

# 14TH INTERNATIONAL FOOD DATA CONFERENCE

## UPDATING THE SERBIAN FOOD COMPOSITION DATABASE WITH ESSENTIAL BUT MISSING MICRONUTRIENTS



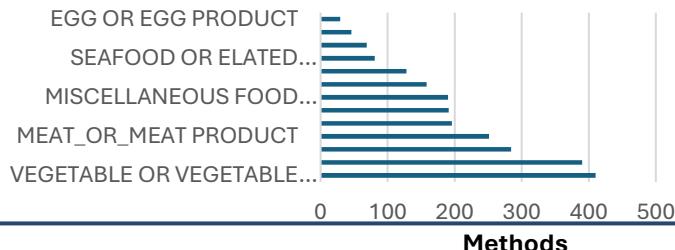
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### Background and Objectives

Figure 1: Distribution of foods by groups.



Food composition data are vital for assessing dietary intake and nutritional deficiencies. The Serbian Food Composition Database (FCDB) needs updates to cover essential micronutrients, especially those lacking in Europe. This study expands the FCDB with nutrient values for ~1000 foods, prioritizing chemical analysis of 11 key micronutrients.

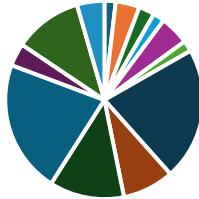
### Methods

Data on Zn, Ca, Fe, Mg, K, Se, vitamins A, B12, D, and folate were compiled from literature, analyses, and international tables, then harmonized per EuroFIR™ standards. EU Menu intake data (2017–2023) identified priority foods by consumption, nutritional relevance, and feasibility of analysis.

Figure 2: Coverage of Food Groups by micronutrients.



Figure 3: Average micronutrient values



- BEVERAGE (NON-MILK)
- EGG OR EGG PRODUCT
- FAT OR OIL
- FRUIT OR FRUIT PRODUCT
- GRAIN OR GRAIN PRODUCT
- MEAT OR MEAT PRODUCT
- MILK, MILK\_PRODUCT OR MILK SUBSTITUTE
- MISCELLANEOUS FOOD PRODUCT
- NUT SEED OR KERNEL PRODUCT
- PRODUCT FOR SPECIAL NUTRITIONAL USE OR DIETARY SUPPLEMENT
- SEAFOOD OR RELATED PRODUCT
- SUGAR OR SUGAR PRODUCT
- VEGETABLE OR VEGETABLE PRODUCT

### Results



Preliminary analysis identified staple foods in 13 food groups frequently consumed in Serbia but lacking complete micronutrient profiles. A prioritized list of foods and corresponding nutrients was developed, enabling targeted laboratory analyses. Examples include bread, dairy products, and certain vegetables.



### Conclusion

An updated and harmonized food composition database lays the foundation for accurate dietary assessment, effective fortification, and nutrition policies that support both vulnerable and general populations.

### Acknowledgements

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