of guideline 93/43 EWG about foodstuff hygiene

With this GL we try get one hygiene standard all over Europe 5 Ways are assigned for it:

1. Introduction into the HACCP concept
2. Fixing of temperature control points
3. Fixing of micro biological criterions like number of germs, critical values for certain microbes
4. Order of certain hygiene rules (appendix of the GL)
5. Work out of voluntary guideposts for a better hygiene.

The Definition:

We understand under foodstuff hygiene all measures and precautions, which are necessary to produce, fit for consumption products.

Range of validity:

The GL include all steps of preparation, processing, manufacture, packaging, storing, transportation, distribution, handling and offering to sale or to the delivery to the consumer. The only exemption is the first age production like milk or the slaughtering of animals. Affected is each kind of Foodstuff Company that means every public or private firm, like bakery, galleys, and restaurants or without acquisition purpose like old peoples home etc. The assumption, to submit the company under the GL law, is that one or more of these actions will do in the company.

1. The HACCP concept

The GL tells:

The food companies setting the critical control points for the food safety during the production and take care that certain safety measures are fixed, keep it and observed and all this according the HACCP regulations.

This passage of GL is basis for the briefing of the HACCP system.

With the HACCP, risks can be recorded, analysed, observed and therefore they becoming considerable controllable

Therefore the concept is good for safety of health and cares for the quality standard too.

The other quality safety systems which is always shown together with this one like the **150 9.000** are going more further.

This system was voluntary, until now. The HACCP is fixed by the government and it must applied *Include are all risks and dangers of the companies.*

1. Raw materials and ingredients

2. Procedures

[Delivery, storing, preparation, processing and completion]

3. Composition of the semi and final products

4. Packaging

5. Storing of already produced Items

6. Logistics

The GL prescribe the HACCP system for the hygiene area. Besides the checking of risks through microorganisms we can also control, without any additional expenditure, chemical risks like they are leftovers from cleaning and disinfecting utensils as well as strange particles through glass, cigarettes and others.

The pros of the HACCP concept:

- The company is transparent
- Better employee motivation
- Avoid from errors and faulty products
- Economic advantages like avoid of deficits, marketing and sales promotion.
- Introduction of care duties

The documentation is not strictly fixed in the GL. How we will see in the following explanations, in the future, the observance of foodstuff must be checked in each company, if the new concept was already introduced, keep it and controlled.

Besides the documentation is a important mean to prove the own care and the conversion of all regulations.

Origin and development

In the sixties the NASA start a program, to guarantee the highest standard for the food supply in the space.

The first things they use was risk analyse from pharmaceutical industry.

In 1971 the first whole description of the concept was published.

In 1985 the first official application recommendation through the national Academy of Science.

We could already see the concept can get the trust of the consumers.

As the following a document was created for the application in foodstuff producing procedures, (The Alinorm 93/13 A

In 1993 the GL about food hygiene came to Europe and was still published in the same year.

The HACCP is a systematically application for the realisation, the evaluation and the prevention of risks and dangers.

Explanations for the 16-point system

1. Fixing the range of validity

We recommend, separating the different sections of the company. Normally this is already done, because of the different working conditions.

We recommend also, limiting the conversion for just one section. The experience we will get there are also useable for all the other sections in the company.

Before the start, all involved employees, should have training for the new concept.

Of course the company's leadership should support the whole concept too.

2. Designate the team for the HACCP:

In small companies it's also possible that just person is charge for the HACCP.

The representatives or the team must have training first, for the concept.

The company's leadership should offer further training for the employees.

The following requirements must be take into consideration.

- **The team must be overlapped**
- **All company section must be included**
- **Competent in all questions (sales, production etc.)**
- **Should find out dangerous hygiene risks.**
- **For a better analyse of the risks, experts should be always available, intern as well as extern too.**

If we use a team, than a designated person should be delegated, to guarantee that the composition of the team is correct and its possible for the team to suggest certain changes as well as the team can realise the plan. Other tasks of the designated person from the team

are to publish results and decisions and to represent colleagues.

3. The logging of product dates, explanations and requests on the products

This point will take the biggest expenditure, first.

But especially here, together with the point 4, we will see the transparent of each company sector.

Product explanation:

To the product explanation it is necessary to get the certain factors, like:

➤ **Composition**

Raw materials, ingredients, supplementary materials, recipes, approved / requested and / or micro biological facts, like fat content, or the norm for ice cream processing or for dairy products. Recommends of the german association for microbiology.

➤ **Conditions and signs**

This include the enumeration of physical and chemical features, like the pH value, water activity, concentration of the single components, store temperature etc.

➤ **Kind of treatment**

Like dry, frozen, cooked, or salted, tins, vacuum, or carton.

➤ **Store and distribution conditions**

Freezing, deep-freezing, room cooling, Room temperature, keeping hot.

➤ **Durability**

Expired date, using date, conditions to catch these instructions

➤ **Kinds of preparations**

Grill, water, microwave, cooking

➤ **Purpose of applications**

certain diets, mean meals, breakfast or dinner
bestimmte Diäten, Hauptmahlzeiten
Frühstück oder Abendessen

Notices:

The logging of single cases is actually not necessary, because these products are made of ready prepared foods.

Therefore we also have a chance to create a *load booklet* for the distributor. There are fixed the minimum hygiene demands. Simultaneous, it is possible to set quality standards as prerequisite for the delivery.

4. Set up from floating frameworks and procedure diagram

To explain the production, we recommend using the floating frameworks.

Each single working step can take out and focused separate.

Examples for the procedures are the community food.

By logging the product dates, product explanation, the request on the products as well as the logging of floating frameworks and procedure diagrams, the process is becoming transparent.

The receiving:

➤ **Agreement with the samples**

➤ **Correct package**

➤ **Cleanliness during transportation**

➤ **Hygiene faultless loading (no smoking, safety clothes etc.)**

➤ **No dirties, like pests**

➤ **Disadvantageous handicaps through other foodstuff or materials**

➤ **Appearance, smell and taste**

The storing

➤ Cleanliness of the storing rooms, no wet walls, dirties or mould, dust or structural lacks etc.

The preparation:

a) The mise en place:

Checking of the equipment, the facilities, and rooms, cleaning, heating, cooling, freezing or drying of goods.

b) Additional preparation

Defrost, mixing, cooking, pasteurisation, sterilisation, storing, closing or distribution and transportation

To get a high transparent we must:

- **The plan of the buildings**
 - **The schedules for cleaning and disinfecting**
 - **Information about the company and personal hygiene**
 - **Information about the arrangement and technical details from the machines (DIN direction)**
 - **Parameter about the procedures, time curves and the duration**
 - **Overview about the internal product traffics**
- use this one!!**

5. Checking and confirmation of the fixed floating frameworks and diagrams

The HACCP team should arrange with the company representatives, a process observance, for the fixed documents.

Discussion with the colleague is important, that the team stay close to the simple employees.

5. Enumeration of the risks and measures to their prevention

Already in the company we will talk about, safety and certain risks, so that each single step can be seen as part of the entire program. During the listing

of high risks, all biological and / or physical risks, which can be expected, will be observing.

This especially includes all Steeps from the receiving to the distribution. This listing should include, if there is any not possible degree on:

➤ **Biological contamination**

[Surviving or increase of germs)

➤ **Chemical contamination**

[Lay off, origin or continue of chemical materials through transfer of enzyme, oxidation's etc.

➤ **Physical changes are the results of chemical and biological contaminations.**

which will be on the procedure or on semi as well as on final products.

We always have to ask us, if through certain measures, the hygienically risks for foodstuff can be minimised or removed too.

Besides we will see that one measures works against several risks.

But also the specialisation from measures like cleaning and disinfecting schedules or temperatures of fridges should be always set.

6. Fixing of the critical control points

The fixing of the critical control points is based on the background of the dates from the under passage 3-6 already mentioned things in connection with the way through the company.

At the same time we check each sector like loading ramp, store, galley etc. We have to ask:

- **What to check?**
- **Who?**
- **Where?**
- **How?**
- **How often?**

Based on each single module from the floating framework, its possible to get, through several times company walks and discussions with the representatives, all risks and dangers.

To fix the critical control points, we can get a standard of valuations, which shows us, if urgent measures are necessary, if we can expect a lower quality or may we have longer problem with hygiene risks. For the decision, if we already got a critical point, we can use the decision tree. He was published in the *RL 91/493/EWG* concerning the own control of fish products from *20.5.1994*

(94/356/EG-Amtsblatt 37 Nr. L 156/50) In this decision is fixed How can we realise the principles of own controls, according the HACCP standards.

Besides they count as a universal guideline for the realising of the entire HACCP concept. On another outline for dairy products, the decision tree was used too. The procedure sometime looks a bit extravagant. Therefore some suggestions, from us, how to make the danger analyse more transparent.

7. Fixing of warning signs from critical values

How to see from the checklist, critical control points must be fixed. Among legal temperature values, se should also look at the recommends from the german association for hygiene and microbiology. General, all legal critical values must be used.

9. Logging of Observing system for the critical control points

The definition of the observing and control system is the following:

- **What will be checked?**
(tins, meat, vegetable etc.)
- **Where will be checked?**
(Loading, store, production)
- **How will be checked?**
(Visual control, thermometer)
- **When will be checked?**
(Time, Frequent)
- **Who makes the check up?**
(Name, time, set the replacement)

If we already make all the single measures from the passage 6-9, we can summarise the result in a collective folder.

An example for this we can find on table 11 at the appendix.

There, at the same time, we have training for the staff and the finding of the risks. Besides certain requests will be fixed and explain what happen if the regulations will not kept. Through these explanations, the employees as well as the representatives will get a better understanding for the course.

10. Fixing of Measures in case of crossing the critical values

We distinguish 2 situations:

a) The observed parameter, moving around the critical value. There is a danger that the hygiene control over the product on this point will loose. Therefore we have to place measures immediately, so that we don't lose the risk control, for example we Reheating the materials after the break down from the cooling process.

b) The observed critical values are out of the standard already. Immediately we have to take a corrective action against to bring back the norm. For example: the checking of heaters and freezers. The correction and other measures can be summarised like this:

➤ **Who is in charge for the correction measures?**

➤ **How we will get back to the norm? (Kind of measures)**

➤ **What happen to products, which was produced during the norm deviation?**

These measures must be documented too.

11. Regular Checking, if the observing measures are still working properly

The method and proceeds will be fixed from the HACCP team:

a) The test method:

That means, spot checks and stronger tests on critical points.

Check up of storing and distribution conditions as well as the pre-delivery inspection of all products.

b) The test procedure:

That means, all inspections and control checks, observing of the critical values and the record from the corrective action

Note:

The check up must be guarantee the dependability of the control system

After changes in the working procedures everything has to check up again, to avoid new critical control points.

12. The documentation

Like we explain already, a correct hygiene observance, without good check ups, as well as a good documentation is not possible.

Therefore the following should be fixed by the HACCP:

Who make the documentation – How and Where?

The means, that the kind and circumference of the documentation must be fixed. Besides its important too, who has permission of access for the documentation's

Important:

The documentation is made for the legal observance and for the fixing of realisation from the HACCP concept in each company.

From the observances we can get copies. In the first working folder is recommended, that the documents should keep for a term of 2 years.

Many times the documentation has been underestimated from the people. She is not just a make for the own confirmation, that all measures was used properly, but also it is an exactly evidence about the care duty opposite to the authorities.

In the jurisdiction we realise written things as already happen, but unwritten things are not.

13. Fixing of temperature control criterions

The regeneration of microorganisms, when the quantity can be doubled, especially depends on the pH-value, temperature and the food offer.

Under good conditions, bacteria's can share once during 20 minutes. Therefore the temperature is very important during storing and preparation.

For frozen products, for example, The correct temperature must be always -18°C or below until its coming to the consumer.

Just during the distribution or before fixing in the super markets, variations up to 3°C are allowed. Since 01.01.1998 means of transport, with a higher capacity, than 2m^3 and other transportation for frozen foodstuff, must be equipped with suitable measuring devices. This is also count for the storing places, since the 01.01.1997

During the working procedure, the circulating air around the deep frozen products must be observed in regular distances, so that the course of temperature can controlled.

These readings must be kept for 1 year!!

Also for perishable food, we have already some rules and regulations:

The meat hygiene order

- Ground meat and products, which based on ground meat up to **4°C**
- The inside temperature of the animal body up to **7°C**
- House rabbits up to **4°C**
- Side products from the slaughtering up to **3°C**
- Transportation of fresh meat should be with **7°C**
- Gefrorene Vor- und Zwischenprodukte mindestens **-12°C**

The fish hygiene order

- Fresh fish should be stored up to **2°C** or under melting ice before he will distribute to the dealer.

Hen's egg hygiene order

- From the day 18 on, eggs must be stored between **5°C to 8°C**
- Other temperature criterions we can find on foodstuff, which was produced from raw hen's egg or egg products, raw milk, pasteurised milk, milk products as well as butter and cheese.

By perishable food we find different instructions in Germany's federal lands.

Some federal lands have requested, that during the serving of warm food the minimum temperature should be at least **65°C**.

Others just asking for **60°C**.

Also the serving temperatures for perishable foods are different. In contrast with the cooling temperature, The view is almost equally. They are fixed between **6°C to 8°C**.

We must pay attention to this kind of regulations for our HACCP concept. We have to take consideration for fixing the critical values. In the European countries there exist some lists, where the single products groups with the fixed temperature are fixed.

14. Fixing of the microbiological criterions

We have all over Europe norms for cooked crayfishes and other molluscs. The EWG announce already too, that they will fix same microbiological criterions.

After the legalisation from EU the law will be realised in each member country. In this decision we got norms like for salmonella and examination duty during the preparation and before the distribution through the producer, to find out how the norm and standard was fulfilled.

Also the procedure in case of not keeping the norms is written there. After that, the findings and the wrong items as well as the corrective action, which we did against, must show to the authorities.

Simultaneous all the procedures should revised to analyse this points and to identify the reasons for contamination.

The frequent of analyse must be become higher. During passing the limits in Germany will result in prohibition on marketing. In Germany certain food like milk, ice cream etc., have already fixed, microbiological legal norms. Besides we still have recommendations from the German hygiene and microbiology association, for the following products:

- **Raw and dry noodles**
- **Spices**
- **Dry soups and dry products**
- **Mixed salads**
- **Deep frozen breads**
- **Deep frozen pastries**
- **Deep frozen convenience**
- **Delicate salads**
- **Tofu**

This recommendations are no legal regulations, but also important. Therefore, these points should be also included during the making of critical points.

And also this values will used from the foodstuff observance, to evaluate.

Reference values are made for the consumer's prevention.

If the tasted food has a lower or the same value than the guidelines, than the food can still served.

The Cross over the from the limits, its just a sign that the critical point was reached.

The responsible team should look for the reasons to minimise or remove these.

The results are samplings and stronger company checks.

If the critical values will cross over more than doubled, than it should be checked, if after the advising other consequences against the producer can be realised.

The kind of penalty depends on the offence. Therefore we must also see that a single test is not always represent for the entire procedure.

Note:

The reference value is not a legal standard, but the results are important to obtain an expert opinion on hygienically risks.

15. Vorgabe bestimmter Hygiene-Vorschriften

Appendix to the GL 93/43/EWG

The exactly content of the GL you will find down on this booklet.

Most of the regulation from the European community was already transferred to national law from all member countries.

Some innovations we will explain in the following appendix. These regulations are not yet fixed to german law.

I. General demands

In this passage you find general demands for companies, which produce foodstuff, except the under passage III fixed requirements.

Universal news is not the content of these requirements

We should inform, that the GL request now to get a better prevention from contamination through condensation and moulding of foodstuff on surfaces.

A new demand for air pipes tell us, that the filter and other parts, which are requested to change or to clean must be easier to reach.

II. Specified demands

Here we find the regulations for rooms, where with the food preparation.

With the exception of eating areas and the requirements which we find under demand III.

This specified demands are almost similarly to the national requirements from the member states.

New is, the specified demand for ceilings. They must be constructed, so that an accumulation of dirt can be avoided as well as the moulding, or the removing of used materials must be reduced too.

For ceilings, which use fins, this will be difficult to put in action.

Another difficult requirement is that windows should be build, so that the collection of dirt is not possible.

The furnishing from the windows with insect gratings, which must be easy to remove, its not fixed yet in all companies.

III. Demands on changeable and / or not permanent establishment

On changeable locations, like mobile trucks, market stands, principal used private facilities as establishments, and occasional as restaurant used private rooms and sales automates.

This passage doesn't bring such big news.

IV. Transportation

Container for the transportation from foodstuff must be keep clean and in a proper outfit, so that the food is protected against any contaminations.

V. Requirements for specific Devices

Also these requirements are not new for the companies. New is just the mark that, equipment must be installed, that the areas around can cleaned too

VI Food waste

Exact details about the regulations for the treating of waste, we can find in requirements for pork plague.

The producer of this kind of garbage must guarantee that the waste can be destroyed at all the time.

If this garbage is used to feed the animals, than it must guaranteed too, that the food was reheated already.

We also find notes that the rooms for the storing of this kind of garbage, must easy to clean and to disinfect as well as in good conditions too.

Besides the garbage rooms must be free of germs and pests.

Contamination of food, potable water and equipment through the waste must be always impossible.

VII Personal Hygiene

Unfortunately the food council just use very simple explanations to fix the personal hygiene. A high standard for personal hygiene, cleanliness and proper outfit is requested.

We hope that, for the transferral of the guidelines the standard from the last regulations will not get lower All other regulations for the personal hygiene are fixed already in german "federal law of epidemics"

VIII Foodstuff Regulations

According the regulations, raw materials will not be accepted from food producing companies, if prove to be contaminated with vermin, pests, parasites and germs or toxically rotten materials, so that they even after the selection or hygienically treatment in the company are not good for consumer.

The regulation is assumed, that the foodstuff companies making check ups during the receiving of goods.

The following wording:

„Normal selection and / or after the implementation of processing in the company”

Is not compatible with german law. A foodstuff, which is unhygienic or spoilt, cannot come back to the normal standard through preparation.

For a good example we have the pork chop, which fell down on the ground.

After the cleaning and cooking, condemnation is not expected, but the foodstuff is uneatable already.

If the consumer knows about, what happen to the pork chop, it will make him sick already.

In this passage we also find other simple wordings, which give us space, for fixing our own critical temperature points. This is possible, because, its requested only, that foodstuff, which is excellent media for the growth of bacteria's, must be stored on temperature, out of risks for the human health. But its not defined exactly, from where to

where is the risk. (See also fixing of temperature criterions-Chapter 2)

IX. Training

The new regulation, we find here is that, the company responsibilities must be guarantee that, person which are in contact with foodstuff that persons, should be controlled and get practice for the food protection and hygiene.

This examinations was fixed in the GL 91/497/EWG for setting the questions of health for European union domestic business with fresh meat for the extension of their regulations on the distributions from fresh meat as well as the GL92/45/EWG for setting the questions of animal laws during the shoot and marketing of game. The same things were also fixed in the GL 92/n6/EWG for setting the questions health during commerce with chicken meat. Besides the own controls according the HACCP standards, even in the past there was already training for the people, who handle foodstuff.

In the GL52/5/EWG for setting the questions of health for European union domestic business with fresh meat products and the GL92/no/EWG for the regulation of ground meat and their products during making and distribution. Ground we call meat, which is cut in small pieces with less than 100 gram. Also the GL 92/46/EWG with hygiene regulations for the making and distribution of raw milk, heated milk and all products, which based on milk, is include.

For this product specified guidelines from the European community, the training is a must, before we get details about the circumference from the schooling. Since short time there is a suggestion from the Council of norms for foodstuff and agriculture products (**NAL**) from the german institute of Norms e. V. (**DIN**)

According their plan the employees should make the following training:

1. Main knowledge's in microbiology of the foodstuff

Recognise and knowledge about kinds of growth from bacteria's, organisation of the bacteria's, moulds, yeast and viruses.

Knowledge about metabolism products from the microorganisms Including the toxins

2. Conditions for the growth of bacteria's and microorganisms

Parameter for the wanted and unwanted growth:

Nutrients. Temperature, time, moisture, pH -value, aw-value.

3. Micro biological risks

Knowledge about the germs, which can result in spoil.

4. Other risks for the health

Residues of cleaning and disinfecting means, lubricants, strange materials, or defective control equipment.

5. Special instructions

The employees must be informed about peculiarities on their working sector. As well as the results of mistakes for the product.

➤ Hygiene for rooms and equipment, main knowledge's about cleaning, disinfecting and their frequencies, the intensity, temperature, certain means.

➤ Raw materials, store and distribution regulations. Besides the regulation for temperature, pest prevention and control.

➤ Product and preparation hygiene Observing of pressure, temperature, moisture, storing temperature

➤ Personal hygiene body – and hygiene for clothes

➤ Knowledge about the keeping and fixing of wastes, about the hygienically treatment from garbage and waste water.

16. Preparing of voluntary guidelines for Good Hygiene Practice (GHP)

We should set guidelines for a good hygiene practice under participation of producers and substitute of certain groups, which include the HACCP principles.

If it's necessary to fix these kinds of guidelines for the whole European community, the commission will create it. During this time the commission is still working on this guidelines.

We don't have any concrete outlines yet.

The guidelines should be used on a voluntary basis only, to guarantee also that the HACCP concept will put into action in each company.

Hygienically observing through the authorities

The observing is fix in the law according the paragraphs 40 to 43 from the LMBG. After the publishing of the guideline 89/397/EWG about foodstuff observing, is the central point of the observation, one of the following things:

➤ Inspection

➤ Sampling and analyse

➤ Hygiene check for the employees

➤ Checking of the print and date bases

➤ Checking of the company made control systems with a comparison from the success they got.

In the guideline 93/43/EWG about foodstuff hygiene, its requested that the companies must make observation measures to guarantee that the food producing companies has already fixed the critical control points, which are important for the procedures and must care also for, that certain safety measures was fixed, checked, and keep it, according the HACCP standards.

Besides, the authorities for the observation must guarantee also, that the standard of the microbiological criterions and temperature control criterions, which was fixed from the European community, will always keep.

The tasks of the observation authorities in case of hygiene controls will get more concretised:

Inspections through the certain authorities include all evaluations in the company, like the existing risks for the foods.

The authorities have to look especially for the company voluntary fixed control points, to guarantee that they work properly.

Through this demand on the observation authorities, we se again that the concept from the HACCP must be used in all foodstuff companies with all the consequences for both sides.

Several doubts about the documentation from the HACCP concept will eliminate. If there is no documentation from the company about the control and observing measures, how the authorities shall

know about the realisation from these regulations. Depend on the kind of the expected risks; the frequent of the inspection must be fixed from the authorities too.

For the evaluation from the company and of the certain risks from safety, a suggestion was create.

Afterwards there will be an arrangement into groups, if the companies producing products with low risks, medium risks or high risks.

As high-risk food we call foodstuff with durability less than one week that means chemical and / or microbiological perishable food. Therefore, facilities like canteens and restaurants, we call as high-risk food.

Other suggestion for the fixing of critical control points include also the kind of preparations, the importance of the company, the company conditions and the trust to the company's leadership.

There shall work with point systems to get the right frequent for the company's inspection. The frequent can be from 2 to 12 month.

For the showing of already functioning quality systems, the points will get lesser, so for the next time the frequent can be higher. Altogether we can summarise, that we are a changing of the observation and the foodstuff control goes back to a point what she always should be, just a control measure, if the companies own control systems runs properly to guarantee all requested standards.

The control of the safety according HACCP standards, must be guarantee from those, which are affected, that

means all which producing any kind of foodstuff (exemption the first age production forms, there are special regulations).

All steps during the preparation, processing, manufacture, packaging, storing, transportation, distribution, handling and offering to sale or to the delivery to the consumer must follow the regulations from the HACCP- Concept.