

## Unlock Every Child's Potential With Iron



### Iron Deficiency — One of the Top 10 Preventable Risks Impeding a Healthy Life

The World Health Organization's (WHO) 2002 Report, "Preventing Risks, Promoting Healthy Life", named iron deficiency as one of the top 10 preventable risks to disease, disability, and death in the world today.

800,000 of deaths worldwide are attributable to iron deficiency each year. 20% of perinatal mortality (combination of fetal death and deaths of infants in their first 28 days) and 10% of maternal mortality in developing countries is attributable to iron deficiency.

The loss of "healthy life years" due to non-fatal outcomes such as cognitive impairment are even greater. Annually, iron deficiency causes the loss of 25 million healthy life years. WHO warns that the "costs of inaction are serious" and encourages government-led action to reduce these risks and fulfill the government's responsibilities to protect its citizens. Worldwide, life expectancy can be increased by 5 -10 years if governments and individuals combine efforts against the major health risks in each region.

Many health risks are analyzed in this report and are compared using DALY calculations. A DALY (disability-adjusted life year) is equal to the loss of one healthy year of life. DALY calculations are based on the contribution of the different risks to mortality and morbidity and allows the different health problems to be compared on an equal footing.

### Why Are Children Iron Deficient?

Full-term infants that are exclusively breastfed by a healthy mother obtain enough iron from their mother's milk and their own iron stores for about the first 6 months of life. From 6-24 months of age, even with a good diet, infants frequently become anemic because of their high iron requirements during this period of rapid growth. One reason for this is that typical infant foods, especially in developing countries, are not "iron-rich". Even when iron-rich or fortified foods are available, young children have limited capacity in their stomachs. Their general intake of food is lower and they do not consume enough food to fill their iron need. Frequent feedings are recommended at this age for this reason.

### What to do:

In places where an infant's diet does not include iron fortified foods or where anemia prevalence is over 40%, WHO recommends children 6-23 months receive supplemental iron at a dosage of 2mg/kg body weight per day. Iron supplements for children come in the form of syrup, tablets, sprinkles and spreads although not all of these are available in every community. *Please see the next bulletin for detailed information on iron supplements.*



Gail Naimoli

### Did you know?

1,624 babies die per day due to iron deficiency.

*The World Health Report -  
Preventing Risks,  
Promoting Healthy Life,  
2002.*



## A HEALTHY CHILD IS:

active --- playful --- happy --- curious --- hungry --- explores --- learns --- has a good appetite --- interacts with his/her environment.

**Iron deficiency and anemia have detrimental effects** on all these characteristics of a healthy child, making him/her lethargic, unhappy, listless, unable to concentrate, lacking in appetite, hesitant, and less able to resist illnesses.

Anemia is not often looked for in children and symptoms are sometimes difficult to notice. Even in medical clinics it is not recognized as an urgent problem in children. Yet, more and more studies are showing that the high prevalence of iron deficiency and anemia in young children and its serious effects are compromising the development and future achievements of children around the world. As well, programs to assist child development and education are hindered in their ability to fully achieve their goals because of the effects of iron deficiency.

## How Big is the Anemia Problem in Children?

Until recently, anemia has not been part of the standard health/disease surveys in most countries, making it difficult to generate interest and concern for working to reduce iron deficiency. In the last few years, the Demographic and Health Survey (DHS) and a number of individual country surveys have added anemia measures. The prevalence data are confirming the severity of the problem, showing large numbers of children with anemia. Anemia rates are especially high in children under 2 (the age where critical physical and mental development occurs) and these data strengthen the urgent appeal to address the childhood anemia problem immediately. Some of the most recent prevalence figures are shown below.

### Recent population-based surveys of childhood anemia

<u>Country</u>	<u>Year</u>	<u>Age</u>	<u>Percent of children with anemia</u>
Bolivia	1998	(6-59 months)	55 %
Cambodia	2000	(6-59 months)	63 %
Egypt	2000	(6-69 months)	30 %
Haiti	2000	(6-59 months)	63 %
India	1998-99	(6-35 months)	73 %
Kazakhstan	1999	(6-59 months)	37 %
Krygyz Republic	1997	(6-35 months)	46 %
Madagascar	1997	(6-35 months)	73 %
Peru	2000	(6-59 months)	49 %
Uganda	2000	(6-59 months)	59 %
Uzbekistan	1996	(6-35 months)	60 %

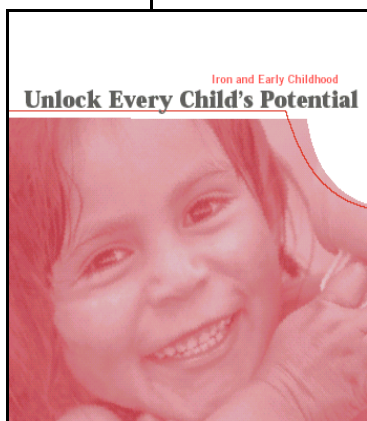
## Advocacy Tools:

Advocacy tools can help you convince government officials, donors, and program personnel of the importance of reducing iron deficiency.

**Two PowerPoint presentations** for advocacy purposes have been created for your use. These are designed for policymakers and early child health and development audiences. They contain detailed information about the consequences of iron deficiency and the actions that need to be taken or supported. These presentations can be used "as is" or altered, depending on your time limit and interest. We would appreciate notification of where and when they are used so that we can monitor who is receiving the "iron message" and determine the results of advocacy efforts.

Please contact The Manoff Group or The Micronutrient Initiative to obtain these presentations and other advocacy tools. See address on the back of this bulletin or go to the Iron Deficiency Project Advisory Service (IDPAS) website.

**Iron Deficiency Project  
Advisory Service (IDPAS)**  
Hundreds of articles and  
resources to help reduce  
iron deficiency—  
[www.micronutrient.org/  
IDPAS](http://www.micronutrient.org/IDPAS)



**Unlock Every Child's Potential: Iron and Early Childhood** will be available soon in SPANISH and FRENCH.

## Organizations that can help:

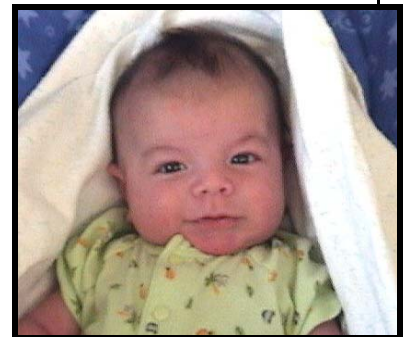
**GAIN—The Global Alliance for Improved Nutrition—** was launched at the UN Special Session on Children, May 2002

GAIN will support developing countries in the implementation of locally developed food fortification programs designed to help eliminate the devastating - and often deadly - effects of micronutrient deficiencies. Leveraging the expertise and experience of its partner organizations, GAIN will support national fortification of regularly consumed products, as appropriate to, and tailored for, local dietary needs and customs. GAIN will also support in-country social marketing of those fortified foods. GAIN's partners include bilateral donors, foundations, UN and other multilateral agencies, developing country governments, private sector companies, NGOs and academic institutions. Funds available for the first year of GAIN activities will be between US\$20-25 million with more than US\$70 million committed over 5 years, including US\$50 million from the Bill & Melinda Gates Foundation, US\$8 million from USAID, CDN\$5.5 million from the Micronutrient Initiative and CDN\$500,000 from the Canadian International Development Agency. For more information: [www.gainhealth.org](http://www.gainhealth.org)

## Actions Achieve Results:

### Provide supplemental iron

Even if a baby looks healthy, he/she needs supplemental iron from about 6 months through the second year of life. Infants are growing and developing so fast that iron from food is not enough. Supplements in the form of syrup, sprinkles, spreads and tablets are available for children. *Descriptions of iron supplements and guidelines for their usage in children will appear in the next issue of this bulletin.*



Anne Wieder

**If your program serves food to children, try to give items fortified with iron.**

**Increase consumption of iron-rich foods**