



Policies on folic acid: the Italian position

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What is the Istituto Superiore di Sanità

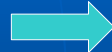
- The Istituto Superiore di Sanità (ISS) is the leading technical and scientific public body of the Italian National Health Service.
- Its activities include research, control, training and consultation in the interest of public health protection.

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

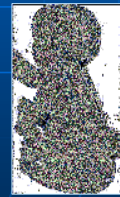
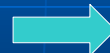
Neural Tube Defects (NTDs) in Italy

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-conceptual supplementation

- Still insufficiently 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



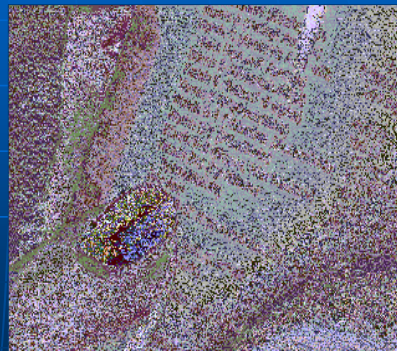
In conclusion: Folic Acid supplementation

- 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-hordinated 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

Distri





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)

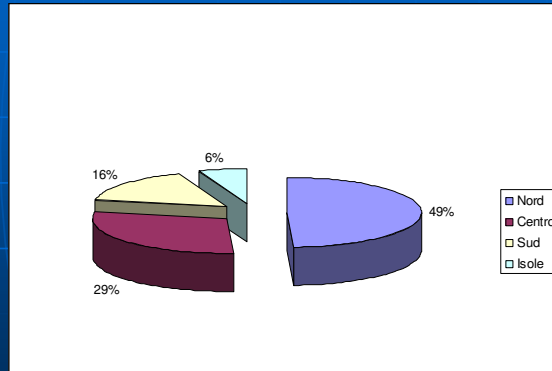


The following working groups have been established within the Network:

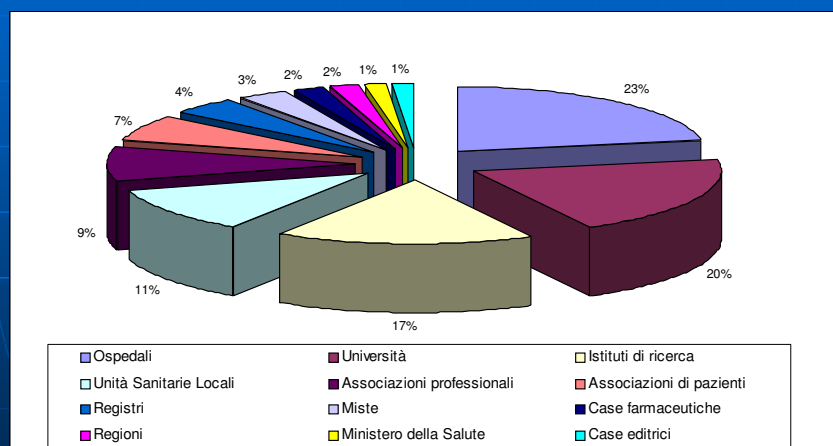
- Advocacy
- Diet
- Pharmaceuticals and diet integrators
- Education of health care workers
- Information of the general population
- Research
- Surveillance and evaluation of the impact



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-conceptual 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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