


Campus Menu Assessment

Project Outcomes I from MedDietMenus4Campus



4th July, 2025


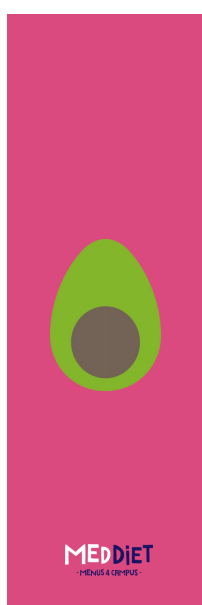
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Menu Mediterranean Index and Characterization




WP1 - Objectives




- 1 Develop an overall model to guide research on the adherence of the Med Diet in public higher education institutions (HEIs) canteens
- 2 Develop an index to evaluate compliance of menus with the Mediterranean Diet

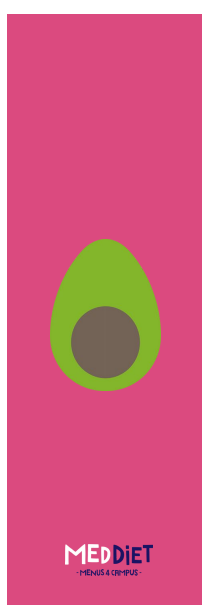


Why do we do this?



Menu Mediterranean Index and Characterization

-  Influential role of university campuses in shaping students' lifestyles;
-  Promote healthy eating habits, the adherence to the Med Diet and expand the availability of nutritious meal options in the cafeterias
-  Discourage the consumption of unhealthy foods.



Nutrients, 14(9), 1911. <https://doi.org/10.3390/nu14091911>
The British journal of nutrition, 126(1), 53–65. <https://doi.org/10.1017/S0007114520003761>



How do we do this?

Menu Mediterranean Index and Characterization



Considering the Mediterranean Diet as one of the healthiest dietary patterns, efforts should focus on integrating it into university cafeteria menus.



The **Mediterranean Diet Compliance Index (MeDCIn)** was developed as an innovative tool to assess how well cafeteria menus adhere to the Mediterranean Diet.



Download the MeDCIn



meddiet4campus.eu/resources



Download the MeDCIn



meddiet4campus.eu/resources

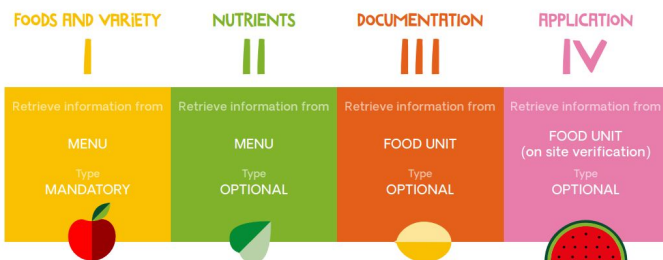
12 items focused
on availability of
typical DM foods

10 items focused
on variety of typical
DM foods



INDEX TO EVALUATE MENU COMPLIANCE WITH THE MEDITERRANEAN DIET

This index is organised in 4 dimensions:



DIMENSION I FOODS AND VARIETY

IA - FOODS

QA1	Availability of traditional Mediterranean dishes
QA2	Availability of vegetables soup
QA3	Availability of non-starchy vegetables (side dish or on dish)
QA4	Availability of seafood dishes
QA5	Availability of dishes with eggs as the main protein source
QA6	Availability of meat dishes
QA7	Availability of dishes containing pulses
QA8	Availability of fresh fruit as dessert
QA9	Availability of whole grains
QA10	Availability of nuts and seeds (in dishes or salads)
QA11	Availability of olive oil (cooking and dressing)
QA12	Use of seasonal products

IB - VARIETY

QB1	Stewed dishes with tomato and/or onion and/or garlic and/or leek at least 3 times a week
QB2	Traditional soups of the MD (vegetables soup, use of pulses in some soups) at least 3 or 4 times a week
QB31	More than 1 variety daily and not repeated in consecutive days
QB32	More than 1 variety daily and not repeated in three consecutive days different in at least 3 week days
QB4	Higher number of fish than meat dishes
QB5	Dishes with eggs as the main protein source at least once a week
QB61	Lean meat dishes in a higher number than red meat dishes
QB62	No use of processed meat
QB63	Use of processed meat dishes no more than once a week
QB71	Pulses - 1 to 2 times a week
QB72	Pulses - 3 or more times a week
QB81	Fresh Fruit - Daily
QB82	Fresh Fruit - 3 to 4 times a week
QB83	Fresh Fruit - 1 to 2 times a week
QB84	Sweet desserts no more than 3 times per month
QB85	Sweet desserts no more than once a week
QB86	Sweet desserts 2 to 3 times / week
QB87	Sweet desserts more than 3 times / week
QB9	Whole grains - 2 or more times a week
QB10	Nuts and seeds (in dishes or salads) - once or more a week
QB11	-
QB12	-

Free access to the paper:



BMC Nutrition

RESEARCH

Open Access



60 menus

Development of a tool to assess the compliance of cafeteria menus with the Mediterranean Diet

S. S. Silva¹, A. Rocha¹, L. Ferreira¹, B. Neto², D. Dikmen³, S. Vidacek Filipce⁴, Z. Satalic⁴ and C. Viegas^{5*}

High internal consistency (Cronbach's alpha = 0.88)

High inter-rater reliability (Cohen's Kappa = 0,92)

Silva et al. BMC Nutrition (2024) 10:163

Methods



Quantitative cross-sectional study



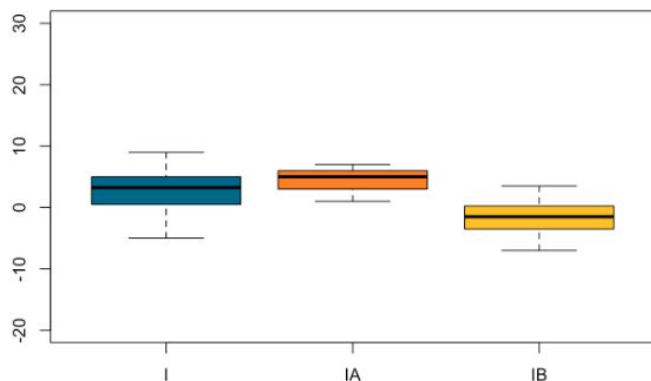
Menus from 52 different HEI followed a cycle of 4 weeks.

24 from Portugal
14 from Turkey
14 from Croatia

Menus were collected from several HEI in different cities in each country, to provide a broader sample.



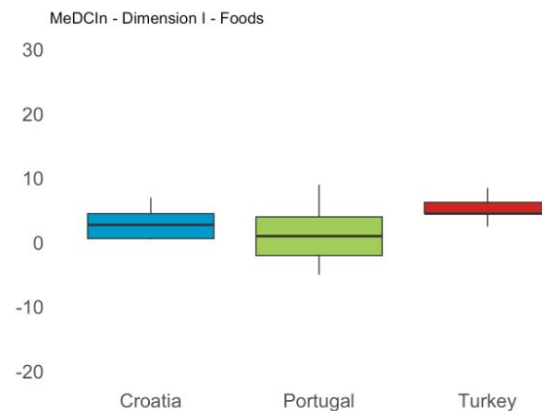
MeDCIn score results for all countries



Compliance of the menus with MD is **very low** ($x = 2.7 \pm 3.4$)

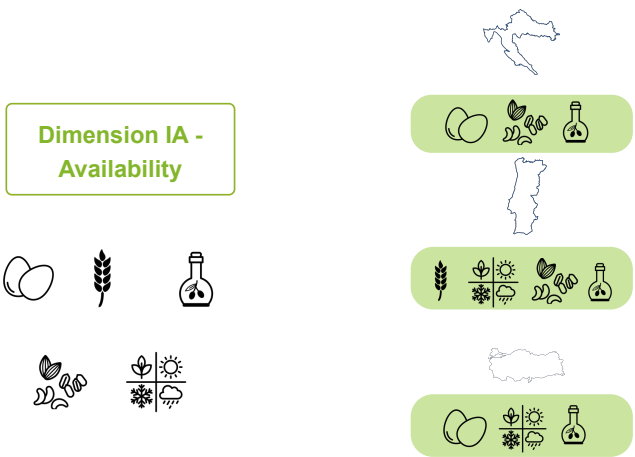
Similar values for availability of foods (IA)

MeDCIn score results by country

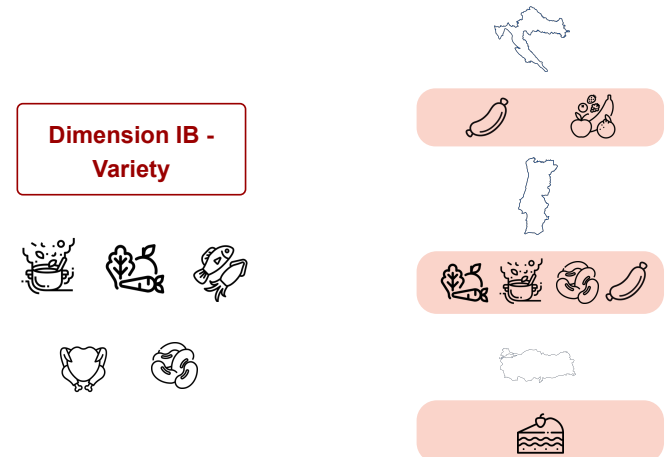


Turkish menus score the **highest** ($x = 5.2 \pm 1.7$; low) and Portugal the **lowest** ($x = 1.10 \pm 3.7$; very low)




Menus compliance with the Mediterranean Diet






Menus compliance with the Mediterranean Diet



Menus compliance with the Mediterranean Diet

-  All countries showed a very low compliance
-  Different results → different cultures and gastronomy
-  Opportunities to promote more sustainable and mediterranean menus


Key findings

-  Foods with different costs in each country → olive oil; nuts and seeds
-  Low availability of olive oil → not mentioned in the menus (NA); Mainly used for seasoning and not for cooking
-  Eggs not seen as good source of protein → barrier to sustainable diets

Key findings


Seasonality

Seasonality difficult to assess - availability of all types of foods all year




Compliance

Low compliance by low variety of key MD foods (pulses, vegetables and MD dishes)




Offer

High consumption of processed meat in PT and HR







Key findings



Turkey



Traditionally, offer sweet desserts is a sign of respect and hospitality to guests seen as an important part of the culture.




Necessity to reduce the offer of desserts and increase fresh fruit consumption in HEI canteens.



To Conclude


Studies shown a diverse level of adherence to this food pattern, in line with our results.

Martínez-González MA et al., Vidal-Peracho C. et al., Vagenas-Radd S. et al., Figueiredo L et al.



Improve menus offer focusing on:

- reducing meat consumption
- promoting of vegetables and pulses consumption.







Menu Characterization and Water and Carbon Footprint assessment


Paper waiting for publication

Higher Education settings menus have low compliance with the Mediterranean Diet and high Carbon and Water Footprint: a case study from Portugal, Croatia and Turkey

Authors

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- Understand the current food offer in university cafeterias
- Choose the best strategies to promote and maintain MD adherence in this population.



Thank you for your attention

For further details and information:



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SCAN ME



Acknowledgements



This work is financed by national funds through FCT – Foundation for Science and Technology, I.P., under the project PRIMA/0008/2022, PRIMA/0009/2022, PRIMA/0010/2022 and PRIMA/0011/2022.



The PRIMA programme is supported under Horizon 2020 the European Union's Framework Programme for Research and Innovation.



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