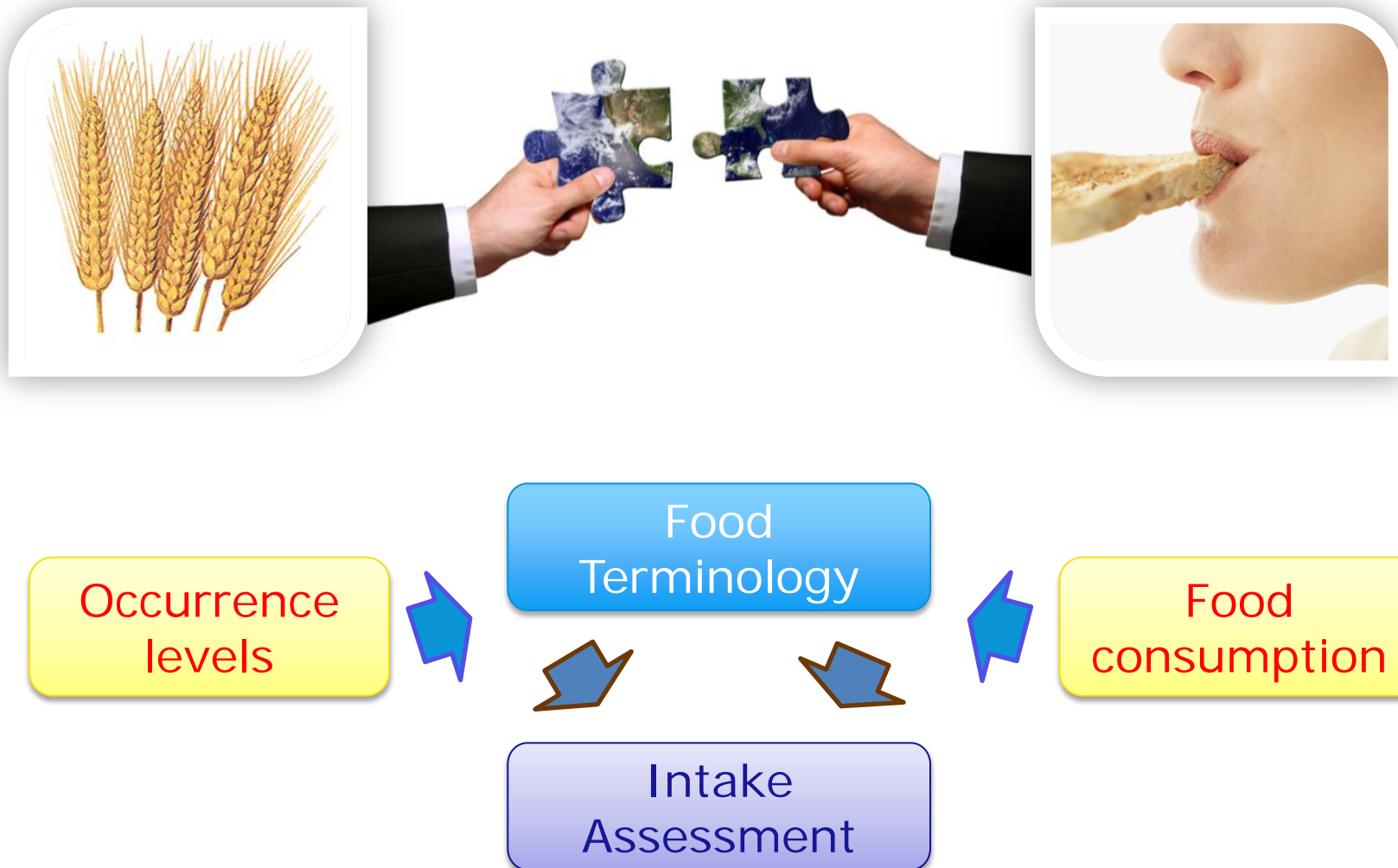




Dietary intake of caffeine

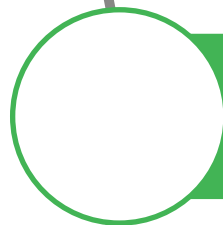
DIETARY INTAKE ASSESSMENT



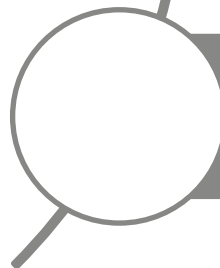
SUMMARY



Caffeine levels in food and beverages



Food consumption data in EFSA



Caffeine intake results



CAFFEINE LEVELS IN FOOD AND BEVERAGES

Caffeine sources:

- Chocolate,
- Coffee,
- Tea,
- Cola beverages (caffeinated), and
- Energy drinks



Caffeine concentration levels were retrieved from:

- peer-review scientific papers,
- national reports, and
- web sites.



Products in which chocolate occurs as a minor constituent, e.g. "chocolate biscuits", were not considered due to the relatively low and highly variable caffeine levels.



CAFFEINE LEVELS IN FOOD AND BEVERAGES

Fitt E., Pell D. and Cole D., 2013. Assessing caffeine intake in the United Kingdom diet. Food Chemistry, 140, 421-426.

This paper reports information on caffeine levels from:

- 400 samples prepared at home, in workplaces or purchased in retail settings of:
 - teas (e.g. loose leaves, bags, vending machines, and instant tea), and
 - coffees (e.g. filter coffee, vending machines, espresso, and instant coffee)
- 162 samples from another UK survey (MAFF, 1998).
- websites of manufacturers for different products and brands

COFFEE

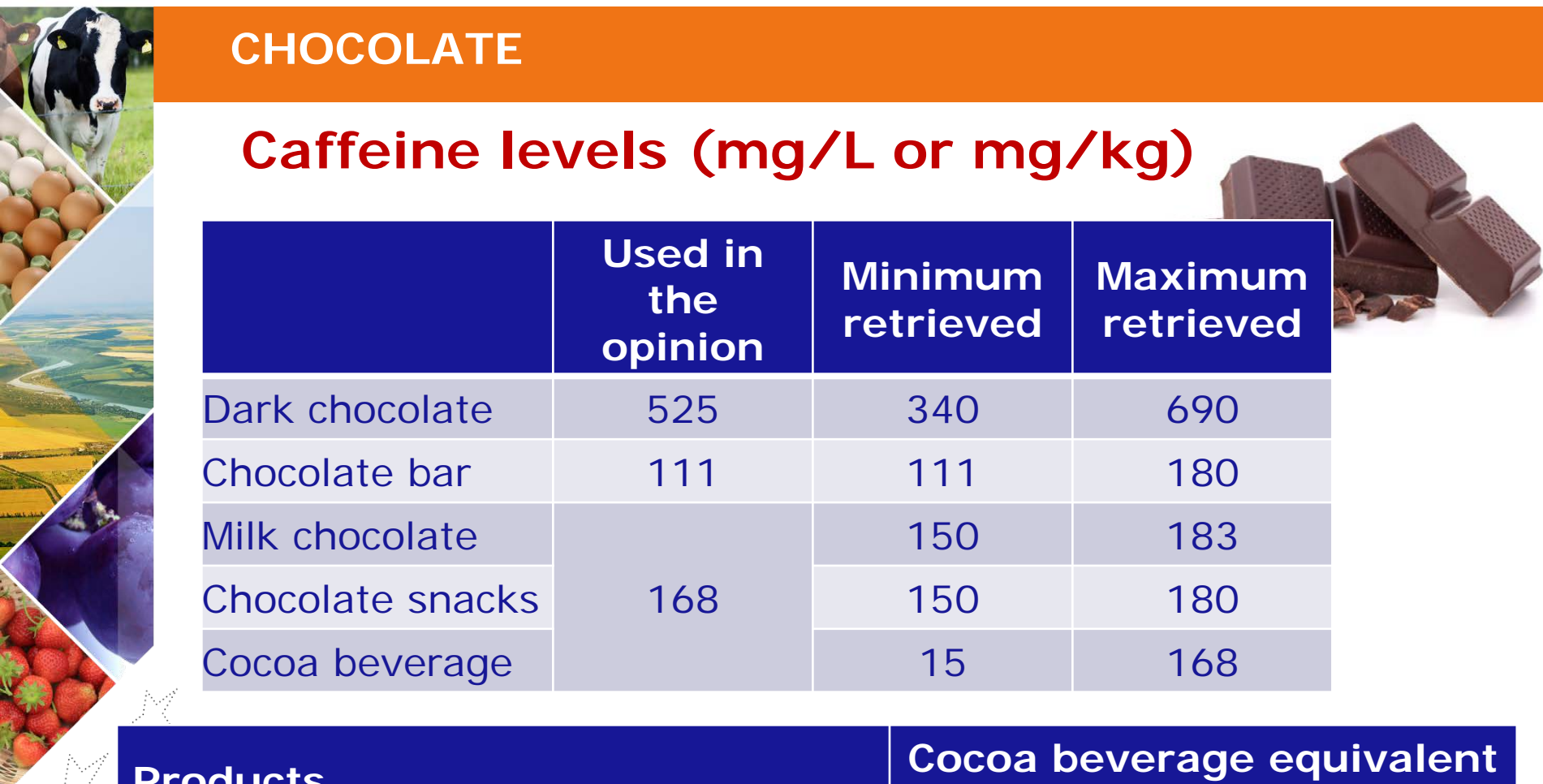
Caffeine levels (mg/L or mg/kg)

	Used in the opinion	Minimum retrieved	Maximum retrieved
Coffee drink	445	320	690
Instant coffee, ready to drink	445	300	690
Cappuccino	272	250	315
Espresso coffee	1,340	713	1,897
Decaffeinated and imitates	21	21	29



CHOCOLATE

Caffeine levels (mg/L or mg/kg)



	Used in the opinion	Minimum retrieved	Maximum retrieved
Dark chocolate	525	340	690
Chocolate bar	111	111	180
Milk chocolate	168	150	183
Chocolate snacks		150	180
Cocoa beverage		15	168

Products	Cocoa beverage equivalent per g of product
Cocoa beverage, Hot chocolate and Cocoa drink	1 grams
Cocoa powder or Cocoa mass	60 grams
Cocoa beverage-preparation, powder	15 grams

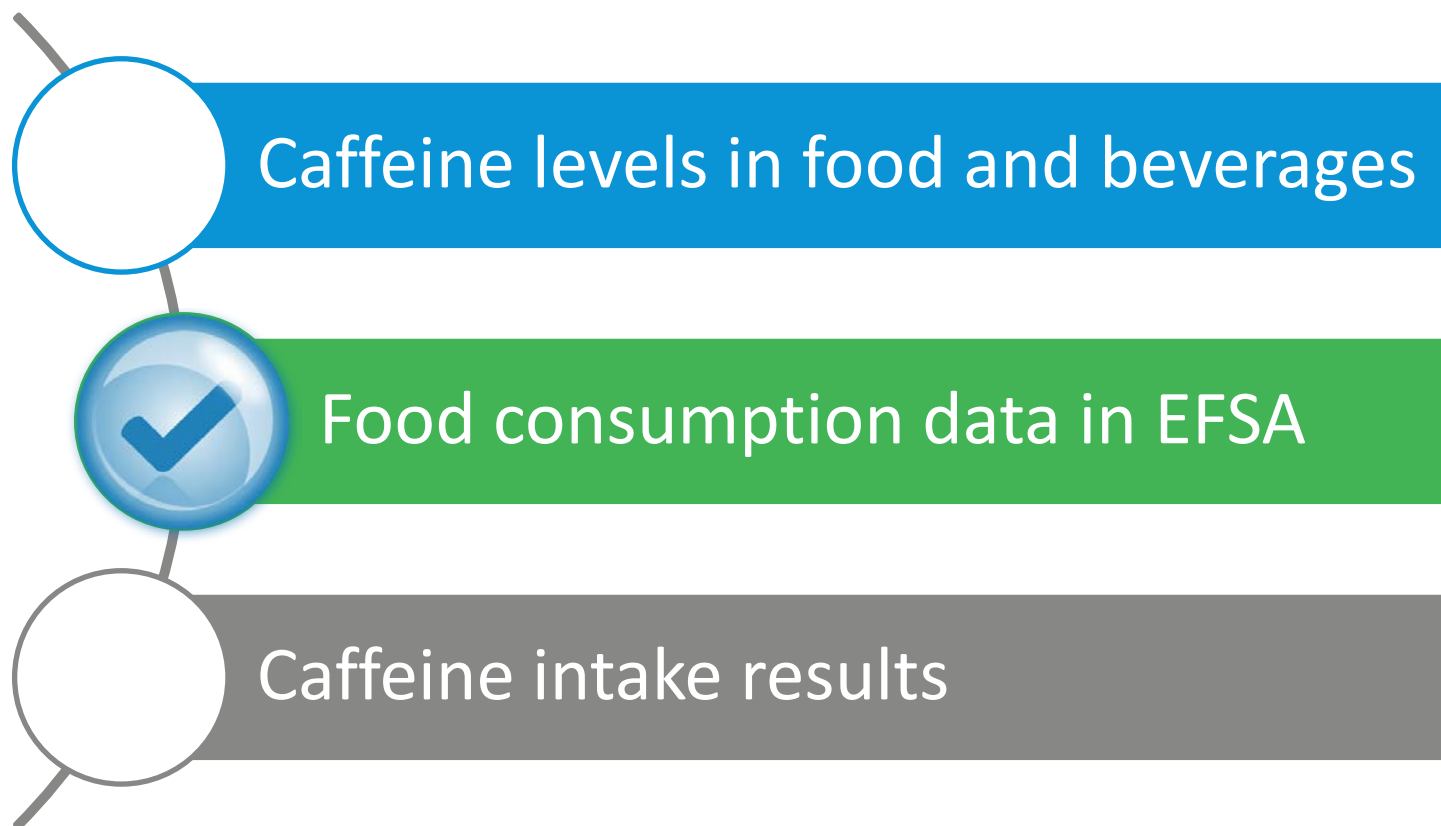
TEA, COLA BEVERAGES AND ENERGY DRINKS

Caffeine levels (mg/L or mg/kg)

	Used in the opinion	Minimum retrieved	Maximum retrieved
Black tea	220	100	320
Green tea	151		
Tea (unspecified)	165		
Tea, decaffeinated	25	25	
Cola beverages (caffeinated)	108	79	130
Energy drinks	320	150	335



SUMMARY



COMPREHENSIVE CONSUMPTION DATA

The EFSA Comprehensive European food consumption database contains data:

- 24-hour recall or dietary record method
- data collected at individual level
- most recent data within each country
- random sample at national level
 - different age classes, from infants to elderly
 - special population groups



The screenshot shows the EFSA website with the following structure:

- Header:** EFSA logo and "European Food Safety Authority Committed to ensuring that Europe's food is safe".
- Navigation Bar:** ABOUT EFSA, NEWS & EVENTS, TOPICS, PUBLICATIONS, **PANELS & UNITS** (highlighted), COOPERATION, APPLICATIONS HELPDESK, CALLS & CONSULTATIONS.
- Breadcrumbs:** Home > Panels & units > Evidence Management > Food consumption data > Comprehensive database.
- Left Sidebar:**
 - Advisory Forum & scientific cooperation
 - Animal health & welfare
 - Biological hazards
 - Biological monitoring
 - Contaminants
 - Evidence Management
 - About us
 - Topics A-Z
- Main Content Area:**

The EFSA Comprehensive European Food Consumption Database

The Comprehensive Food Consumption Database is a source of information on food consumption across the European Union (EU). It contains detailed data for a number of EU countries. The database plays a key role in the evaluation of the risks related to possible hazards in food in the EU and allows estimates of consumers' exposure to such hazards, a fundamental step in EFSA's risk assessment work. The database will also be relevant in future for other fields of EFSA's work, such as the assessment of nutrient intakes of the EU population.

 - [Guidance for the use of the EFSA Comprehensive European Food Consumption Database](#)

EFSA used its food classification system 'FoodEx' to categorise all foods and beverages included in the Comprehensive Database.

MAGNITUDE OF THE DATABASE

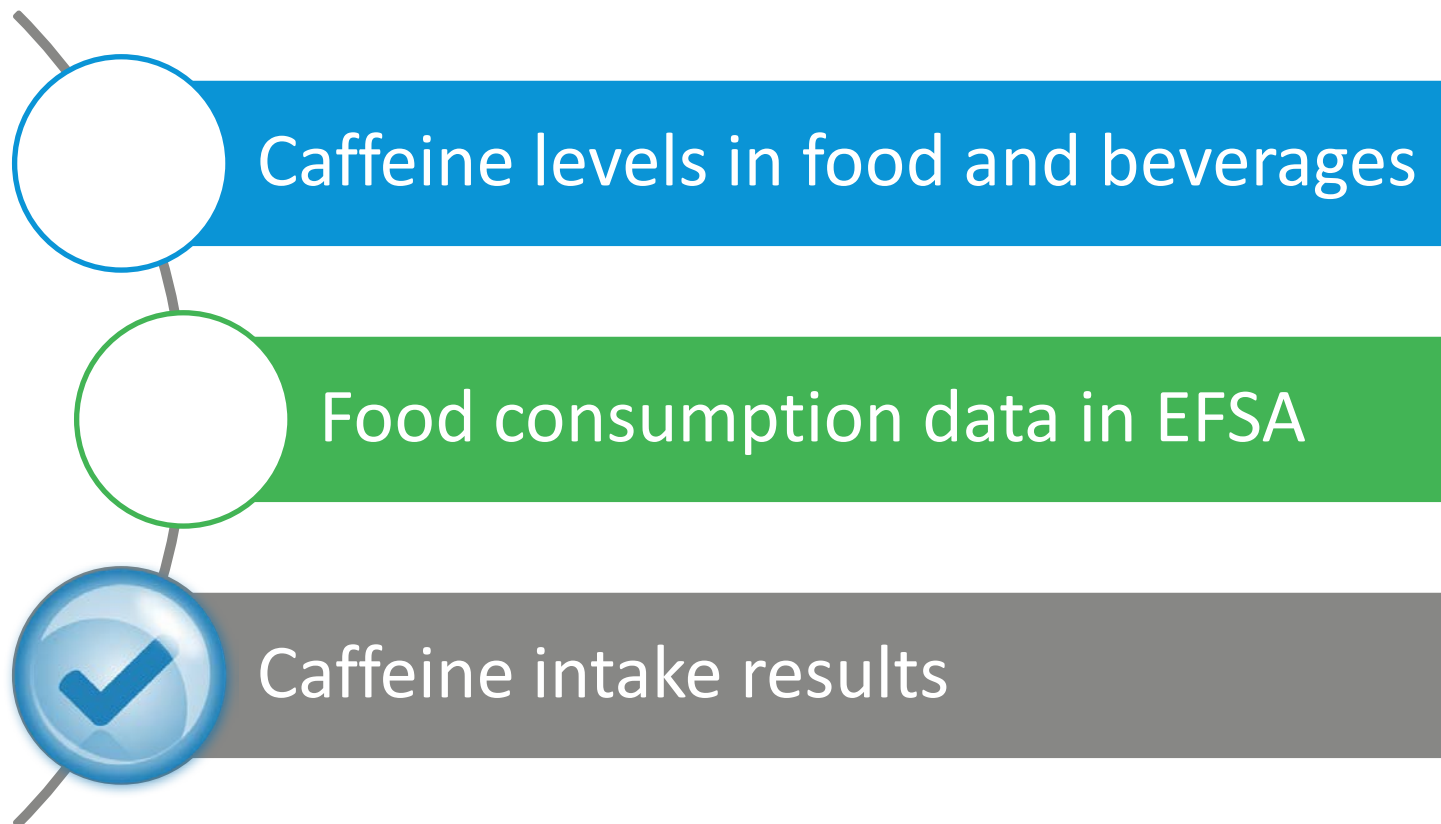
Number of	1 st release	2 nd release
Dietary surveys	32	49
Member States	22	23
Subjects	66,492	93,570
Different foods	63,495	125,531
Different FoodEx1 codes	1,504	1,573
Different FoodEx2 codes	-	1,787
Consumption records	6,309,489	10,426,602

AGE CLASSES

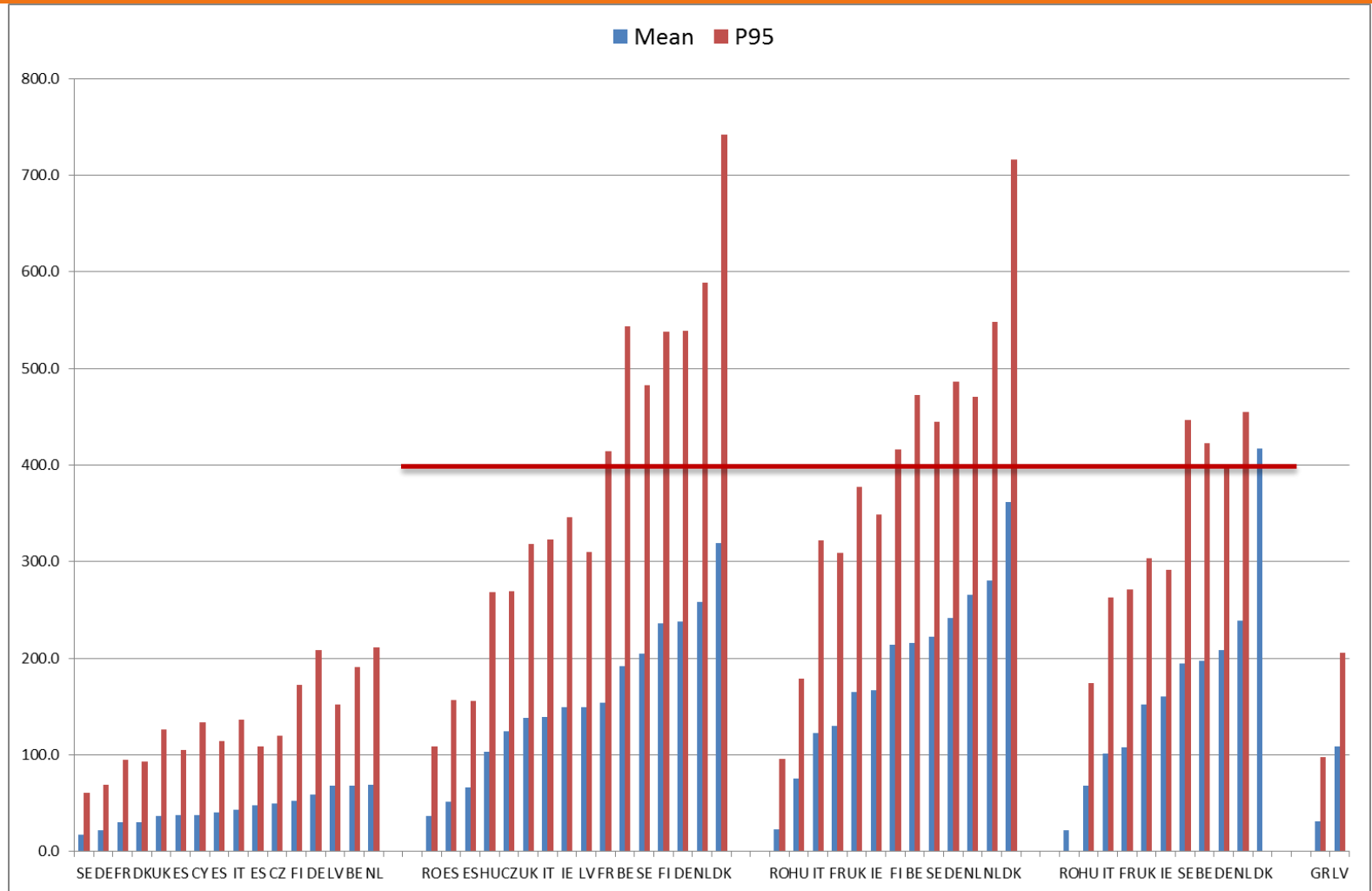
Age class	Age range (years)	Number of surveys *	Number of countries*
Infants	0 – 1	6	6
Toddlers	1 – 3	11 (10)	11 (9)
Children	3 - 10	19 (17)	19 (14)
Adolescents	10 - 18	19 (16)	19 (13)
Adults	18 - 65	22 (16)	22 (15)
Elderly	65 - 75	15 (13)	15 (12)
Very elderly	> 75	13 (11)	13 (11)
Special population group		2 (2)	2 (2)

* In parenthesis only surveys with more than one day per subject

SUMMARY



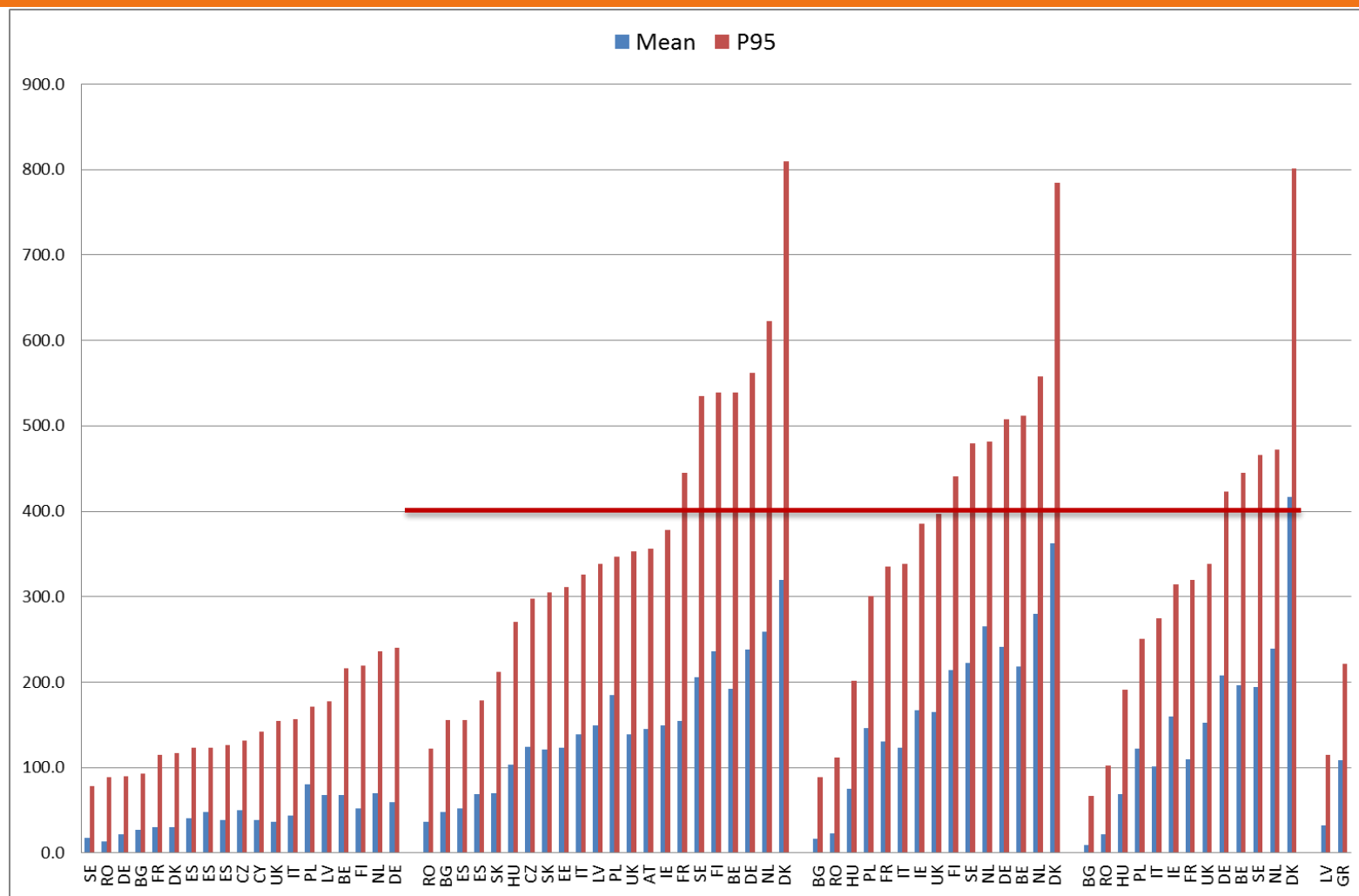
ADULTS – INTAKE PER DAY



Daily caffeine intake in mg per day

Special

ADULTS – INTAKE ON A SINGLE DAY



Adolescents

Adult

Elderly

Very elderly

Special

Daily caffeine intake in mg per day

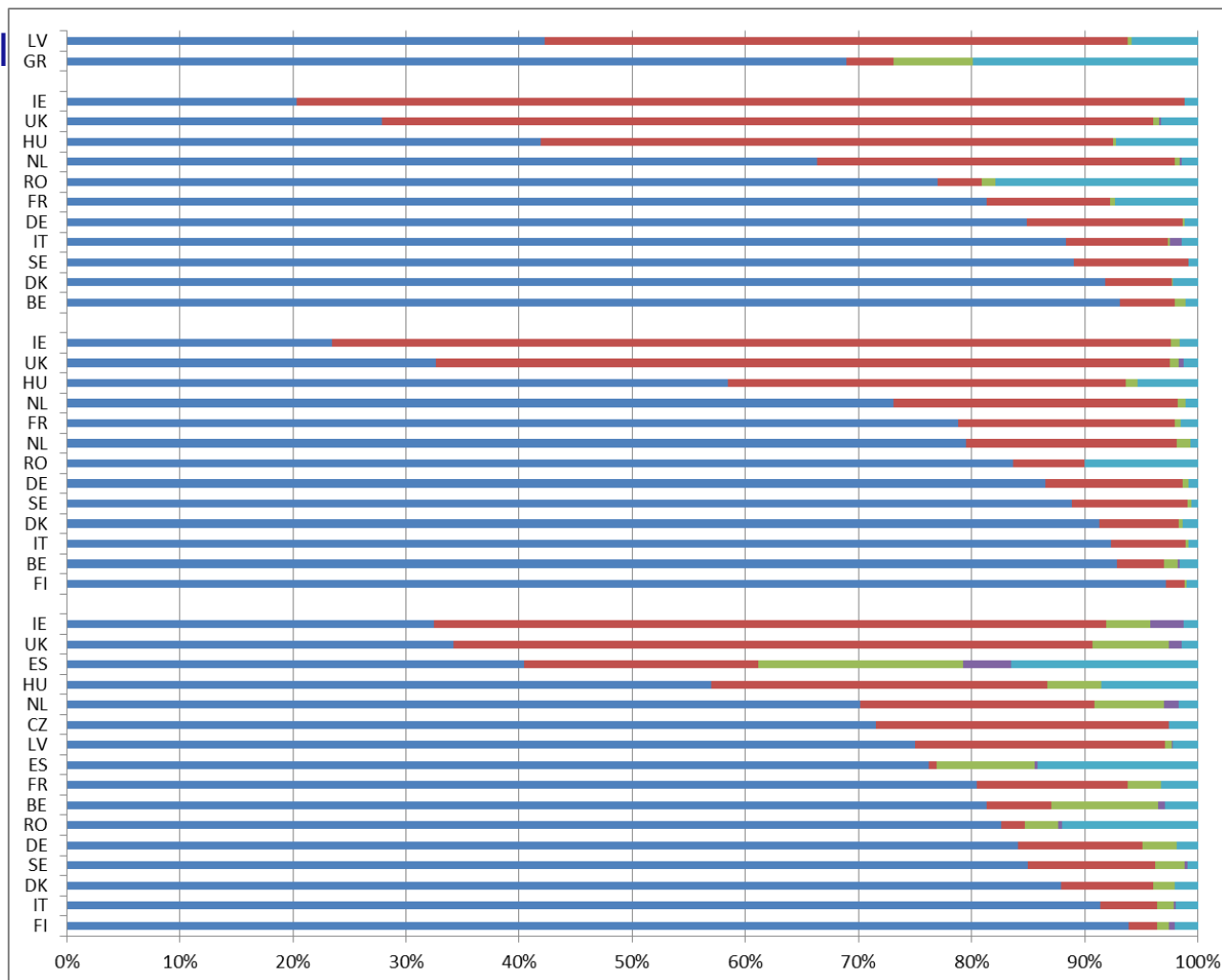
ADULTS - SOURCES

Special

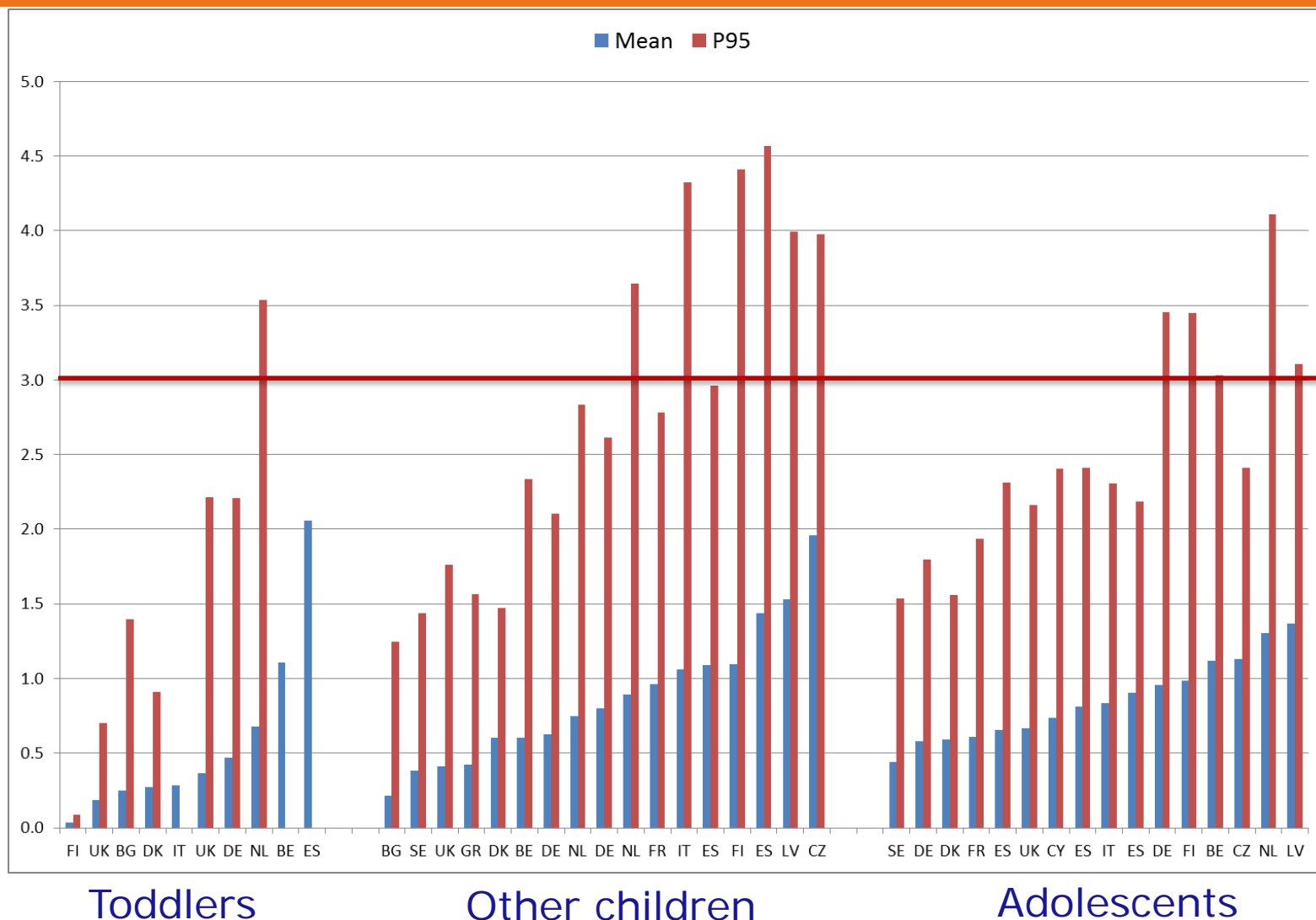
Very elderly

Elderly

Adults



CHILDREN – INTAKE PER KG BODY WEIGHT PER DAY

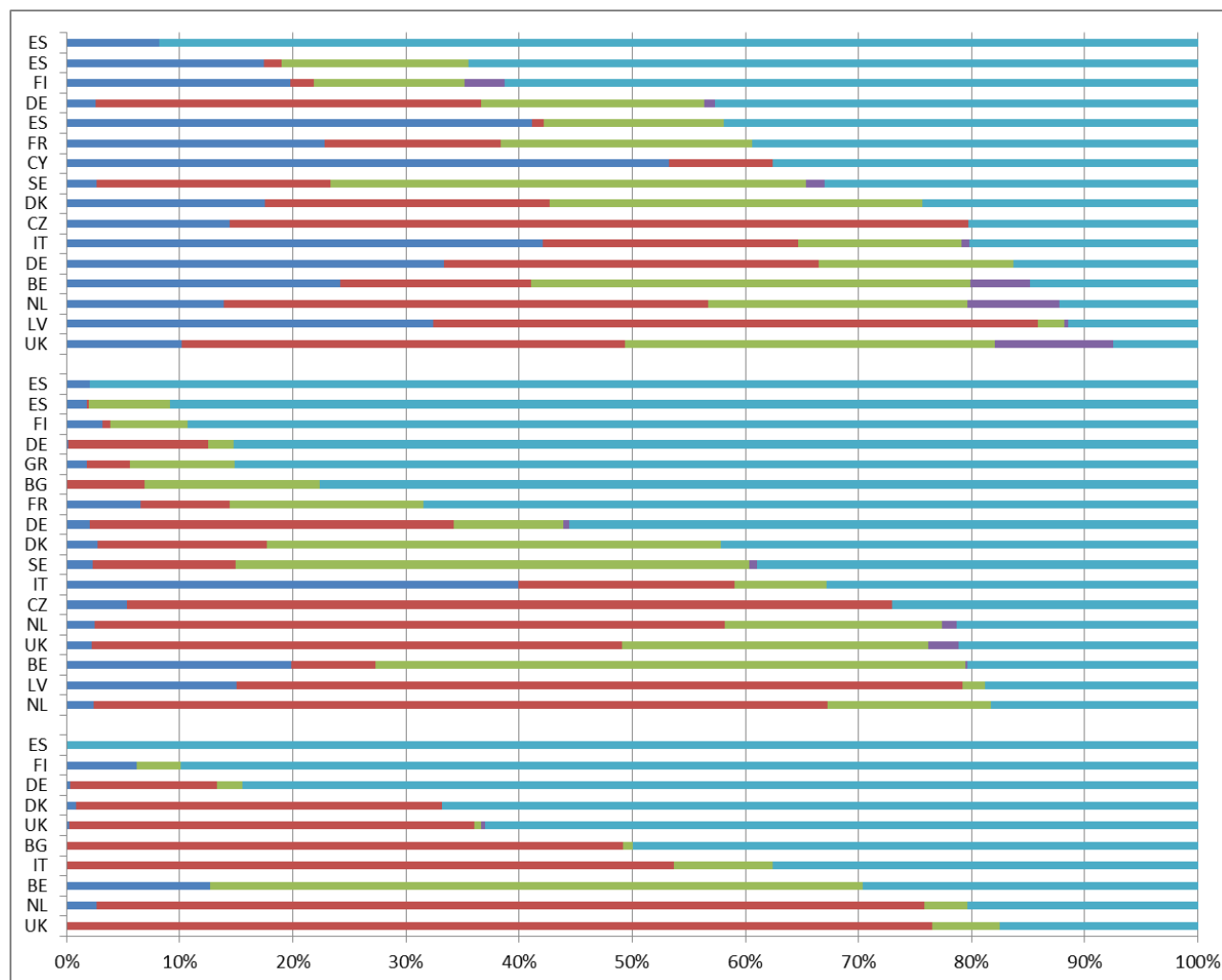


Daily caffeine intake in mg/kg body weight per day

CHILDREN - SOURCES

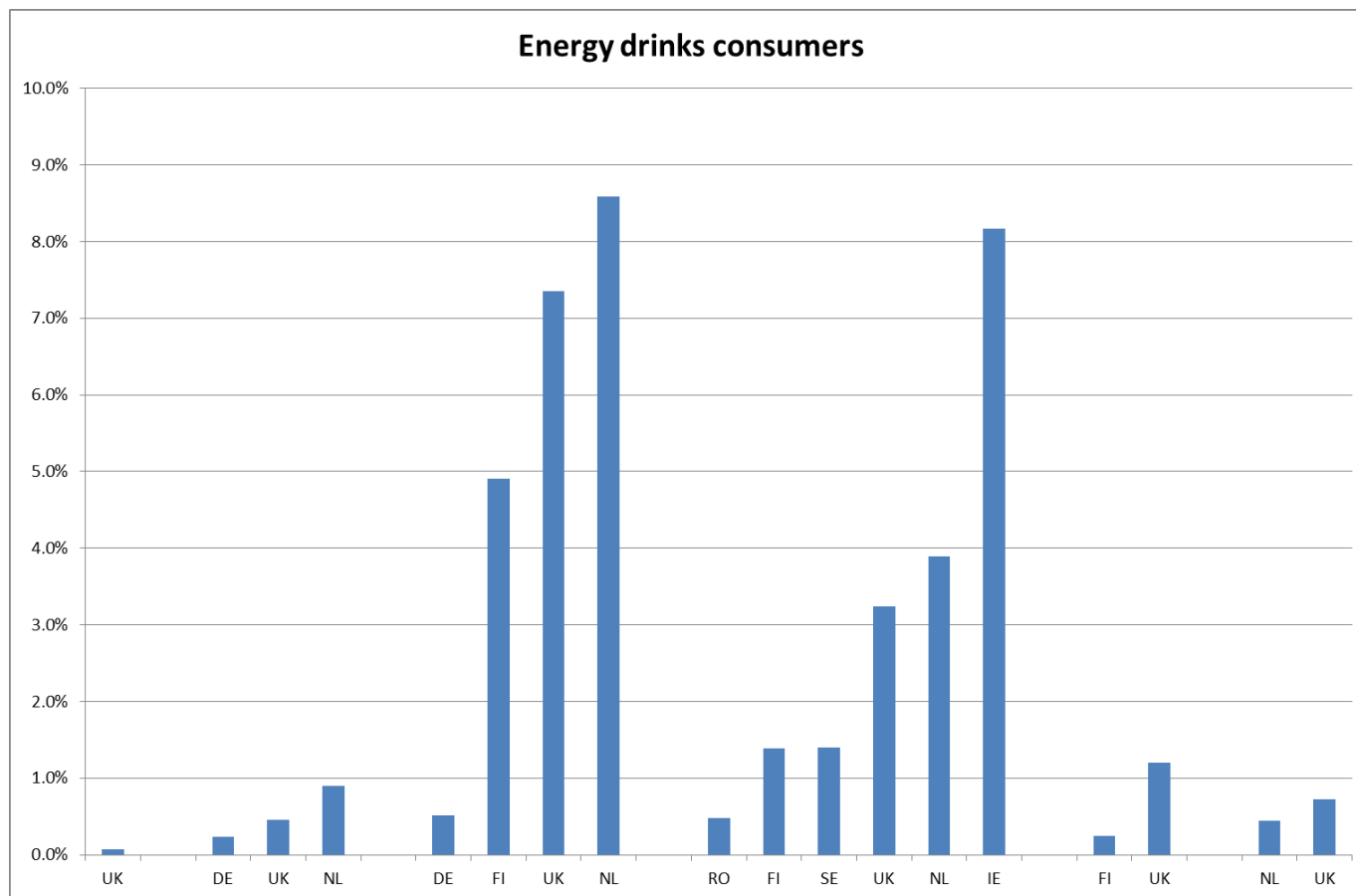


Toddlers
 Other children
 Adolescents



- Coffee
- Tea
- Cola beverages
- Energy drinks
- Chocolate

ENERGY DRINK CONSUMERS



Toddlers Other children Adolescents Adults Elderly Very elderly

Based on the surveys coded in FoodEx2 in the EFSA Comprehensive European food consumption database.

DIETARY INTAKES OF CAFFEINE

OPEN FOR DISCUSSION

