

**Folate Status of the Population in the EC and
Strategies for Change - Expert Discussion Forum**

Situation in Poland

National Food and Nutrition Institute, Warsaw, Poland

- Health disorders connected with folic acid deficiency in Poland
- Folate intake in Polish population
- Legislative regulations relating to flour fortification with folic acid
- Recommendations of Polish Experts Group for Strategy of Flour Fortification with Folic Acid.

Health disorders connected with folic acid deficiency in Poland

- **Prevalence**
 - of neural tube defects (NTD) – 1-2/ 1000 living births
 - (350-700 new-born babies per year)
 - Cause of 34% of infants deaths

- **Neural Tube Defects Primary Prevention Programme - 1997**
 - the main aim – propagation of folic acid supplements intake (0,4 mg) by women of child-bearing age

- Frequency* of folic acid supplements intake by women of child-bearing age in Poland
 - 17% - before pregnancy
 - 63% - during the first trimester of pregnancy

* Data from Mother's and Child's Institute

Health disorders connected with folic acid deficiency in Poland

Prevalence of hiperhomocysteinemia (%) among adults in Poland*

		<5 mmol/l	5-10 mmol/l	10-15 mmol/l	>15 mmol/l
18-39	Female	2,2	57,7	33,5	6,7
	Male	0,7	44,3	37,6	17,4
	Total	1,5	51,1	35,5	12,0
40-60	Female	0,5	48,1	41,7	9,71
	Male	0,0	29,3	47,7	23,0
	Total	0,3	38,7	33,7	16,4
≥60	Female	0,0	28,3	46,4	25,3
	Male	0,0	16,2	49,4	34,4
	Total	0,0	23,3	47,7	29,0

*POLKARD Programme

Health disorders connected with folic acid deficiency in Poland

Most frequent cancer morbidity in Poland

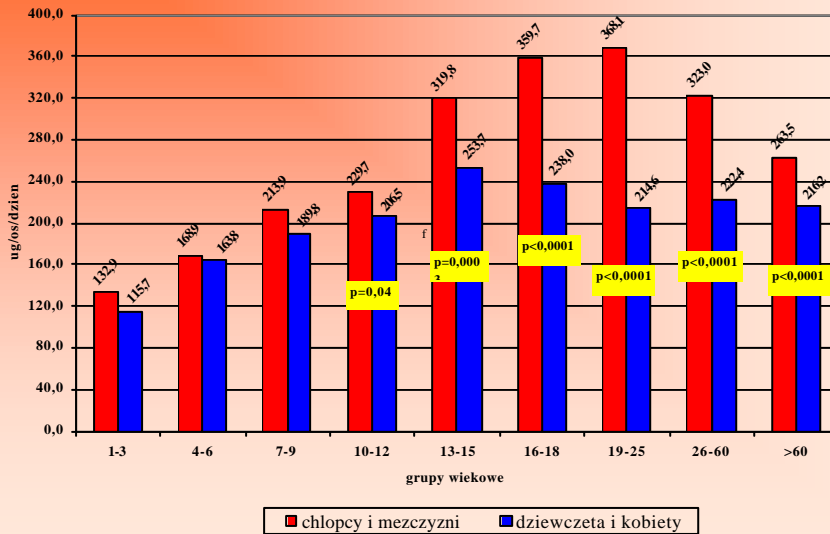
- **Male**
 - Lung – 27,1%
 - **Colorectal – 10,3%**
 - Prostate – 8,1%
- **Female**
 - Breast – 20,7%
 - **Colorectal – 10%**
 - Lung – 7,8%

Folate intake in Polish population

The data of dietary intake of folate comes from countrywide representative survey in the group of 4134 males and females carried out in 2000.

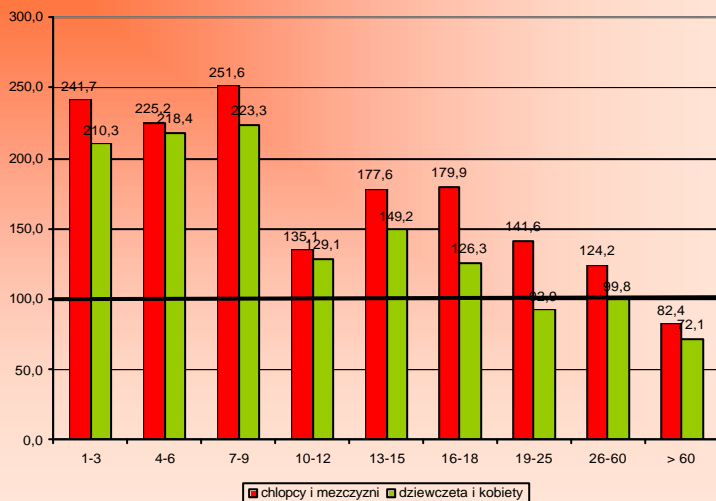
The 24 hour recall was used as the method to collect the dietary information.

Folic acid intake (mg) with diet according to the age (female and male)



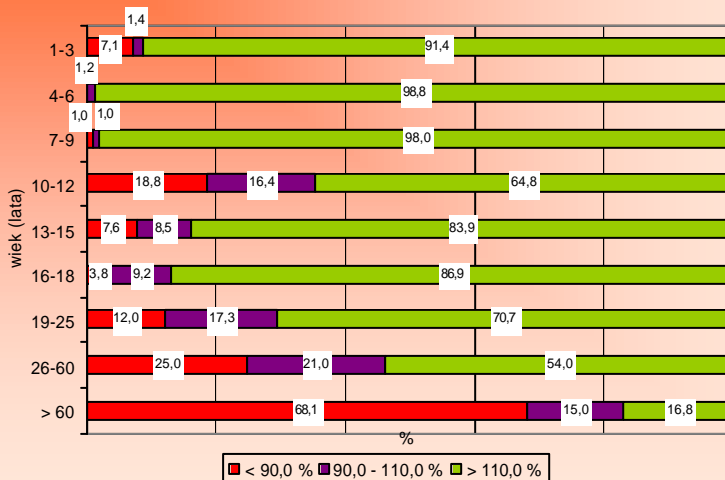
L. Szponar: Household Food Consumption and Anthropometric Survey in Poland .

The per-cent of Polish RDA



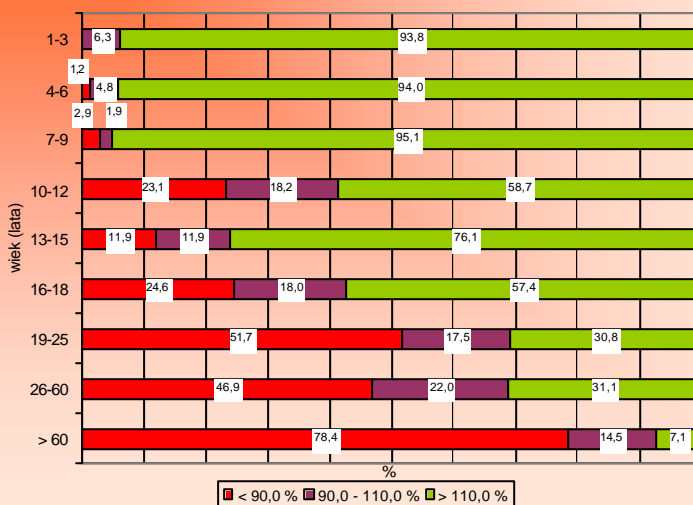
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The per-cent of subjects with folic acid intake below, close and above Polish RDA (Males)



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The per-cent of subjects with folic acid intake below, close and above Polish RDA (Females)



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Main folate food sources

- Vegetables and pulses (27-29%)
- Cereals (21-27%)

Conclusion

- Average folic acid intake in Polish population is satisfactory
- There are some population groups with dietary folic acid deficiency risk:
 - it's content was below 90% Polish RDA in diets of:
 - 51,7% - among 19-25 y old women
 - 46,9% - among 26-60 years old women
 - 78,4% - among over 60-year women and in 68,1% diets of the same age men

Legislative regulations relating to flour fortification with folic acid

- In 2000 Ministry of Health gave permission for producing flour fortified with folic acid (and other vitamin B) used by individual consumers.
- In 2006 – permission for fortification of flour used in baker's industry
 - **The maximum fortification level – 100% of RDA per 100 g of product**

Fortification is not obligatory

Recommendations of Polish Experts Group, (established by Ministry of Health), for Strategy of Flour Fortification with Folic Acid (meeting – October'2006).

- There are the important health reasons for adding of folic acid to selected sorts of flour. It will give to consumers a possibility of an aware choice.
- Education on the folic acid importance for health and it's intake from natural food and supplements of population, especially among women of child-bearing age, children and adolescents is the best tool for improving of folic acid intake.

Recommendations of Polish Experts Group,
(established by Ministry of Health), for Strategy of Flour
Fortification with Folic Acid
(meeting – October'2006) .

- There is a need to introduce the procedures for doctors on folic acid supplements recommendations.
- Monitoring of food products fortified with folic acids intake should be done.

