

Institute of Agricultural and Food Economics
National Research Institute



Food Safety System in Poland

Stanisław Kowalczyk
(General Economics Department)

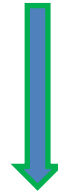
Warsaw, 18 December 2018

Food adulteration - an old problem

- Code of Hammurabi (XVIII BC) - Mesopotamia : *rules of beer trade*
- The Bible (the Wisdom of Sirach, II BC) –
*„It is difficult for a merchant to keep himself from wrong doing,
and for a retailer to be acquitted of sin” (Sirach 26:29)*
- Pliny the Elder (23-76 AD): *the Natural History*:
adulterated products in ancient Rome:
 - bread (chalk)
 - wine (water, lime, gypsum, marble)
 - cheese (thyme, vinegar)
- The Assize of Bread and Beer (1266) England
linking the price of cereals with the price of bread and beer
- Reinhaitsgesetz (1516) – Bavaria/Germany
*beer standards: water, hop, barley
brewing and beer trade*
- Krakowska taksa żywnościowa (*Cracow Assize of Food*, 1573) Poland
rules of trade: bread, beer, wine, meat, fish
beer standards: water, hop, wheat

Food adulteration - an old problem (cont.)

The average level of food adulteration



- Canada (the 1850s – 70s) - over 50%
- Great Britain (the 1850s) – over 65%
- USA - (XIXth – XXth) – up to 70-80% (ketchup, smoked meat, sausage, jelly, canned peas, candies)

Food adulteration – present day

EU Monthly summary of articles on Food Fraud and Adulteration (since September 2016)



October 2018

European Commission

Monthly Summary of Articles on Food Fraud and Adulteration

Retrieved mainly from the JRC tool Medisys: (<http://medisys.newsbrief.eu>)

Food Fraud Cases

Italian authorities seized 85 kg of honey that was diluted by the addition of unauthorised substances. Businessonline , 01/10/18	Honey Dilution
Bangladesh authorities have sealed a synthetic fruit-juice manufacturing plant for producing juices that did not contain any fruits and were manufactured with hazardous chemical substances. Daily Star , 01/10/18	Fruit juice Substitution
A fifth of meat sample tests conducted by the Food Standards Agency in England, Wales and Northern Ireland in 2017 contained either partially or even entirely meat from species not declared on the label. Lamb was most frequently replaced by meat from other species and cow was the most commonly undeclared species. Minced meat was the most affected by mislabelling. Siraouspost , 02/10/18	Meat Mislabelling
A British butcher company admitted fraud charges for selling meat labelled as the "Best of British" when actually it was sourced from abroad. It was also selling frozen chicken as fresh and falsely indicating that meat came from highly reputed meat varieties. Birminghamlive , 02/10/18	Meat Mislabelling
According to a study by an Australian University, almost 20 % of honey on the Australian market is adulterated with substances extraneous to honey such as cane sugar or corn syrup. For imports from Asia, the rate of adulterated samples went up to 50 %. Six out of the 21 samples imported from Europe were also found to be adulterated. News , 02/10/18 Yinhuasnet	Honey Artificial enhancement
Indian Food Inspection Authorities seized 4000 kg of spices in Punjab to which textile colours were added. The News , 04/10/18	Spices Artificial enhancement
One of the five largest distributors of eggs in Taiwan recalled its eggs because they contained nicarbazin, which is outlawed in Taiwan. The company was accused of fraudulently relabelling the recalled eggs with new expiry dates. Some of the recalled eggs were added to liquid eggs and sold to restaurants, hotels and bakeries. Taipei Times , 09/10/18	Egg Mislabelling

© European Union, 2018

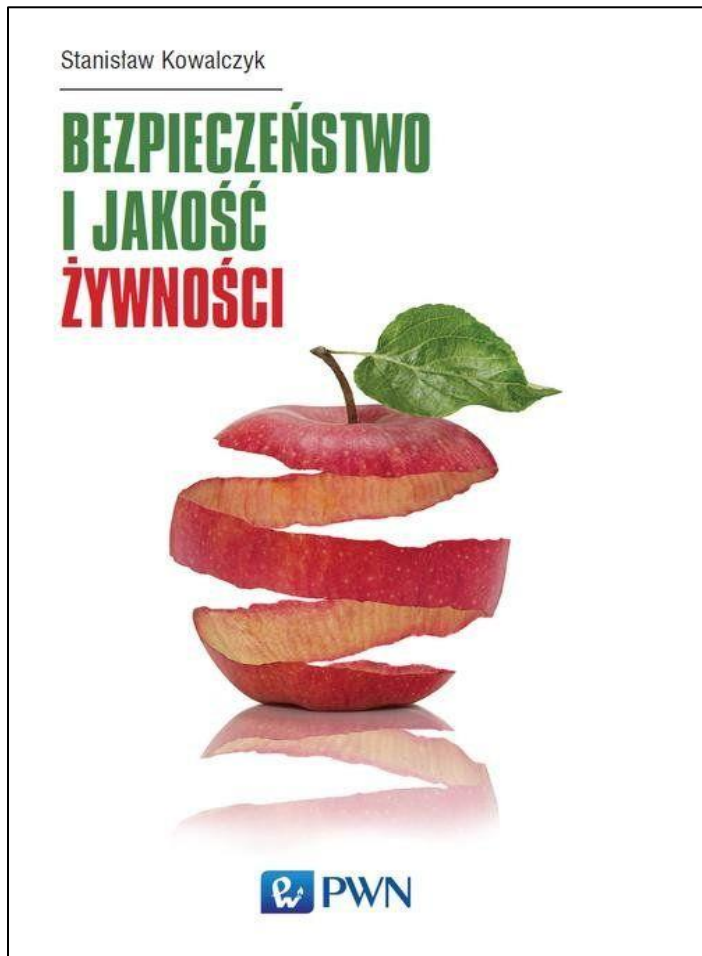
October 2018 – JRC Food Fraud Monthly Report 1/3

Food adulteration – present day

EU Monthly summary of articles on Food Fraud and Adulteration
(October 2018)

- (Great Britain): **A fifth of meat sample** controlled by the British Food Standards Agency in 2017 contained meat from species not declared on the label.
- (Australia): According to a study by an Australian University, **20 % of honey on the Australian market is adulterated**; for imports from Asia - up to 50 %, from Europe – up to 30%.
- (Spain): **37 % of fish dishes** in restaurants in Madrid – **adulterated** (other species of fish).
- (Italy): Italian authorities **seized 300,000 litres of adulterated wine** (synthetic flavourings were added)

Food adulteration – present day

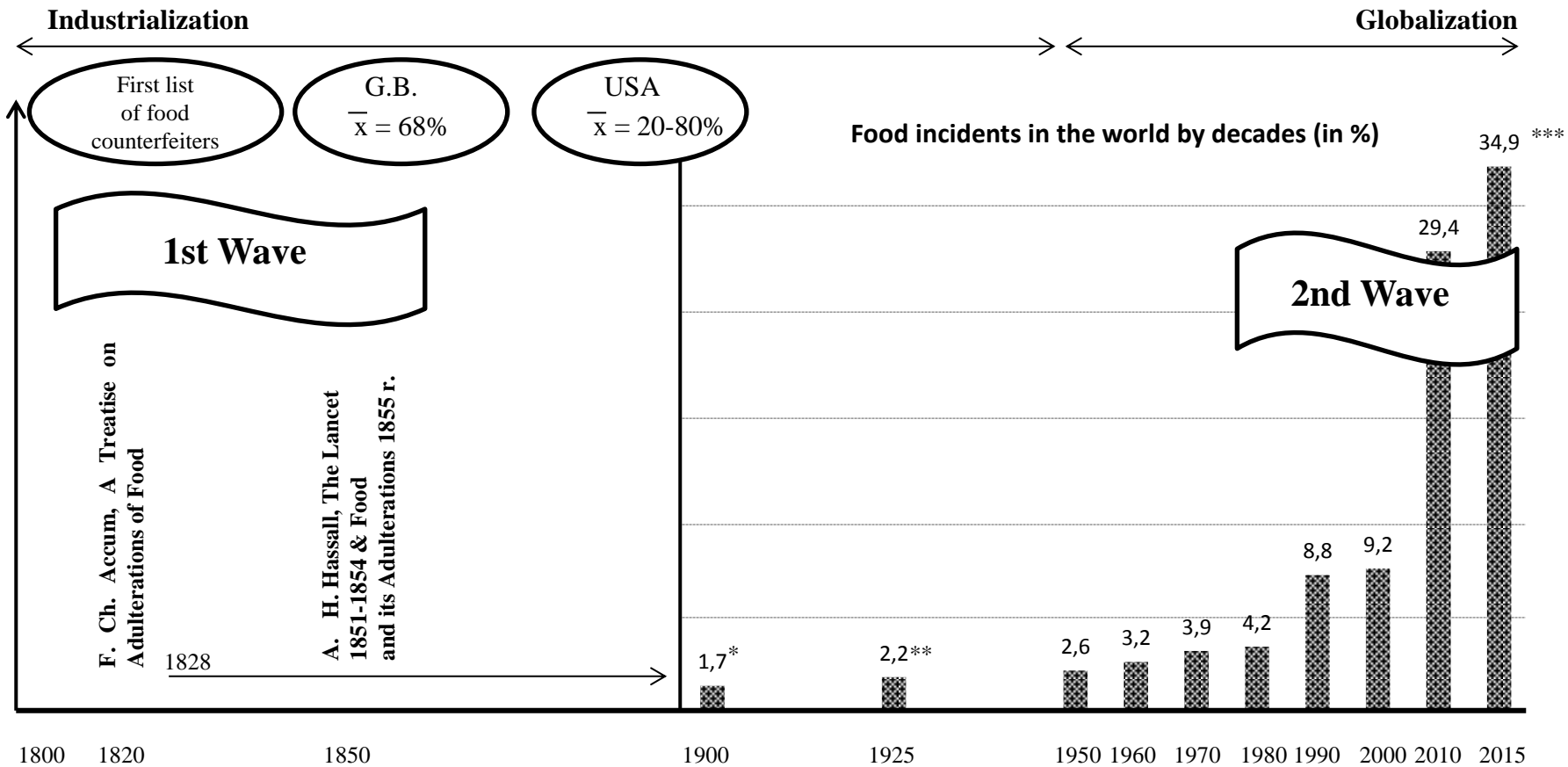


over 700 food incidents from
around the world

*A food incident is where concerns
about actual or suspected threats to
the safety of food and feed require
intervention to protect consumers.*

[UK Food Standards Agency]

Food adulteration in the world (1800 – 2015)



* 1,7% - do 1900 r., ** 2,2% - lata 1900-1925, *** 34,9% - po 2010 r.

Źródło: Opracowanie własne.

Food adulteration – present day

1st Wave: XIXth Century

Main causes:

- industrialization
- emergence of an „anonymous consumer”

Methods of adulteration:

- use of substances **harmful for health and life**

2nd Wave: XXth/XXIth Century

Main causes:

- globalization,
- global/long food supply chain (more and more intermediaries)

Methods of adulteration:

- use of substances less **harmful** for health and life
.....*more for.....wallet*

Food adulteration – a global problem

*„,with globalization, goods and products can almost flow freely between countries, regions, and continents. So **the food safety problem is therefore no longer a national or regional issue, but rather a global one.***

„Food safety problem is a global issue”

By Ho Chi-Ping

ChinaDaily, 2011-06-15

http://www.chinadaily.com.cn/hkedition/2011-06/15/content_12697152.htm

Access: 04-12-2018

***Food fraud is a problem around the world** leading to unease and effects to peoples health*

Dr . Amy Kircher,

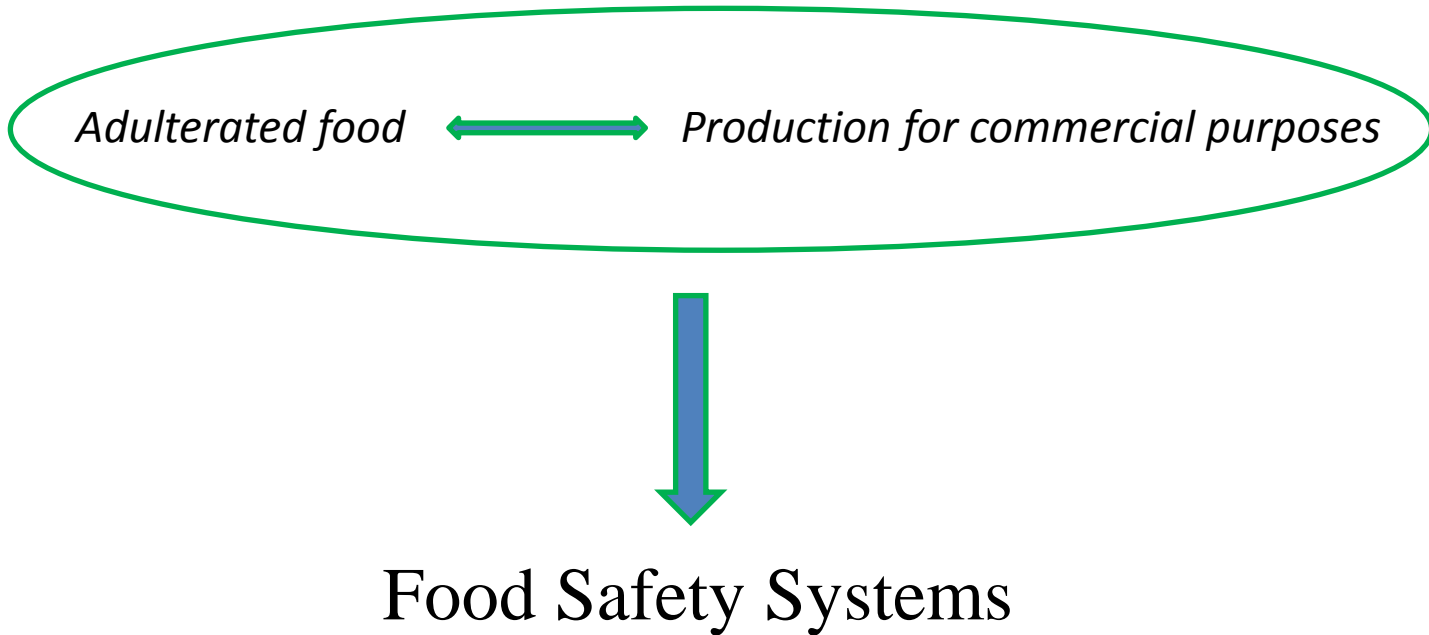
Director of the Food Protection and Defense Institute

University of Minnesota

<https://www.thescientistschannel.com/disrupting-food-adulteration-around-the-world>

Access: 04-12-2018

Consequences of globalization and food adulteration



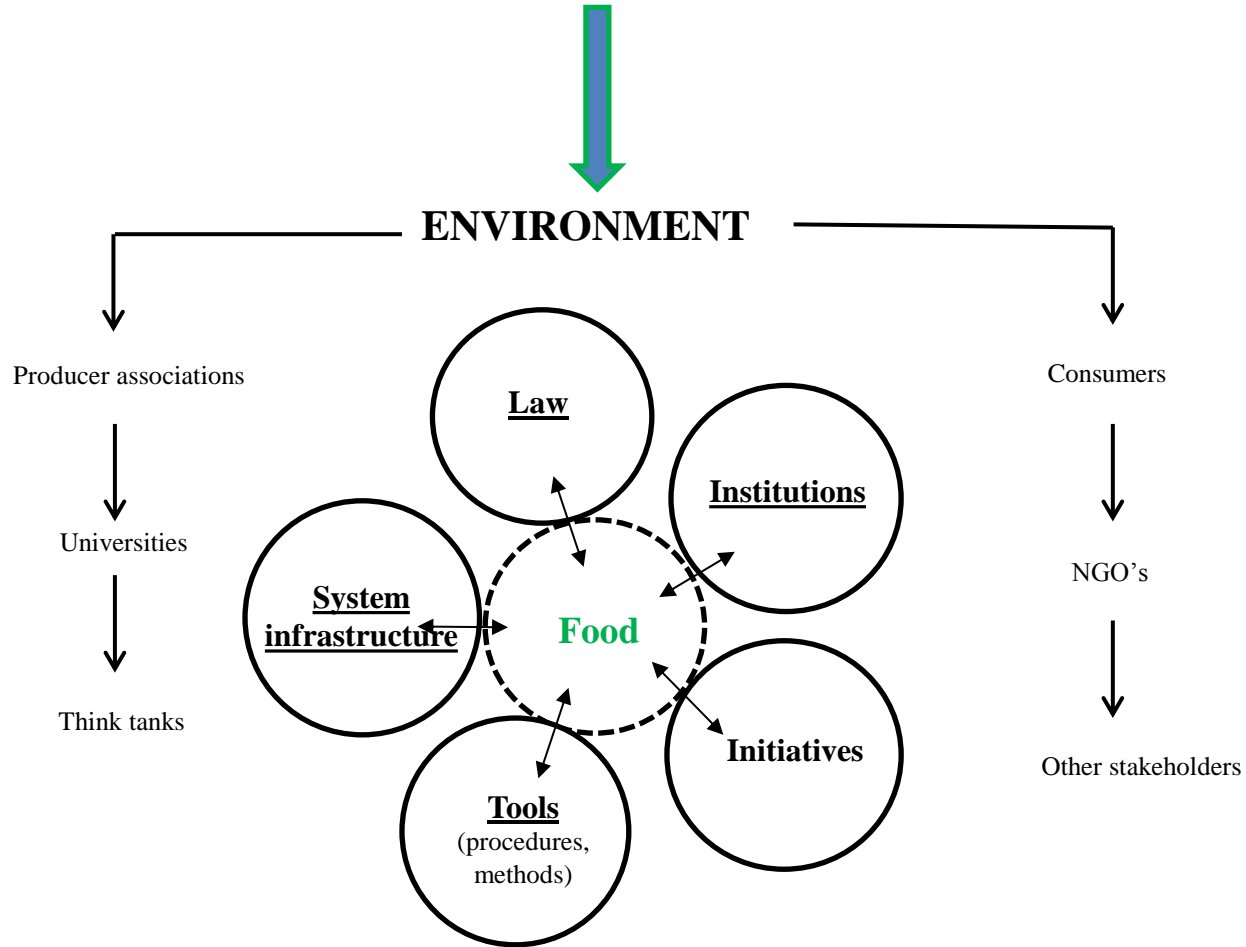
What is the Food Safety ?



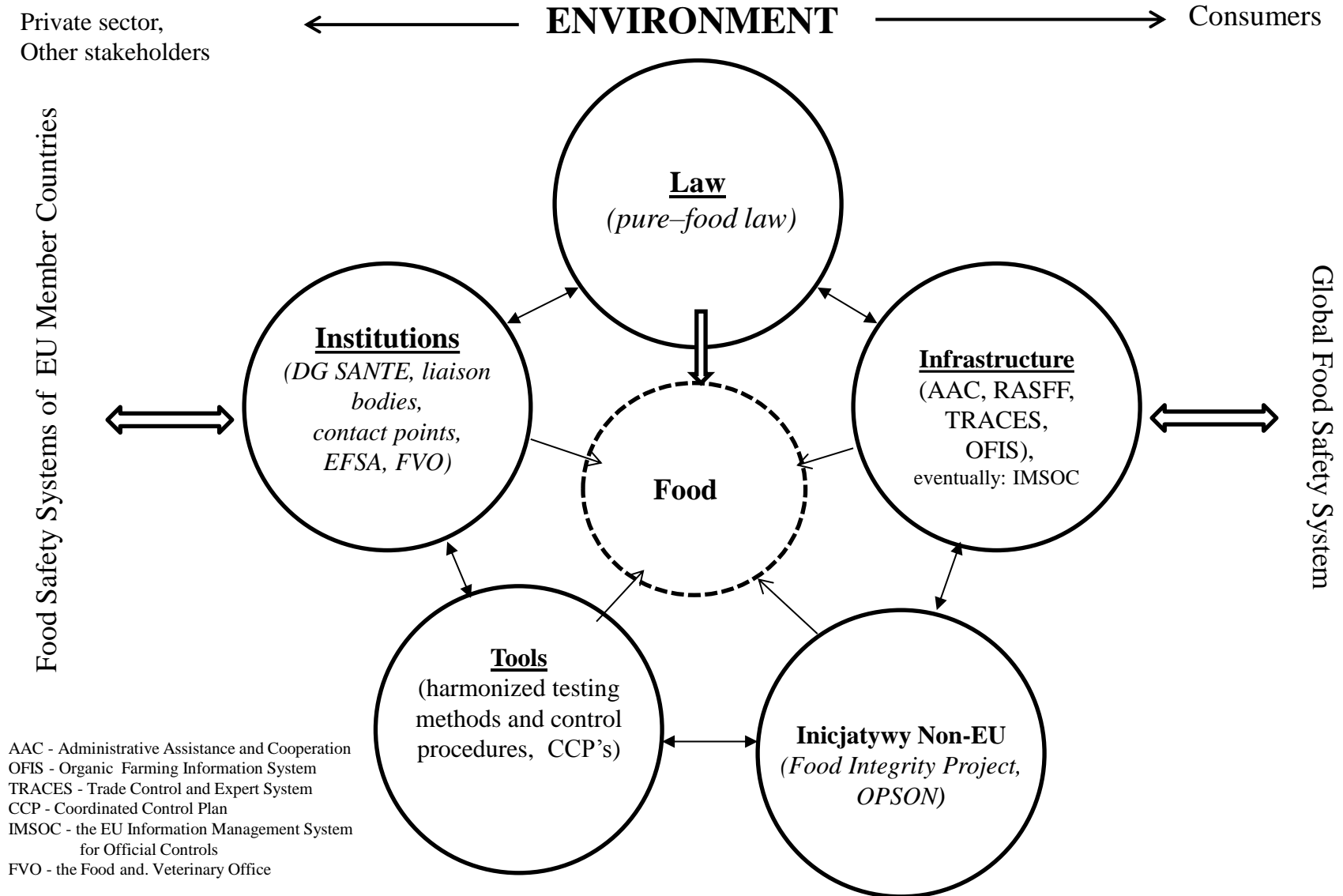
The whole of activities aimed at minimizing the risk of production and buying contaminated or adulterated food

What is the Food Safety System ?

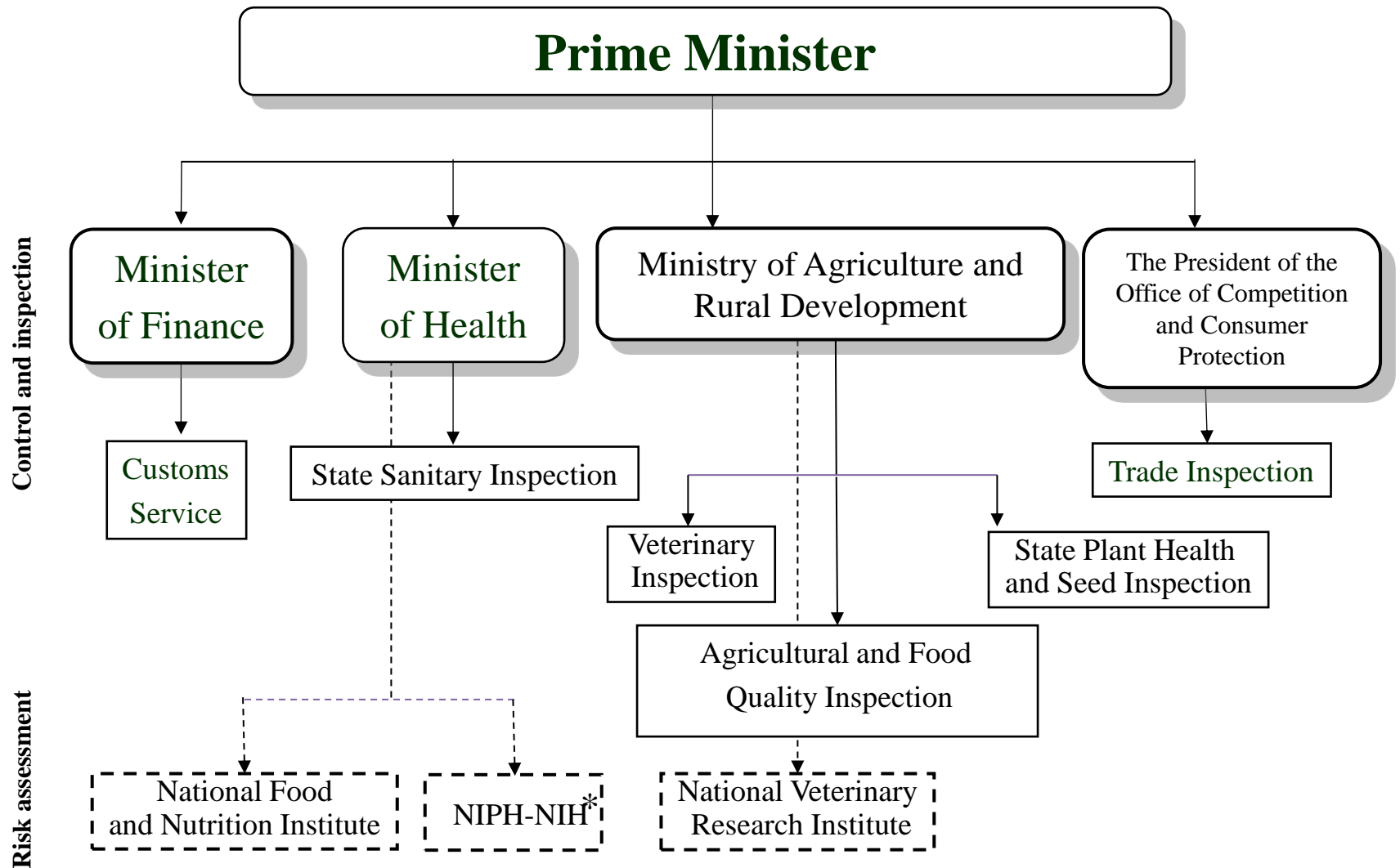
Framework of the food safety system



EU Food Safety System



Structure and Organization of Official Services Responsible for Food Control in Poland



* National Institute of Public Health-National Institute of Hygiene (NIPH-NIH)

Main Tasks of Food Control Institutions in Poland

State Sanitary Inspection

official control of:

- foodstuffs hygiene,
- pesticide residues in food,
- contaminants,
- import of food of non-animal origin,
- materials and articles intended to come into contact with food,
- food additives,
- GMO in food,
- food supplements
- novel food.

„Health safety”

Plant Health and Seed Inspection

- evaluation of how plants are threatened by pests,
- examination of samples of plants, plant products, soil and grounds to state the presence or the absence of pest organisms.

Main Tasks of Food Control Institutions in Poland

„Health safety”

Veterinary Inspection

- examination of slaughtered animals and their meat,
- border veterinary control,
- supervision of safety of **animal origin foodstuffs**, including veterinary conditions of production,
- processing, storing, transporting and retail sale,
- supervision of producing, marketing and using of feedingstuffs,
- supervision of usage of pharmaceuticals and medical substances intended for animals,
- control of the occurrences of chemical and biological, medicinal and radiation contamination residue in foodstuffs of animal origin and feedingstuffs,
- supervision of health of animals
- supervision of compliance with regulations on animal welfare,

Main Tasks of Food Control Institutions in Poland

„Economic safety”

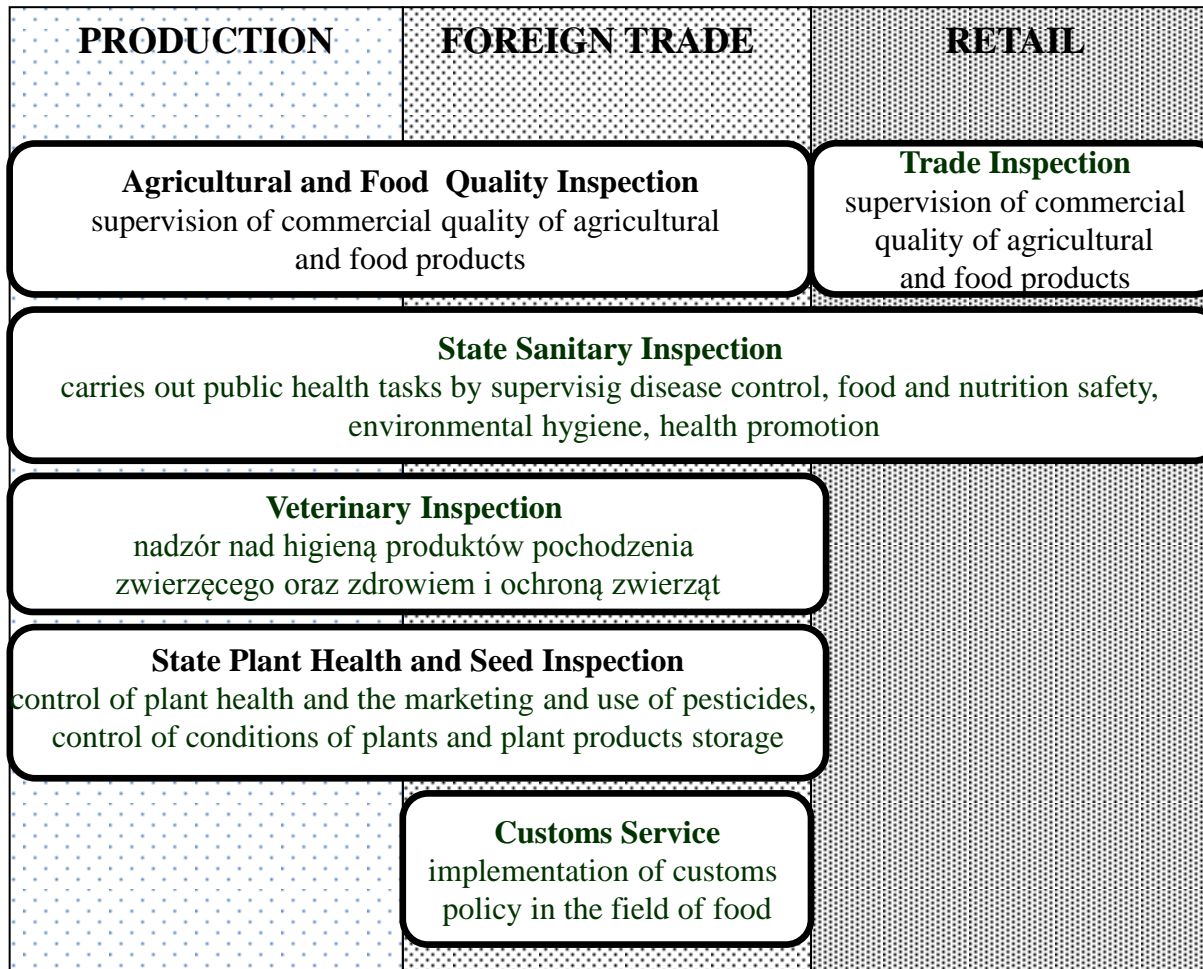
Agricultural and Food Quality Inspection

- control of commercial quality of agricultural and food products **in food processing plants**,
- control of agricultural and food products labelled, with registered protected geographical indications, protected designations of origin or certificates of specific character,
- control of agricultural and food products storage and transport conditions,
- control of organic production,
- co-operation with paying agencies (Agency for Restructuring and Modernisation of Agriculture) in the scope of the Common Agricultural Policy,
- co-operation with or participation in international organisations working in the area
- of commercial quality and international marketing of agricultural and food products (Codex Alimentarius Commission, United Nations/Economic Commission for Europe - Working Party on Agricultural Quality Standards, OECD - Standards for Fruit and Vegetables).

Trade Inspection

- control of commercial quality of agricultural and food products **in wholesale and retail sale**,
- control of labelling of agricultural and food products in wholesale and retail sale,
- mediation in disputes between consumers and operators to protect consumer interests and rights

Structure and Organization of Official Services Responsible for Food Control in Poland



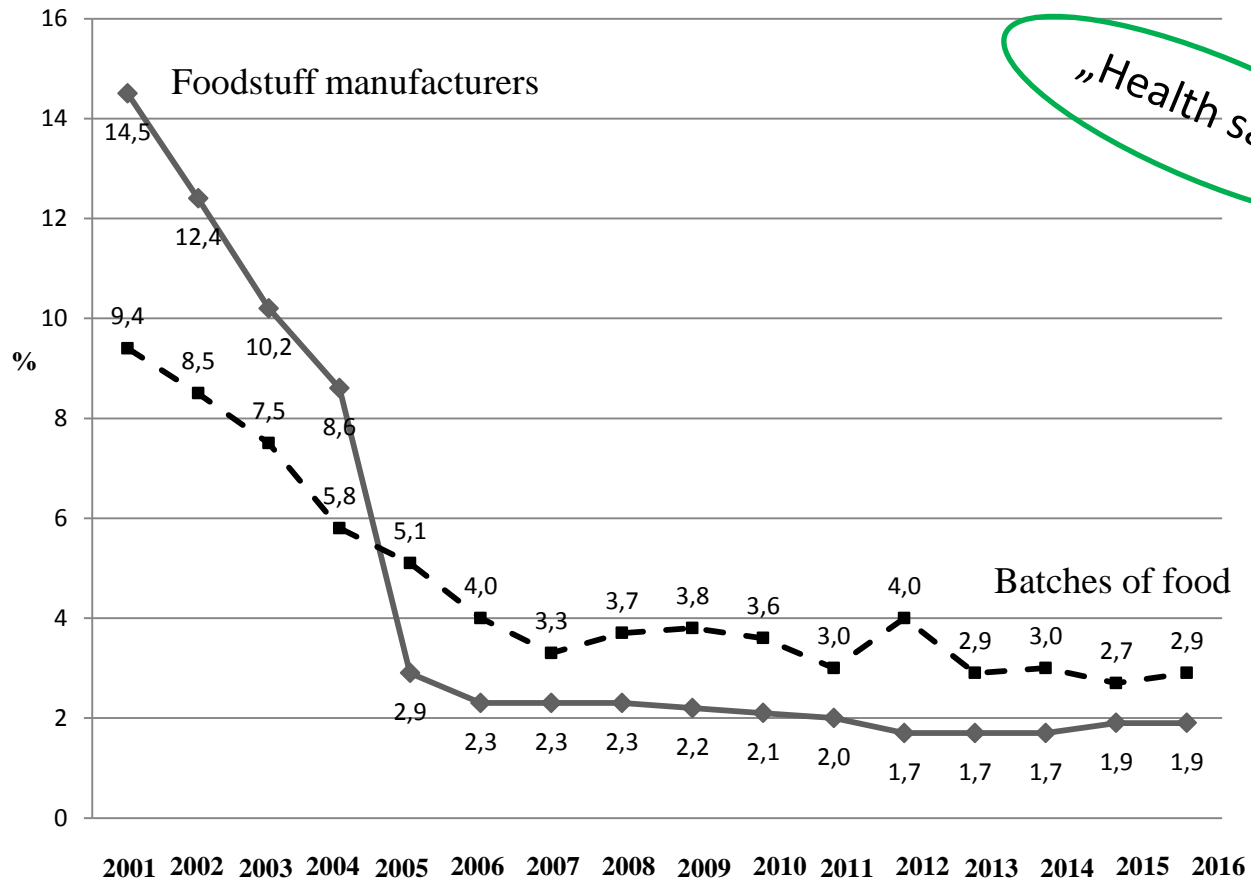
Polish system:

- diffuse
- multi-institutional
- demanding good coordination



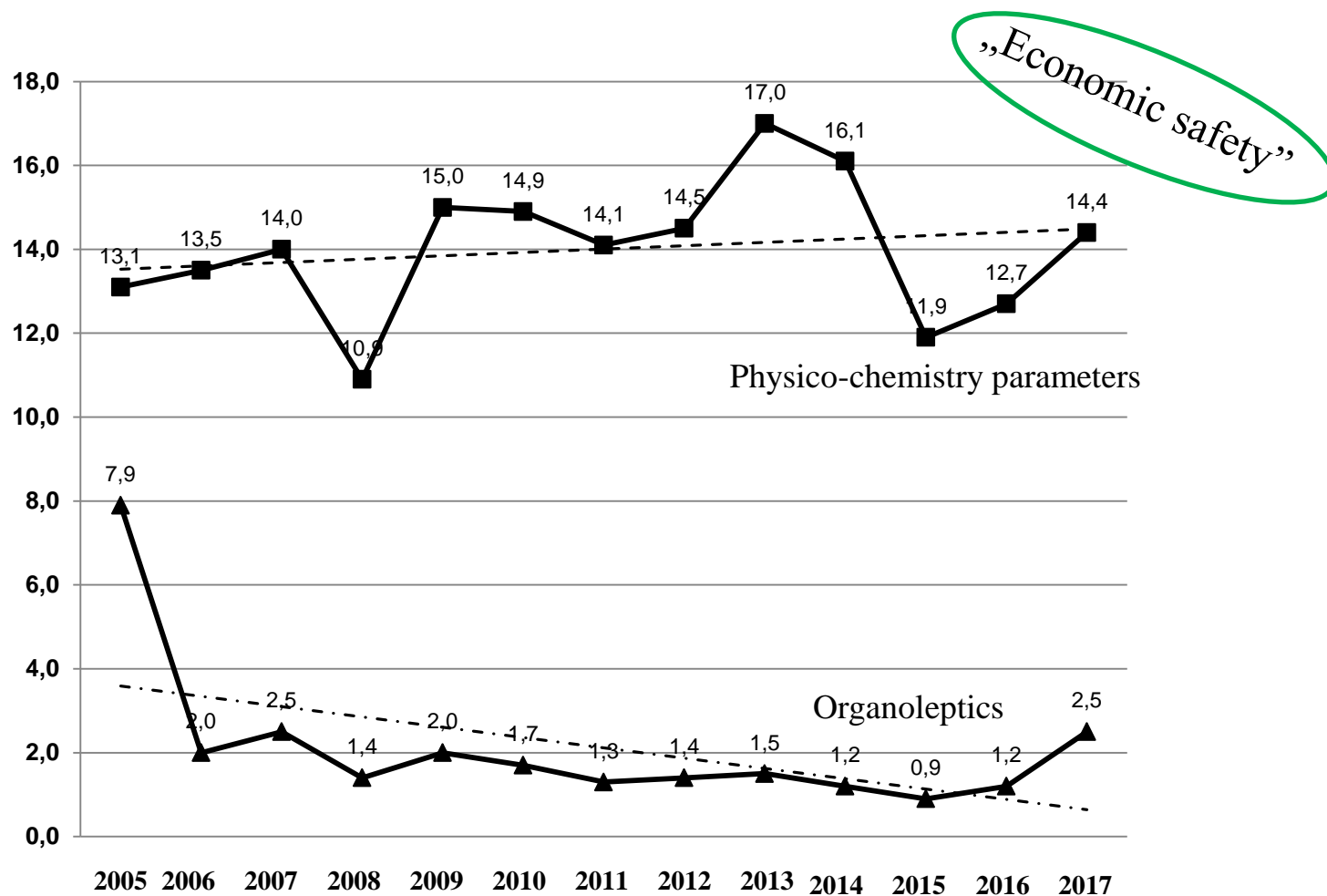
Consolidation

Part of food batches with inadequate health quality and foodstuff manufacturers with sanitary conditions not in line with the requirements of food law.



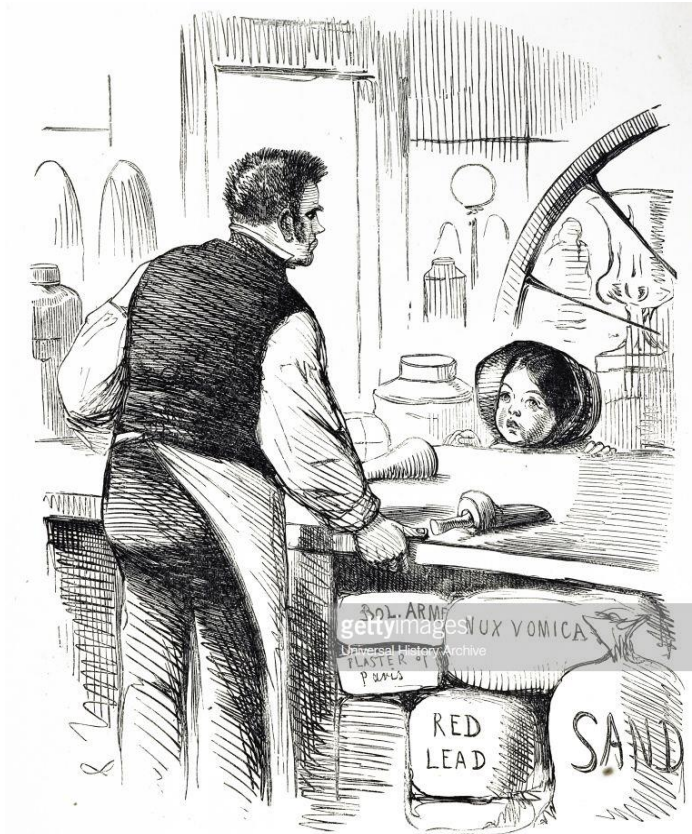
Source: Control results of State Sanitary Inspection

Inspected foodstuff batches showing transgressions according to quality control parameters as found during 2005- 2017 (in %)



Source: Control results of Agricultural and Food Quality Inspection

Thank you for your attention !



THE USE OF ADULTERATION.

Little Girl. "IF YOU PLEASE, SIR, MOTHER SAYS, WILL YOU LET HER HAVE A QUARTER OF A POUND OF YOUR BEST TEA TO KILL THE RATS WITH, AND A OUNCE OF CHOCOLATE AS WOULD GET RID OF THE BLACK BEADLES."

Little Girl:
*Please, a quarter of a pound of
your best tea to kill the rats and
a ounce of chocolate to
dislodge of beadles*