

Consumption of whole grains among Slovenian consumers

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Whole Grains: A Game Changer for Public and Planetary Health
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Non-communicable diseases in Slovenia



- An important way to control NCDs is to focus on reducing the risk factors associated with these diseases
- Consumption of whole grains is associated with a reduction in the risk of developing non-communicable diseases



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Unhealthy diet in Slovenia...



- > men
- ➤ lower socio-economic status
- lower education
- > eastern part of Slovenia

NIJZ, 2021

https://www.nijz.si/sl/publikacije/health-inequalities-in-slovenia

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National Programme on Nutrition and Health Enhancing Physical Activity 2015-2025

Specific targets

To increase:

- the prevalence of breast-fed children;
- number of those having breakfast every day;
- · the intake of vegetables and fruit;
- physically active population.

To decrease/reduce:

- overweight and obese population;
- undernourished and functionally less capable elderly and patients;
- the intake of saturated fats, sugars and salt;
- · the content of trans fats in food.





Recommended intake of whole grains

Whole grains are considered as an important part of a healthy eating pattern, and therefore its consumption is recommended.



Twelve recommendations of healthy eating (in Slovene)

- 1.Uživajte v hrani; jejte v rednih obrokih. Uživajte pestro hrano pretežno rastlinskega izvora.
- 2. Izbirajte polnovredna živila iz žit in žitnih izdelkov.
- 3. Večkrat dnevno imejte na krožniku svežo zelenjavo in sadje iz lokalne pridelave.
- 4. Nadzorujte količino zaužite maščobe in nadomestite večino nasičenih oz.
- živalskih maščob z nenasičenimi in nerafiniranimi vrstami olja.
- 5.Mastno meso in mastne mesne izdelke nadomestite s stročnicami, ribami, perutnino ali pustim mesom.
- 6. Vsak dan užijte priporočeno količino posnetega mleka in manj mastnih mlečnih izdelkov.
- 7. Jejte manj slano hrano.
- 8. Omejite uživanje sladkih živil in pijač.
- 9. Pijte dovolj tekočine.
- 10. Omejite uživanje alkohola.
- 11.Hrano pripravljajte zdravo in higienično.
- 12.Bodite dovolj telesno dejavni, da bosta vnos in poraba energije uravnotežena; tako boste ohranili primerno telesno maso.



Wholemeal* bread - consumption frequency

• Consumption frequency:

*Wholemeal bread is made from whole grain flour

	toddlers	adolescents	adults	older adults
high (every day/ 4-6 times per week)	39.1 %	30.6 %	40.5 %	58.0 %
never	6.7 %	15.3 %	12.5 %	9.9 %

High wholemeal bread consumer in Slovenia: female, older adult, eastern part of SI

SI.Menu Survey 2018





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Wholemeal bread - intake

Wheat* bread and rolls, brown or wholemeal *(Triticum spp.)			
Population Group		Number of consumers	Mean g/day
Toddlers	343	98	9.2
Adolescents	484	132	17.8
Adults	385	131	28.4
Older adults	450	214	48.8



All data: EFSA Comprehensive Food Consumption Database, SI.Menu 2018 Survey

Rye bread and rolls, wholemeal				
Population Group	of	Number of consumer s	Mean g/day	
Toddlers	343			0.2
Adolescents	484	6		0.5
Adults	385	6		0.7
Older adults	450	7		0.5

Multigrain (not only rye-wheat) bread and rolls			
Population	Number of	Number of	Mean g/day
Group	subjects	consumers	
Toddlers	343	11	0.8
Adolescents	484	12	1.7
Adults	385	14	1.9
Older adults	450	11	1.2

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Buckwheat flour and buckwheat products

Consumption frequency

Buckwheat flour and buckwheat products are consumed every day by only 0.2%, once a week by 16.3%, 1 - 3 per month by 46.8% and never by 31.9% of the adolescents and adult population of Slovenia. 31.1 % of toddlers consume buckwheat flour and buckwheat products at least once per week.

• Average high consumer of buckwheat is older adult man.

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Buckwheat flour and products			
Population	Number of	Number of	Mean g/day
Group	subjects	consumers	
Toddlers	343	3	0.4
Adolescents	484	. 9	0.4
Adults	385	4	1.0
Older adults	450	18	1.8



Inadequate Intake of Dietary Fibre in Adolescents, Adults, and Elderlies: Results of Slovenian Representative SI. Menu Study

- The main food groups contributing to dietary fibre intake were bread and other grain products, vegetables and fruits, with significant differences between population groups.
- The results indicate that the intake of dietary fibre in Slovenia is lower than recommended.
- The proportion of the population with inadequate fibre intakes (<30 g/day) was 90.6% in adolescents, 89.6% in adults, and 89.3% in elderlies, while mean daily fibre intakes were 19.5, 20.9, and 22.4 g, respectively.
- Considerably higher intake of dietary fibre could be achieved by encouraging consumers for whole-meal options in bread and cereal products and with increased overall consumption of plant-based foods.

Seljak, B.K.; Valenčič, E.; Hristov, H.; Hribar, M.; Lavriša, Ž.; Kušar, A.; Žmitek, K.; Krušič, S.; Gregorič, M.; Blaznik, U.; et al. Inadequate Intake of Dietary Fibre in Adolescents, Adults, and Elderlies: Results of Slovenian Representative SI. Menu Study. Nutrients **2021**, 13, 3826. https://doi.org/10.3390/nu13113826



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Thanks for your attention!



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