Micronutrient malnutrition: it's a women's issue, a human rights issue and a development issue. It's devastating but preventable!

The Micronutrient Initiative
This guide accompanies the video “All We Expect – Nutrition: a basic human right” which is available in English, French and Spanish from:

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About the video

Micronutrient malnutrition is a problem of immense proportion, with devastating effects. Women and girls are particularly vulnerable. But it is preventable: solutions are known, are relatively simple and very economical. Immediate actions are required.

The video points out the significance of micronutrient malnutrition, especially as it affects women. It outlines the effects of three micronutrient deficiencies: iron deficiency, iodine deficiency disorders, and vitamin A deficiency. Some examples of how to overcome the deficiencies are given, and the need for immediate action to expand on these efforts is emphasized. Suggestions are offered on how to initiate further actions.

The video addresses policy-advisors and decision-makers in government and in nongovernmental organizations (NGOs); food industry executives; and health, agriculture and education professionals. The video would also interest the general public and is available in broadcast-quality format.

How to effectively use the video

Use the video as a tool to initiate thought, and stimulate questions and discussion. Encourage the viewers to assess their own potential to contribute, and that of their organizations, in helping to end micronutrient malnutrition.

Watch the video yourself, and go through this guide. Familiarize yourself with the terms used and actions that can be taken to eliminate micronutrient deficiencies; then organize a group viewing for your colleagues and associates. After the group has seen the video, talk about the problem, the solutions, and the need for action. Use the “Discussion Starters” (later in this guide) to raise questions and generate ideas. You might find it helpful to show the video again, or parts of it, to aid the discussions.

Make copies of the “Action Starters!” section of this guide, and distribute the pages to viewers.

All viewers can list:
• their own multiple roles in life;
• actions they can take through these roles;
• what the organizations they belong to can do;
• people they know who can help; and
• more “action” ideas of their own.

Then MOBILIZE ... put ideas into ACTION!

Your action strengthens the movement to end micronutrient malnutrition!
Micronutrient malnutrition is devastating

Over two billion people are affected by micronutrient malnutrition. The majority is female.

Micronutrient malnutrition is a socio-economic and a health problem. The lifelong effects of these deficiencies have an immense detrimental impact on girls and women — on their physical and mental development, their livelihood and productivity, reproductive outcomes, and even their survival.

Micronutrients are the vitamins and minerals that our bodies and minds need in order to function fully. They're called micronutrients because they are needed in only small amounts. But that small amount can make a huge difference.

The persistent shortage of three micronutrients — iron, iodine, and vitamin A — has the following effects:

Iron deficiency: debilitating fatigue and exhaustion; anemia; pregnancy complications; increased risk of maternal mortality; decreased work capacity; and diminished learning potential.

Iodine deficiency: impaired physical coordination and learning ability; goitre; apathy; physical and mental disabilities.

Vitamin A deficiency: nightblindness; total blindness; decreased resistance to infections; and increased child deaths.

Micronutrient malnutrition is a hidden hunger ... it often can’t be seen or felt, but it can literally make the difference between life or death.

And it is preventable. The solutions are at hand, are relatively simple and are economical. In fact, the benefits far outweigh the costs. We have the knowledge, the resources, and the technologies. All we need is action.
We know the solutions. Act now!

The fundamental causes of micronutrient malnutrition in women of all ages include poverty, gender discrimination and inadequate public health measures. While a national strategy proceeds to address the alleviation of poverty and the development of the health care system, specific micronutrient programmes must be promoted. We have the know-how and steps must be taken. These steps are the focus of the video and include strategies such as:

- dietary improvement;
- fortification of commonly-eaten foods; and
- supplementation.

These strategies (together with public health measures) for the correction of micronutrient deficiencies are technically well-defined and are economical. The challenge, therefore, is not mainly technical, but social – to assign priority to the problem of micronutrient malnutrition, allocate the resources needed, and create demand, motivation and sustained commitment.

We can end hidden hunger while working to end poverty — so, act NOW!

Dietary Improvement - In the long term, the solution to ending hidden hunger lies with dietary improvements. Nutrition communication and education interventions encourage people to adopt good dietary practices and sustain them. The production and promotion of nutrient-rich foods is emphasized. For example, growing vegetables, legumes, and/or raising livestock or poultry, for household use or sale, can be encouraged. Cooking methods that maximize nutritional benefits can be promoted. Programmes to support breastfeeding need to be encouraged, since breastmilk is an important source of nutrients, even into the second year of life. Often though, there are economic and practical obstacles that hinder the adoption of desirable food and nutrition behaviours, so attention needs to be paid to them.

Fortification - Adding nutrients to commonly-eaten foods has helped eliminate vitamin and mineral deficiencies in industrialized countries. Salt iodization is one example; many other foods can be fortified with iodine, iron, and/or vitamin A (e.g., flour, cereals, oils).

Iodization – general term covering iodization programmes using various agents (e.g., iodide or iodate), and foods (salt, oil, bread, water).

Iodized salt – salt to which potassium iodate or iodide has been added, to levels set by government standards.
For each country situation, both the ‘right’ food and the specific vitamin or minerals to be added to it should be identified. The right food is one which is centrally produced, and is consumed regularly and in relatively constant amounts by everyone. Its characteristics are not changed by fortification and the food is generally acceptable to consumers. The key to a successful fortification program that can be sustained is creation of consumer demand for nutritious foods – natural or fortified – and their acceptance of such products.

Supplementation - Supplementation with micronutrients is often done to prevent or control deficiencies. Supplementation is the provision of nutrients in capsule, tablet, injectable or liquid form. It can be beneficial and even necessary as an immediate, short term measure. The safety of giving nutrients has been addressed by expert technical groups, and recommendations and guidelines are available for iron, iodine and vitamin A programmes. For example, giving vitamin A supplements in areas at risk of vitamin A deficiency to infants after 6 months of age, and to mothers within 6 weeks of delivery is widely supported. Iron supplementation is often recommended in developing countries to all high-risk groups (e.g., pregnant women, infants and children under two years) in areas with a high prevalence of anemia. For information on dosing amounts and frequency of administration refer to WHO, IVACG, INACG and ICCIDD publications; for information see “Some Key Organizations”.

The elimination of IDD through the use of iodized salt costs as little as US $0.05 cents per year.
Promises have been made! Political actions are needed!

Governments have a political obligation to take action against micronutrient malnutrition.

At three major international conferences – the World Summit for Children in 1990, the Ending Hidden Hunger Conference in 1991, and the International Conference on Nutrition in 1992 – most governments made a commitment to achieve these goals by the year 2000:
- virtual elimination of iodine deficiency disorders;
- virtual elimination of vitamin A deficiency; and
- reduction of iron deficiency anemia in women by one-third of the 1990 levels.

Are these promises being kept?

Governments must allocate resources – human, financial and organizational – to improve nutrition. A number of ministries – planning, health, education, agriculture, information, trade, etc. – can play a role. Political support is needed at all levels – from the national to local levels.

- Bilateral and multilateral development assistance agencies can all support social programmes and actions to eliminate micronutrient malnutrition.

- People can urge governments to keep their promises. Some possible actions:
  - Actively promote public policies that support nutritional improvement. Make your views heard through activities like lobbying, writing letters to politicians, and using the media to communicate information about micronutrient malnutrition.
  - Advocate that poor people’s organizations be involved in decision-making on nutritional issues.
  - Volunteer your time to work with anti-hunger advocacy organizations.
  - Expand and strengthen anti-hunger advocacy activities.
  - Organize public discussion about the role of politics in solving the micronutrient malnutrition problem.
Discussion Starters

• What are the three nutrient deficiencies discussed in the video?

• Why are these nutrients called micronutrients?

• What is meant by “hidden hunger”?

• Why/how is nutrition related to:
  • economic status ...
  • education ...
  • gender?

• Is micronutrient malnutrition a problem in your community/country? If not, why not? If it is, why?

• What steps have been taken to help prevent or eliminate micronutrient malnutrition in your community/country? Have any of these steps been taken by an organization in which you are a member?

• What strategies – or combination of strategies – against micronutrient deficiencies need to be established or strengthened in your country?

• How can you contribute to efforts to eliminate micronutrient malnutrition?

• Are you employed by the government? Are you a member of a nongovernmental organization (NGO), the media, the food industry, a labour group, a citizen’s group, service club or organized group of any kind? Are you a politician, policy-advisor, human rights activist, student, or professional—for example, in the field of health, law, economy, education, religion, science, or communication?

• How can you, and your colleagues and associations become resources and springboards for action?

• What strategies could you play a part in, to help end micronutrient malnutrition?

• What projects can you initiate to support actions against micronutrient malnutrition?

• Are you part of a group involved in programmes in health, education, agriculture, rural development, poverty reduction, or women’s programmes? Are nutritional concerns integrated into your programmes? If not, how could they be incorporated?

Iron supplementation of anemic women results in an improved sense of vitality and well-being, can reduce pregnancy complications, increase work capacity and increase take-home pay.
There is a role for everyone

Micronutrient malnutrition touches, and is touched by, many facets of life; therefore, diverse actions are needed to deal with it effectively. There is a real need for actions by government, and by nongovernmental organizations, community groups and the food industry, amongst others.

There is a role for everyone - public and private sector: government ministries and agencies, politicians, policy advisors, bilateral aid agencies, non-governmental organizations, food industry, trade unions, professional groups, educators, researchers, economists, agriculturalists, media, anti-poverty organizations, religious communities, citizen’s groups, student associations, peace and justice organizations, children’s group leaders, women’s groups, and others.

Alliances can be formed to build a stronger movement to end hidden hunger. Play a role as part of this large, potentially powerful movement. Learn about other committed individuals and groups. Explore ways of collaborating with them, or learning from their efforts.

Action Starters!

Ending hidden hunger requires the full participation of a range of organizations, both public and private, national and international. No single group can do it alone; no single action is enough.

Examples of possible actions are listed below. Examine them carefully to see how many apply to you and your organization. Maybe you can think of others.

- Build on existing programmes - like agriculture, rural development, health, education, and women’s programmes - and integrate nutritional considerations.

- Design health programmes so that iron deficiency is addressed. Iron deficiency is so prevalent in women and children that a health programme that does not give high visibility to anaemia control is seriously deficient.
• Make sure that health practitioners understand situations when supplements are needed, and dosage schedules.

• Encourage policies and promote values that foster workplace support of activities like breastfeeding, anemia prevention and control, and other health and nutrition services for workers.

• Exercise your power to influence, educate and motivate others.

• Urge legislation to ensure that salt is iodized, and priced to be accessible to the poor.

• Support programmes that assist women in their efforts to produce food for their families and for sale, such as:
  • gardening projects;
  • programmes to preserve nutrient-rich foods for year-round availability; and
  • programmes providing education and financial credit to women for raising livestock, cultivating nutrient-rich foods, and selling their products.

• Design food aid programmes that add micronutrients to basic commodities. Flour, oil, and condiments can be fortified with iron as well as iodine and vitamins.

• Improve supply management and the capacity to deliver supplements, and increase coverage of at-risk groups. Explore potential channels for the delivery of supplements, including school visits, workplace programmes and nutritional safety net programmes. Advocate the provision of direct services, such as iron tablets for pregnant women, and vitamin A supplements for children with measles.

• Include micronutrient information in your educational programmes.

• Include the topic of micronutrient malnutrition in your school curriculum.

• Test salt for the presence of iodine; it's fast and easy. It can be part of classroom activities, student projects, or done in the workplace, or anywhere you can inform the public about iodine deficiency disorders.
• Inform and educate people in high-risk areas so they learn to recognize the effects of micronutrient deficiencies, and ways to overcome them. Health and agricultural workers, teachers, NGOs, and media can all spread the message. Use public information and educational campaigns, and face-to-face education to teach the importance of proper diet, the consumption of nutrient-rich foods, including fortified foods, and the benefits of breastfeeding.

- The benefits of breastmilk as an important source of nutrients, even into the second year of life, must be made more widely known.

• Improve health system management, focusing on training health workers in the prevention and management of micronutrient deficiencies, increasing community outreach, and designing effective nutrition education programmes.

- Provide training about micronutrients for agricultural workers, teachers and others.

• Work toward the fortification of commonly-eaten foods - such as salt, flour, cereals, oils, and margarine - with micronutrients.

Food Producers: Find out what's needed to make fortification part of your production process - then do it.

Scientists: Research foods that would be appropriate vehicles for fortification.

Food vendors: Demand accessibility of fortified foods - such as iodized salt - and use/market them.

Governments: Set food standards and establish regulations. For example, pass legislation and implement regulations to support universal salt iodization.

- Communicate the science that is known to those who can act on it.

Work with the media

- Work with the media to communicate information about micronutrient malnutrition.

• Use all communication channels - from the mass media to conferences and popular forms of cultural expression - to exchange ideas and information. Enlist the support of artists, musicians and actors. Use newspapers, television,
radio, NGO newsletters, theatre, children's fairs, etc.; there are so many ways to spread the message.

- Use multilateral and bilateral aid to support social programmes and actions to eliminate micronutrient malnutrition. Development assistance agencies can help with programme design and financing.

- Communicate across disciplines and professional circles.

- Food and agricultural policies need to consider the nutritional quality of the food supply and promote the production, marketing and consumption of micronutrient-rich foods.

- Learn about and benefit from the experiences of other committed individuals and groups.

- Gain the support of the media, politicians and people in positions of power.

- Create strong national and international networks.

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**Some Key Resources**


*Ending Hidden Hunger*. A 20-minute video produced by Bedford Productions for UNICEF/WHO. Available in English, French and Spanish, on PAL, NTSC, SECAM formats. For a copy (US $10 plus postage and handling) contact: Bedford Productions Ltd., 6th Floor, 6 Vigo Street, London, W1X 1AH, UK; Tel: (71) 287-9928; Fax: (71) 287-9870


ICCIDD. March 1995. ICCIDD Notes. An excellent compilation of a wide range of resources (books, brochures, reports, audiovisuals). Available from: ICCIDD Focal Point, Tulane University School of Public Health and Tropical Medicine, 1501 Canal Street, Ste. 1300, New Orleans, Louisiana 70112 USA. Fax: (504) 585-4090: e-mail: lcihd@mailhost.tcs.tulane.edu


Some Key Organizations

Administrative Committee on Coordination/Sub-Committee on Nutrition of the United Nations (ACC/SCN). A focal point for harmonizing the United Nations system's policies and activities in nutrition. The SCN compiles and distributes nutrition information (including an excellent newsletter, SCN News, and has produced a number of publications that focus on women and nutrition) and sponsors technical meetings. Contact: ACC/SCN, c/o WHO, 20 Avenue Appia, CH-1211 Geneva 27, Switzerland; Tel: (41 22) 791 0456; Fax: (41 22) 798 8891.

American Public Health Association (APHA), International Clearinghouse on Infant Feeding and Maternal Nutrition. A centre for information and materials on the health and nutrition of women and children. Clearinghouse provides access to information through its documentation centre; disseminates information to practitioners in the field; strengthens the capacity of field-based organizations to produce and disseminate information; and promotes networking among organizations and individuals. The Clearinghouse produces a bulletin, Mother and Children, three times a year in English, French and Spanish. The feature article in 1994 (Issue 13, No. 1) was on “Combatting anemia in adolescent girls; A report from India”. A fall 1995 issue of Mother and Children is a special issue on women and nutrition. Contact: Clearinghouse, APHA, 1015 5th Street NW, Washington, DC 20005, USA. Tel: (202) 789-5600; Fax: (202) 789-5661.

Asian Vegetable Research and Development Centre (AVRDC). A member of the International Agricultural Research Center network, AVRDC helps set up vitamin A gardens using indigenous foods. A vitamin A home garden has been established that can supply a family of five with 100% of the recommended dietary vitamin A year-round. Contact: AVRDC, PO Box 42, Shanhua, Tainan, Taiwan, Republic of China, 74119.

Bread for the World Institute. An NGO that seeks to inform and motivate concerned citizens for action on policies that affect human nutrition. Produces an annual report on the state of world hunger. Contact: Bread for the World Institute, 1100 Wayne Avenue, Suite 1000, Silver Spring, MD, USA, 20910; Tel: (301) 608-2400; Fax: (301) 608-2401.

Helen Keller International (HKI). A US-based NGO that provides technical assistance to strengthen and expand existing vitamin A programmes. HKI has
produced numerous training materials and publications on vitamin A. Contact: HKI, 90 Washington Street, New York, NY, USA, 10006; Tel: (212) 943-0890; Fax: (212) 943-1220

**International Baby Food Action Network (IBFAN).** Contact: IBFAN, c/o GIFA, CP 157, 1211 Geneva 19, Switzerland.

**International Council for the Control of Iodine Deficiency Disorders (ICCIDD).** An international network of experts dedicated to the control of IDD. Assists with the development of national programmes, provides technical counsel and produces numerous technical reports and a newsletter. Contact: ICCIDD, Avenue de la Fauconnerie 153, B-1170 Brussels, Belgium; Tel: (32 2) 675-8543; Fax: (32 2) 675-1898.

**International Eye Foundation.** An NGO dedicated to the prevention and cure of blindness in developing countries. Operations provide training, equipment and medicines, clinical services, operational research, and development of community-based programmes in 10 countries. Audiovisual materials, resource library, and reference services are maintained. Contact: Laire Isaacson, 7801 Norfolk Avenue, Bethesda, MD, USA, 20814; Tel: (301) 986-1830; Fax: (301) 986-1876.

**International Nutritional Anemia Consultative Group (INACG).** Provides consultative services and advice to operational and donor agencies seeking to reduce nutritional anemia. Publications and guidelines for anemia control programmes are available. Contact: INACG Secretariat, c/o The Nutrition Foundation, Inc., 1126 16th St. N.W., Washington, DC 20036 USA; Tel: (202) 659-9024; Fax: (202) 659-3617.

**International Vitamin A Consultative Group (IVACG).** Provides consultation and guidance to agencies seeking to reduce vitamin A deficiency. Publications, resource materials and programme guidelines available. Contact: IVACG Secretariat, c/o The Nutrition Foundation Incorporated, 1126 Sixteenth Street N.W., Suite 200, Washington, DC 20036 USA; Tel: (202) 659-9024; Fax: (202) 659-3617.

**Micronutrient Initiative (MI).** See inside back cover.

**Mothercare.** Produces numerous publications and guides on maternal health, including training manuals. Contact: Mothercare, c/o John Snow, Inc., 1616 N. Fort Myer Dr., 11th floor, Arlington, VA 22209 USA; Tel: (703) 528-7474; Fax: (703) 528-7480.

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**Fortification has been the most direct strategy to eliminate micronutrient deficiencies in many industrialized countries.**
Programme Against Micronutrient Malnutrition (PAMM). Offers short-term courses to assist national teams working on micronutrient programmes acquire required skills in advocacy, laboratory management, information management, communications and interventions. Also offers technical advice. Contact: PAMM, c/o Centre for International Health, Emory University, School of Public Health, 1518 Clifton Road, N.E., Atlanta, Georgia 30322 USA. Tel: (404) 727-5417/16; Fax: (404) 727-4590.

Teaching Aids at Low Cost (TALC). An NGO dedicated to increasing access to educational materials on health and nutrition, TALC offers an extensive listing of books and slide materials. Contact: TALC, PO Box 49, St. Albans, Herts, UK, AL1 5TX: Tel: (44 1) 727 853869; Fax: (44 1) 727 846852.

United Nations Children’s Fund (UNICEF). A specialized UN agency that aids governments to undertake programmes benefitting women and children. UNICEF produces various publications and documents, and maintains a UNICEF Video, Film and Radio Catalogue. Contact: your national UNICEF office, or UNICEF House, Nutrition Section, Three United Nations Plaza, New York, NY, USA, 10017; Tel: (212) 326-7000; Fax: (212) 326-7336.

World Alliance for Breastfeeding Action (WABA). Formed in February 1991 as a global network of organizations and individuals who believe that breastfeeding is the right of all children and mothers, and who dedicate themselves to protect, promote and support this right. WABA acts on the Innocenti Declaration and works in close liaison with UNICEF. Contact: WABA, P.O. Box 1200, 10850 Penang, Malaysia. Tel: (60 4) 6584 816; Fax: (60 4) 6572 655.

World Alliance for Nutrition and Human Rights. Works in areas such as research, monitoring, education and training, and curriculum on nutrition, ethics and human rights. It has a Steering Committee and a small secretariat. Produces a newsletter. Contact: the WANHR Secretariat, c/o The Norwegian Institute of Human Rights, Grensen 18, N-0159 Oslo, Norway. Tel: (47 2) 411360; Fax: (47 2) 422542.

World Health Organization (WHO) A UN agency that acts as the world’s directing and coordinating authority on questions of human health. WHO maintains offices in most regions of the world. Numerous publications on nutrition are available. Contact: Nutrition Unit, Division of Food and Nutrition, WHO, 20 Avenue Appia, 1211 Geneva 27, Switzerland; Tel: (41 22) 791 4146; Fax: (41 22) 791 4156.
The Micronutrient Initiative Initiative (MI) was established in 1992 as an international secretariat within the IDRC in Canada, by its principal sponsors: Canadian International Development Agency (CIDA), International Development Research Centre (IDRC), United Nations Children’s Fund (UNICEF), United Nations Development Programme (UNDP), and the World Bank.

The MI’s mission is to advance global efforts to eliminate micronutrient malnutrition. The MI supports programmes to achieve by the year 2000 the following goals, endorsed by most governments at three international conferences:

- virtual elimination of iodine deficiency disorders;
- virtual elimination of vitamin A deficiency; and
- reduction of iron deficiency anemia in women by one-third of the 1990 levels.

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For every day of delay, another 50,000 infants are born with reduced mental capacity from iodine deficiency; another 300 mothers die in childbirth due to severe anemia; and another 4,000 children die from the effects of vitamin A deficiency.

These are unnecessary tragedies. Proper nutrition is a basic human right.