

## Investigating levels of food variety consumed across European countries in an adult population

N. F. C. Devlin<sup>1</sup>, B. A. McNulty<sup>1</sup>, A. Turrini<sup>2</sup>, C. Tlustos<sup>3</sup>, A. P. Hearty<sup>1</sup>, J. L. Volatier<sup>4</sup>,  
C. C. Kelleher<sup>1</sup> and A. P. Nugent<sup>1</sup>

<sup>1</sup>UCD Institute of Food and Health, University College Dublin, Dublin 4, Republic of Ireland, <sup>2</sup>INRAN, National Research Institute on Food and Nutrition, Rome, Italy, <sup>3</sup>Food Safety Authority of Ireland, Dublin, Ireland and <sup>4</sup>ANSES, France

The aim of this study was to characterise the variety of foods consumed across European countries based on foods selected in a total diet study (TDS) approach, where data was provided by the EFSA Comprehensive Database<sup>(1)</sup>. This database was developed from national food consumption surveys and represents data for seven population groups across 22 European countries. TDS foods were selected if they satisfied the criteria of 90% of the weight of the total diet and a consumer rate  $\geq 5\%$ . Selected TDS foods were grouped into 1 of 20 food groups. Differences in the number of selected TDS foods per food group per country are presented, with the view of defining representative food lists.

Food groups	Number of TDS foods					
	France	Germany	Italy	Ireland	Sweden	Czech Republic
Grains and grain products	13	17	8	6	9	10
Vegetable & vegetable products	13	7	15	5	3	7
Starchy roots and tubers	4	3	1	3	4	2
Legumes, nuts and oils seeds	4	0	1	1	0	0
Fruits and fruit products	12	8	8	3	3	3
Meat and meat products	9	9	6	7	3	7
Fish and other seafood	2	0	2	1	1	1
Milk and dairy products	9	10	6	4	6	3
Eggs and egg products	1	1	1	1	1	1
Sugar and confectionary	2	0	1	2	0	1
Fats and oils	2	1	1	2	2	2
Fruit and vegetable juices	5	3	2	1	1	1
Non-alcoholic beverages	11	9	4	9	5	2
Alcoholic beverages	8	5	3	4	4	3
Drinking water	3	2	2	1	2	2
Herbs, spices & condiments	1	3	1	1	1	1
Food for infants & children	0	0	0	0	0	0
Nutritional products	0	0	0	0	0	0
Composite food	0	5	1	2	7	0
Desserts & other foods	2	2	1	1	1	0
Total TDS foods	101	85	64	54	53	46

Total number of foods consumed in each country were: 1233, 19334, 975, 1681, 1055, 443 respectively.

The results indicate that the French appear to have the greatest variety in their diet with 101 TDS foods selected, while the Czech Republic shows a lesser variation with just 46 foods selected. Although differences in survey methodology may have contributed to these figures, the results may suggest that France consume a more varied diet in comparison to the other countries studied here. This may support earlier research on the French paradox<sup>(2)</sup> but also suggests that any TDS list for France will be longer than that for any other European country.

The research leading to these results received funding from the European Union Seventh Framework Programme (FP7/2007-2013) under Grant Agreement 289108 (Total Diet Study Exposure). This publication reflects only the authors' views, and the Community is not liable for any use made of the information contained therein.

1. EFSA Comprehensive European Food Consumption Database (2011) *European Food Safety Authority*.
2. Ferrieres J, (2004) *Heart* **90**, 107–111.