Cheat sheets

Each card has two cheat sheets, as in the online game: the experts' data on the consequences, and on how often and how much we meet it. Look when you want more information. A cheat sheet takes no points off.

↑ HOW SERIOUS → HOW OFTEN, HOW MUCH

01 Campylobacter

↑ Most recover within a week; rarely, Guillain-Barré syndrome follows

→ They reach us now and then: through an undercooked piece, splashes or a dirty board

02 Salmonella

↑ Passes in a few days; more dangerous for small children and older people

→ Eggs and meat are eaten almost daily, but control programmes and heat keep Salmonella off the plate

03 Listeria monocytogenes

↑ Kills a higher share of patients than any other food infection in the European Union

→ Listeriosis is about 55 times rarer than Campylobacter infection: ready-to-eat food is usually eaten before its date, before much Listeria builds up

04 Norovirus

↑ Fatal cases are very rare and mainly affect already frail patients

→ Highly infectious; outbreaks are regular, and not only through food

05 Toxoplasma gondii

↑ Harmless in a healthy adult; effects on a foetus can be permanent

→ Heat or freezing kills the parasite, but it survives in cured meat and on unwashed vegetables

06 Shiga toxin-producing E. coli

↑ In some children it causes kidney failure with lasting damage

→ Fewer than 100 bacteria are enough, but an ordinary kitchen cooks mince through, and heat kills them

07 Yersinia enterocolitica

↑ Usually clears up on its own, but sometimes leads to needless surgery

→ In an ordinary kitchen pork gets cooked, and heat kills Yersinia

08 Hepatitis E virus

↑ Most infected people notice nothing; only people with liver disease or weak immunity fall seriously ill

→ Relatively common in pork: in Germany its RNA was found in 1 in 5 liver sausages. Thorough cooking kills it

09 Anisakis: fish parasites

↑ A live larva causes sharp pain and usually needs a doctor; half of allergy cases need emergency care

→ Larvae are in many sea fish, but live ones rarely reach people: fish for eating raw is frozen, home-salted fish not always

10 Cereulide

↑ It usually passes by itself within a day. The infants who fell ill mostly had mild symptoms too; liver damage is a very rare exception

→ The spores are in many foods. The toxin forms when cooked food stays warm for hours instead of going into the fridge: that happens now and then, not every day

11 Bird flu in eggs, meat and milk

↑ The illness can also be mild, an eye inflammation for example. Yet hundreds of people worldwide have died of bird flu

→ People catch it through close contact with sick animals, not at the table. So we meet the virus in food rarely

12 Vibrio bacteria in seafood

↑ In a healthy person it usually passes in a few days. Vibrio vulnificus infection can kill vulnerable people

→ The bacteria live in warm, brackish seawater, and shellfish collect them. As the sea warms, there are more of them

13 Cronobacter: bacteria in formula powder

↑ Most at risk are babies under 2 months and those born early. Worldwide about 40 % of the severely ill die

→ Water temperature and time decide: water at 70 °C kills the bacteria, and formula drunk at once has no time to spoil

14 Staphylococcal toxins

↑ It starts fast, after half an hour to eight hours, and usually passes within a day

→ About one person in four carries the bacteria, but the toxin forms only when two things meet: unwashed hands and hours in the warm. That happens sometimes, not at every meal

15 African swine fever

↑ People do not catch this virus. Pigs suffer: there is no treatment, and the whole herd on the farm is culled

→ Meat with the virus rarely reaches a buyer: wild boar shot in affected areas are tested. The virus survives for months in meat and sausages, but it does people no harm

16 Fox tapeworm

↑ The first signs appear after 5 to 15 years. Untreated, the disease progresses and is fatal

→ The eggs get into soil, onto berries and into dogs' fur with fox droppings. Only a small share of the people who swallow them fall ill

17 Tick-borne encephalitis from raw milk

↑ 0.5–2 % of patients die, and up to 10 % are left with severe damage to the nervous system. After infection through milk the illness starts sooner, around day four

→ Latvia has many ticks, but only about 1 % of patients with tick-borne encephalitis are infected through food. Shop milk is pasteurised

↑ HOW SERIOUS → HOW OFTEN, HOW MUCH

18 Aflatoxins

↑ There is no safe dose: in theory any amount raises the risk

→ The limit is as low as technically possible, and contaminated shipments are stopped at the European Union border

19 Deoxynivalenol (DON)

↑ Effects appear at high doses and pass within hours

→ Not an exotic toxin: it comes with everyday bread and porridge, and children's average intake exceeds the daily limit

20 T-2 and HT-2 toxins

↑ Immune effects are seen even at comparatively low doses

→ The toxins are taken in mainly by people who eat oat flakes, and since 2024 oats have had binding limits in the European Union

21 Ochratoxin A

↑ Harms the kidneys with long-term intake; carcinogenic in animals

→ Everyday products usually hold little ochratoxin, and only years of intake harm the kidneys, not a single loaf

22 Patulin

↑ The irritation passes; the limit comes from a long-term rat study

→ Juice is pressed from sound fruit, and patulin in juice has a legal limit

23 Alternaria toxins

↑ In cell studies they damage DNA; assessors assume a cancer risk as a precaution, unproven in humans

→ The European Food Safety Authority (EFSA) estimated that our long-term intake exceeds the threshold below which there is no concern

24 Ergot alkaloids

↑ The concern is long-term intake from food, especially in toddlers

→ Cleaning removes the black grains, but alkaloids can remain; intake is highest where a lot of rye bread is eaten

25 Acrylamide

↑ Carcinogenic in animals, only probably in humans; no acute effects, the lifetime dose is what counts

→ Almost everyone takes it in every day, only 50 to 425 times less than the dose that caused tumours in animals

26 Furan

↑ Liver damage in animals; the margin to a harmful dose is small

→ Coffee is drunk daily, but furan is volatile: part of it escapes while the coffee is made, and how much depends on the method

27 Benzo(a)pyrene and PAHs

↑ One meal does no harm: the effect adds up over a lifetime

→ Depends on habits: smoked food carries polycyclic aromatic hydrocarbons (PAHs), but not everyone eats it, and not every day

28 Glycidyl esters

↑ Harm can only build up over a long time; infants are the most at risk

→ Formula-fed infants take in the most, but their food has the strictest limit

29 Nitrosamines

↑ To be safe, experts assumed every cancer-causing nitrosamine is as potent as the most potent one. So the real hazard is probably lower

→ Every age group takes in enough nitrosamines to raise a health concern. Meat products are the main source

30 Lead

↑ No safe level, but everyday intake is low: the effect is small, though lasting

→ Little in each source, but many sources: the doses add up, and everyone takes some in every day

31 Cadmium

↑ The safe level is set by early changes in the kidneys, not by damage. A little above it the risk of harm is very low; in smokers cadmium builds up much faster

→ Everyone takes some in every day, and it builds up in the kidneys for decades: years count, not days

32 Inorganic arsenic

↑ No safe intake level can be set; what is measured is the gap to the dose at which cancer was seen in humans

→ In Europe exposure is far lower than in South Asia, where arsenic from underground gets into drinking water

33 Methylmercury

↑ The unborn child, whose nervous system is developing, is the most sensitive; in adults the effect is smaller

→ Most in large predatory fish, eaten comparatively rarely in Latvia; herring, sprat, salmon and cod hold little

34 Lead shot in game

↑ No safe level of lead has been agreed. Small children and unborn babies are the most sensitive: brain development suffers

→ The fragments cannot be seen or picked out. Small game killed with shot holds the most lead

35 PFAS (“forever chemicals”)

↑ The limit is set by how well vaccines work in children; the substances can harm health over a long time

→ They do not break down, and they leave the body very slowly, so doses from many sources build up

36 Dioxins and dl-PCBs

↑ The most sensitive effect: a lower sperm count in men highly exposed as boys; dioxins stay in the body for years

→ They build up in fat and stay in the body for years, so doses from milk, meat, eggs and fish add up

↑ HOW SERIOUS → HOW OFTEN, HOW MUCH

37 Eggs from backyard hens

↑ There are no acute effects. PFAS build up in the body over years and weaken the immune system: in children vaccines work less well

→ Most people eat shop eggs, so we meet it sometimes, not often. In 2025 the Netherlands tested eggs at 60 places: at 31 of them one egg a week or less already exceeded the safe level for PFAS

38 Histamine

↑ Symptoms start quickly and pass within hours

→ The cold chain stops it: fish kept cold does not form it, but cooking will not remove it

39 Nitrate

↑ Harmful effects are only seen at doses far above the everyday intake

→ Most in winter-grown leafy vegetables; adults regularly go over the acceptable daily intake

40 Pesticide residues

↑ Residues are usually far below the dose at which effects are seen

→ Fruit and vegetables are eaten every day, but the residues found are nearly always below the legal maximum

41 Glutamate (E621)

↑ Reactions to a large dose usually pass quickly, with no lasting effects

→ For an adult the daily limit is about 2 g, but children can exceed it even with an average diet

42 Peanut allergy

↑ For an allergic person a tiny amount is enough: traces count, not quantity

→ Only allergic people, and labels protect them: the danger is a mislabelled pack

43 Aspartame

↑ You would have to drink a great many cans to reach the daily limit

→ Only people who regularly use sugar-free products take it in, and even they are usually far from the daily limit

44 Microplastics

↑ Toxicology data are missing: that means neither that microplastics are safe nor that they are dangerous

→ We use water and salt every day, but no authority can yet say how much we take in

45 Titanium dioxide (E171)

↑ DNA damage cannot be ruled out, which is exactly why it was banned

→ It is still taken in with medicines, but without a safe dose nobody can say whether that is a lot or a little

46 Cyanogenic glycosides

↑ Eating too much usually brings nausea and headache; severe poisoning is rare

→ These substances are only in a few plants, mainly in seeds and kernels; whole apple seeds pass through intact

47 Pyrrolizidine alkaloids

↑ High doses cause severe liver damage; no safe dose can be set for the cancer risk

→ One cup means nothing; the concern is for people who drink a lot of one tea for years

48 Tropane alkaloids

↑ Hallucinations and confusion set in within 5–30 minutes, and a doctor may be needed

→ Buckwheat is eaten often, but thorn-apple seeds rarely get into the harvest, and since 2022 there has been a European Union limit

49 Polyols (sugar alcohols)

↑ The diarrhoea starts soon after eating and passes on its own

→ Mainly people who eat sugar-free products take them in, but those who eat a lot exceed the daily limit

50 Chemicals from packaging and tableware

↑ Even for bamboo tableware, some of which released melamine and formaldehyde over the limits, the European Commission said: no acute risk

→ Food touches packaging, dishes and utensils every day, so a little always passes into it

51 6PPD-quinone

↑ Deadly to salmon, harms the liver and nerves of lab animals; whether it harms people is unknown

→ It is found in human urine and blood; in vegetables from Europe and Israel only traces were found; nobody knows how much comes from food

52 Cinnamon and coumarin

↑ Usually nothing happens. Liver damage was seen only in sensitive people taking coumarin as a medicine, and it passed

→ Cassia cinnamon has a lot of coumarin, Ceylon cinnamon little. A 15 kg child reaches the daily limit with 0.5 g of cassia a day

53 Vitamin D overdose

↑ The calcium level rises slowly, over weeks. In severe cases calcium settles in the kidneys, and the heart rhythm can be disturbed

→ Overdoses come from high-dose drops, several products at once, or a product that holds more vitamin than its label says. Only a few people reach a dangerous dose

54 Shellfish toxins

↑ Saxitoxin blocks nerve signals, and the muscles stop working. There is no antidote: only a ventilator keeps the person alive

→ Poisonings are rare. Cooking does not destroy the toxin, but the checks at shellfish farms protect; those who fall ill mostly gathered the shellfish themselves

↑ HOW SERIOUS → HOW OFTEN, HOW MUCH

55 Green and sprouted potatoes

↑ A small child needs less to fall ill, because the child weighs less. Severe poisonings with effects on the nervous system are very rare today

→ Peeling removes 25–75 % of the glycoalkaloids, boiling only 5–65 %. Green and sprouted potatoes reach the plate sometimes, more often in spring, when stored potatoes sprout

56 False morels

↑ In the body gyromitrin turns into a substance that damages the liver, the kidneys and the nervous system. In the past people died of such poisoning

→ After drying, up to half of the poison can remain. Severe poisonings are rare all the same

57 Slush ice drinks with glycerol

↑ The children it happened to went to hospital with low blood sugar and reduced consciousness. All recovered

→ For a small child one large cup drunk fast is enough. It happens rarely: doctors have described 21 such cases in 15 years

58 Glyphosate

↑ In 2015 the International Agency for Research on Cancer (IARC) called it probably carcinogenic. Risk assessors, counting real doses, find no concern

→ Residues are found most often in cereals and pulses. Only some products hold them, and in small amounts, so we meet it sometimes

59 Antibiotic residues in meat and milk

↑ After treatment an animal's meat and milk may not be sold for a set time, so food holds no drug or only traces

→ About one sample in a thousand exceeds the limit. So we meet residues rarely, though we eat meat, milk and eggs every day

60 Butterfish (escolar)

↑ Unpleasant but not dangerous: the oil passes through undigested, and it is over in a day or two

→ People cannot digest wax esters. The larger the portion, the greater the chance of falling ill, but not everyone is affected by this fish

61 Blue-green algae toxins

↑ At a high dose microcystins damage the liver: this is known from animals and from poisonings through water. For food there are no data on effects

→ Blue-green algae bloom every summer, but hardly anyone measures how much toxin is in the fish we eat. So the intake cannot be worked out

62 Poppy seeds

↑ At a high dose the alkaloids also slow the breathing, but in an adult this passes. A poppy seed brew is dangerous for a baby. A drug test after a poppy seed bun can come up positive

→ The alkaloids stick to the seeds from the plant's latex; washing, grinding and baking cut the amount by 25–100 %. We get a larger dose sometimes: when the seeds are many and neither washed nor baked

63 Seaweed and iodine

↑ The thyroid starts to work too little or too much, and then a doctor is needed. It usually recovers once the iodine intake falls

→ Brown seaweeds such as kombu hold the most iodine. Too much iodine reaches those who take brown seaweed or seaweed tablets regularly; they are few, so we meet it rarely

64 Jelly sweets with HHC

↑ How HHC acts is known from poisonings: in Czechia in 2024 five schoolchildren went to hospital after jelly sweets with HHC. It usually passes within a day or a few days

→ HHC has been a banned substance in Latvia since 2022, so we meet it rarely. Since 2025, 599 parcels with new psychoactive substances have been seized, some hidden in sweets

65 Cannabidiol (CBD) oil

↑ At medicinal doses cannabidiol affects the liver. For smaller doses over a long time the data are missing; for young people, pregnant women and people on medication, safety could not be established

→ The products are easy to get, but nobody has counted how many people take them and at what doses

66 Bisphenol A

↑ There are no acute effects, so the consequences are not very serious. Nor are they mild: because of effects on the immune system the tolerable dose was cut about 20,000-fold

→ The amounts are tiny, but the new safe dose is smaller still: in 2023 the European Food Safety Authority (EFSA) concluded that all age groups exceed it. So we meet it often

67 Sulphites

↑ In a sensitive person the reaction starts soon after eating and passes. The European Food Safety Authority (EFSA) could not rule out that high doses over a long time affect the nervous system

→ Sulphites are in many everyday products, so we meet them often. People who have a lot of these products may take in more than the European Food Safety Authority (EFSA) considers safe

68 Liver during pregnancy

↑ For the baby the effects are for life. Adults who take in more than 1.5 mg a day for years have more brittle bones in old age

→ One portion of liver gives several days' worth. It becomes dangerous when a pregnant woman eats liver regularly or together with vitamin A supplements, and that happens rarely

69 Gluten and coeliac disease

↑ For a patient, crumbs are enough to do harm. On a strict gluten-free diet the gut heals, but the diet is for life

→ At least one person in a hundred has coeliac disease, and some do not know it. Those who know avoid gluten, so we meet the harm rarely

↑ HOW SERIOUS → HOW OFTEN, HOW MUCH

70 Liquorice

↑ In severe cases the heart rhythm is disturbed, and hospital care is needed. Once the liquorice stops, blood pressure and potassium return to normal

→ What harms is regular eating for weeks, not one sweet. Few people eat it that way, so we meet it rarely. Finland advises pregnant women against liquorice

71 Treated citrus peel

↑ Bavarian checks found on average 2.3 mg of thiabendazole per kilogram in treated oranges: below the permitted level, which is set with a margin

→ The treatment stays in the peel: less than a tenth reaches the flesh, less than 1 % the juice

72 Food fraud

↑ Syrup in honey does no harm to health, nor does horse meat in lasagne. History has seen otherwise: melamine in milk, methanol in vodka

→ Checks find some of these products adulterated, so we meet fakes sometimes. In the European Commission's check of imported honey, published in 2023, 147 of 320 samples were suspected of containing added sugar syrup

73 Azo dyes in sweets

↑ The effect, if any, is small and passes. A British study in 2007 saw it in some children, not in all

→ Since 2010 products with these colours have had to carry a warning in the EU, and many makers have replaced them. So we meet them sometimes, not with every sweet

74 Undercooked chicken

↑ Most recover within a week; rarely, Guillain-Barré syndrome

→ Chicken is eaten almost weekly; below 74 °C in the centre, every infected bird reaches the plate with live bacteria

75 Self-hunted game

↑ Illness lasts months, not days, and many end up in hospital; often several who ate the same meat fall ill together

→ Game is eaten a few times a year, but freezing does not kill Trichinella: a test or thorough cooking protects

76 One board for meat and salad

↑ The same bacteria as in raw chicken; death and lasting nerve damage are the exception

→ It happens unnoticed, and salad is never heated: bacteria from raw meat stay alive on it

77 Unwashed hands

↑ A few rough days; no lasting effects in a healthy person

→ Hands touch food several times a day, and about 18 virus particles are enough

78 Cooked too brown

↑ No acute effect, and it is only probably carcinogenic in humans: this is about a lifetime's intake

→ A dark crust adds more every time, and per kilogram of body weight children take in the most

79 Washing chicken before cooking

↑ The same consequences as undercooked chicken, by another route

→ The bird itself gets cooked: bacteria reach people only through splashes that fly up to 80 cm

80 Unwashed salad and berries

↑ Usually mild; severe cases are a rare exception, in individual outbreaks

→ Contamination comes from the field, and salad and berries are eaten raw: only washing lowers the germ count

81 Frozen berries straight from the freezer

↑ Norovirus, gone in a few days, sets the rating, not hepatitis A

→ Frozen in summer, eaten in winter: the virus survives the whole way, but one minute of boiling kills it

82 Raw milk

↑ In small children Shiga toxin-producing Escherichia coli (STEC) can cause kidney failure with lasting damage

→ Few people drink it, but they drink it regularly, and boiling deals with everything the milk may carry

83 Mushrooms you picked yourself

↑ At first you seem to get better; that is when the toxins destroy the liver

→ Many pick mushrooms, but mostly in autumn, and cooking does not destroy the toxin: only sure identification protects

84 Undercooked burger

↑ 60 % of haemolytic uraemic syndrome cases in the European Union are in children under five

→ Mince is eaten several times a month, and in a pink middle the bacteria stay alive

85 Energy drinks

↑ What years of use do to teenagers is not known: there are too few studies, and the European Food Safety Authority (EFSA) is reassessing it

→ One can exceeds the figure the European Food Safety Authority (EFSA) gives for a 40 kg child, but that figure was carried over from adults

86 Leftovers left out

↑ Usually over within a day; very rarely the toxin damages the liver

→ Spores survive boiling and the toxin survives reheating, so time decides, not heat

87 Thawing meat on the counter

↑ Thorough cooking kills the bacteria, but not all of their toxins

→ While the middle is still hard, the surface sits for hours in the warm, where bacteria grow fastest; in a fridge they barely do

88 Frozen breaded chicken

↑ Usually over in a week, but young children and older people may need hospital care

→ The crumb is deceptive: in Canada in 2005 about 40 % of shoppers thought these products were precooked; what decides is whether the raw meat carries Salmonella

↑ HOW SERIOUS → HOW OFTEN, HOW MUCH

89 Frozen vegetables, uncooked

↑ In a European outbreak, 10 of the 53 patients died

→ Blanching is not cooking, but at home frozen vegetables are usually boiled, and heat kills Listeria

90 Raw dough

↑ In children, Shiga toxin-producing Escherichia coli (STEC) can cause haemolytic uraemic syndrome; in the European Union in 2023, 60 % of those cases were in children under five

→ Bacteria cannot grow in dry flour but survive, and only baking kills them; everyone wants to lick the spoon

91 Eating food past its “use by” date

↑ Listeriosis patients almost always need hospital care; about one in six dies

→ Many people eat food past the date, but Listeria is in a small share of products, and listeriosis is rare: about 55 times rarer than Campylobacter infection

92 Eating food past its “best before” date

↑ A quality date: if the pack is intact and the food looks and smells fine, it can be eaten

→ This date is on long-keeping staples found in almost every home; past it quality changes, not safety

93 Scraping off the mould

↑ Mycotoxins: some harm the liver or kidneys, some cause cancer; how much is left depends on the mould

→ Heat kills the mould but not its toxins; only a few studies have measured how much is left after scraping

94 Charred barbecue meat

↑ They are considered carcinogens, but one meal does no harm

→ Most people barbecue, mainly in summer, but the black bits are a small part of the meal

95 Several supplements at once

↑ The Netherlands received 238 reports of nerve damage linked to vitamin B6

→ In a Baltic survey over 40 % of respondents take 3–5 supplements; what decides is each nutrient's total, not the number of products

96 Honey for babies

↑ If a baby falls ill, it usually needs a long hospital stay, often with breathing support

→ Spores are found in about 4 % of honey samples worldwide. Infant botulism is very rare; none in Latvia in 2015–2022

97 Home-canned food

↑ The toxin paralyses muscles; patients need hospital care and antitoxin, and recovery takes weeks or months

→ The toxin forms if spores survive in a jar without acid. About 80 cases a year in Europe, none in Latvia in 2015–2022

98 Well water

↑ An adult usually gets diarrhoea for a few days. Formula made with nitrate-rich water can turn a baby “blue”

→ Only part of the population drinks well water, mostly in the countryside; there, bacteria were found in five of six wells

99 Wild garlic and its poisonous look-alikes

↑ Autumn crocus first causes severe vomiting and diarrhoea; after 1 to 3 quieter days the organs fail

→ Wild garlic smells of garlic, but the smell stays on the fingers, and the next leaf can no longer be told by it. Mix-ups are rare, but they come back every spring

100 Undercooked kidney beans

↑ Four or five raw beans are enough. It usually passes the same day

→ Almost everyone boils beans properly or takes canned ones. Half-raw beans reach the plate rarely: most often from a slow cooker, where the temperature is too low

101 A bitter courgette or pumpkin

↑ France recorded 353 cases in five years, none severe. Severe cases with bleeding from the gut are a very rare exception

→ The bitter substances appear when the plant has crossed with an ornamental gourd or suffered heat and drought. Cooking does not destroy them

102 Green tea extract in capsules

↑ In rare cases the liver inflammation is severe. Nobody can tell in advance whom it will hit

→ Signs of liver damage were seen from 800 mg of EGCG a day. A tea drinker takes in 90–300 mg a day, and the tea does not harm the liver. Only capsules give so large a dose, so we meet it rarely

103 The extra-hot chip challenge

↑ Almost all cases were mild, and no lasting harm is left. Severe cases are a very rare exception

→ French poison centres took 124 calls in five years; a third were about children aged 10 to 15

104 Whole grapes and nuts for a small child

↑ With the airway fully blocked, the brain lasts only a few minutes without oxygen

→ The risk is highest up to the age of three: the child cannot yet chew properly. Almost always all ends well

105 Very hot tea and coffee

↑ One hot cup does no harm: the risk grows over the years. The International Agency for Research on Cancer rates very hot drinks as “probably carcinogenic to humans”

→ A drink cools to 65 °C in a few minutes, and most people wait that long, so we meet it sometimes. What matters is the habit of drinking at once, for years

106 The “fat burner” DNP

↑ In the United Kingdom from January 2012 to August 2013: 21 enquiries to the poisons service and 4 deaths

→ An industrial chemical, declared unfit for human consumption back in 1938. Most people never come across it

107 Fennel tea for a baby

↑ There are no acute effects. The concern is cancer risk later in life: no safe dose can be set, and babies are the most sensitive

→ A baby weighs little, so from a cup of tea it gets many times more per kilogram of body weight than an adult. Only some families give the tea, so we meet it sometimes, not often

↑ HOW SERIOUS → HOW OFTEN, HOW MUCH

108 Raw eggs

↑ It usually passes in a few days. Babies, older people and people with weak immunity fall more seriously ill

→ A raw dish has no heat to destroy Salmonella, but we eat such dishes only now and then, and few people ever meet an infected egg

109 Lead from petrol

↑ Children in two Swedish towns averaged 60 µg/L of lead in their blood in 1978: five times the level that already costs one intelligence quotient (IQ) point

→ Lead came from air and food at once, so everyone's total dose was high

110 Methylmercury in Minamata

↑ By the end of August 1956 there were 30 cases, 11 of them fatal. In the worst-hit areas, 13 of 188 babies born in 1955–1958 were severely ill

→ For 36 years factory waste carried methylmercury into the bay, fish built it up, and families ate them daily

111 Cadmium in Toyama rice

↑ Worst hit were women over 35 who had given birth: bones broke until the person could no longer move

→ Cadmium builds up in the kidneys, and rice and river water brought it in every day for decades

112 Melamine in infant formula

↑ By the end of November 2008, 294,000 babies were affected, over 50,000 were in hospital and six died

→ Formula was the main food, so a baby on the most contaminated brand took in 40–120 times the tolerable intake

113 Ergotism epidemic

↑ Four Ural districts registered 10,104 cases; 1,633 went to hospital; in one area, 11 of 170 hospital patients died

→ The poorest had no old grain, so they ate the fresh harvest, when ergot is most toxic

114 Methanol in Pärnu

↑ Of 154 people poisoned, 68 died. Of the survivors, 20 were left with damage to sight or the nervous system

→ By taste and smell methanol cannot be told from ordinary alcohol. Whoever bought this vodka drank a dangerous dose on the first evening

115 "Mad cow disease"

↑ The disease starts years later and cannot be treated. The median age at death was 28

→ At the peak of the epidemic, in January 1993, almost 1,000 new sick cattle were found in the United Kingdom every week

116 E. coli in sprouts

↑ Of 4,075 patients 908 developed haemolytic uraemic syndrome, a severe form of kidney failure, and 50 died

→ The sprouts came from one farm in Germany; the seeds were imported from Egypt. In the warmth and damp of sprouting the bacteria multiplied

117 Radioactive iodine in milk

↑ By 2005 thyroid cancer had been found in more than 6,000 people who were children or adolescents at the time of the accident

→ Iodine-131 settled on the grass, cows ate it, and it passed into the milk. It was at its highest in the first weeks

118 The toxic oil of Spain

↑ About 20,000 people fell ill; about 300 died soon after. Which substance in the oil was to blame has not been proven to this day

→ Aniline had been added to the oil to keep it out of food. Fraudsters reprocessed it and sold it at markets as olive oil

119 Lead in cinnamon apple purée

↑ 566 cases were recorded; more than half were under two years old. The highest blood lead level was 39.3 µg/dl

→ The pouches held 1.9–3.0 mg of lead per kilogram of purée. Lead chromate was found in the cinnamon: probably added for weight and colour

120 Listeriosis in South Africa

↑ 1,060 cases were confirmed; 216 people died. 42 % of the patients were newborns, infected before birth

→ Listeria had settled in the plant and contaminated the sausage after cooking. In the fridge it goes on multiplying