

Folate Status of the Population in the EC and Strategies for Change

- Expert Discussion Forum

11./12.01.2007, Berlin

"Change" with two goals:

- reduction of occurrence of neural tube defects
- increase of folate intake and thereby folate status

Possible "Strategies"

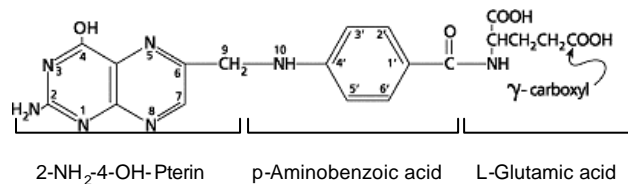
- nutrition education
- food based dietary guidelines
- fortification of (a) carrier food(s)
 - mandatory
 - voluntary
- supplements
- accompanying measures

" Policy decision making in any country considering fortification with one or several micronutrients should not be limited to the documentation of the indications for fortification ...

A plan for evaluating the effectiveness and safety of the intervention is also needed"

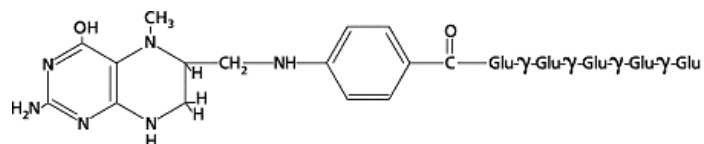
(Rosenberg IH (2005) Am J Clin Nutr 82:279-280)

Folic acid



Folate

e.g. 5-Methyl-Tetrahydrofolate-Pentaglutamate
(5-methyl-H4PteGlu5)



1µg folate equivalent = 1 µg dietary folate = 0,5 µg folic acid

Background for discussion

- Unsatisfactory folate status / folate intake of substantial parts of the European population e.g. Germany 1998: 75% of women > 18y have serum folate < 10 µg/L and erythrocyte folate < 400 µg/L and folate intake is below recommended levels in 80% (Thamm et al, 1999).
- stable (?) incidence of neural tube defects
- EC legislation – in place with respect to food supplements (Directive 2002/46/EC)
 - pending with respect to fortification of foods (free movement of goods except on grounds of public health protection; mandatory addition on national level in special cases)

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- Folic acid fortification
 - mandatory – defined food categories?
 - voluntary – restriction to defined food categories?
- Folic acid supplement use enhancement
 - promotion campaign?
 - part of pregnancy care?
- Level of fortification/dosage
 - harmonised?
 - population specific?
- Need for simultaneous Vitamin B12 fortification?
- Endpoints for monitoring of efficiency
 - folate serum levels?
 - folate red blood cell levels?
 - free folic acid in serum?
 - homocysteine in plasma?
- Endpoints for monitoring of effects
 - incidence NTD?
 - incidence other malformation?
 - incidence / CVD mortality?
 - incidence of cancers?
 - other
- Endpoints for monitoring potential adverse effects
- Technical and legal preconditions

Thank you for your attention

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