

Food Safety Compliance training

Legislation



With our Food Safety Compliance for QA managers training we go back to the basics, the foundation to properly fulfill the complex function of a QA manager, now and in the future.

Introduction

1. Legislation

- EU regulations & Information sheets & Recall
- Listeria control
- Additives regulation
- NVWA



Legislation

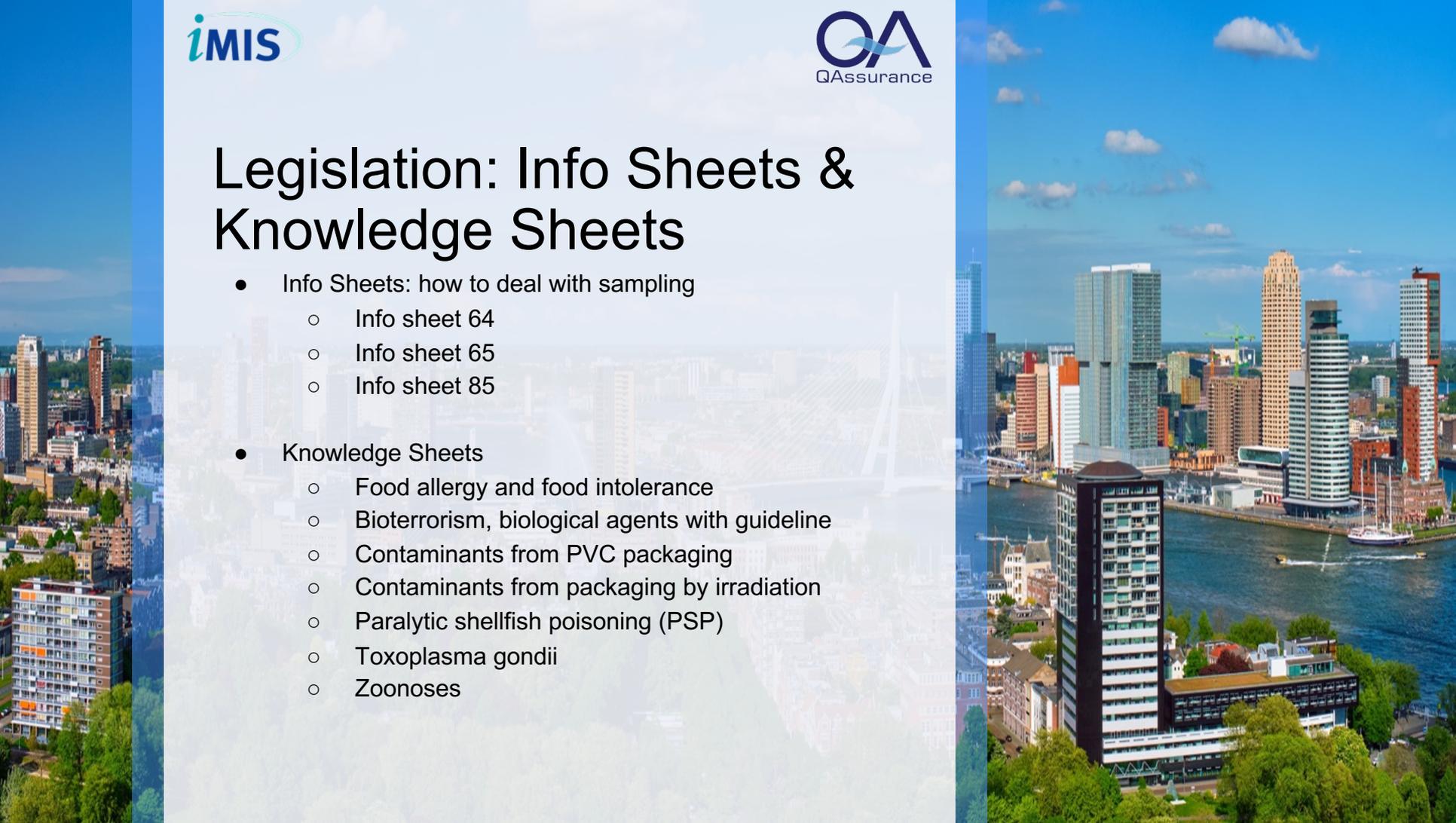
Legislation: EU regulations

- 1990-496 Nutritional information
- 2002-178 General Food Law
- 2005-2073 Microbiological criteria
- 2005-396 Pesticide residues
- 2006-1881 Contamination of food
- 2006-1924 Nutrition and health claims
- 2008-1333 Additives
- 2008-1334 Aromas
- 2011-1169 Food information



Legislation: Info Sheets & Knowledge Sheets

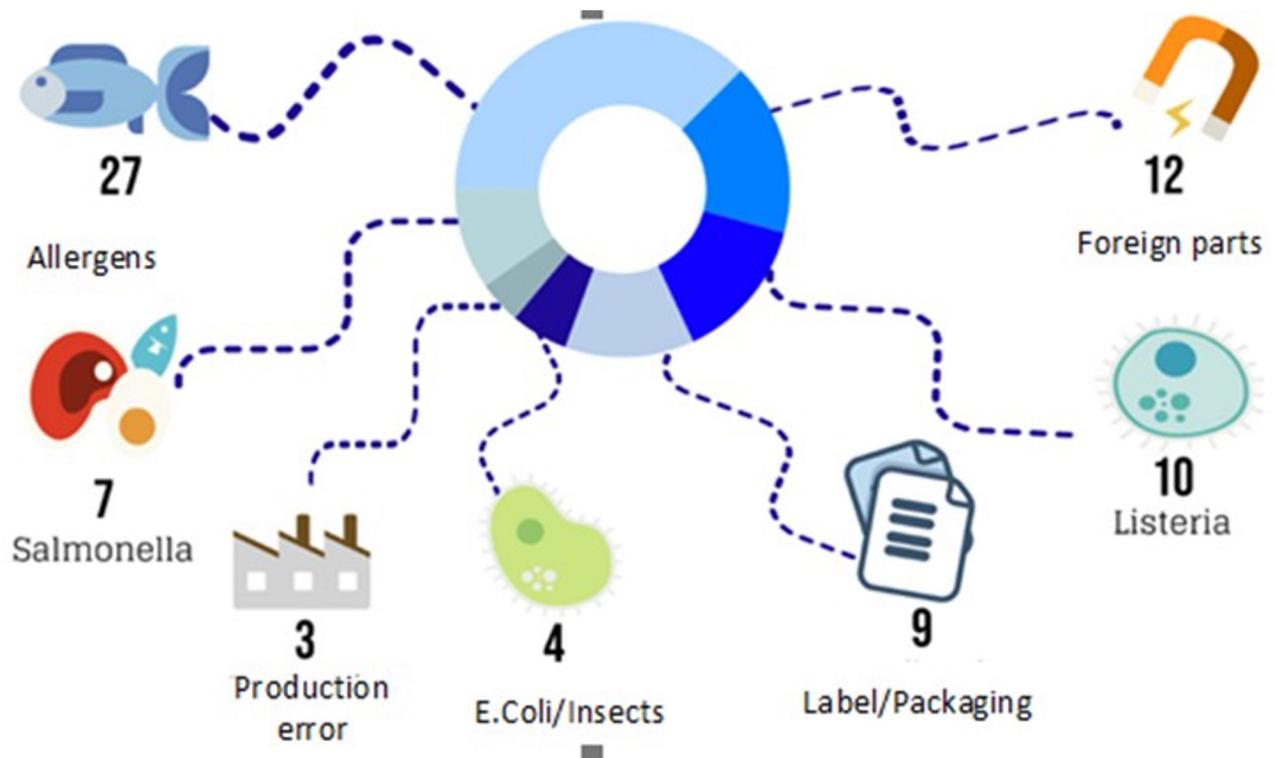
- Info Sheets: how to deal with sampling
 - Info sheet 64
 - Info sheet 65
 - Info sheet 85
- Knowledge Sheets
 - Food allergy and food intolerance
 - Bioterrorism, biological agents with guideline
 - Contaminants from PVC packaging
 - Contaminants from packaging by irradiation
 - Paralytic shellfish poisoning (PSP)
 - Toxoplasma gondii
 - Zoonoses



Legislation: Recall

- 2002-178 General Food Law
- Article 19: By order of competent authority
- BuRO risk assessment
- Reporting guide
- Issue management
- RASFF - Food and Feed Safety Alerts

Legislation: Recall (VMT overview 2019)



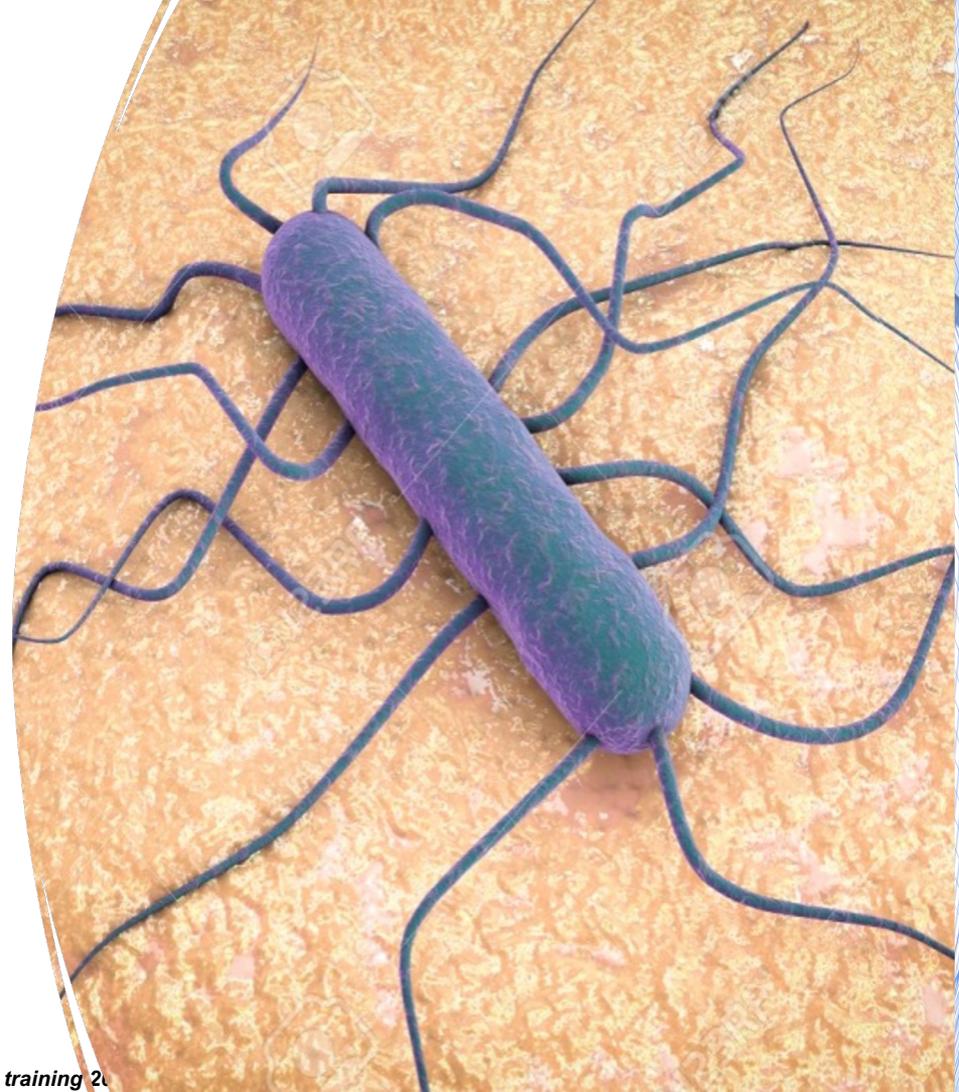
Listeria control

- Info Sheets: how to deal with sampling
 - Info sheet 64
 - Info sheet 65
 - Info sheet 85
- Knowledge Sheets
 - Food allergy and food intolerance
 - Bioterrorism, biological agents with guideline
 - Contaminants from PVC packaging
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Listeria monocytogenes

Risk management



Content

- Listeria Monocytogenes
 - Case example
 - Legislation and interpretation

- Risk assessment and reporting
 - Shelf-life study with FFSP
 - NVWA in practice

Listeria species

Micro-organism: Listeria spp

Family: Listeriaceae

Genus: Listeria

Species:17

-L. monocytogenes L. grayi

L. innocua

L. ivanovii

-L. seeligeri

-L. welshimeri

-L. marthii

L. rocourtaie

L. weihenstephanensis

L. grandensis

L. riparia

L. booriae

L. fleischmannii

L. florendensis

L. aquatica

L. newyorkensis

L. cornellensis



Case example

Largest deadly outbreak of *Listeria monocytogenes*

Listeria outbreak in luncheon meat

- Cause: *Listeria monocytogenes*
- 1.060 causes of illness between December 2017 and June 2018
- 216 deaths (mortality \pm 20%)
- 41% babies younger than one month

Producer Enterprise Foods

- Brand name: Tiger Brands
- Largest producer of consumer goods in South Africa.
- Fully certified food safety management system
- FSSC 22.000 v4.1

Economic consequences

- No meat (goods) consumption
- Import from South Africa stopped
- Three countries also stopped importing dairy, vegetables and fruit

European legislation

- Regulation (EC) no. 2073/2005
- Info sheet 85 (microbiological criteria for food) (NVWA)
- 12 July 2019

Information Sheet 85

- Page 7 - modified: definition ready-made.
- Page 13 - added: guideline for re-use in relation to 'processing' for 'treatment'.
- Page 15 - adapted: table 2 'per food category' to 'per production location'.
- Page 15 - added: sampling scheme for process hygiene criteria (same as info sheet 85 from before September 2017).
- Page 16 - added: sampling frequency for small sprout vegetable producers.
- Page 22 - deleted: 'Listeria spp.' as an environmental research requirement in the decision tree of figure 1.
- Page 23 - added: guideline sampling (frequency/number) of environmental research.
- Page 23 - added: explanation of the limitation of the application of (more) quantitative analysis following qualitative analysis (abs / 25g)
- Page 25 - added: identification of (possible) CCPs from predictive models.
- Page 28 – added: application of text that restricts the shelf life in relation to opening MAP packaging.
- Page 29 - adapted: from 'raw material(s)' to 'foodstuff(s)'.
- Page 34 - clarified: application of ISO 16140-2 when using alternative analysis methods.
- Page 35 - removed: accreditation requirements for analyzes following the sampling of processing areas (environmental investigation).

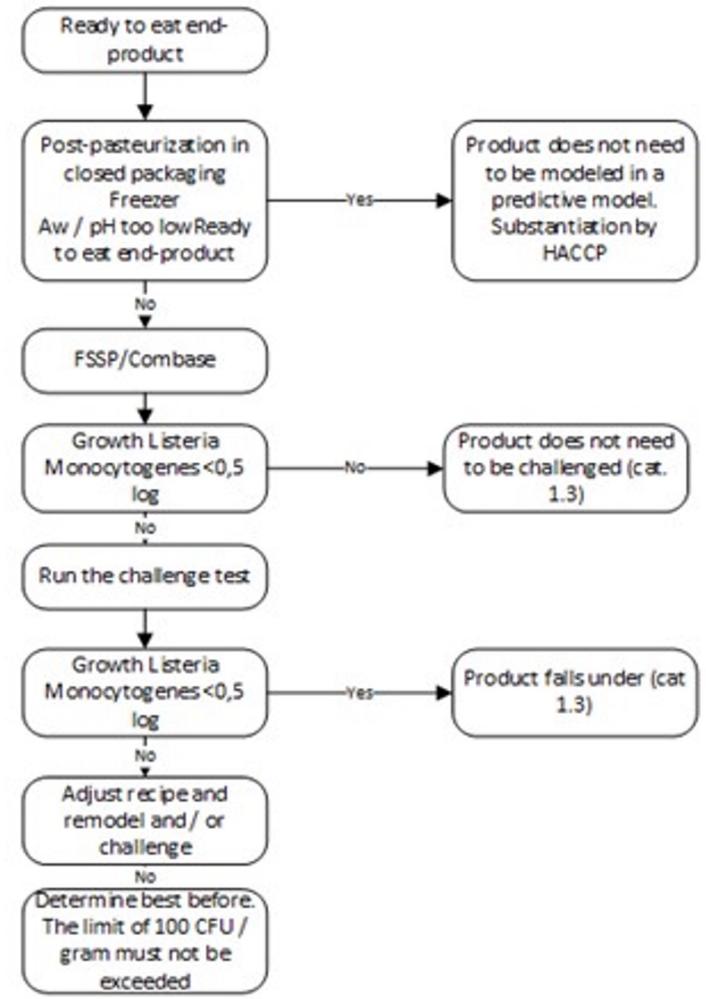
Information Sheet 85

- *Listeria monocytogenes*:
- Absent in 25-gram product
- Products that have been placed on the market; max. 100 CFU/gram.

Growth factors *Listeria monocytogenes*

- pH > 4.4
- Aw > 0.92
- pH > 5.0 and Aw > 0.94
- No heating for 2 minutes at 70°C in the core.
- No protective microflora.

Decision tree



Product overview

Article number		Best before fresh	Best before frozen	Particularities	Meats	Ready to eat end product	Frozen	Pasteurized in closed packaging	pH ≤ 4,4	aW ≤ 0,92	pH ≤ 5,0 and aw ≤ 0,94	FSSP already in practice	Notes
1234	Jalapeno burger	28	365	Processing		x					x	x	

Parameters needed for FSSP-study

- **Dry matter**
- **pH**
- **Salt (sodium)**
- **CO2 in packaging**
- **Organic acids**
 - Acetic acid E260
 - Benzoic acid E210
 - Citric acid E330
 - Diacetate E 262
 - Lactic acid E325
 - Sorbic acid E200
- **Option: Aw value**

Shelf-life study with FSSP 4.0



Food Spoilage and Safety Predictor (FSSP)

Parameters overview

1234	art.nr.	
Jalapenoburger		
5,97	pH 1	
5,99	pH 2	
5,83	pH lab	
1,51	zout 1	
1,68	zout 2	
1,55	zout 3	
35,00	droge stof 1	
35,50	droge stof 2	
35,60	droge stof 3	
1,30	lactaat berekend	
0,53	acetaat berekend	
15,00	tth	
15	aantal dagen log 0,5	
1,34	lactaat 1	
1,16	lactaat 2	
1,27	lactaat 3	
0,59	acetaat 1	
0,54	acetaat 2	
0,54	acetaat 3	

FSSP version 4.0

Listeria monocytogenes growth model

Product characteristics

	Product 1	Product 2
L. monocytogenes initial cell level (cfu/g)	1	1
Temperature (°C)	5.0	5.0
NaCl in water phase %	4.0	4.0
pH	6.2	6.2
Smoke components - phenol(ppm)	10	10
% CO2 in headspace gas at equilibrium	0	0
Nitrite, mg/kg	0	0
Storage period (d)	40	
Include lag time for L. monocytogenes	<input type="checkbox"/>	<input type="checkbox"/>

Organic acids in water phase of product

	Product 1	Product 2
Acetic acid (ppm)	0	0
Benzoic acid (ppm)	0	0
Citric acid (ppm)	0	0
Diacetate (ppm)	0	0
Lactic acid (ppm)	0	0
Sorbic acid (ppm)	0	0

Apply Clear

Constant temperature | Series of constant temperatures | Temperature profiles from logger data

	Growth rate, lag time and growth boundary parameter (psi)			Time for 100-fold increase (d) L. monocytogenes (d)
	μ_{max} (1/h)	lag time (d)	Psi (Ψ)	
Product 1				
Product 2				

Salinity

Dry matter, %

NaCl in product, %

Water phase salt in product, %

pH

Listeria monocytogenes growth model

Product characteristics

	Product 1	Product 2
L. monocytogenes initial cell level (cfu/g)	<input type="text" value="1"/>	<input type="text" value="1"/>
Temperature (°C)	<input type="text" value="5.0"/>	<input type="text" value="5.0"/>
NaCl in water phase %	<input type="text" value="4.0"/>	<input type="text" value="4.0"/>
pH	<input type="text" value="6.2"/>	<input type="text" value="6.2"/>
Smoke components - phenol(ppm)	<input type="text" value="10"/>	<input type="text" value="10"/>
% CO2 in headspace gas at equilibrium	<input type="text" value="0"/>	<input type="text" value="0"/>
Nitrite, mg/kg	<input type="text" value="0"/>	<input type="text" value="0"/>
Storage period (d)	<input type="text" value="40"/>	<input type="text" value="40"/>

Organic acids in water phase of product

	Product 1	Product 2
Acetic acid (ppm)	<input type="text" value="0"/>	<input type="text" value="0"/>
Benzoic acid (ppm)	<input type="text" value="0"/>	<input type="text" value="0"/>
Citric acid (ppm)	<input type="text" value="0"/>	<input type="text" value="0"/>
Diacetate (ppm)	<input type="text" value="0"/>	<input type="text" value="0"/>
Lactic acid (ppm)	<input type="text" value="0"/>	<input type="text" value="0"/>
Sorbic acid (ppm)	<input type="text" value="0"/>	<input type="text" value="0"/>

Include lag time for L. monocytogenes

Constant temperature Series of constant temperatures Temperature profiles from logger data

	Growth rate, μ_{max} (1/h)	lag time and growth boundary parameter (psi) lag time (d)	Psi (ψ)	Time for 100-fold increase (d) L. monocytogenes (d)
Product 1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Product 2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Listeria monocytogenes growth model

Product characteristics

	Product 1	Product 2
L. monocytogenes initial cell level (cfu/g)	1	1
Temperature (°C)	5.0	5.0
NaCl in water phase %	4.0	4.0
pH	6.2	6.2
Smoke components - phenol(ppm)	10	
% CO2 in headspace gas at equilibrium	0	0
Nitrite, mg/kg	0	0
Storage period (d)	40	

Include lag time for L. monocytogenes

Organic acids in water phase of product

	Product 1	Product 2
Acetic acid (ppm)	0	0
Benzoic acid (ppm)	0	0
Citric acid (ppm)	0	0
Diacetate (ppm)	0	0
Lactic acid (ppm)	0	0
Sorbic acid (ppm)	0	0

Apply Clear

Constant temperature | Series of constant temperatures | Temperature profiles from logger data

Growth rate, lag time and growth boundary parameter (psi)

	μ_{max} (1/h)	lag time (d)	Psi (Ψ)
Product 1			
Product 2			

Time for 100-fold increase (d)
L. monocytogenes (d)

Smoke components - phenol

Organic acids

Organic acids in water phase of product

	Product 1	Product 2
Acetic acid (ppm)	0	0
Benzoic acid (ppm)	0	0
Citric acid (ppm)	0	0
Diacetate (ppm)	0	0
Lactic acid (ppm)	0	0
Sorbic acid (ppm)	0	0

Apply Clear

Acetic acid E260

Dry matter, %	<input type="text" value="35"/>
Acetic acid and acetate in product, %	<input type="text" value="0.2"/>
OR	
Sodiumacetate in product, %	<input type="text" value="0.27"/>
Water phase acetic acid and acetate, %	<input type="text"/>
Water phase sodiumacetate, %	<input type="text"/>
Acetic acid in water phase of product, mg/l	<input type="text"/>

Dry matter, %	<input type="text" value="35"/>
Acetic acid and acetate in product, %	<input type="text" value="0.2"/>
OR	
Sodiumacetate in product, %	<input type="text" value="0.27"/>
Water phase acetic acid and acetate, %	<input type="text" value="0.31"/>
Water phase sodiumacetate, %	<input type="text" value="0.41"/>
Acetic acid in water phase of product, mg/l	<input type="text" value="3067"/>

Temperature

Listeria monocytogenes growth model

Product characteristics

	Product 1	Product 2
L. monocytogenes initial cell level (cfu/g)	1	1
Temperature (°C)	5.0	5.0
NaCl in water phase %	4.0	4.0
pH	6.2	6.2
Smoke components - phenol(ppm)	0	10
% CO2 in headspace gas at equilibrium	0	0
Nitrite, mg/kg	0	0
Storage period (d)	40	
Include lag time for L. monocytogenes	<input type="checkbox"/>	<input type="checkbox"/>

Organic acids in water phase of product

	Product 1	Product 2
Acetic acid (ppm)	3067	0
Benzoic acid (ppm)	0	0
Citric acid (ppm)	0	0
Diacetate (ppm)	0	0
Lactic acid (ppm)	0	0
Sorbic acid (ppm)	0	0

Apply Clear

Constant temperature | Series of constant temperatures | Temperature profiles from logger data

Time - Temperature series

Temperature (°C) +

Storage period (hours) -

Graph results

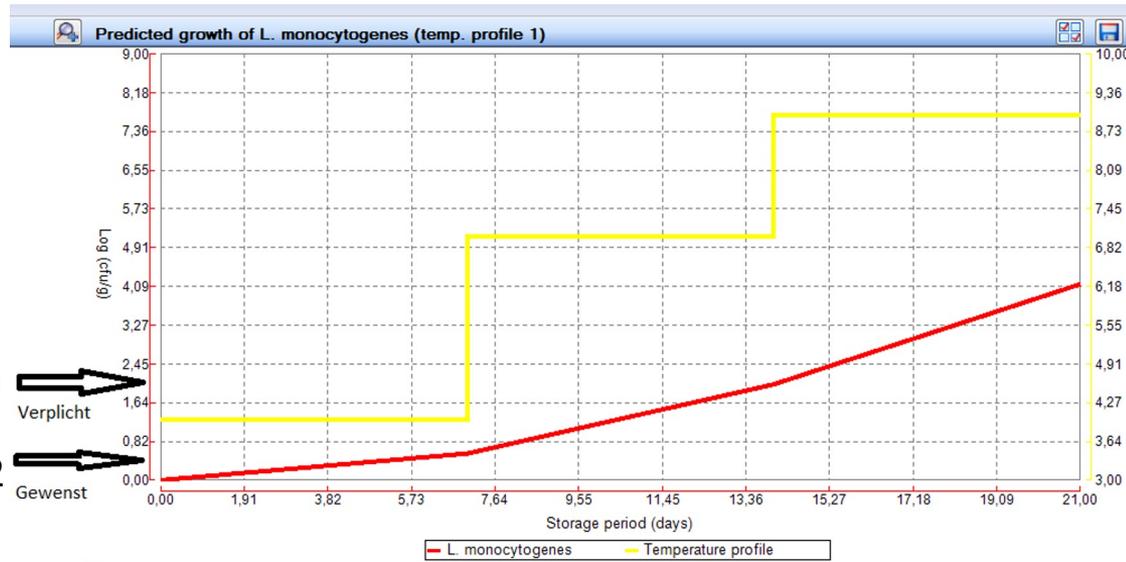
Active temperature profile

Temperature profile 1 Temperature profile 2

Time - Temperature series	
Temp. (°C)	Time (h)
4	168
7	168
9	168

Time - Temperature series	
Temp. (°C)	Time (h)

Results

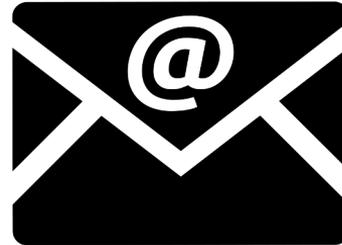


< 2 log (100 cfu/g)
 < 0,5 log (3,2 cfu/g)

Cornelis Bartlema Food Group BV Report



Example report, available for inspection



Can be requested at info@qassurance.com

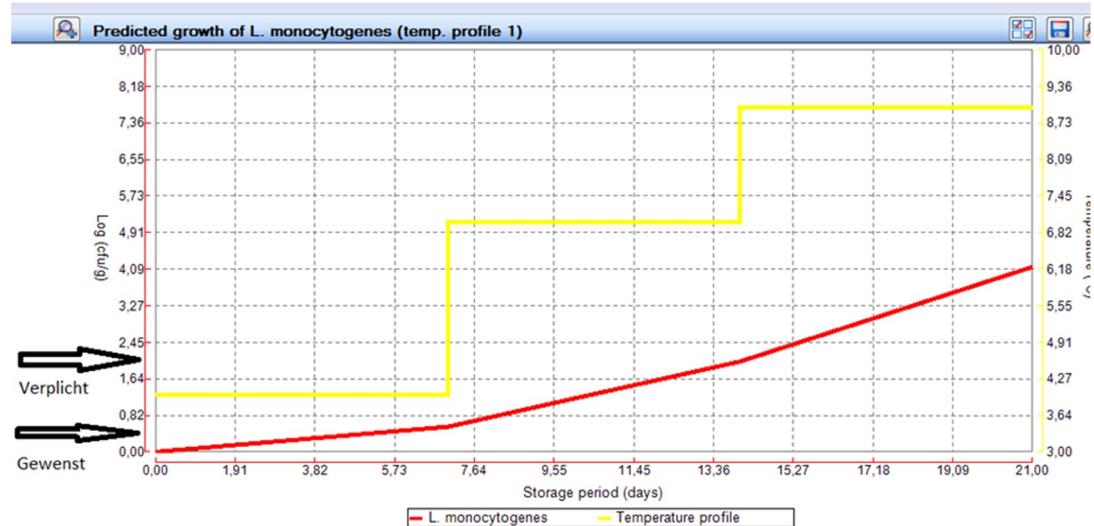
Challenge test

- Growth test in which the product is deliberately contaminated

-> perform at a value of 0.5 - 2 log cfu/g

Listeria lessons

- Increased supervision (veto)
- Positive release
- Verification of temperature profile
- Determine FSSP parameters 3x
- Preparation advice is sufficient for B2B
- Validate <0,5 log with challenge test
- FSSP screenshots
- EDP audits....
- Listeria present: always counting
- Aroma not for preservation
- Acid of preservative labeling
- HACCP study update: more CCPs



New CCP's and LCP

PROCESS STEP	HAZARD	HAZARD TYPE	CAUSE	CONTROL MEASURE	CCP: CRITICAL CONTROL POINT	SUBSTANTIATION
Pasteurization (exterior product min. 2 minutes at 72 degrees)	Post-contamination with pathogenic microorganisms such as Listeria	Microbiological	Not working hygienically	Pasteurization step	CCP	Listeria Monocytogenes is killed at 72 degrees Celsius for 2 minutes
Weigh out and add preservatives	Outgrowth of (spore-forming) micro-organisms in the end product	Microbiological	Incorrect weighing or not adding pink salt and / or lactate, diacetate, acetic acid, etc..	Check on weighing and adding preservatives	CCP	The consideration of preservatives is secured in the ERP system. When adding too much or too little, the ERP system issues a message. This also applies to not adding preservatives. The color of the product can also be seen if no nitrite has been added. See also: TNO report on nitrite.
Labeling	Outgrowth of Listeria Monocytogenes, present due to post-contamination	Microbiological	Post-contamination	Checking new labels for regeneration advice	Legal requirement	We deliver to professional end users who regenerate. Advice: heat for at least 2 minutes to core temperature ? 75 degrees Celsius before use. Preparation advice: Oven: approx.: 50 minutes, Max 110 degrees Celsius.

Recipe management in SpecCheck

		% Total Moisture Loss		% Remaining water	
		<input type="text" value="20,00"/>		<input type="text" value="5,21"/>	
		% Water for Moisture Loss		% Moisture loss other Ingredients	
		<input type="text" value="25,21"/>		<input type="text" value="0,00"/>	
Ingredient	Function	E-nr	%n*	%v**	%sp***
pork (78%)			62,07	77,59	
water			25,21	6,51	
salt			3,17	3,96	
caramelized sugar			2,48	3,10	
sodium lactate	food acid	E325	1,88	2,35	
natural aroma			0,82	1,03	
triphosphates	stabilizer	E451	0,69	0,87	
sodium (di) acetate		E262	0,58	0,72	
dried corn syrup			0,47	0,58	
diphosphates	stabilizer	E450	0,40	0,49	
dextrose			0,36	0,45	
Monosodium Glutamate (MSG)	flavour enhancer	E621	0,34	0,43	

~~Enterprise Foods~~

Additives regulation

- **Nitrite**
- Additives legislation
- Raw products: the use of additives
- Case: Filet Americain



Nitrite: function

- E249 = potassium nitrite; E250 = sodium nitrite
- Microbial preservation: The nitrite (present as HNO_2) is able to penetrate the bacterial cells and react with bacterial proteins, so that all kinds of essential processes in the bacterium are disrupted.
- Coloring agent: red coloring of meat (via heating or oxidation and fermentation)
- Chemical preservation. Nitrite reduces the susceptibility to oxidation of unsaturated fats.
- Interaction with salinity, pH, A_w , additives.
- Color formation: minimum 50 mg/kg required.

Nitrite: substitutes?

- As a preservative:
No declaration on the label: vegetable extract
 - Via oxidation and fermentation, nitrate -> nitrite
- As colorant and stabilizer:
 - Antioxidants with herbs and spices
- Status 2016: no alternative to nitrite in meat products yet
- Additives legislation:

E 249 - 250	<u>Nitrit</u> <u>es</u>	ML = 150 mg/kg , except sterilised meat products (Fo > 3.00) ML = 100 mg/kg , only sterilised meat products (Fo > 3.00)
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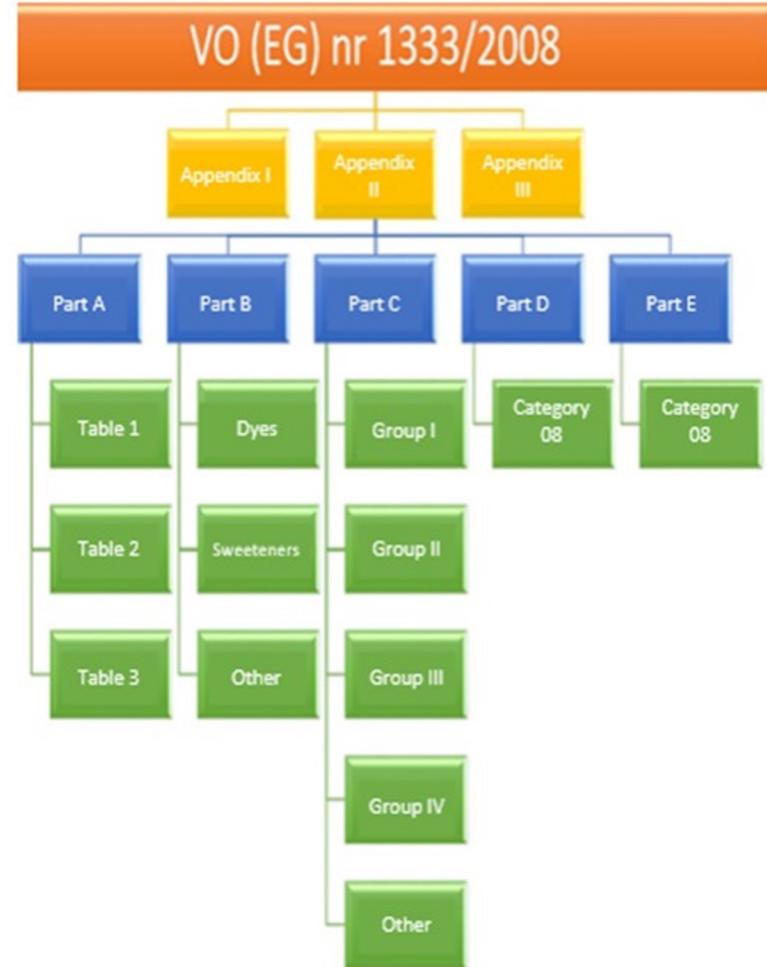
Additives regulation

- Nitrite
- **Additives legislation**
- Raw products: the use of additives
- Case: Filet Americain



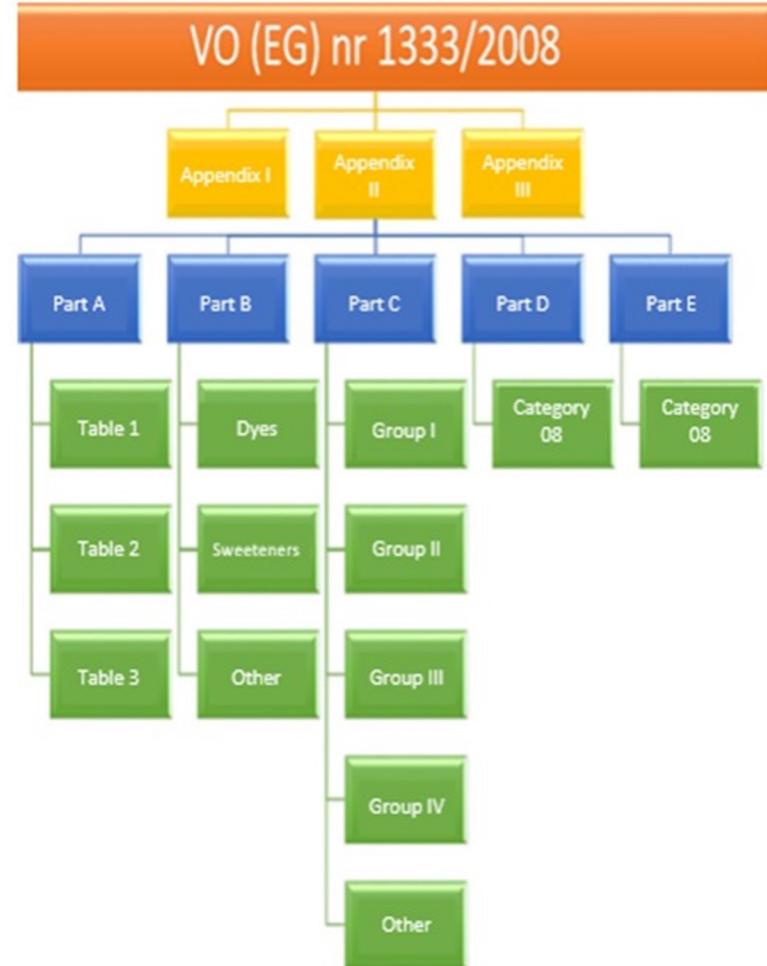
Structure of additives legislation

thanks to Karin Koppen (VNV) for the pictures



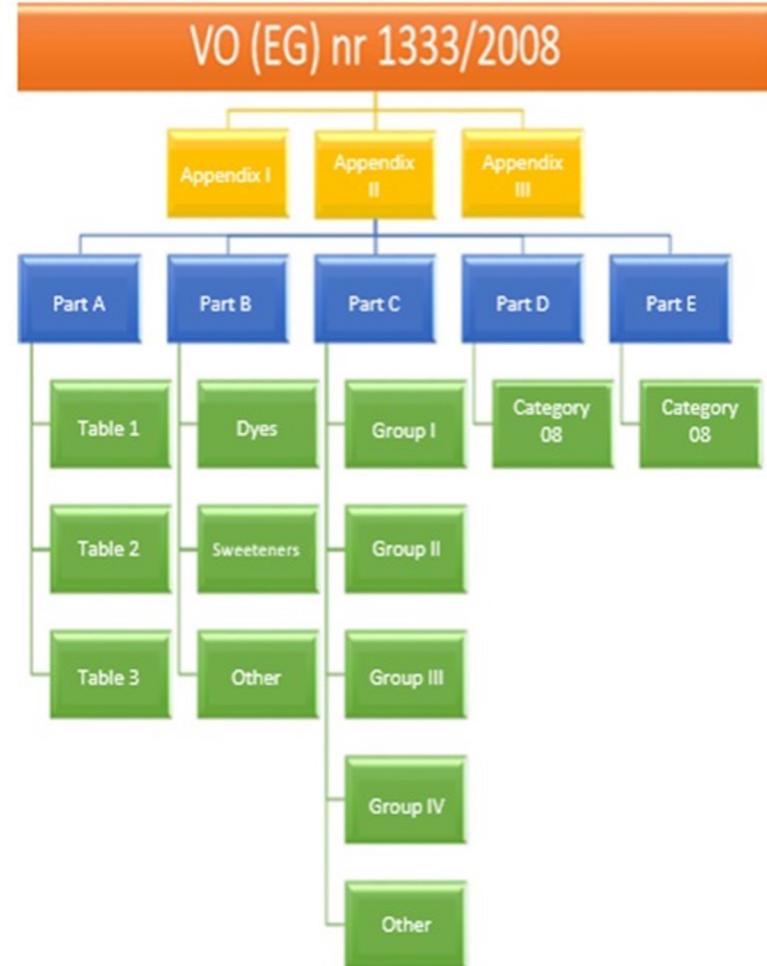
Additives legislation

- Annex I
Functional classes of additives



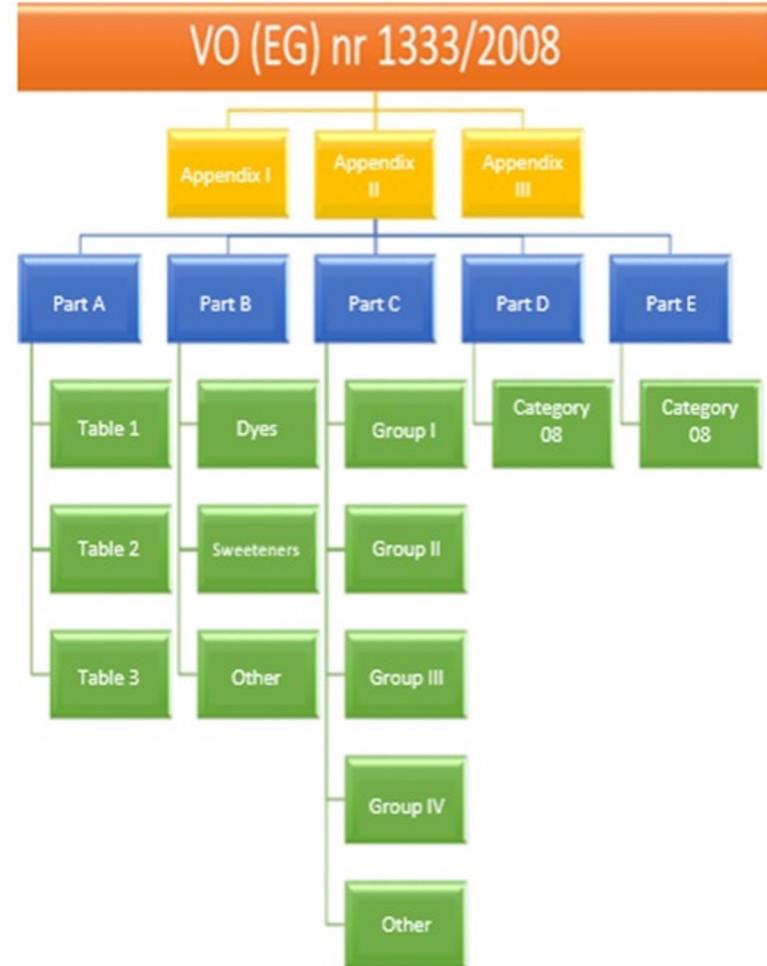
Additives legislation

- Annex II
EU list of additives approved for use in foodstuffs



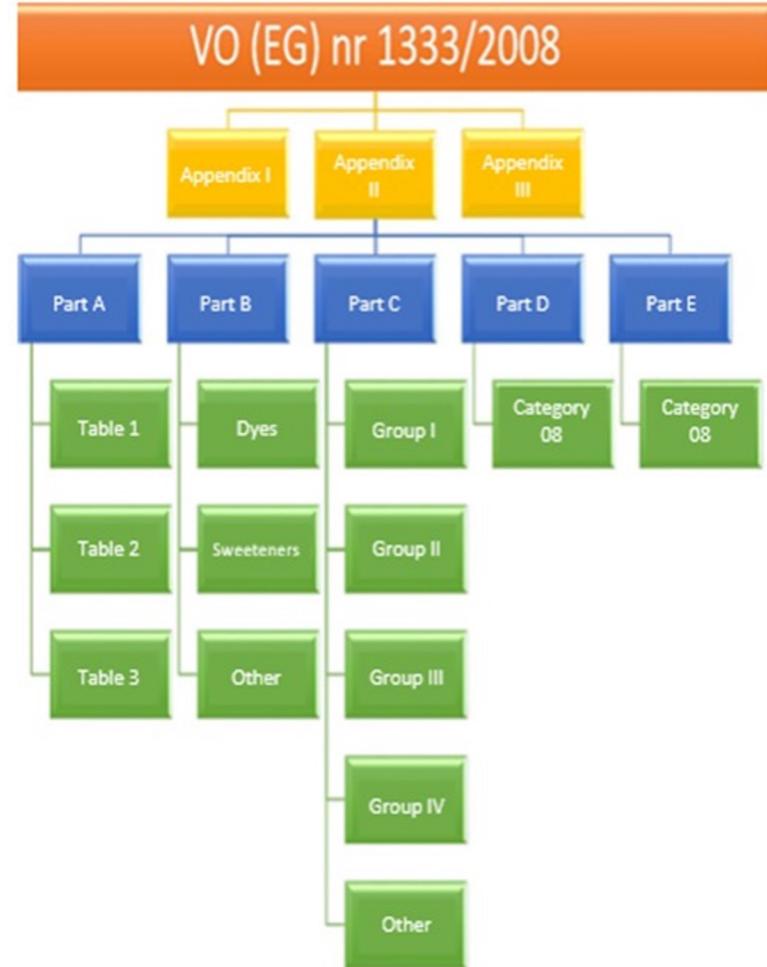
Additives legislation

- Annex II, Part A
General provisions
- Table 1: Additive not allowed by carry-over
- Table 2: Coloring agent not allowed
- Table 3: Colorant in the form of lacquers



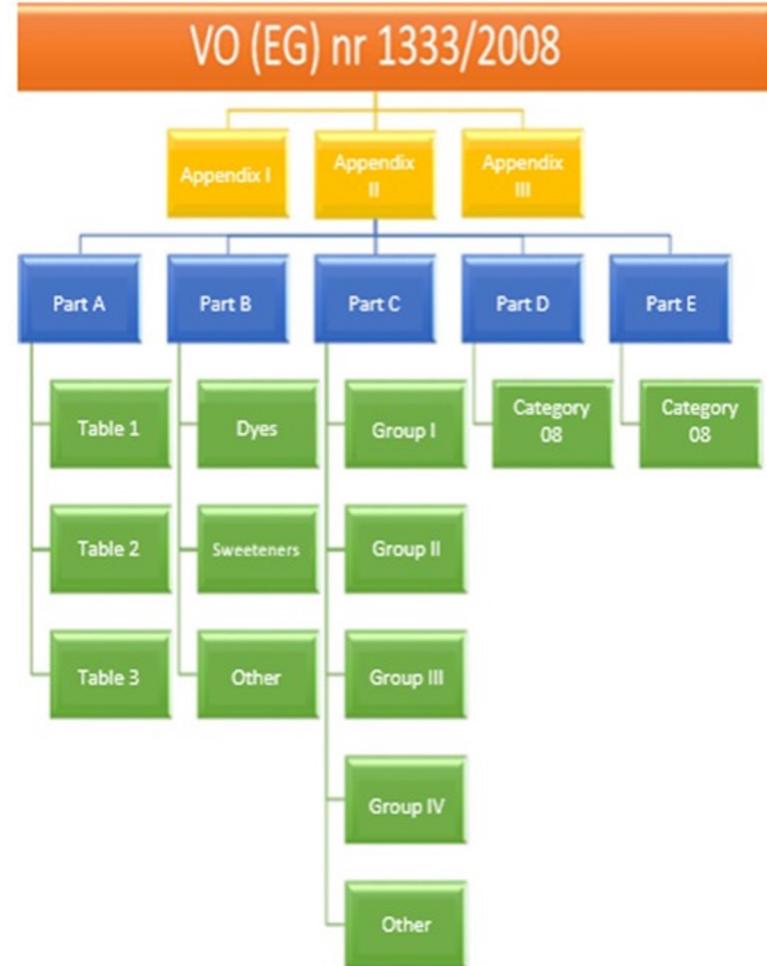
Additives legislation

- Part II, Part B
List of all additives
- Colorants
- Sweeteners
- Other



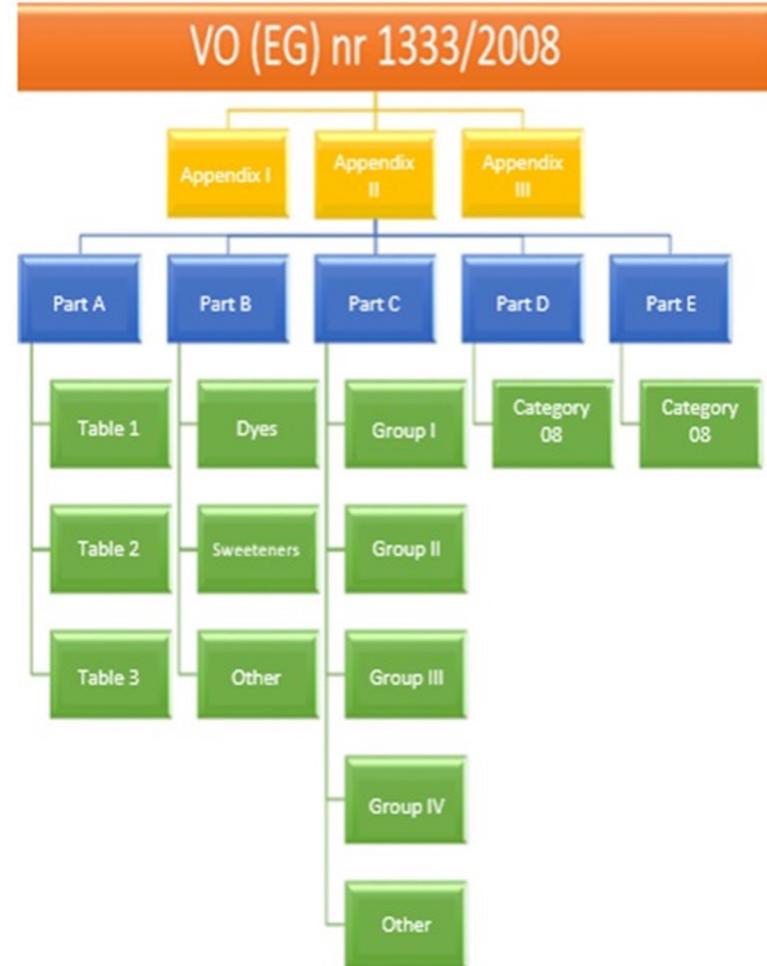
Additives legislation

- Annex III, Part C
Definitions of groups of additives



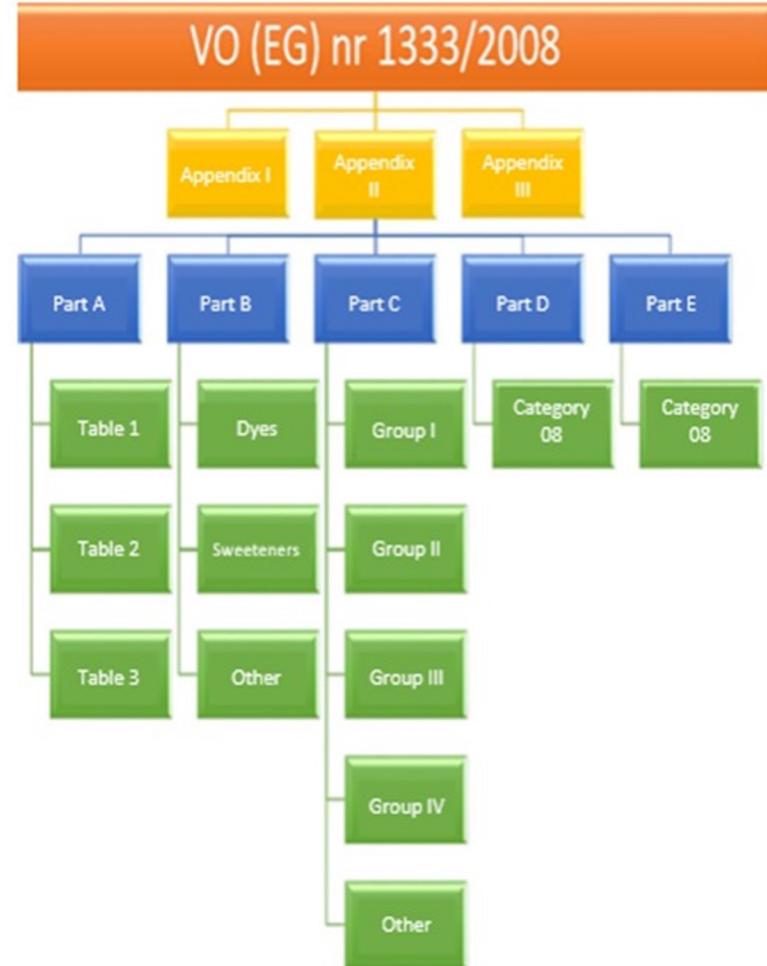
Additives legislation

- Annex II, Part D
Foodstuff categories
- Category 8: meat

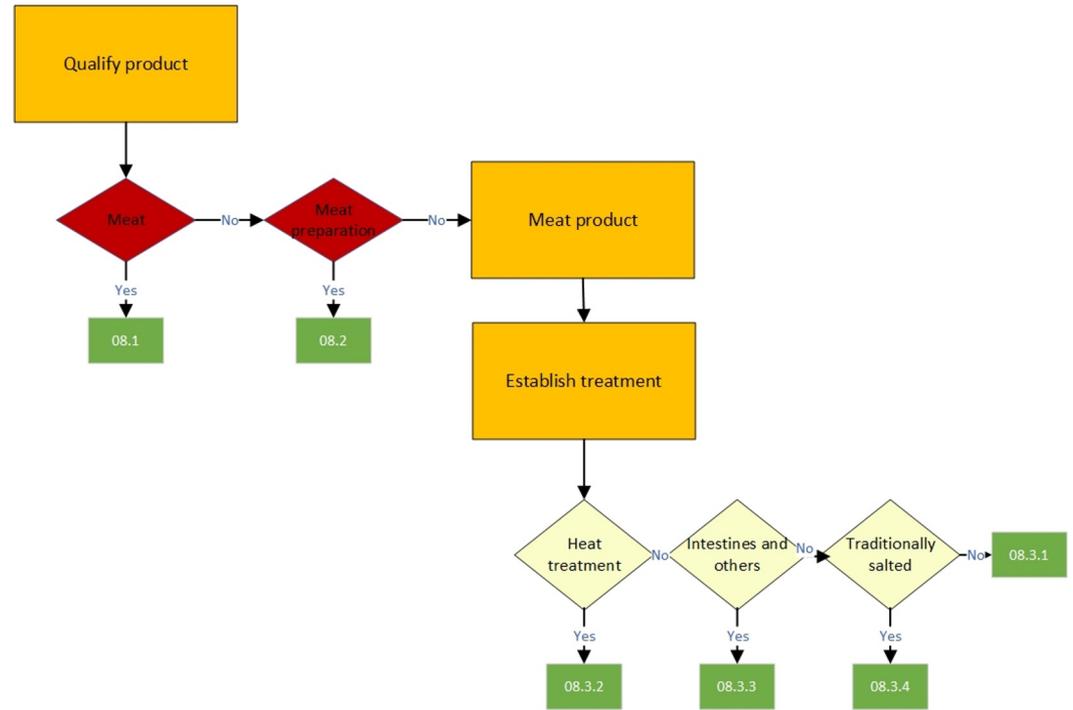


Additives legislation

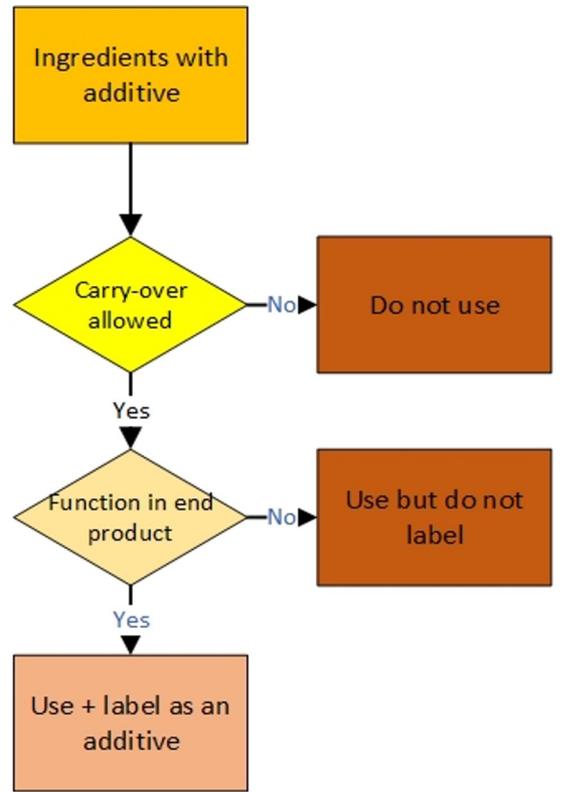
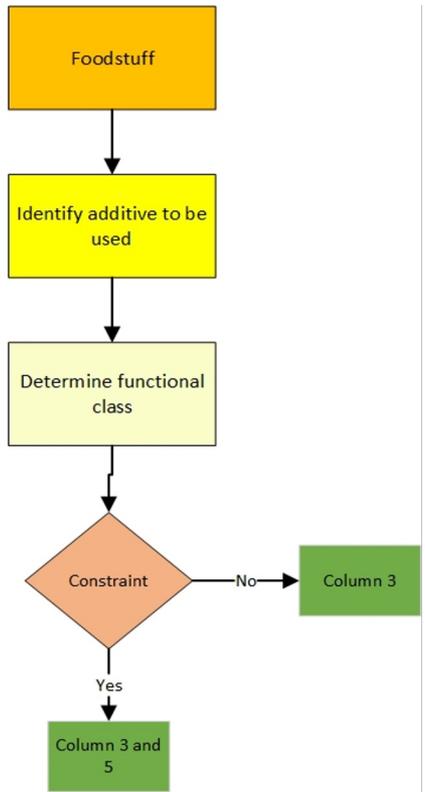
- Annex III
EU list for the use of food additives, food enzymes, food flavors and conditions of use



Qualify product



Additives to be used



Carry-over (1/2)

The presence of a food additive is allowed:

- a) in compound foods not listed in Annex II, provided that the food additive is authorized in one of the ingredients of the compound food;
- b) in a food to which a food additive, food enzyme or food flavor has been added, provided that the food additive:
 - i) is authorized in the food additive, food enzyme or food flavor in accordance with this Regulation, and also
 - ii) got into the food via the food additive, food enzyme or food flavor, and also
 - iii) has no technological function in the final product;
- c) in a foodstuff intended for use only in the preparation of a compound foodstuff, provided that the compound foodstuff complies with this Regulation.

Carry-over (2/2)

- Unless expressly provided otherwise, paragraph 1 shall not apply to infant formulas, follow-on formulas, processed cereal-based foods and baby foods, and dietetic foods for infants and young children for special medical purposes as referred to in Directive 89/398/EEC.
- Where a food additive is added to a food in a food flavor, food additive or food enzyme and has a technological function in that food, it shall be considered as a food additive of that food and not a food additive of the added flavoring, food additive or food enzyme and shall thus fulfill the conditions for use of that food.
- Without prejudice to paragraph 1, the presence of a food used as a sweetener is permitted in compound foods with no added sugar, compound foods with reduced energy value, compound diet foods intended for a low-calorie diet, in non-cariogenic compound foods and compound foods with an extended shelf life, provided that the sweetener is any of the ingredients of these compound foods is permitted.

Additives regulation

- Nitrite
- Additives legislation
- **Raw products: the use of additives**
- Case: Filet Americain



Raw meat products: the use of additives

- beef sausage (and comparable products such as tea sausage and steak sausage)
- Filet American
- Roast beef
- Carpaccio

Raw meat products: the use of additives

Regulation 853/2004 Annex I

- 1.10 Fresh meat: meat that, apart from the cooling or freezing treatment, has not undergone any treatment to improve the shelf life, including vacuum-packed meat or meat in CA packaging (controlled atmosphere).
- 1.15 Meat preparations: fresh meat, including meat that has been minced into small pieces, to which foodstuffs, seasonings or additives have been added or that has undergone processing which is not sufficient to change the internal muscle tissue structure of the meat and thereby the characteristics of fresh meat to disappear.
- 7.1 Meat products: **processed products** obtained from the **processing** of meat or from the further processing of such processed products, so that the cut surface shows that the **characteristics of fresh meat have disappeared**.

Regulation 853/2004 Annex I

- 1.10 Fresh meat: meat that, apart from the cooling or freezing treatment, has not undergone any treatment to improve the shelf life, including vacuum-packed meat or meat in CA packaging (controlled atmosphere).
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Regulation 852/2004, article 2

- 1m. **Processing:** an operation that significantly modifies the original product, including by means of heating, smoking, salting, maturing, drying, **marinating**, extraction or extrusion, or a combination of such treatments.”
- 1n. Unprocessed products: food that has not undergone treatment, including products that have been divided, cut into parts, slices, or pieces, deboned, minced, skinned, ground, cut, cleaned, trimmed, peeled, crushed, chilled, frozen, deep-frozen or thawed.
- 1o. **Processed products:** foodstuffs resulting from the processing of unprocessed products; these products may contain ingredients necessary for their manufacture or to give them specific characteristics.

Raw meat product or meat preparation?

- Marinating to the core is one of the operation mentioned in Regulation 852/2004 to obtain a processed product.
- This marinating, salting and fermentation has the result that the characteristics of fresh meat have disappeared (as with dry sausage).
- The mechanical processes also influence the structure of fresh meat. This creates a processed product (meat product) as mentioned in Regulation 853/2004 under Annex I under 7.1.

Additives regulation

- Nitrite
- Additives legislation
- Raw products: the use of additives
- **Case: Filet Americain**



Filet american: a meat product or a meat preparation

- The NVWA regards filet american as a meat product with regard to the use of additives. With regard to storage temperature, the storage temperature of 7°C is also accepted for a meat product, while a maximum storage temperature of 4°C has been set for meat preparation.
- The NVWA regards filet american in the context of regulation 2073/2005 as a meat preparation that is consumed raw.

Regulation 853/2004

- *7. PROCESSED PRODUCTS*
- *7.1. Meat products: processed products obtained from the processing of meat or from the further processing of such processed products, so that the cut surface shows that the characteristics of fresh meat have disappeared.*

Filet american: as a meat product

- If it appears from this that these products meet the criterion of a “meat product”, that is in any case clear. But that also applies to the microbiological criteria of Regulation 2073/2005. The microbiological safety of these meat products could then be guaranteed via Annex I of this regulation under point 1.8.

1.8	Meat products intended to be eaten raw, with the exception of products where the salmonella risk is eliminated by the production process or the composition of the product	<i>Salmonella</i>	5	0	Absent in 25 g	EN/ISO 6579	Products placed on the market, for the duration of their shelf life
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Filet american: as meat preparation

- If filet american were to be regarded as a meat preparation instead of a meat product, the use of additives will be severely limited, as well as those additives that are very important for the food safety and shelf life of the product.

Example product portfolio analysis (1/2)

	MEAT PREPARATION (raw)	carry over: if NOT made by name, generally ordered by raw materials		MEAT PREPARATION (cooked)	
E number	Meat preparation: 8.2 allowed	Table 2, coloring agent: excluded from carry over principle during preparation	carry over ?	Meat products 8.3.2 (heat treated)	Carry over (dyes are allowed here)
160c	No	Excluded for carry over	May not	Only in sausage, pate and terrines	Yes, allowed
150c	No	Excluded for carry over	May not	Only in sausage, pate and terrines	Yes, allowed
150a	No	Excluded for carry over over	May not	Only in sausage, pate and terrines	Yes, allowed
1422	No	No	Yes, allowed	Yes, for group 1	
1414	No	No	Yes, allowed	Yes, for group 1	
631	No	No	Yes, allowed	No	Yes, allowed
627	No	No	Yes, allowed	No	Yes, allowed
621	No	No	Yes, allowed	No	Yes, allowed
551	No	No	Yes, allowed	No	Yes, allowed
510	No	No	Yes, allowed	No	Yes, allowed
500	yes, with poultry meat	No	Yes, allowed	Yes, for group 1	
466	No	No	Yes, allowed	Yes, for group 1	
451	No	No	Yes, allowed	No	Yes, allowed
450	No	No	Yes, allowed	No	Yes, allowed

Example product portfolio analysis (2/2)

	MEAT PREPARATION(raw)	Carry over: if not made by name, generally ordered by raw materials		MEAT PREPARATION(cooked)	
E number	Meat preparation: 8.2 allowed	Table 2, coloring agent: excluded from carry over principle during preparation	carry over ?	Meat products 8.3.2 (heat treated)	Carry over (dyes are allowed here)
	Yes, in the case of ground meat, prepackaged preparations of fresh ground meat to which ingredients other than additives or salt have 331 been added.	no	Yes, allowed	Yes, for group 1	
	316no	no	Yes, allowed	Yes, in salted products and preserved products	Yes, allowed
	Yes, in the case of ground meat, prepackaged preparations of fresh ground meat to which ingredients other than additives or salt have 301 been added.	no	Yes, allowed	Yes, for group 1	
	Yes, in the case of ground meat, prepackaged preparations of fresh ground meat to which ingredients other than additives or salt have 300 been added.	no	Yes, allowed	Yes, for group 1	
	Yes, in the case of ground meat, prepackaged preparations of fresh ground meat to which ingredients other than additives or salt have 270 been added.	no	Yes, allowed	Yes, for group 1	
	Yes, in the case of ground meat, prepackaged preparations of fresh ground meat to which ingredients other than additives or salt have 262 been added.	no	Yes, allowed	Yes, for group 1	
	Yes, in the case of ground meat, prepackaged preparations of fresh ground meat to which ingredients other than additives or salt have 260 been added.	no	Yes, allowed	Yes, for group 1	
	211no	no	Yes, allowed	Yes, with surface treatment for fried meat products	Yes, allowed
	210no	no	Yes, allowed	Yes, with surface treatment for fried meat products	Yes, allowed
	202no	no	Yes, allowed	Yes, with surface treatment for fried meat products	Yes, allowed
	150No	Excluded for carry over	May not	Only in sausages, pates and terrines	Yes, allowed
	124no	Excluded for carry over	May not	no	Yes, allowed



NVWA



NVWA

1. Tracing

- Properly recording the current method of tracing all normal products as well as any biological flow.
- Describe any missing trace actions in more detail and record them in additional records.
- Method of tracing closed weekly: demonstrably correct.

2. Additives

- Raw materials, Recipes, End products up to date
- 2 E-number analysis on this product portfolio
- Keep E-number analysis up to date

NVWA

3. Microbiology

- Check microbiological plan for legislation.
- Check microbiological plan last year for compliance.
- Carefully implement current year microbiological plan.

4. Listeria

- Demonstrable compliance with info sheet 85 regarding Listeria.
- Analysis of current product portfolio in which FSSP must be substantiated with, among others, why Challenge tests have or have not been carried out.
- Describe the Listeria approach that demonstrably meets the legal requirements.

NVWA

5. STEC

- 5A Using the product portfolio, analyze which raw products to be consumed can have STEC as a problem.
- 5B Conform STEC to NVWA policy and guarantee these products regarding STEC
- 5C Info sheet 64 of NVWA considered for STEC

6. EDP audit

- 6A Administrations may be taken without any reason / suspicion

Food Safety Compliance Legislation



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