Mandatory Folic Acid Food Fortification in Ireland: a background to the decision

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Summary

• Why add folic acid to bread in Ireland?

• Details of main recommendations
NTDs - failure of normal closure of embryonal neural tube

Ireland has one of the highest rates of Neural Tube Defects

Between 49 and 93 babies are born with NTDs every year in Ireland
Women in Ireland who may become pregnant are advised...

‘take 400ug folic acid every day’

...but very few women take folic acid as recommended

Timeframe for preventing NTDs

Neural Tube closes 28 days after conception....

....just when most women are beginning to suspect they might be pregnant!
Rates of NTDs in Ireland and other countries

% NTD affected pregnancies resulting in a live birth

81% (Dublin)
11% (London)
9% (Paris)

Burden of disease is much higher in Ireland
42 countries have mandatory folic acid food fortification programmes

Incidence of NTDs in four Canadian Provinces after mandatory folic acid food fortification was implemented

Incidences of NTDs in 4 Canadian Provinces

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<th>Year</th>
<th>Nova Scotia</th>
<th>Newfoundland</th>
<th>Ontario</th>
<th>Quebec</th>
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Public consultation on folic acid food fortification in Ireland

Policy should change to promote the addition of folic acid to flour or bread

- **Strongly Agree**: 16%
- **Agree**: 59%
- **Neither agree nor disagree**: 2%
- **Disagree**: 17%
- **Strongly disagree**: 1%
- **Don't Know**: 1%

Base: 360
Recommendations
Some important aspects

Most breads (including wholemeal) will be fortified
(120µg folic acid / 100g bread)

↓

Women will be provided with 25% of their folic acid needs

NTDs will be reduced by 24%
(higher protective effects where folate status is low)
Most breads (including wholemeal) will be fortified (120µg folic acid / 100g bread)

Folate deficiency will be eradicated
This will benefit older adults in particular
↓ homocysteine levels
(possible modest reduction in cardiovascular disease)

Women who are sexually active need to continue to take folic acid supplements

Folic acid food fortification will not fully protect pregnancies against NTDs

Promotion of folic acid supplement use must continue