



# Policies on folic acid: the Italian position

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## What is the **Istituto Superiore di Sanità**

- The Istituto Superiore di Sanità (ISS) is the leading technical and scientific public body of the Italian National Health Service.
- Its activities include research, control, training and consultation in the interest of public health protection.

<http://www.iss.it/cnmr>

# Neural Tube Defects (NTDs) in Italy

Data from the regional birth defects registries connected to the National Rare Disease Registry (ISS) and EUROCAT

**Anencephaly:** 0.39: 10,000 births  
1.94: 10,000 births +TA



**Spina bifida:** 1.48: 10,000 births  
3.28: 10,000 births + TA



**Encephalocele:** 0.25: 10,000 births  
0.80: 10,000 births + TA

**NTDs:** 2.12: 10,000 births  
6.02: 10,000 births + TA

## FOLATE STATUS IN ITALY

**Average dietary intake 0,213 mg/die,  
(with wide individual variations):**

- 37% from vegetables/fruits
- 29% from grain-based commodities
- then milk/dairy products.

Average intake is adequate for the general population, but not for pregnancy



## Current policy on folic acid in Italy

- Dietary advice (general population)
- Periconceptional supplementation since 2005: "folic acid" is free of charge as a "drug" (decision of the Italian Drug Agency)
- Food fortification on voluntary basis



## Food containing high quantity of folates



- **Fruits:** orange, mandarins, fresh orange juice
- **Green Vegetables:** spinaches, artichokes, endive, beet, broccolis, cabbages
- **Liver**
- **Nuts and peanut butter**
- **Dried peas or beans**

## **DIETARY ADVICE**

- Communication campaigns (web, newspapers, TV, leaflets) to the general public in collaboration with the National Institute for Research on Food and Nutrition
- Raising awareness among health operators also through courses and meetings

## **Promotion of peri-conceptional supplementation**

- Still unsufficiently diffused in Italy
- A priority of the Italian Network for the Promotion of Folic Acid



## Recommendation of the Italian National Network

- Women who are planning pregnancy or do not exclude this possibility should take 0.4 mg of Folic Acid daily.
- In order to be effective in preventing Neural Tube Defects the assumption of Folic Acid should start at least one month before the conception and should continue during the first three months of pregnancy.



- Women who have had prior NTD-affected pregnancy are at higher risk of having a subsequent affected pregnancy
- Women at high risk (affected by diseases such as diabetes, malabsorption, taking antiepileptic drugs, etc.).

should assume 4-5 mg of Folic Acid every day for the same period of time



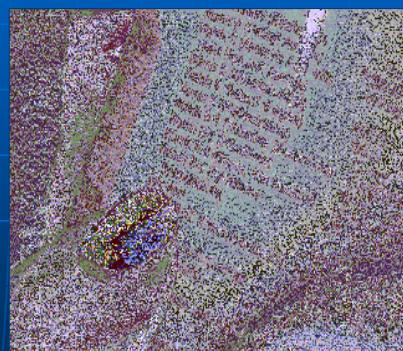
## In conclusion: Folic Acid supplementation

- All women that are planning a pregnancy
- Women who have had a previous child with NTD and woman at risk (diabetes, etc.)



## Dose levels of Periconceptional folic acid

Based on the conclusions  
and recommendations of the  
**Meeting “Regional Policy  
for Prevention  
of Congenital Disorders”,  
WHO/EURO Meeting  
Istituto Superiore di  
Sanità  
11-12 November, 2002**





## Fortified Grain Products

On a precautionary basis, taking into account:

- 1) Recent scientific evidences on possible adverse effects of high levels of folates
- 2) The high intake of grain-based products by the Italian population which, in the case of universal fortification, might lead to exceeding the Upper Level (1 mg/day) recommended by Scientific Committee on Food

## Fortified food products

The ISS recommends to promote the availability of fortified food products in the Italian market

Currently, only corn flakes and few other fortified commodities are widely available in Italy



## **ACTIONS UNDERTAKEN**

Raising awareness among health operators  
also through courses and meetings

Collaboration with the Association of Spina  
Bifida families

Awareness about healthy lifestyles and  
preventive approaches is key element to  
empower people about their own health

## **The history of folic acid in Italy**

- A “relatively” new issue for ITALY
- First National Workshop at the ISS in 2001 with Report available also in the ISS website
- The WHO-EURO / ISS Meeting Regional Policy for Prevention of Congenital Disorders with the Report available also in the ISS website (2002)
- The Italian Network (2004)



## Italian Network for Folic Acid Promotion

- Started in April 2004, in order to integrate and optimize activities on the prevention of birth defects using folic acid at local or regional level
- The Network is co-ordinated by the National Centre Rare Diseases – Istituto Superiore di Sanita' (ISS)
- It involves 162 constituencies including : research institutes, the Health Ministry, Italian Drug Agency, Regions, local health service, Universities as well as physicians, journalist and representatives of patients association. National Registry of Rare Diseases, Registries of congenital malformations (Members of EUROCAT)



## Distribution of the Italian Network organizations by Region

Distr





## Collaboration with regional Registries of congenital malformations

### Registri Regionali Malformazioni Congenite



■ Registri Malformazioni  
Congenite:

Registro Toscana (RTDC)  
Registro Emilia Romagna  
(IMER)  
Registro Nord-Est Italia (NEI):  
Veneto, Friuli-Venezia-Giulia,  
Trentino Alto Adige  
Registro Sicilia (ISMAC)  
Registro Lombardia  
Registro Campania (RCDC)

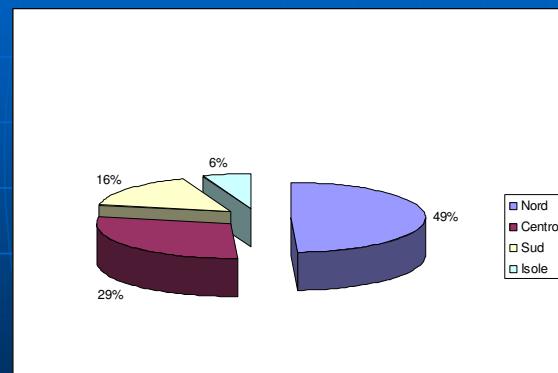


The following working groups have been  
established within the Network:

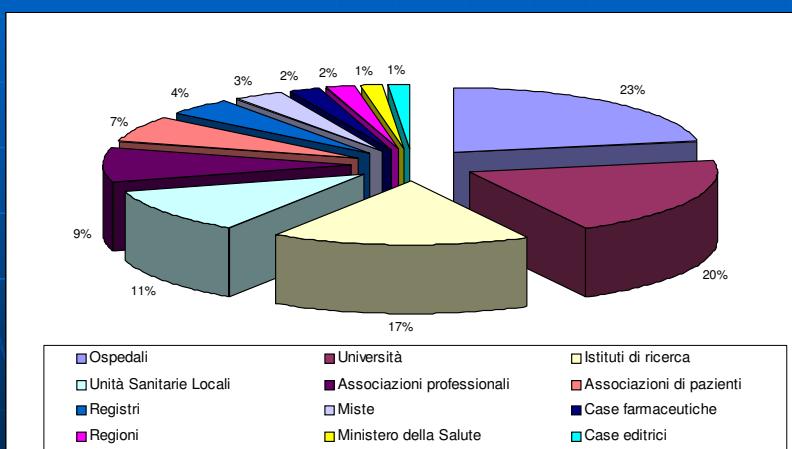
- Advocacy
- Diet
- Pharmaceuticals and diet integrators
- Education of health care workers
- Information of the general population
- Research
- Surveillance and evaluation of the impact



## Distribution of the Italian Network's participants by area



## Distribution of the Italian Network's organizations by structure



## **ACTIVITIES of the Network**

- Elaboration and diffusion of the Recommendation on the peri-conceptional supplementation
- National and international Meetings, national courses
- Elaboration of National Reports (Rapporti ISTISAN "Congenital Malformations and Folic Acid")

- Communication campaigns (web, newspapers, TV, leaflets) to the general public in collaboration with the National Institute for Research on Food and Nutrition
- Raising awareness among health operators also through courses and meetings

**THANKS  
FOR YOUR ATTENTION**

**Additional information  
<http://www.iss.it/cnmr>  
(see: Folic Acid)**

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