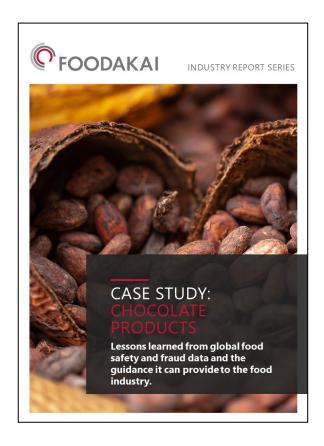


### **INDUSTRY REPORTS INSIGHTS**





### **CATEGORIES + DEFINITIONS**

### >>MILK & MILK PRODUCTS CATEGORIES

- I. Butter (12 sub-categories incl. flavored, salted, unsalted, frozen)
- II. Cheese (253 sub-categories incl. curd, raw cheese, frozen, spread)
- III. Milk (20 sub-categories incl. infant formula, raw, fermented, baby milk)
- IV. Yogurt (25 sub-categories incl. yogurt drink, frozen, flavored)
- V. Other dairy (36 sub-categories dairy desserts, powders)

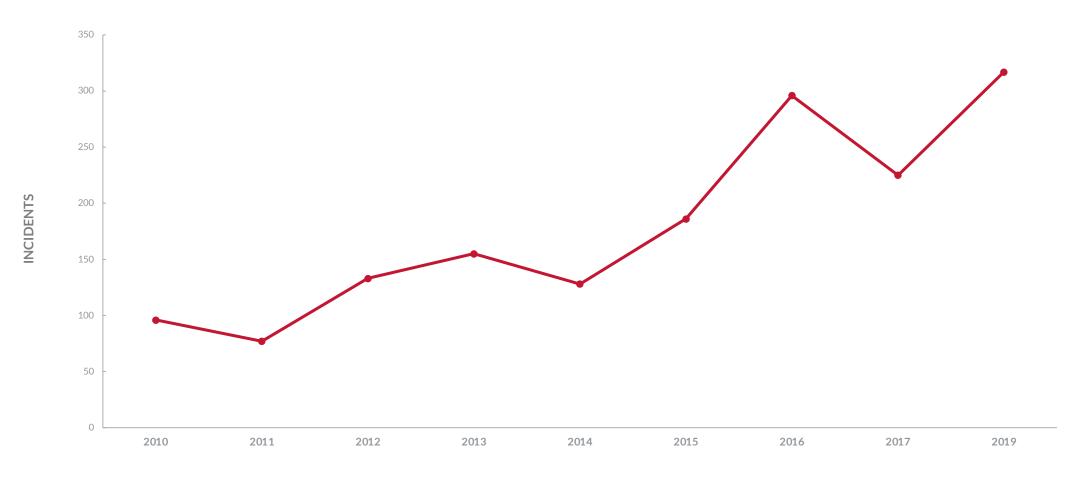
### >>FOOD SAFETY INCIDENTS

All food safety related incidents that are announced by official sources, of national and international food safety authorities, customs, ministries for food, health and the environment.

As "incidents" are classified all following terms: food recalls, border rejections, food alerts, public announcements, official information announcements, information for attention, import refusals, import alerts, enforcement reports, imported food reports and consumer advisories.

# A. DAIRY PRODUCTS: FOOD SAFETY HAZARDS & FRAUD STATISTICS

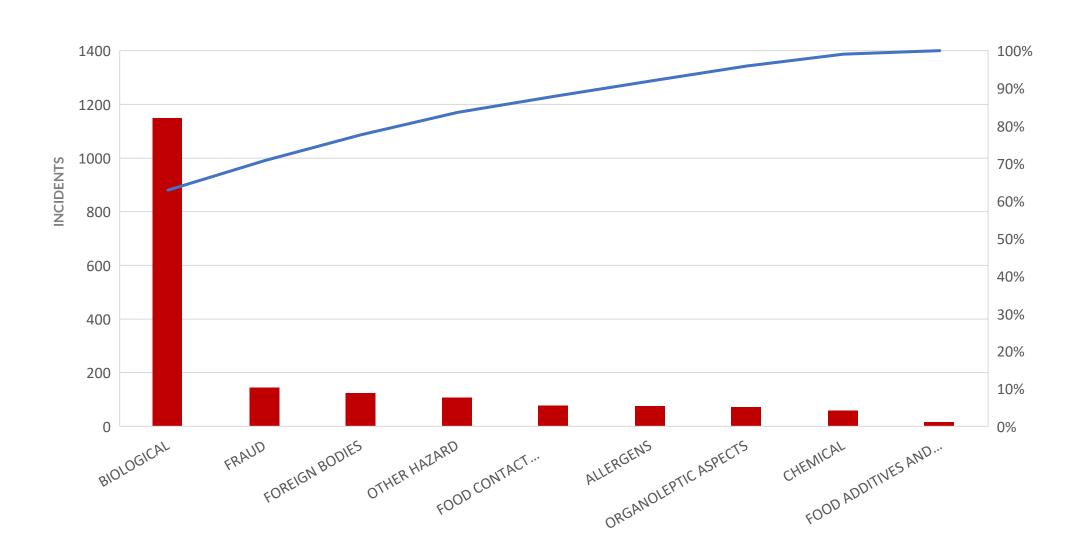
## INCIDENT TRENDS IN DAIRY PRODUCTS (2010-2020)



### DAIRY PRODUCTS INCIDENTS OVERVIEW

	<u>2010-2015</u>	2015-2020	<u>2019</u>	<b>2020 YTD</b>
BUTTER	16	40 (+150%)	5	1
CHEESE	383	808 (+111%)	214	26
MILK	83	133 (+60%)	59	5
YOGURT	92	116 (+26%)	17	4
OTHER DAIRY	23	57 (+148%)	24	4
TOTAL	597	1154 (+93%)	319	40
AVERAGE INCIDENT OCCURRENCE RATE/ MONTH	<b>10</b> /MONTH	19 <sub>/монтн</sub> (+90%)	<b>27</b> /MONTH	<b>20</b> /MONTH

### TOP EMERGING HAZARD CATEGORIES IN DAIRY PRODUCTS (2010-2020)



# TOP 10 EMERGING HAZARDS IN DAIRY PRODUCTS (2019)\*

- 01 LISTERIA MONOCYTOGENES
- 02 MOULDS
- 03 ESCHERICHIA COLI
- 04 SHIGATOXIN-PRODUCING E. COLI
- 05 SALMONELLA SPP.

- 06 E. COLI 0:26
- **07** GLASS FRAGMENT
- 08 FAT IN DRY MATTER (FDM)
- 09 ALLERGENS
- 10 PLASTIC FRAGMENT

<sup>\*</sup> account for 64% of all 2019 dairy-related incidents

### TOP HAZARD CATEGORY FOR KEY DAIRY PRODUCTS (2010-2020)

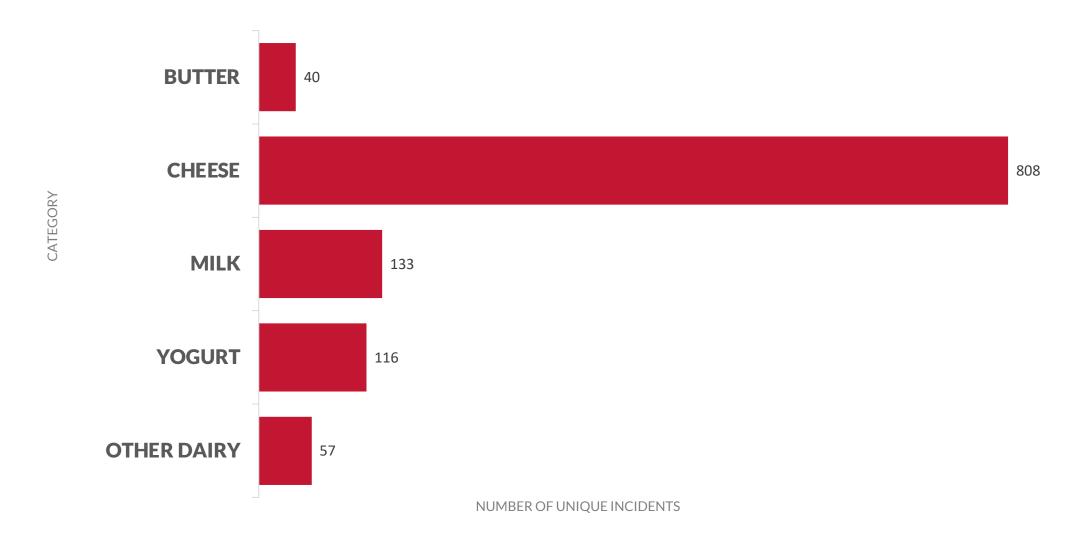
DAIRY CATEGORY	TOP HAZARD
BUTTER	BIOLOGICAL
CHEESE	BIOLOGICAL
MILK	BIOLOGICAL
YOGURT	FOREIGN BODIES
OTHER DAIRY	BIOLOGICAL

### TOP HAZARD CATEGORY FOR KEY DAIRY PRODUCTS (2019)

DAIRY CATEGORY	TOP HAZARD
BUTTER	FRAUD
CHEESE	BIOLOGICAL
MILK	BIOLOGICAL
YOGURT	ALLERGENS
OTHER DAIRY	BIOLOGICAL

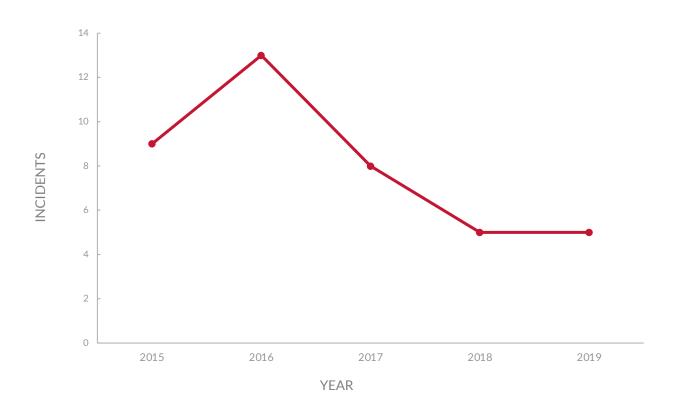


### 5-YEAR OVERALL INCIDENTS IN KEY CATEGORIES OF DAIRY PRODUCTS



### RECENT INSIGHTS FOR BUTTER (LAST FIVE YEARS)



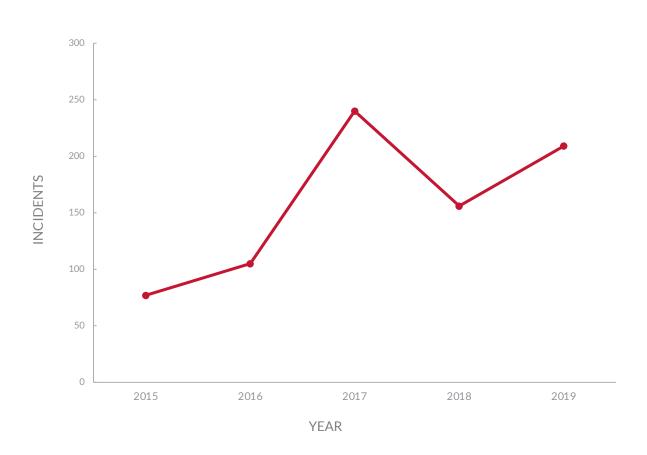


### >>TOP 5 HAZARDS

- \* account for 56% of all butter-related incidents for the last 5 years
- 01 LISTERIA MONOCYTOGENES
- 02 COLIFORMS
- 03 TOO HIGH CONTENT OF WATER
- 04 INCORRECT LABELLING
- 05 MOULDS

### RECENT INSIGHTS FOR CHEESE (LAST FIVE YEARS)

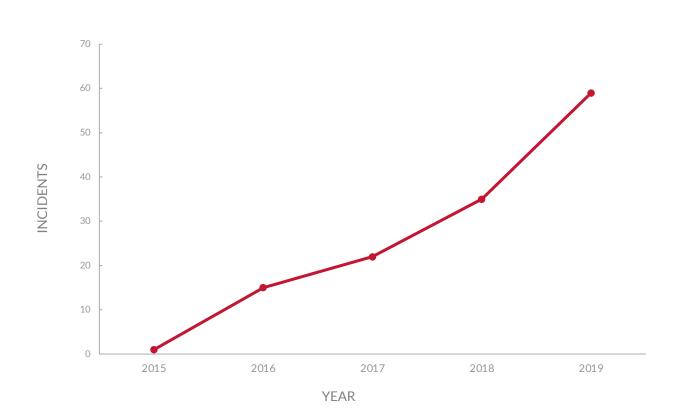




### >>TOP 5 HAZARDS

- \* account for 64% of all cheese-related incidents for the last 5 years
- 01 LISTERIA MONOCYTOGENES
- 02 MOULDS
- 03 SHIGATOXIN-PRODUCING E.COLI
- 04 ESCHERICHIA COLI
- **O5** SALMONELLA SPP.

### RECENT INSIGHTS FOR MILK (LAST FIVE YEARS)





- \* account for 51% of all milk-related incidents for the last 5 years
- 01 SALMONELLA SPP.
- 02 ALLERGENS
- 03 BACILUS CEREUS
- 04 CRONOBACTER SAKAZAKII
- 05 MISBRANDING

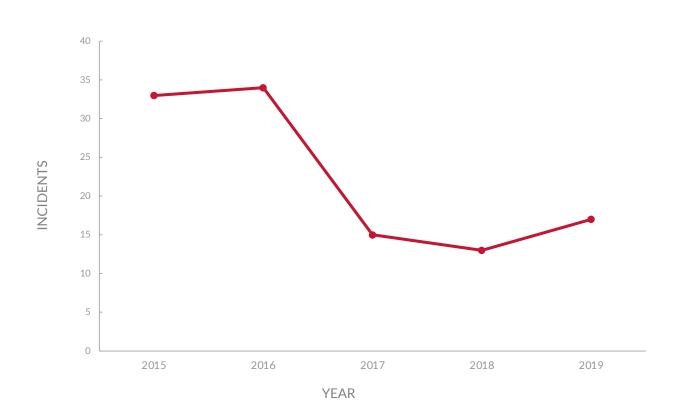
### RECENT INSIGHTS FOR YOGURT (LAST FIVE YEARS)





 $^st$  account for 45% of all yogurt-related incidents for the last 5 years

- 01 LISTERIA MONOCYTOGENES
- 02 RUBBER FRAGMENTS
- 03 MOULDS
- 04 PLASTIC FRAGMENT
- 05 PACKAGING DEFECT

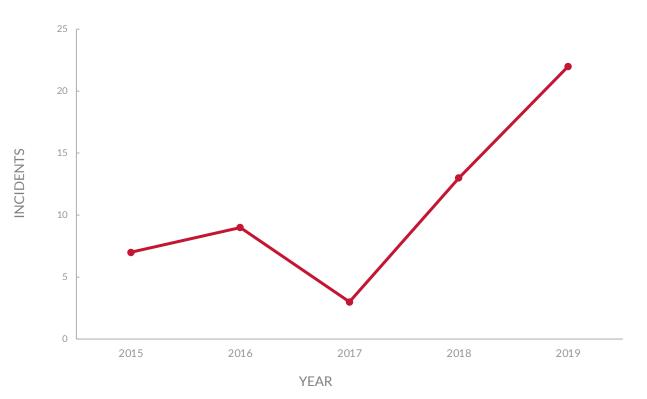


### RECENT INSIGHTS FOR OTHER DAIRY PRODUCTS (LAST FIVE YEARS)





- 01 LISTERIA MONOCYTOGENES
- 02 ALLERGENS
- 03 GLASS FRAGMENT
- **04** EGGS AND PRODUCTS THEREOF
- 05 SALMONELLA





### TOP EMERGING HAZARDS IN KEY INGREDIENTS

### >> FRUITS AND VEGETABLES

\* 1206 incidents for 2019 and 2020 YTD

### The top 5 hazards

- 01 LISTERIA MONOCYTOGENES
- 02 AFLATOXIN
- 03 OCHRATOXIN A
- 04 CHLORPYRIPHOS
- 05 SALMONELLA SPP.

### The top 5 countries of origin

- 01 UNITED STATES
- 02 TURKEY
- 03 CHINA
- 04 CANADA
- 05 MEXICO

### >>

\* 295 incidents for 2019 and 2020 YTD

### The top 5 hazards

- 01 MOULDS
- 02 ABNORMAL SMELL
- 03 TEBUCONAZOLE
- 04 AFLATOXIN
- 05 ISOPROTHIOLANE

### The top 5 countries of origin

- 01 UNITED STATES
- 02 INDIA
- 03 CHINA
- 04 ITALY
- 05 AUSTRALIA

### TOP EMERGING HAZARDS IN KEY INGREDIENTS

### >> SUGAR AND SYRUPS

\* 18 incidents for 2019 and 2020 YTD

### The top 5 hazards

- 01 BENZOIC ACID
- UNAUTHORIZED USE OF e950
- 03 GLUTEN
- 04 COMPOSITION
- 05 MILK

### The top 5 countries of origin

- 01 TAIWAN
- 02 UNITED STATES
- 03 INDONESIA
- 04 THAILAND
- 05 SOUTH KOREA

### >> ADDITIVES, BOTANICAL EXTRACTS & FOOD COLORS

\* 27 incidents for 2019 and 2020 YTD

### The top 5 hazards

- 01 MILK
- 02 TRIAZOLE
- NON-PATHOGENIC BACTERIA
- 04 EGGS
- 05 CHLORAMPHENICOL

### The top 5 countries of origin

- 01 INDIA
- 02 TAIWAN
- 03 UNITED STATES
- 04 CHINA
- 05 SOUTH KOREA