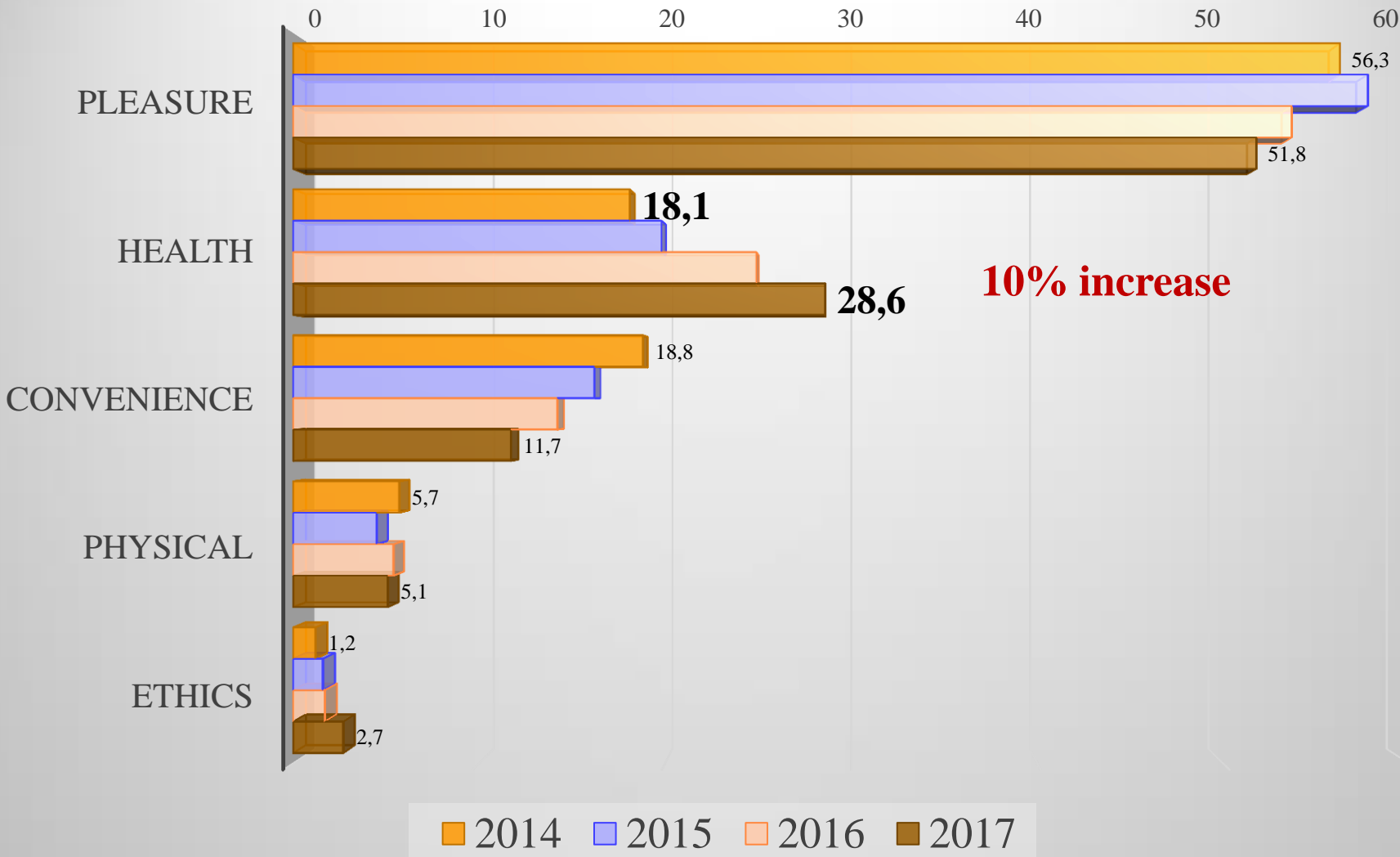


# Transformation of food trends into practice

Zsófia Kertész

Campden BRI Magyarország Nonprofit

# MAIN DRIVERS OF INNOVATION



**Antioxidants-  
polyphenols**

**Fibers, prebiotics,  
probiotics**



**Inflammation**



**Digestive  
Wellness**



**Sugar**

**Fibers  
Plant-based**

**Kombucha**



**Beverages  
Redefined**



**Personalisation &  
Fragmentation**



**Plant-based**



**Good Carbs,  
Bad Carbs**



**Protein**



**Fat**



**Snackification**

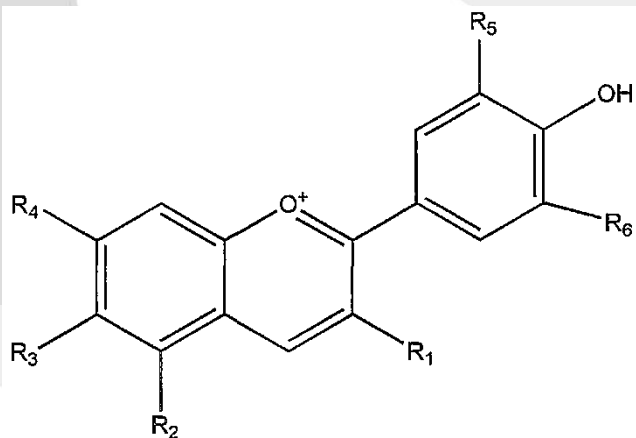
**Olive oil  
Fish oil**

**Adding, reducing, or removing the concentration of certain ingredients have an effect on the sensory attributes of the product!**

- *Appearance*
  - *Taste*
  - *Texture*

## Enriching pancakes in anthocyanins (AC)

- PATHWAY-27 FP7 project
- polyphenol
- anti-inflammatory, antioxidant and antimicrobial effects
- „target” of health claim applications





Unusual appearance

Are the consumers are willing to buy such unique products (repeatedly)?



Unusual taste: anise

It is essential to involve consumers into the product development!

## Let's have a consumer test!

- Who to ask?
- How to recruit them?
- How to ask them?
- Where to ask them?
- Who will do it?





# To have a sufficient consumer test

- Target group
- Staff
- **Appropriate method**
- Understanding of the results
- Facility





# ADVANCED SENSORY AND CONSUMERS METHODS

- ✓ Product mapping
- ✓ Penalty analysis

To understand the product attributes better

- ✓ Mapping the emotions
- ✓ Authenticity test

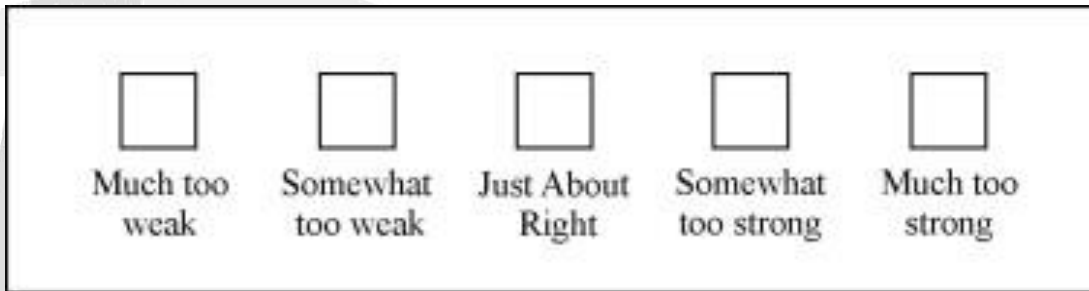
To map the emotions towards the product

- ✓ Situation test
- ✓ Drinkability test

Environment ↔ perception of the product

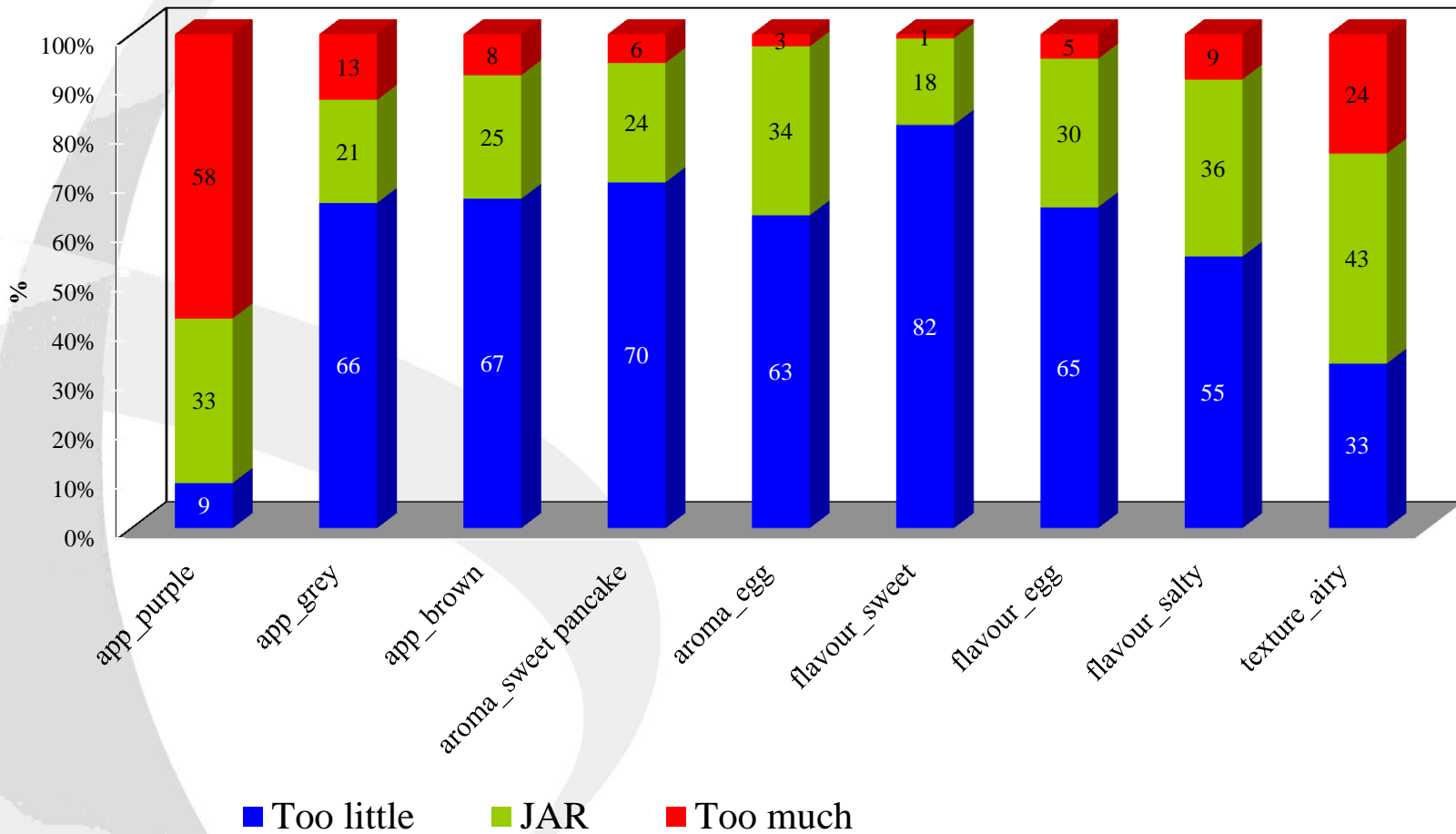
# PENALTY ANALYSIS (PA)

- PA provides a prioritized list of critical product characteristics that are most-penalizing product performance
- JAR scale and 9 point hedonic scale
- Graphical presentation of the results

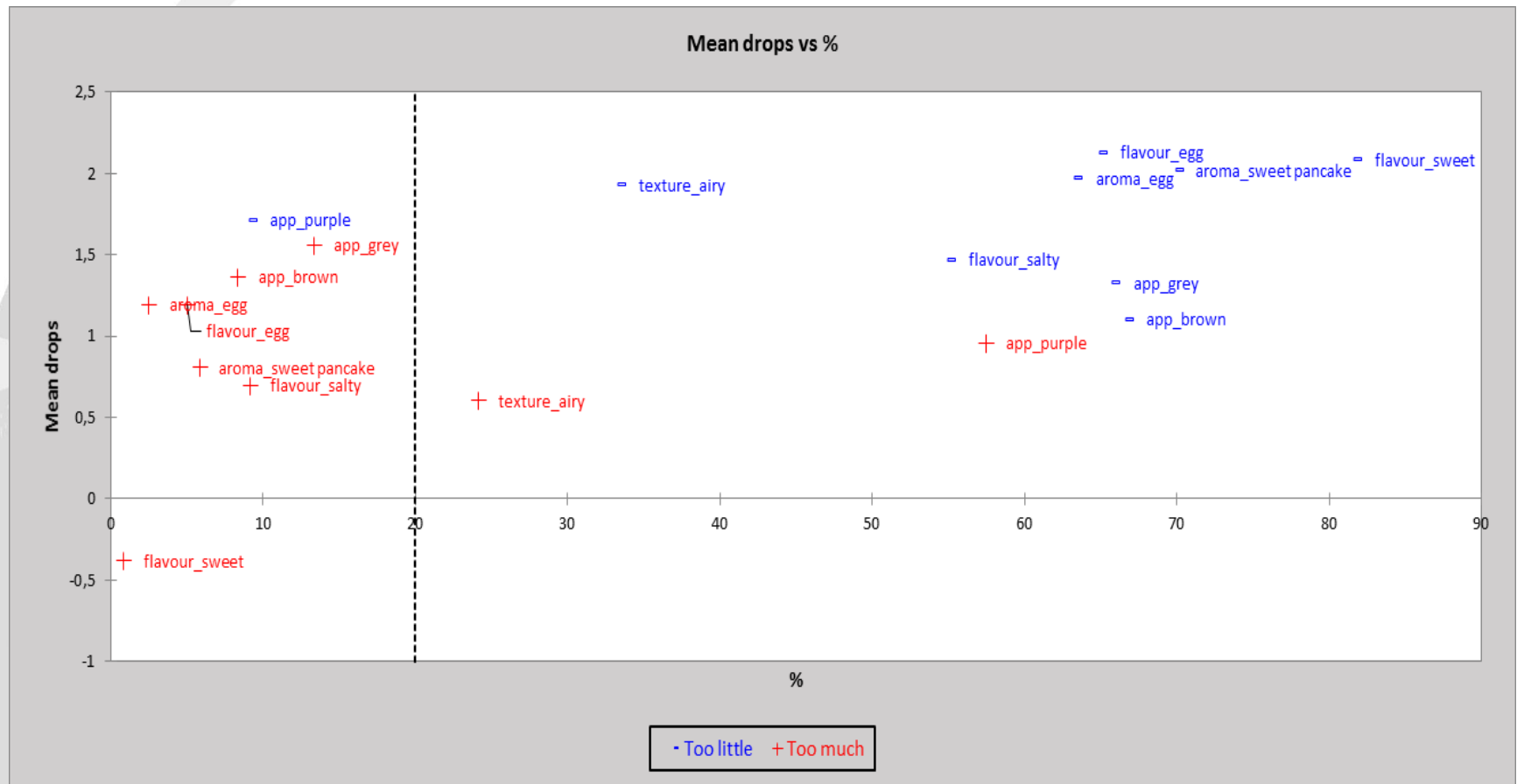


# PENALTY ANALYSIS OF PANCAKE WITH AC (1)

Percentages for the JAR levels (collapsed)



# PENALTY ANALYSIS OF PANCAKE WITH AC (2)



# MAPPING THE EMOTIONS

EsSense Profile™



✓ *Does happiness lead to eating?*

✓ *Does eating lead to happiness?*

- Measuring emotions in food product experience

Overall acceptability (9 point scale)+ Emotion terms (5 point scale)

Active	Glad	Pleasant
Adventurous	Good	Polite
Affectionate	Good-natured	Quiet
Aggressive	Guilty	Satisfied
Bored	Happy	Secure
Calm	Interested	Steady
Daring	Joyful	Tame
Disgusted	Loving	Tender
Eager	Merry	Understanding
Energetic	Mild	Warm
Enthusiastic	Nostalgic	Whole
Free	Peaceful	Wild
Friendly	Pleased	Worried

# SITUATION TESTS

- Liking of products in different environment



Special test facility

# SMES IN THE WORLD OF SENSORY AND CONSUMER ANALYSIS

- Each company has its own method to evaluate its product
- The consumers' involvement is more difficult
  - Lack of staff
  - Lack of facility
  - Lack of time to get familiar with the new methods



INCluSilver H2020 project

I-CON Interreg project





**INCluSilver**

Personalised nutrition for the future

**Target group:** people over 50

**Identified key attributes in a product:**

- Texture
- Easy to open packaging

## **SilverBread**

**Reduced salt content,  
New type of packaging**



**GreenBurger:**  
burger made from QF vegetables



**Interreg**  
CENTRAL EUROPE



**I-CON**

European Union  
European Regional  
Development Fund

To improve entrepreneurial competences and skills in Central Europe through food innovation potentials in the areas of:

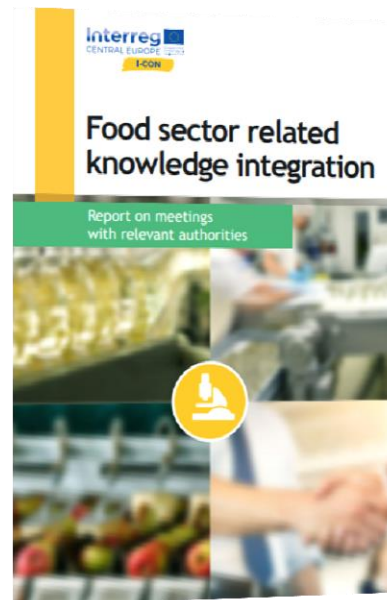
- ✓ Food safety, quality and labelling
- ✓ Mechatronics
- ✓ Food packaging design

# THE AIM OF THE I-CON PROJECT

## Transnational Mentor Scheme

- Help to identify the gaps within the operation of the companies
- Presenting Good Practices
- Helping to SMEs to get in touch with solution providers
- Help to implement that solution





# ATLAS Mapping tool

- Find facilitators, service provider

<http://www.p-tech.si/icon-mapping/>

The screenshot displays the ATLAS Mapping tool interface. At the top, there is a navigation bar with tabs: Organizations, Projects, Funding schemes, CDP labelling tool, **Good practices and solutions**, and Facilitators. Below the navigation bar is a search input field with the text "Search" and a magnifying glass icon. To the right of the search field is a map of Central Europe, showing countries like Deutschland, Polen, Česko, Slovensko, and Magyarország. The map is overlaid with a blue outline of a region. Below the search field is a table with three columns: Title, Organization, and Country. The table contains three rows of data. At the bottom left of the interface is the Interreg Central Europe logo. At the bottom right of the map area, there is a small text credit: "Leaflet | © OpenStreetMap contributors | 2017 Atlas Mapping Tool".

Title	Organization	Country
Food safety consultation: Food safety (C1 4.1.2.)	Chamber of Commerce and Industry of Slovenia, Chamber of Agricultural and Food Enterprises (CCIS-CAFE)	Slovenia
Food quality and labelling consultation (C1 4.1.20.)	Chamber of Commerce and Industry of Slovenia, Chamber of Agricultural and Food Enterprises (CCIS-CAFE)	Slovenia
A sustainable network in food safety (B 3.1.1.1.)	Chamber of Commerce and Industry of Slovenia, Chamber of Agricultural and Food Enterprises (CCIS-CAFE)	Slovenia



# THE I-CON CONSORTIUM



## Slovenia

- Pomurje Technology Park
- Chamber of Agricultural and Food Enterprises

## Austria

- Business Upper Austria

## Hungary

- Campden BRI Hungary Ltd
- South Transdanubian Regional Innovation Agency

## Italy

- CNA National Confederation of Crafts and Small and Medium Sized businesses - Regional Association of Emilia Romagna
- Industry Association Service & Training of Treviso and Pordenone

## Germany

- University of Hohenheim

## Poland

- Polish Chamber of Food Industry and Packaging

## Slovakia

- Slovak Chamber of Commerce and Industry

# I-CON EXPERIENCE (1)

Micro-company in Hungary developed a snack type of product with high added value („superfood”)

- Used the by-product of the their main product
- The composition of the product: protein, fiber and fat
- No CH



**Digestive  
Wellness**



**Good Carbs,  
Bad Carbs**



**Snackification**



**Fat**



**Plant-based**



## I-CON EXPERIENCE (2)

- Product has a short shelf life, it becomes rancid.
- Product specific sensory analysis training for the staff
- Validation of the shelf-life
- Consumers' acceptability
- Long- term: Design of a larger scale production

# I-CON INTERREG PROJECT

**Interreg**  
CENTRAL EUROPE



**I-CON**

European Union  
European Regional  
Development Fund

**Website:** <http://www.interreg-central.eu/Content.Node/I-CON.html>

**Facebook:** <https://www.facebook.com/iconproject.InterregCE/>



Thank you very much for your attention!

**Zsófia Kertész**  
**(z.kertesz@campdenkht.com)**  
**Campden BRI Magyarország Nonprofit Kft**



**Campden BRI Magyarország**