Prevention of NTD by improvement of folic acid intake in France

BfR folic acid fortification meeting, Berlin 11th and 12th January 2007
Jean-Luc Volatier AFSSA/DERNS/PASER

Recent positions on prevention of NTD by improving vitamin B9 intake in France

Context of nutritional risk assessment and management in France

2003 Afssa proposal for an experimentation of flour fortification

2006-2007 Project of National Health and Nutrition Program guide for pregnant women
Context of the nutritional risk assessment and management in France for Human Nutrition

Risk managers for human nutrition:

- Department of Health
  National Nutrition and Health Programs
  (PNNS1 2001-2005, PNNS2 2006-2010)
- Department of Consumption
  Authorisations for voluntary fortification (PARNUTs, others)
- Department of Agriculture

Risk assessor for human nutrition
Afssa Human Nutrition Panel

Folates in the National Nutrition and Health Program (PNNS)

PNNS1 2001-2005

- 9 general public health goals
- 9 specific goals for sub-populations
  - « Improve the folate status of childbearing age women, especially in case of desire of pregnancy »

PNNS2 2006-2010

10 specific goals for subpopulations

« Improve the folate status of childbearing age women, especially in case of desire of pregnancy, in order to decrease the incidence of NTDs »
Afssa proposal for an experimentation of flour fortification (2003)

• Context:
DRI (in French : ANC) published by Afssa in 2000:
Adult men 330 µg/d, Adult women 300 µg/d, pregnant women : 400 µg/d

• Methodology:
Expert subgroup (n=10), fortification simulations by Afssa, discussion and validation of the report and recommendations by the Afssa human nutrition panel

Afssa proposal for an experimentation of flour fortification (2003)

• Results and recommendations:
• A fortification of 350 µg/100 g flour was optimal
  • reduction of 170 to 210 NTD among 800-1000 annual cases
  • Only 5% of the population will have folate intakes above 1 mg/d
• A fortification of 10 µg vit B12 / 100 g flour could allow to avoid vit B12 deficiency
• Experimentation in a region with good morbidity registers and a self production of flour (Alsace)
• Guide to medical doctors and health professionals

« The medical prescription of folate (0.4 mg/d) should be systematic as soon as the stop of contraception for all the women willing to be pregnant. In case of non scheduled pregnancy, this prescription should be given immediately ».

• Guide to childbearing age women

Recall of the food based dietary guidelines that allow sufficient folate intakes
List of foods with high level of folate content
Advice to talk of folate with their medical doctor before the beginning of pregnancy. Recall of the fact that their should be a folate supplementation under control of the MD.
In case of unintended pregnancy, advice of asking an immediate supplementation to the MD.