

Monitoring the intake of food additives in Austria

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Monitoring of the intake of food additives in Austria

General principal

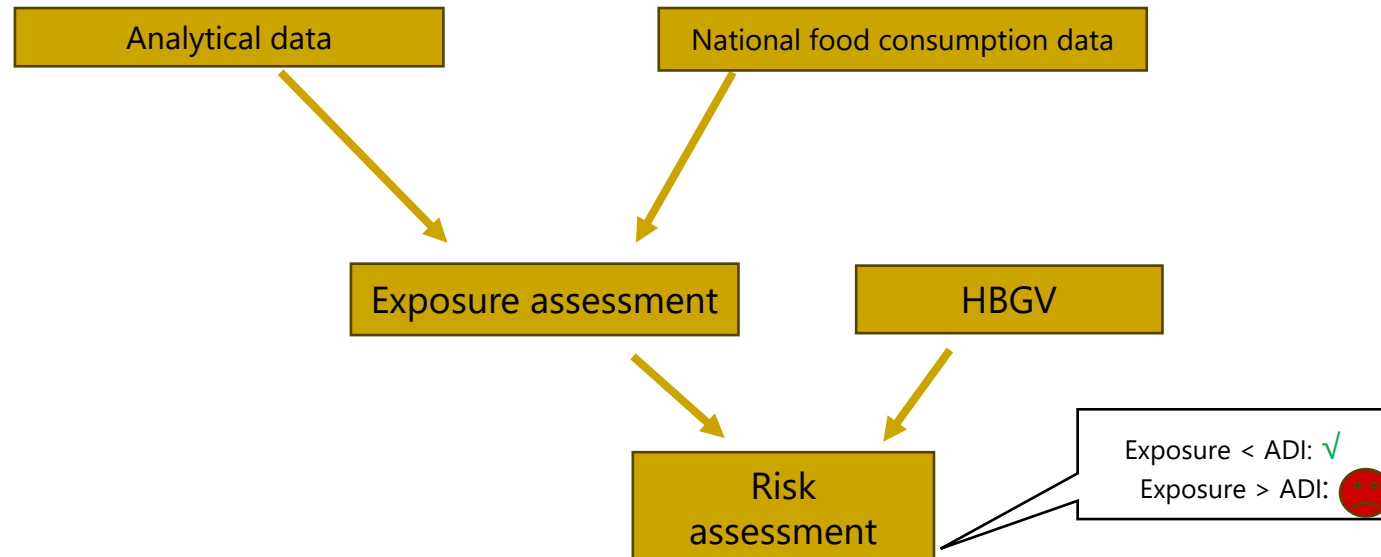
Build on two pillars :



Ages Picturepark ©Wasserbauer



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Analytical data

Priorisation process and practical implementation



- National Control plan:
 - every 3rd - 4th market sample will be analytical monitored regarding sweeteners, preservatives, food colours,...
- National monitoring working group:
 - additional every year different focus action for certain FA in certain products are planned (targeted samples)
 - adapting the national control plan

Analytical data

Criteria for target sampling monitoring



- EFSA has recently or will re-evaluated a certain food additive
- Increased exposure through new food trends
- Not enough analytical data available for a certain food category
- Analytical data is quite old (> 10 years)
- RASFF - notification
- Suspected food fraud
- Survey of used levels at FBO (if no accredited analytical method is available)
- High objection rate (exceeding the maximum levels, incorrect labeling,...)

Analytical data

Examples for target sampling:



- Sulfur dioxide- sulfites (E 220- 228) in white vegetables including pulses and processed mushrooms
 - 04.1.2 Peeled, cut and shredded fruit and vegetables
 - 04.1.3 Frozen fruit and vegetables
 - 04.2.1 Dried fruit and vegetables
 - 04.2.3 Canned or bottled fruit and vegetables
 - 04.2.4.1 Fruit and vegetable preparations excluding compote
- Carrageenan (E 407) and processed Eucheuma seaweed (E 407a)
collection on use levels and the specification by the food inspectors

Analytical data

Outcome

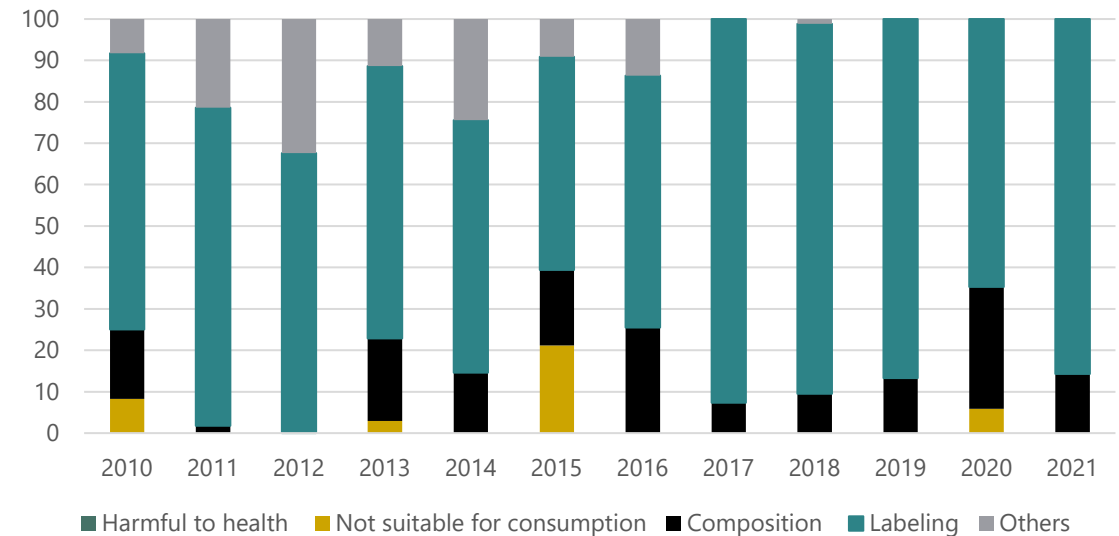


- 2023: 2237 samples of 54 different Food additives in 58 food categories were analysed at AGES and reported to EFSA (29 samples were objected)
- Time trend of the examined samples and the reason of objection

Situation in Austria



Reasons for objections



Risk assessment of the intake of food additive

Reporting



Periodic report of the intake of food colours, preservatives and sweeteners for the Austrian population (children, adolescence and adults)

- "Intake of food colours, preservatives and sweeteners in Austria from 2016-2021" (Tier 3, 2022), Analytical data of 33 food categories, brand loyal vs. non brand loyal, FoodEX2 level 2-4
- "Intake of food colours, preservatives and sweeteners in Austria" (Tier 3, 2017)
- "Intake of food additives in Austria " (Tier 2, 2014)
- "Intake of food additives in Austria- selected examples" (Tier 2 and 3, 2010)

<https://www.ages.at/forschung/wissen-aktuell/detail/aufnahmemengen-von-zusatzstoffen-fuer-die-oesterreichische-bevoelkerung>

Intake of food colours, preservatives and sweeteners in Austria from 2016-2021



Food colours

- Food colours:
E 102, E 104, E 110, E 122, E124, E 129, E 131, E 132, E 133, E 142, E 151
- 8 food categories: pudding, fine bakery wares, dairy ice cream and similar, confectionary including chocolate, processed fruits, seasoning, water -based beverages and wine-like drinks
- Results:
 - Quinoline Yellow (E 104): exceedance of the ADI in children (136%; high consumer, brand loyal)
 - Ponceau 4R (E 124): exceedance of the ADI in children (179%) and adolescent (110%)
(high consumer, brand loyal)
 - main exposure source: fine bakery wares, water-based beverages and confectionary including chocolate

Intake of food colours, preservatives and sweeteners in Austria from 2016-2021



Preservatives

- Sorbate acid and sorbates (E 200-203):
 - 20 food categories, contributes up to 75% of the ADI
 - main exposure source: cakes, yeast leaved pastry, bread and similar products
- Benzoe acid and benzoates (E 210-213)
 - 20 food categories, contributes up to 43% of the ADI
 - main exposure source: confectionary including chocolate, soft drinks, bread and similar products
- Sulfur dioxide and sulfites (E 220-228)
 - 11 food categories, contributes up to 91% of the ADI
 - main exposure source: fruit juice and nectar, wine and wine-like drinks, processed or preserved vegetables

Intake of food colours, preservatives and sweeteners in Austria from 2016-2021



Preservatives

- Nitrite (E 249-250)
 - two main food categories: processed meat products and sausages
 - contributes up to 88.5% of the ADI
- Nitrate (E 251-252)
 - two main food categories: processed meat products and sausages
 - contributes up to 7% of the ADI

Intake of food colours, preservatives and sweeteners in Austria from 2016-2021



Sweeteners

- none of the sweeteners: Acesulfame K (E 950; 23% ADI), Aspartame (E 951; 3% ADI), Cyclamates (E 952; 67% ADI), Saccharin (E 954; 15% ADI), Sucralose (E955; 4% ADI), neohesperidine DC (E 959), neotame (E961) exceeded the ADI.
- Neohesperidine DC and neotame were not detected
- main exposure source: syrups, soft drinks, fermented milk products, confectionary including chocolate

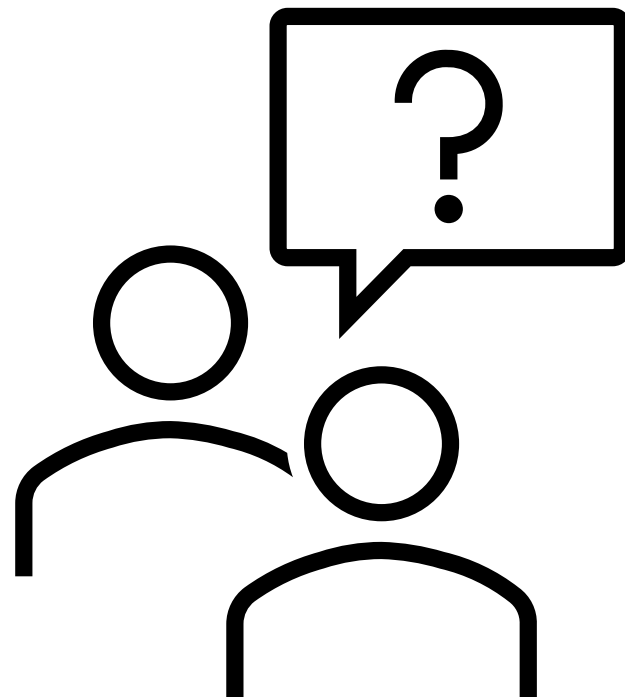
Implementation of the upcoming EU- wide monitoring

Status Quo



- Classification of food additives in high and medium priority
- Identification of relevant food categories
- Feasibility study:
research on available analytical methods for high and medium priority FA
- Implementation of the monitoring program into the national official control plan
- Developing a web-based app, where FBO and Food inspectors can upload the use levels of the requested FA in certain food categories

Thank you for your attention



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