

## Reflections on SUSFANS from the local perspective

# SUSFANS Results for the Czech Republic

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SUSFANS Stakeholder workshop – SZÚ – Prague – 28/02/2019



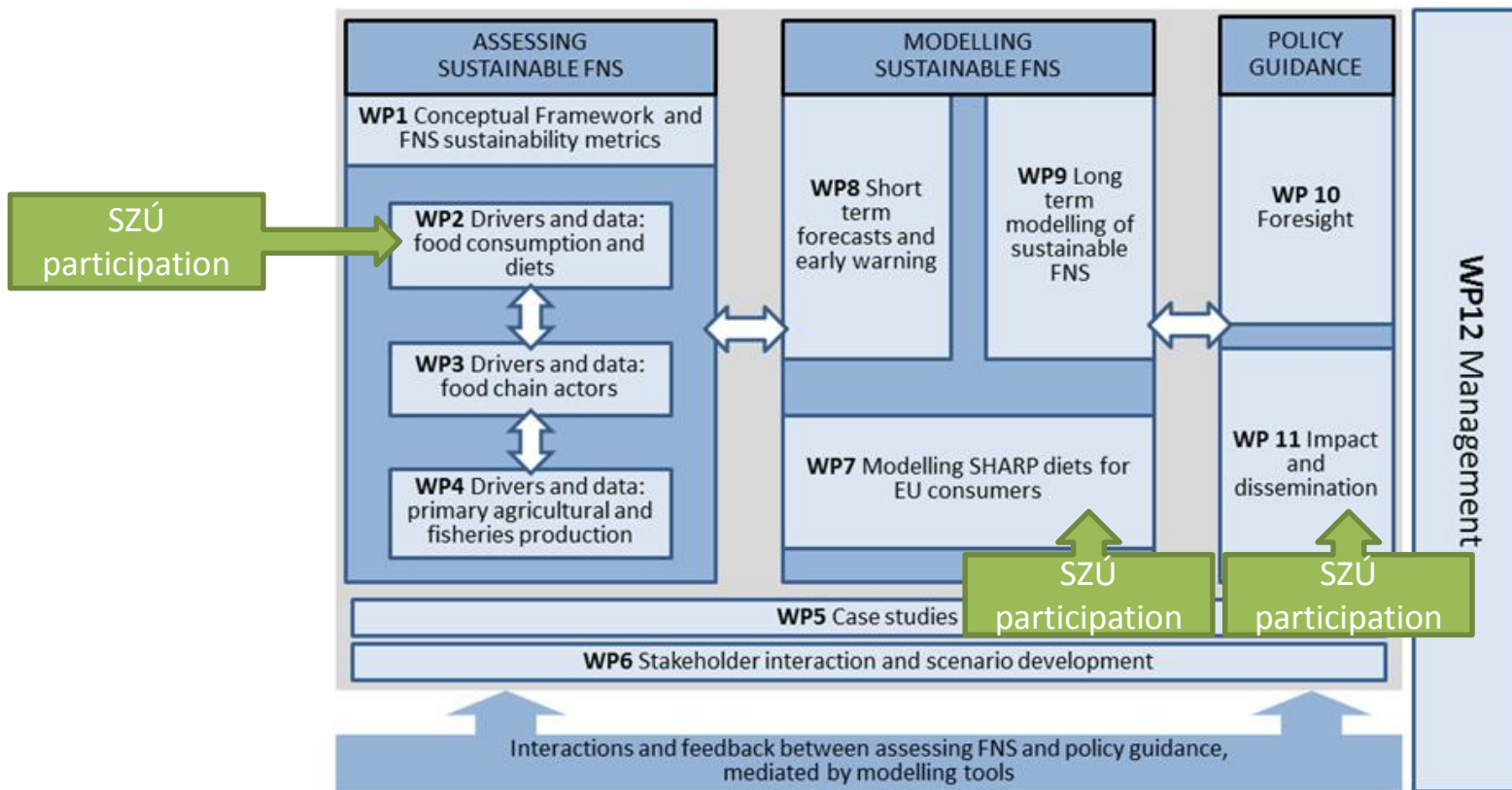


# Czech Republic participation in the SUSFANS project

- **WP 2: Drivers and data: food consumption and diets**
- **WP 7: Modelling SHARP diets for EU consumers**
  - the diversity and nutritional adequacy of diets in different EU regions (CZ, DK, FR, IT)
  - insight into the sustainability of diets of EU consumers
  - SHARP model that delivers options for sustainable FNS diets by combining real-life individual food intake data with sustainability metrics
- **WP 11: Impact and Dissemination**

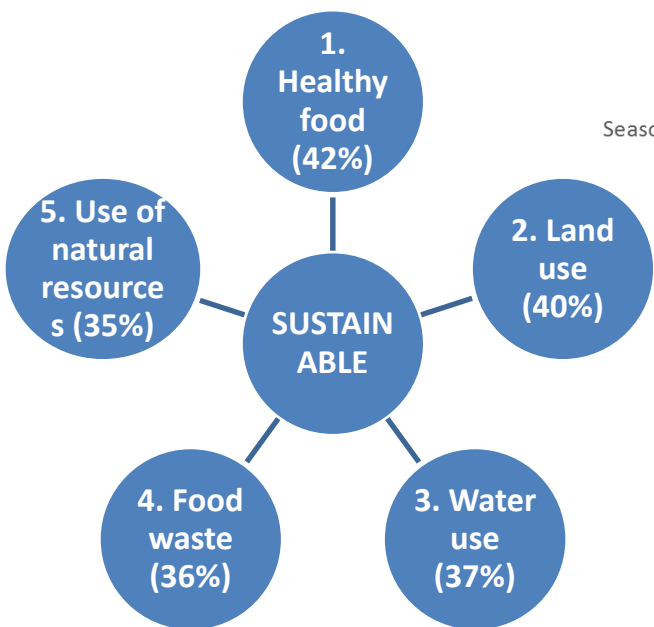


# Czech Republic participation in the SUSFANS project

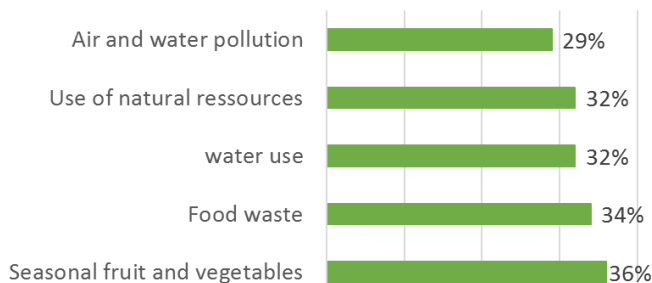


# What is SUSTAINABLE and HEALTHY foods for Czech consumers ?

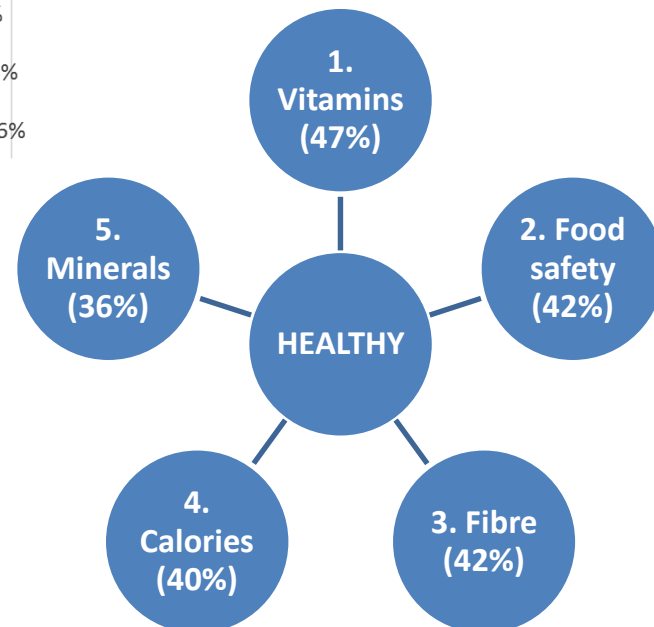
## Czech Republic



### Sustainable foods

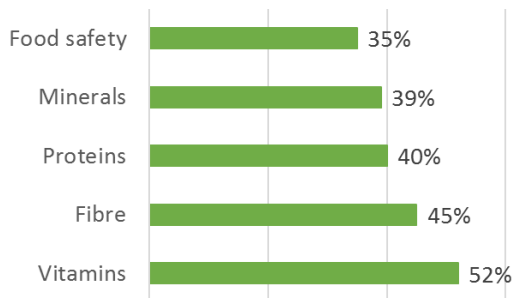


## Czech Republic



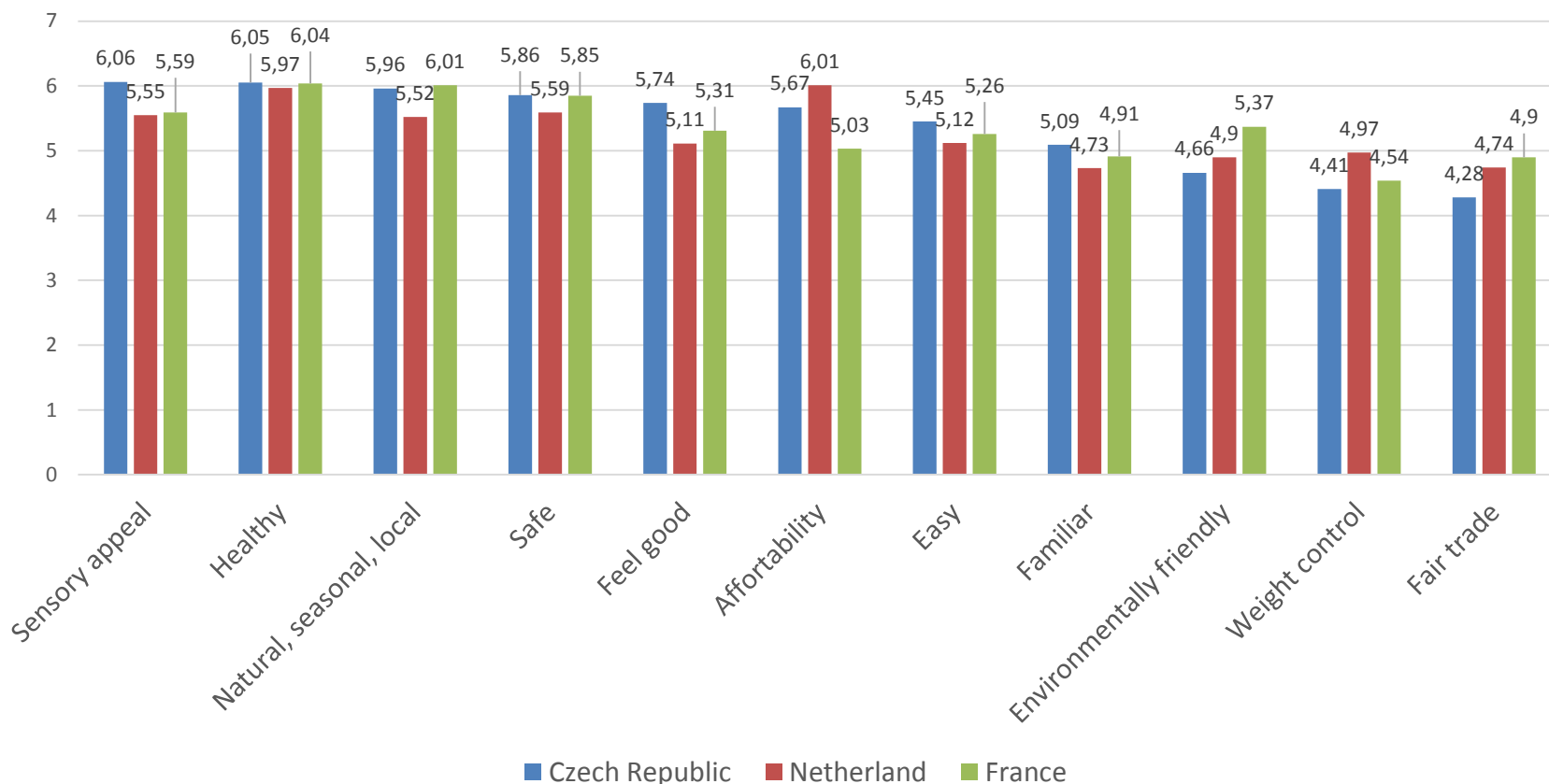
## EU

### Healthy foods



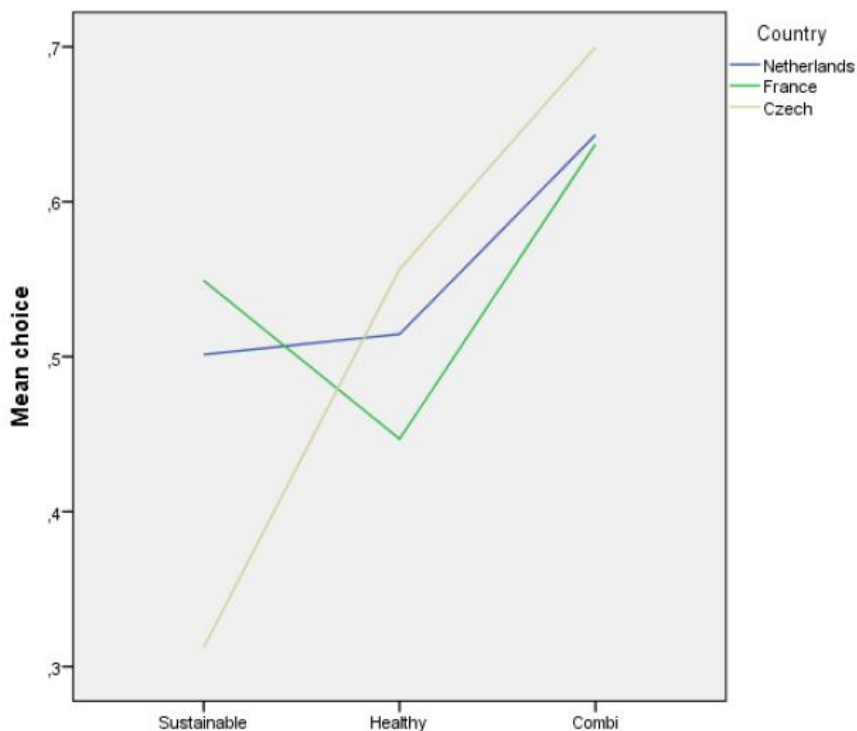
# What are motives of food choices in Czech consumers ?

General food choice motive scores on a 7-point scale



# What are motives of food choices in Czech consumers ?

## Mean choice by benefits information (sustainable, health or both) and by country



In France sustainable information was a bigger driver of consumer choice than health information, whereas in The Czech Republic health information was valued much more.

# Assessment of diets in four European countries



**DENMARK (2005)**  
• **7-day food records**  
(consecutive days)

- n=2025
- 18-75 years



**CZECH REPUBLIC (2003)**  
• **2-day 24h recalls** (non-consecutive days)

- n=1869
- 18-90 years



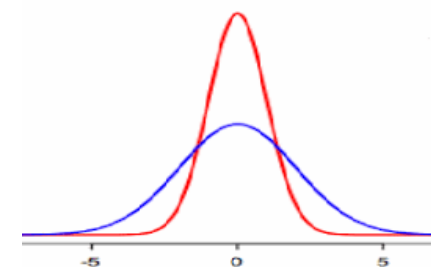
**ITALY (2005)**  
• **3-day food records**  
(consecutive days)

- n=2831
- 18-98 years



**FRANCE (2007)**  
• **7-day food records**  
(consecutive days)

- n=2624
- 18-79 years



*Note:* based on mean of two days standardised for 2,000 kcal

2 random non-consecutive days

Identical food classification system : **FoodEx2** (Efsa)

National Food Composition Databases



# Harmonization and alignment dietary intake in Europe

1. Develop **common** set of **dietary guidelines**, described in D2.2. SUSFANS Protocol
2. Identical food classification system: **FoodEx2** (EFSA)
3. Align **dietary assessment methods**
4. Use **national** Food Composition Data Bases

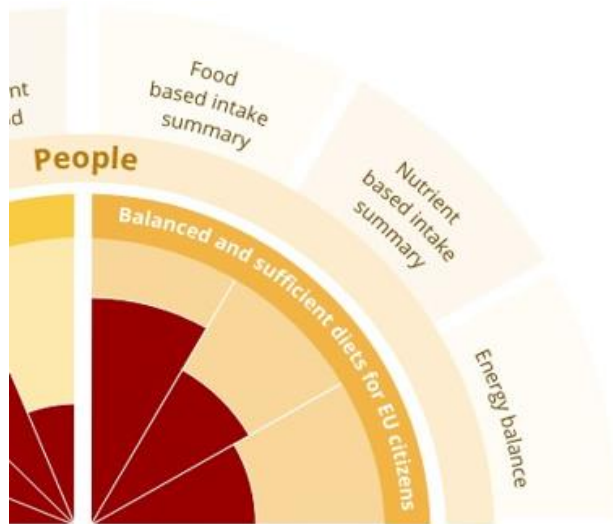




# Harmonization and alignment dietary intake in Europe

5. Link **S-indicators** (GHGe, land use) to foods consumed in 4 countries; EU database with S-indicators linked to FoodEx2 codes=> SHARP-database
6. Modelling of **SHARP** diets
7. Link to other **SUSFANS models** (link via FoodEx2 with MAGNET, GLOBIOM, CAPRI, DIET)

# Assessment of diets in four European countries – health aspects



- From Health metrics :
  1. Food-based dietary guidelines (FBDGs)
  2. Nutrient recommendations
  3. Energy balance

# Common set of FBDGs



## Foods to increase

- Vegetables  $\geq 200$  g/d
- Fruits  $\geq 200$  g/d
- Legumes  $\geq 135$  g/w ( $\geq 19$  g/d)
- Nuts and seeds  $\geq 15$  g/d
- Fish  $\geq 150$  g/ ( $\geq 21$  g/d)
- Dairy  $\geq 300$  g/d

increase consumption  
increase consumption  
increase consumption  
increase consumption  
2 times/w whose one fatty fish

## Foods to decrease

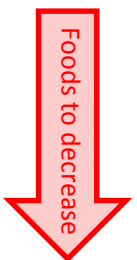
- Red and processed meat  $\leq 500$  g/w ( $\leq 71$  g/d)
- Sugar sweetened beverages  $\leq 500$  mL/w ( $\leq 71$  mL/d)
- Cheese  $\leq 150$ g/w ( $\leq 21$  g/d)
- Alcohol (ethanol)  $\leq 10$  g/d
- Salt  $\leq 6$  g/d

< 500 g/w (meat, excluding poultry)  
  
<1 glass/d

# Food intake in the Czech Republic

## FOOD INTAKE – Population ≥ 18 years

Food group	% adequate	Mean intake	Cut-off
Vegetables (g/d)	13	109	≥ 200
Fruit (g/d)	22	123	≥ 200
Legumes (g/d)	14	9	≥ 19
Nuts and seeds (g/d)	8	4	≥ 15
Fish (g/d)	18	14	≥ 21
Dairy products (g/d)	14	155	≥ 300
Red and processed meat, total (g/d)	36	118	≤ 71
Sugar-sweetened beverages (g/d)	61	137	≤ 71
Hard cheese (g/d)	58	25	≤ 21
Ethanol intake (g/d)	61	16	≤ 10



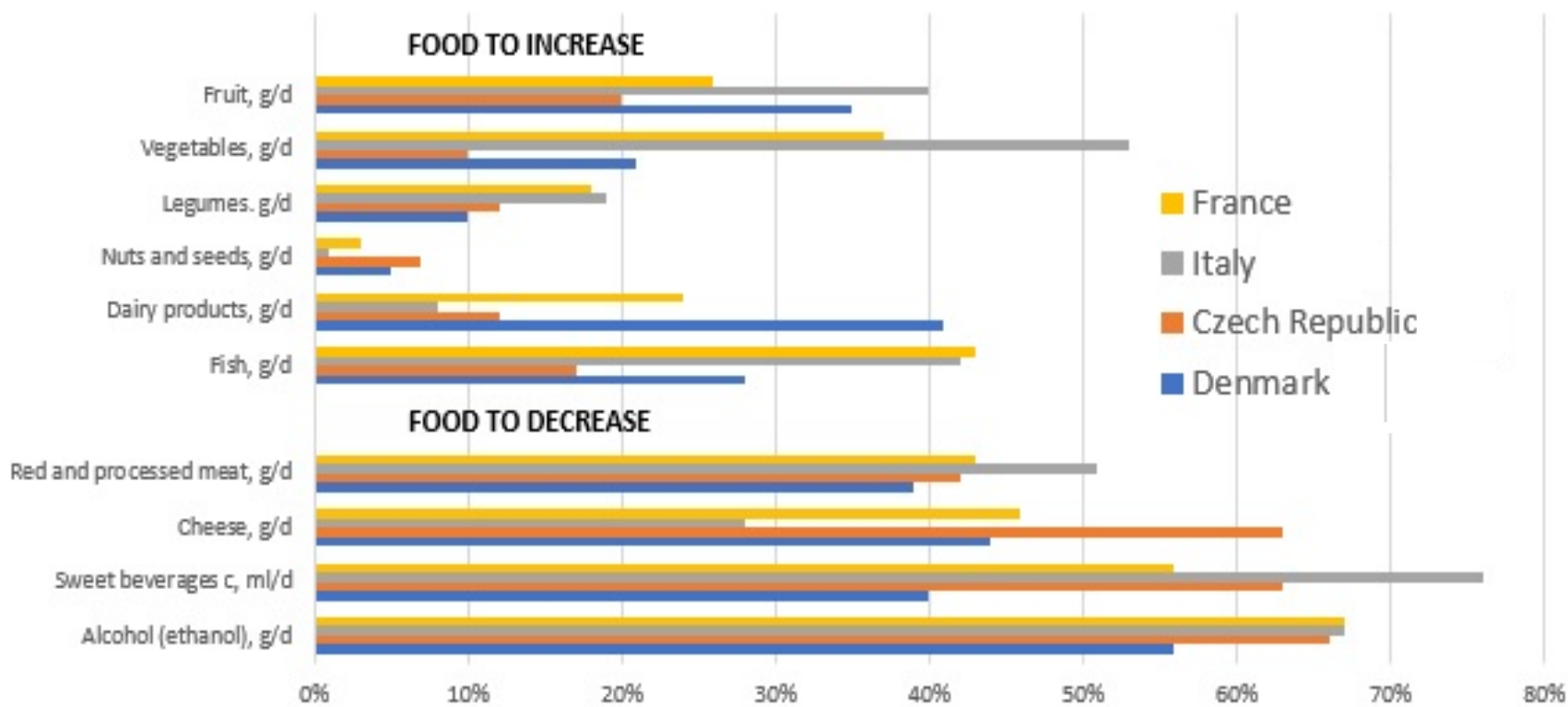
# Nutrient intake in the Czech Republic

## NUTRIENT INTAKE – Population ≥ 18 years

Nutrient	% adequate	Mean intake	Cut-off
Dietary Fibre (g/d)	18	19	≥ 25
Vitamin A RE (ug/d)	50	824	M ≥ 570; F ≥ 490
Vitamin D (ug/d)	2	4	≥ 15
Vitamin C (mg/d)	43	88	M ≥ 90; F ≥ 80
Calcium (mg/d)	44	777	≥ 750
Potassium (mg/d)	23	2746	M ≥ 3500; F ≥ 3100
SFA (E%/d)	20	14	0 - 10

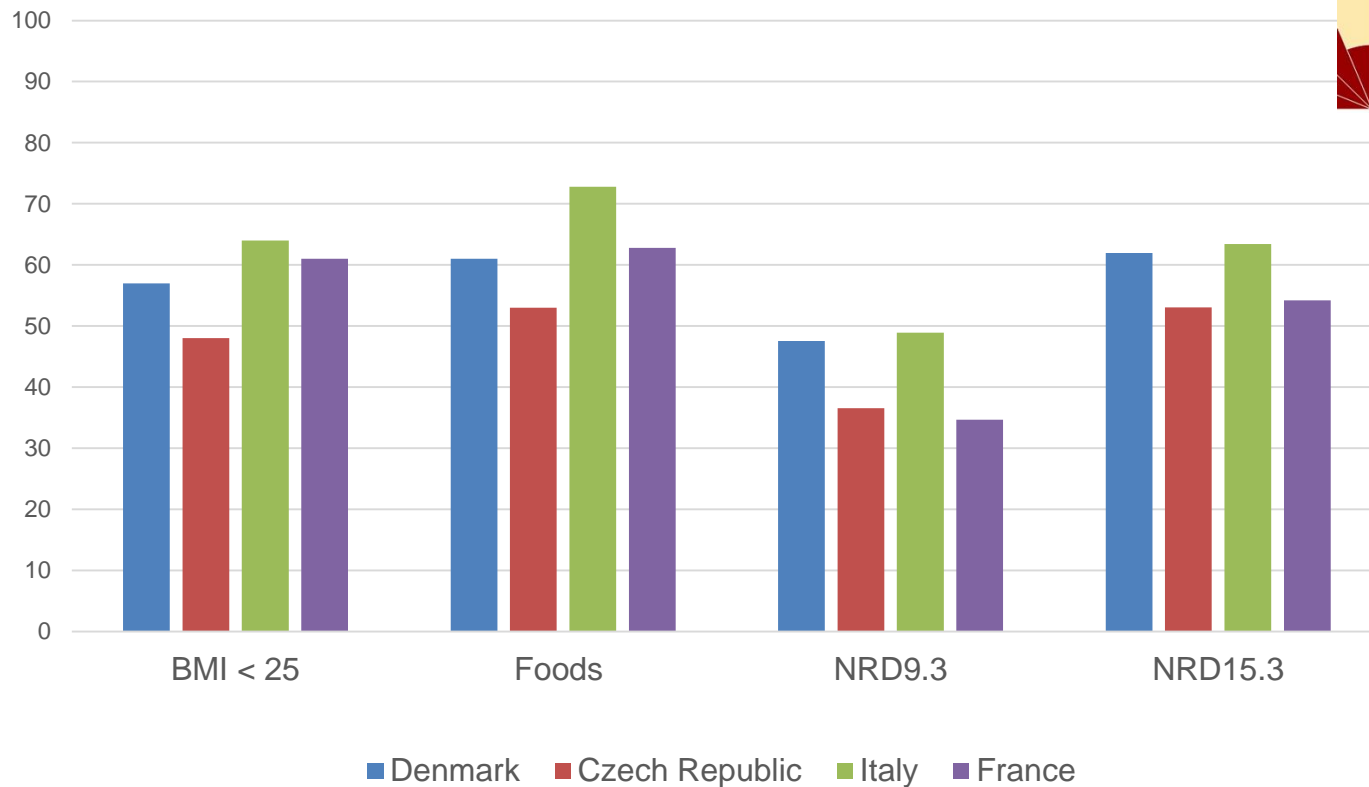
# Comparison of food groups intakes in four European countries

Adherence to national food-based dietary guidelines in 4 European populations, aged  $\geq 18$  years  
2003-2008



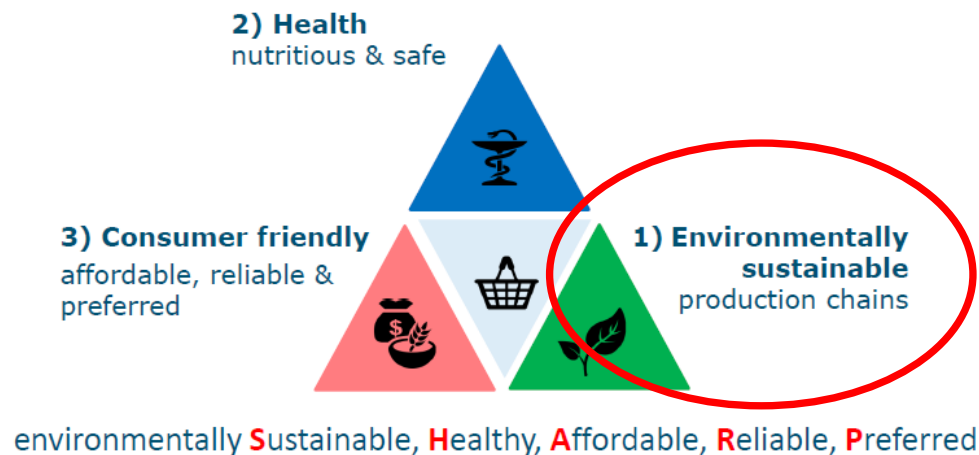
# Assessment of diets in four European countries – health aspects

## Current situation



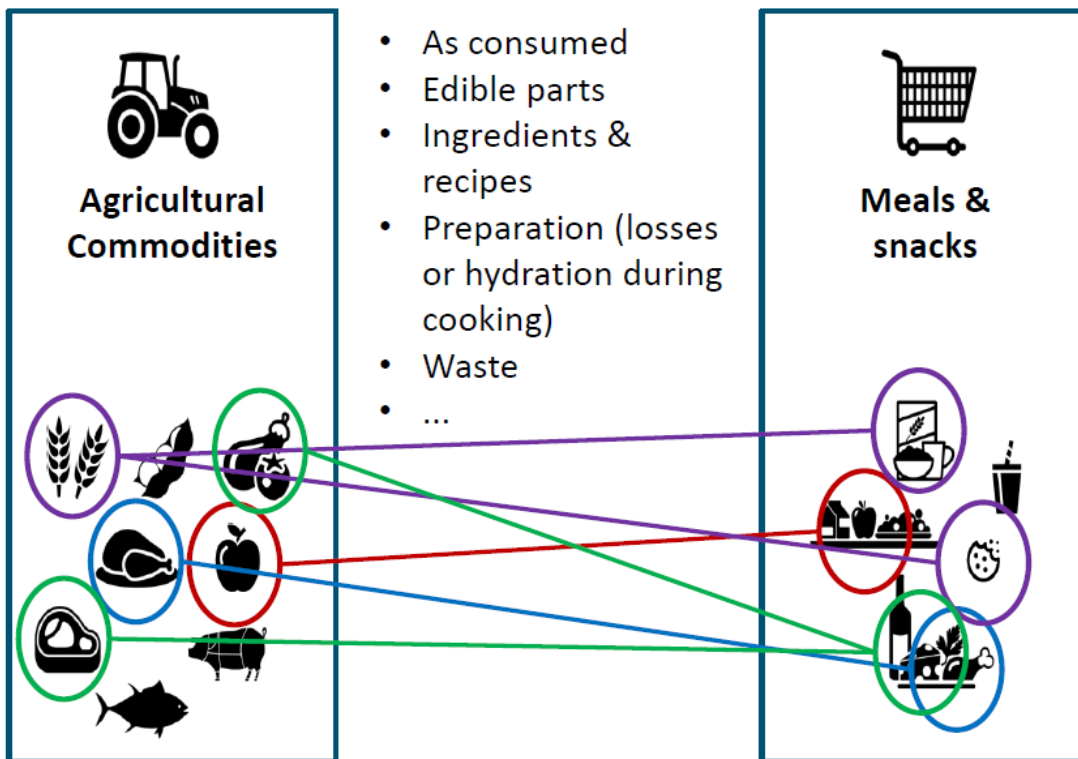
# Assessment of diets in four European countries – sustainability indicators

- Sustainable indicators considered:
  1. Greenhouse gas emissions (GHGe)
  2. Land use





# S-database for SHARP: from commodities to foods (DESIDE)



S-Indicators linked to foods as consumed for 944 FoodEx2 codes  
S-database is food-specific but not (yet) country-specific

## Conclusions from a local perspective

- SUSFANS provided a comparison of **current diets** in four EU countries and identified potential triggers to move towards more balanced and sustainable nutrition,
- **FBDG were not met** and many nutritional inadequacies were observed for CZ diet,
- There was **lower environmental impact** of CZ diet composition compared to three other countries,
- Lowering the **excess of energy intake** is a key factor for reducing environmental impact of the diet,
- **There is a consistence between health and sustainability benefits of changes in CZ diet towards FBDG.**