



Turning the tide of malnutrition

Responding to the challenge of the 21st century



Nutrition, health and human rights

Let us begin with an unequivocal assertion: proper nutrition and health are fundamental human rights. What does this mean? What are the primary links between nutrition and health seen from a human-rights perspective?

Firstly, nutrition is a cornerstone that affects and defines the health of all people, rich and poor. It paves the way for us to grow, develop, work, play, resist infection and aspire to realization of our fullest potential as individuals and societies. Conversely, malnutrition makes us all more vulnerable to disease and premature death.

Secondly, poverty is a major cause and consequence of ill-health worldwide. Poverty, hunger and malnutrition stalk one another in a vicious circle, compromising health and wreaking havoc on the socioeconomic development of whole countries, entire continents. Nearly 30% of humanity, especially those in developing countries – infants, children, adolescents, adults, and older persons – bear this triple burden. This is a travesty of justice, an abrogation of the most basic human rights.

Thirdly, a strong human rights approach is needed to bring on board the millions of people left behind in the 20th century's health revolution. We must ensure that our values and our vision are anchored in human rights law – only then can they become reality for all people.

Ultimately, health and sustainable human development are equity issues. In our globalized 21st century, equity must begin at the bottom, hand in hand with healthy nutrition. Putting first things first, we must also realize that resources allocated to preventing and eliminating disease will be effective only if the underlying causes of malnutrition – and their consequences – are successfully addressed.

This is the “gold standard”: nutrition, health and human rights. It makes for both good science and good sense, economically and ethically. Joined in partnership, we have the means to achieve it.



Gro Harlem Brundtland, MD, MPH

Gro Harlem Brundtland, MD, MPH
Director-General
World Health Organization

What do we mean by *malnutrition*?

Malnutrition means “badly nourished” but it is more than a measure of what we eat, or fail to eat. Clinically, malnutrition is characterized by inadequate intake of protein, energy, and micronutrients and by frequent infections or disease. Nutritional status is the result of the complex interaction between the food we eat, our overall state of health, and the environment in which we live – in short, food, health and caring, the three “pillars of well-being”.

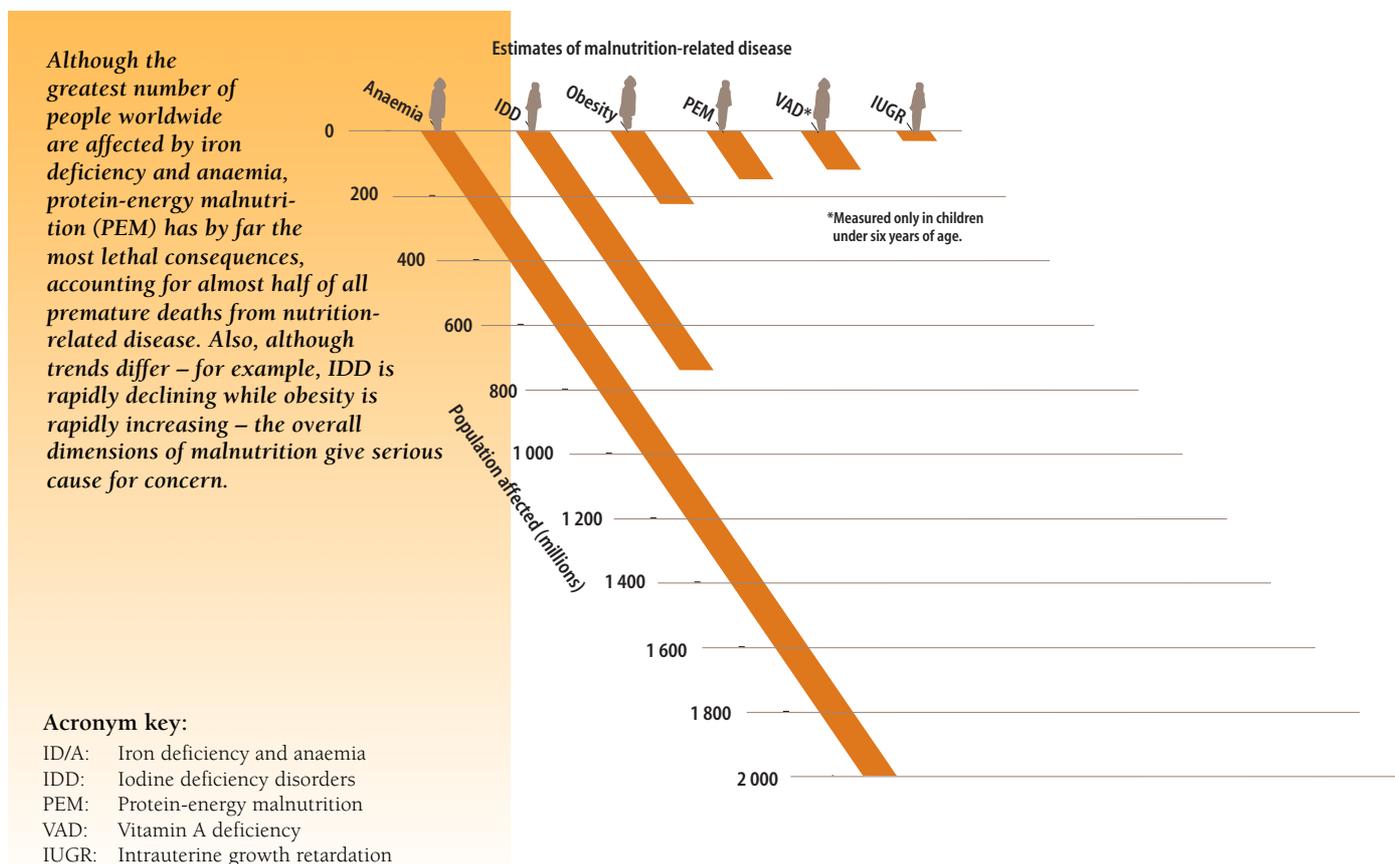
Malnutrition: casting long shadows

Although often an invisible phenomenon, malnutrition casts long shadows, affecting close to 800 million people – 20% of all people in the developing world.

As a result:

- *Malnutrition* kills, maims, cripples and blinds on a massive scale worldwide.
- *Malnutrition* affects one in every three people worldwide, afflicting all age groups and populations, especially the poor and vulnerable.
- *Malnutrition* plays a major role in half of the 10.4 million annual child deaths in the developing world; it continues to be a cause and consequence of disease and disability in the children who survive.
- *Malnutrition* is not only medical; it is also a social disorder rooted in poverty and discrimination.
- *Malnutrition* has economic ripple effects that can jeopardize development.

Dimensions of malnutrition: casting long shadows of disability and death



Determinants of malnutrition

Malnutrition does not develop overnight. Its current dimensions are largely determined by past underdevelopment and discrimination. They, in turn, fuel future downward spirals.

Exacerbated by poverty, malnutrition combines with disease, both chronic and infectious, to form a deadly duo which together can deal a lethal blow to development. The consequences include death, disability, stunted mental and physical growth and, as a result, delayed national development.

Poverty-driven hunger

Compared with the relatively recent past, we live today in a world of abundance. Improved health and increasing agricultural productivity in the 20th century have catalyzed unprecedented social and economic transformations. Today there is more than enough food for all ... theoretically.

The problem is that food is neither produced nor distributed equitably. All too frequently, the poor in fertile developing countries stand by watching with empty hands – and empty stomachs – while ample harvests and bumper crops are exported for hard cash. Short-term profits for a few, long-term losses for many.

Hunger is a question of maldistribution and inequity – not a lack of food. That is why, despite abundance, hunger hovers; despite progress, poverty persists.



Development-driven obesity

Simultaneously, “globesity” – a swelling global tidal wave of *obesity* and diet-related diseases – threatens to envelop us as globalization changes the nature of the world’s nutrition. Yet another form of malnutrition, development-driven obesity, is emerging among all age and socioeconomic groups, especially in countries caught up in the swiftest societal transition.

As a result, diet-related diseases, such as diabetes, cardiovascular disease, hypertension, stroke, and cancer – previously regarded as “rich men’s diseases” – are now escalating in developing countries, superimposed on precarious health systems already buckling under the double weight of communicable and other non-communicable diseases.

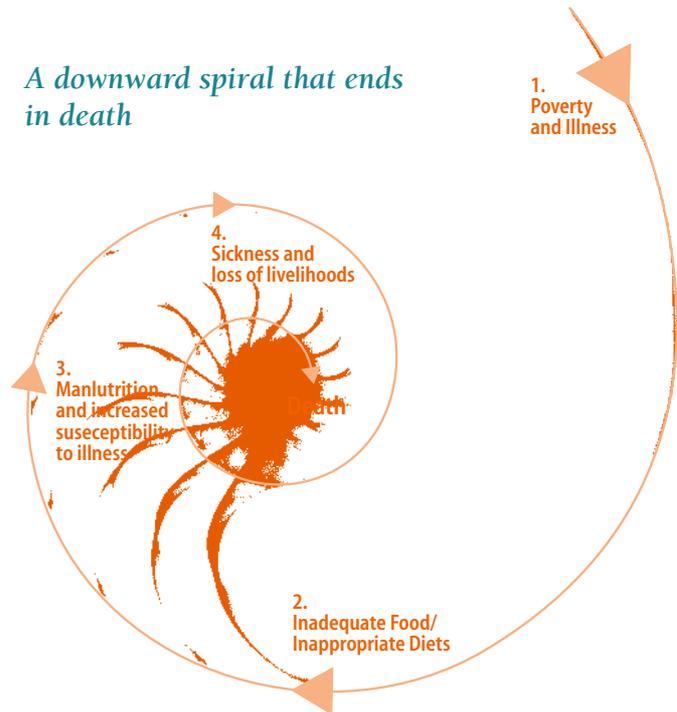


Downward spiral

Malnutrition is the single most important risk factor for disease. When poverty is added to the picture, it produces a downward spiral that may end in death. At the personal level:

- Poor people may eat and absorb too little nutritious food, making them more disease-prone.
- Inadequate or inappropriate food leads to stunted development and/or premature death.
- Nutrient-deficient diets provoke health problems; malnutrition increases susceptibility to disease.
- Disease decreases people's ability to cultivate or purchase nutritious foods.
- The downward spiral of poverty and illness can end in death.

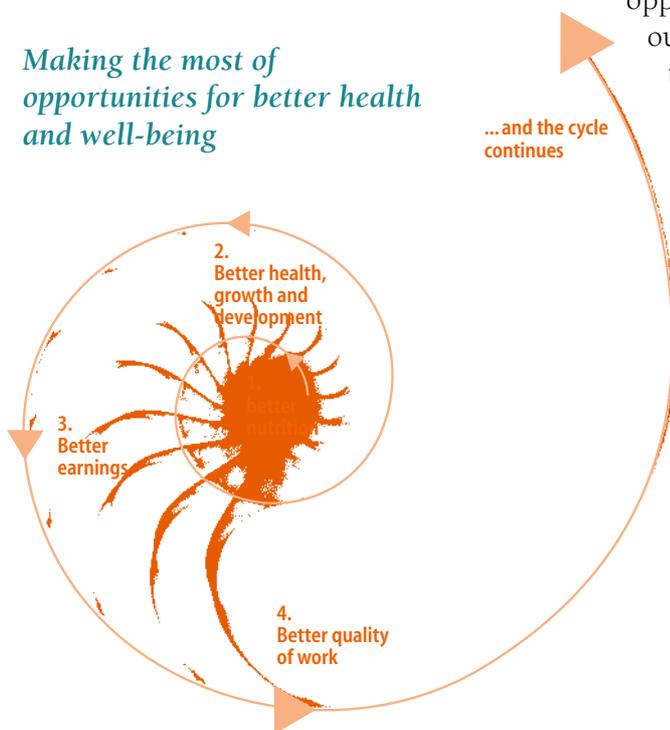
A downward spiral that ends in death



Turning the tide of malnutrition

This need not be so. Better nutrition is a prime entry point to ending the malnutrition maelstrom. Better health means stronger immune systems which means less illnesses. Healthy people feel stronger, can work better and may have more earning opportunities to gradually lift them out of both poverty and malnutrition. Healthier, more productive societies are a potential outcome.

Making the most of opportunities for better health and well-being



Alleviating protein-energy malnutrition

The challenge:

Protein-energy malnutrition (PEM) is by far the most lethal form of malnutrition. Children are its most visible victims. Malnutrition, “the silent emergency,” is an accomplice in at least half of the 10.4 million child deaths each year. These young lives are prematurely – and needlessly – lost.

First recognized in the 20th century, PEM’s full impact has been revealed only in recent decades. Infants and young children are most susceptible to PEM’s characteristic growth impairment because of their high energy and protein needs and their vulnerability to infection.

Globally, children who are poorly nourished suffer up to 160 days of illness each year.

Malnutrition magnifies the effect of every disease.

A FEW SALIENT FACTS

- Protein-energy malnutrition (PEM) affects every fourth child worldwide: 150 million (26.7%) are underweight while 182 million (32.5%) are stunted.
- Geographically, more than 70% of PEM children live in Asia, 26% in Africa and 4% in Latin America and the Caribbean. Their plight may well have begun even before birth with a malnourished mother.



Kwashiorkor: Sudden food deprivation due to natural or manmade emergencies produces a

condition known as kwashiorkor. Apathy, swelling (oedema) of the extremities, torso and face, cracked, peeling, infection-prone skin and unnaturally blond, sparse hair are its visible characteristics.



Marasmus: This child was a low-birth-weight baby who remains chronically malnourished. As a result, fat and muscle

tissue are depleted, and the skin hangs in loose folds with the bones clearly visible beneath. Hyper-alert and ravenously hungry, this child’s severe wasting makes him look like a wrinkled old man long before his time.

The response: managing severe malnutrition

The clinical management of moderate and severe protein-energy malnutrition in children remains ineffective in many parts of the world. Mortality rates of 30% are not uncommon; yet, with adequate management, these rates can be reduced to less than 5%. WHO has produced comprehensive step-by-step guidelines on how best to treat, in a clinical setting, and restore to health the severely malnourished child. These guidelines are being promoted for adaptation and use worldwide in simple learning modules for physicians, nurses, indeed all front-line health workers.



A new global growth curve for the 21st century

Never before has a nutrition research project of this magnitude been undertaken. Unique because of its unprecedented scope and expected benefits, creating a new globally applicable growth curve will establish a new universal standard for infants and young children to guide their nutrition, health, growth and development through the 21st century.

Since the 1970s, WHO has recommended a standardized international growth reference which compares a child's growth in terms of weight and height with a proper benchmark.

Now, in collaboration with several international and national institutions, we are spearheading an international study to recalculate and overhaul the existing curve. The 4-year multicentre study, which began in 1999, involves 10 000 infants and children, includes both longitudinal and cross-sectional components, and involves over a quarter of a million individual infant follow-ups. Participating mothers must also abide by stringent requirements, exclusively or predominantly breastfeeding their

babies for 4-6 months with continued supplementary breastfeeding for up to 2 years.

Because this growth curve will eventually be used in every country of the world, six diverse study sites have been carefully chosen in Africa (Ghana), North America (USA), South America (Brazil), South-East Asia (India) and the Middle East (Oman). This project receives major support from the governments of Brazil, Canada, Norway, Netherlands, Oman and the USA. Other partners include the United Nations University and UNICEF.



MICRONUTRIENT DEFICIENCIES

A little means a lot: the impact of micronutrient deficiencies

Called “micronutrients” because they are needed in only minuscule amounts, these substances are the “magic wands” that enable the body to produce enzymes, hormones and other substances essential for proper growth and development. As tiny as the amounts are, the consequences of their absence are severe. Iodine, vitamin A and iron are most important in global public health terms; their lack represents a major threat to the health and development of populations the world over, particularly to preschool children and pregnant women in low-income countries.

Eliminating iodine deficiency disorders

The challenge

Iodine Deficiency is the world’s most prevalent – yet easily preventable – cause of brain damage. Today we are on the verge of eliminating it – an achievement that will be hailed as a major public health triumph, ranking together with smallpox and poliomyelitis.

Iodine deficiency disorders (IDD) jeopardize children’s mental health – often their very lives. They start before birth. Serious iodine deficiency during pregnancy may result in stillbirths, abortions and congenital abnormalities such as cretinism, a grave, irreversible form of mental retardation that affects people living in iodine-deficient areas of Africa and Asia. However, of far greater global and economic significance is IDD’s less visible, yet more pervasive, level of mental impairment that lowers intellectual prowess at home, at school and at work.

A FEW SALIENT FACTS:

- IDD affects over 740 million people, 13% of the world’s population; 30% of the remainder are at risk.
- IDD preys upon poor, pregnant women and preschool children, posing serious public health problems in 130 developing countries.
- Iodine-deficient people may forfeit 15 IQ points.
- Nearly 50 million people suffer from some degree of IDD-related brain damage.
- Yet we have the means to prevent it – small quantities of iodine at low cost.



IODIZED SALT

Minimal costs for maximum benefits

Five US cents a year and a teaspoon of iodine for a lifetime – a small price to pay for protection against the devastating effects of iodine deficiency.

The elimination of iodine deficiency worldwide promises to be one of the greatest global public health triumphs of the coming decades.

The response: iodized salt

A spectacularly simple, universally effective, wildly attractive and incredibly cheap technical weapon – IODIZED SALT.

Less than 20 years ago, few people realized the magnitude of the problem, let alone the solution. However, since the 1980s, WHO has been at the forefront of a worldwide public health drive to eliminate this under-publicized yet devastating deficiency. The Department of Nutrition for Health and Development (NHD) provides both technical tools – scientifically sound standards, guidelines and methodologies – and guidance to build up countries' national salt iodization programmes.

Partnerships have been crucial to turning the tide against IDD. Alliances with UNICEF, ICCIDD (International Council for Control of Iodine Deficiency Disorders), international and bilateral agencies and the salt industry have helped countries to put permanent national salt iodization programmes firmly in place.

Progress has been dramatic since the primary intervention strategy for IDD control – Universal Salt Iodization (USI) – was adopted in 1993. Salt was chosen because it is widely available and consumed in regular amounts throughout the year, and because the costs of iodizing it are extremely low – only about US\$ 0.05 per person per year.

Where salt iodization has been in place for over five years, improvement in iodine status has been overwhelming.

Over the last decade, the number of countries with salt iodization programmes doubled, rising from 46 to 93. As a result, today:

- 68% of the 5 billion people living in countries with IDD have access to iodized salt;
- The global rates of goitre, mental retardation and cretinism are falling fast.



Iodizing table salt is one of the best and least expensive methods of

preventing IDD. The target is the elimination of IDD through universal salt iodization.

Combating vitamin A deficiency

The challenge

Vitamin A deficiency (VAD) is the leading cause of preventable blindness in children and raises the risk of disease and death from severe infections. In pregnant women VAD causes night blindness and may increase the risk of maternal mortality.

Vitamin A deficiency is a public health problem in 118 countries, especially in Africa and South-East Asia, once again hitting hardest young children and pregnant women in low-income countries.

Crucial for maternal and child survival, supplying adequate vitamin A in high-risk areas can significantly reduce mortality. Conversely, its absence causes a needlessly high risk of disease and death.



SAVING ORISSA'S CHILDREN

Bright saris and stifling, crowded rural rooms. India's mind-boggling logistics: posterizing every wall, training hundreds of helpers, supplying remotest communities. What happens here is played out 19 000 times today in each "booth": children standing in long lines, receiving polio drops, having liquid vitamin A spooned into their mouths. What makes Orissa's National Immunization Day 1999 so special? It's the first Indian state to combine vitamin A supplementation and polio immunization. All day long... by sunset images blur together: bright green fields, white-clad village teacher, young children in siblings' arms, fathers with infants, a child with measles, the maps, the ice boxes, the palpable determination of health workers and volunteers to reach all targeted children in the entire state – that's over 4 million – in just three days.

One week later, in October 1999, a massive cyclone hit Orissa, devastating its homes, villages and roads. Its vitamin A distribution just days before may have helped stave off the infection and disease which followed.

- For *children*, lack of vitamin A causes severe visual impairment and blindness, and significantly increases the risk of severe illness, and even death, from such common childhood infections as diarrhoeal disease and measles.
- For *pregnant women* in high-risk areas, vitamin A deficiency occurs especially during the last trimester when demand by both the unborn child and the mother is highest. The mother's deficiency is demonstrated by the high prevalence of night blindness during this period. VAD may also be associated with elevated mother-to-child HIV transmission.

A FEW SALIENT FACTS

- Between 100 and 140 million children are vitamin A deficient.
- An estimated 250 000 to 500 000 vitamin A-deficient children become blind every year, half of them dying within 12 months of losing their sight.
- Nearly 600 000 women die from childbirth-related causes each year, the vast majority of them from complications which could be reduced through better nutrition, including provision of vitamin A.

The impact of this single supplementation on childhood mortality is as great or greater than that of any one vaccine – and it costs only a couple of cents a dose.

The response: planting the seeds, cultivating the garden

WHO's goal is the worldwide elimination of Vitamin A Deficiency (VAD) and its tragic consequences, including blindness, disease and premature death. To successfully combat VAD, short-term interventions and proper feeding in infancy must be backed up by long-term sustainable solutions. The arsenal of nutritional “well-being weapons” includes a combination of breastfeeding and vitamin A supplementation, coupled with enduring solutions, such as the promotion of vitamin A-rich diets and food fortification.

Planting the seeds. The basis for lifelong health begins in childhood. Vitamin A is a crucial component:

- **Breastfeeding.** Breast milk is a natural source of vitamin A. Promoting breastfeeding is the best way to protect babies from VAD.
- **Vitamin A supplementation.** For deficient children, the periodic supply of high-dose vitamin A in swift, simple, low-cost, high-benefit interventions has also produced remarkable results, reducing mortality by 23% overall and by up to 50% for acute measles sufferers.

“Planting these seeds” between 6 months and 6 years of age can reduce overall child mortality by a quarter in areas with significant VAD. However, because breastfeeding is time-limited and the effects of vitamin A supplementation capsules last only 4-6 months, neither are long-term solutions. Rather, they should be seen as initial steps towards better overall nutrition.

Cultivating the garden. Both literally and figuratively, the next phase is necessary for long-term results:

- **Food fortification.** Taking over where supplementation leaves off, food fortification (e.g. sugar in Guatemala) maintains vitamin A status, especially for high-risk groups and needy families.
- **Home gardens.** For vulnerable rural families (e.g. in Africa and South-East Asia), growing fruits and vegetables in home gardens complements dietary diversification and fortification and contributes to better lifelong health.



Partnerships for progress. In 1998 WHO and its major partners – UNICEF, the Canadian International Development Agency (CIDA), the US Agency for International Development (USAID) and the Micronutrient Initiative (MI) – launched the Vitamin A Global Initiative. In addition, over the past few years, WHO, UNICEF and other partners have provided support to countries to deliver vitamin A supplements through immunization programmes. For example, in 1998 alone, vitamin A supplements were delivered through national immunization days to children in 40 countries.

Battling iron deficiency anaemia

The challenge

Iron deficiency is the most common nutritional disorder in the world. The numbers are staggering: as many as 4-5 billion people, 66-80% of the world's population, may be iron deficient; 2 billion people – over 30% of the world's population – are anaemic, mainly due to iron deficiency, and in developing countries, frequently exacerbated by malaria and worm infections.

A FEW SALIENT FACTS

- Iron deficiency is the main cause of anaemia; both affect all age groups.
- Nine out of ten anaemia sufferers live in developing countries; on average, every second pregnant woman and four out of ten preschool children are anaemic.
- In many developing countries, iron deficiency anaemia is aggravated by worm infections, which cause blood loss to some 2 billion people worldwide; and malaria, which affects 300-500 million people. In endemic areas, malaria may be the primary cause of half of all severe anaemia cases.
- For children, health consequences include premature birth, low birth weight, infections and elevated risk of death. Later physical and cognitive development are impaired, resulting in lowered school performance. For pregnant women, anaemia contributes to 20% of all maternal deaths.

Iron deficiency affects more people than any other condition, constituting a public health condition of epidemic proportions. More subtle in its manifestations than, for example, protein-energy malnutrition, it exacts the heaviest overall toll in terms of ill-health, premature death and lost earnings.

Iron deficiency and anaemia reduce the work capacity of individuals and entire populations, bringing serious economic consequences and obstacles to national development. Conversely, treatment can raise national productivity levels by 20%. Overall, it is the most vulnerable, the poorest and the least educated who are disproportionately affected by iron deficiency, and it is they who stand to gain the most by its reduction.



This father and daughter, both suffer from anaemia and iron deficiency.

The daughter's extreme fatigue and pale tongue are clear signs of anaemia.

Eliminating iron deficiency anaemia will demand truly courageous efforts from the international community and governments of the world. It is time to act.

The response: a three-pronged offensive

Invisible yet ubiquitous in many developing countries, the true toll of iron deficiency and anaemia lies hidden in the statistics of overall death rates, maternal haemorrhage, reduced school performance and lowered productivity.

It need not be so ...

Iron deficiency anaemia affects millions. The health consequences are stealthy but devastating, invisibly eroding the development potential of individuals, societies and national economies. This need not be so. We not only know the causes; we also have solutions that are both inexpensive and effective.

Because of their close linkages, iron deficiency and anaemia must be tackled simultaneously using a multidisciplinary approach tailored to specific circumstances. The comprehensive intervention package features:

- **Increased iron intake.** Iron supplements, iron-rich diets, increasing iron absorption and fortification.
- **Infection control.** Public health measures to control hookworm infections, malaria and schistosomiasis.
- **Improved nutritional status.** Control of major nutrient deficiencies, diet diversification and infection prevention.



The benefits are substantial. Timely treatment can restore personal health and raise national productivity levels by as much as 20%. To assist countries in combating anaemia, WHO has developed guidelines on prevention and control of iron deficiency and anaemia together with a manual for assessing the magnitude of this problem and monitoring interventions.

WHO has also developed a comprehensive package of public health measures addressing all aspects of both iron deficiency and anaemia. This package is being implemented in countries like the United Republic of Tanzania that have high levels of iron deficiency and anaemia, malaria, helminth infections and schistosomiasis.

WHY STOP IRON DEFICIENCY ANAEMIA?

Because iron deficiency anaemia drains the life and vitality out of development.

We have both the means and potential for widespread improvement.

Controlling the global obesity epidemic

The challenge

At the other end of the malnutrition scale, obesity is one of today's most blatantly visible – yet most neglected – public health problems. Paradoxically coexisting with undernutrition, an escalating global epidemic of overweight and obesity – “globesity” – is taking over many parts of the world. If immediate action is not taken, millions will suffer from an array of serious health disorders.

Obesity is a complex condition, one with serious social and psychological dimensions, that affects virtually all age and socioeconomic groups and threatens to overwhelm both developed and developing countries. In 1995, there were an estimated 200 million obese adults worldwide and another 18 million under-five children classified as overweight. As of 2000, the number of obese adults has increased to over 300 million. Contrary to conventional wisdom, the obesity epidemic is not restricted to industrialized societies; in developing countries, it is estimated that over 115 million people suffer from obesity-related problems.

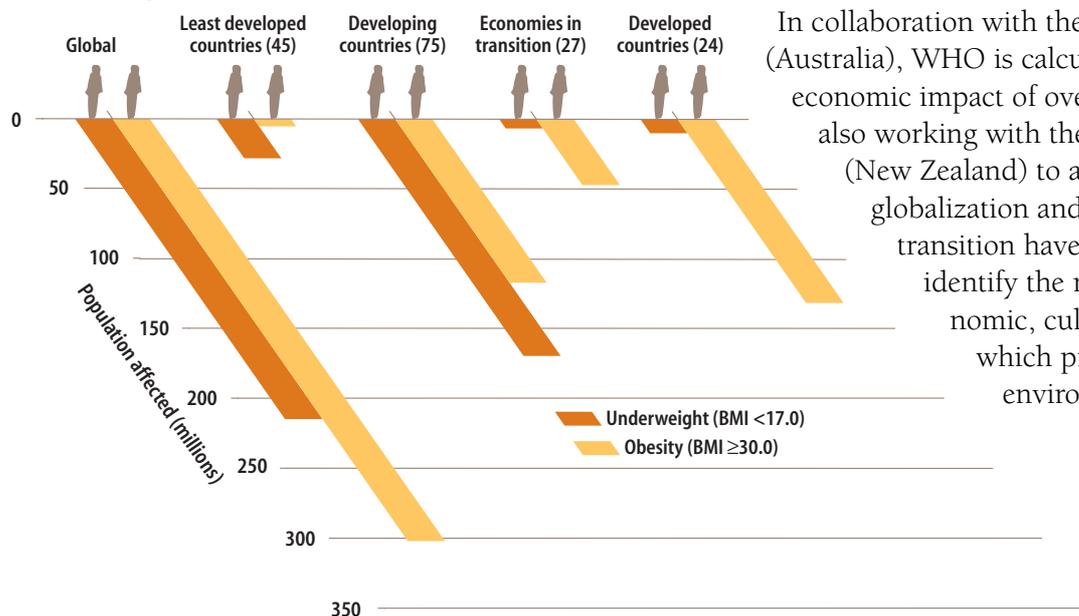
Generally, although men may have higher rates of overweight, women have higher rates of obesity. For both, obesity poses a major risk for serious diet-related noncommunicable diseases, including diabetes mellitus, cardiovascular disease, hypertension and stroke, and certain forms of cancer. Its health consequences range from increased risk of premature death to serious chronic conditions that reduce the overall quality of life.

The response: making healthy choices easy choices

WHO began sounding the alarm in the 1990s, spearheading a series of expert and technical consultations. Public awareness campaigns were also initiated to sensitize policy-makers, private sector partners, medical professionals and the public at large.

Aware that obesity is predominantly a “social and environmental disease”, WHO is helping to develop strategies that will make healthy choices *easier* to make.

Adult population affected by underweight and obesity by level of development (estimates for the year 2000)



In collaboration with the University of Sydney (Australia), WHO is calculating the worldwide economic impact of overweight and obesity. It is also working with the University of Auckland (New Zealand) to analyse the impact that globalization and rapid socioeconomic transition have on nutrition and to identify the main political, socioeconomic, cultural and physical factors which promote obesogenic environments.

Promoting proper feeding for infants and young children

The challenge

Nutrition and nurturing during the first three years are both crucial for lifelong health and well-being. In infancy, no gift is more precious than breastfeeding; yet barely one in three infants is exclusively breastfed during the first four months of life.

Faulty feeding practices begin with giving any other nourishment but breast milk before complementary feeding is nutritionally required – or with substituting entirely for breast milk, which places babies at risk of illness, even death. When complementary feeding begins, uninformed decisions can also interfere with good nutrition in terms of which foods are given, how much and how often and whether breastfeeding continues, as it should. Nutritionally inadequate or contaminated food, and starting complementary feeding too early or too late are major causes of malnutrition in infants and young children.

The response

To enhance infant-feeding practices, WHO and UNICEF launched the Baby-friendly Hospital Initiative in 1992 as a primary intervention strategy for promoting breastfeeding and strengthening national health systems. The Initiative has been implemented in over 170 countries, and the number of hospitals designated “baby-friendly” had risen from 4 300 in 1995 to more than 16 000 at the end of 1999. As a result, mothers are initiating breastfeeding soon after birth, keeping their babies with them around the clock and not giving them any food or drink other than breast milk unless medically indicated. Since the adoption of the International Code of Marketing of Breast-milk Substitutes in 1981, more than 160 countries have reported to WHO on steps taken to implement it.

The health risks that often arise during the transition from breast milk to consumption of the usual family foods can be avoided through appropriate complementary feeding practices. WHO is intensifying its technical support to improve these practices through multi-level training, assessments, and the preparation of recommendations consistent with the highly effective approach known as the integrated management of childhood illness.



Protecting nutrition in emergencies

The challenge

Emergencies, by their very nature, are complex events. Many are natural in origin; too many are manmade. Worldwide, there were some 21.5 million refugees and displaced persons in 1999 – largely as a result of wars, political turbulence, civil conflict and social unrest (e.g. Afghanistan, the Balkans, Democratic People's Republic of Korea, East Timor, Somalia and Sudan). Add to this the burgeoning number of

victims of natural disasters, such as hurricanes in Honduras, floods in Mozambique, drought in the Sahel, and earthquakes and volcanic eruptions in the Philippines. In the aftermath of all such emergencies, malnutrition runs rampant, exponentially increasing the risk of disease and death.

One poignant example is India's east coast state of Orissa. In October 1999, a series of cyclones devastated the region, killing over ten thousand people and making at least 15 million others temporarily homeless and 2.25 million dependent on external food aid. In helping to contain the health and malnutrition crisis, WHO joined a UN disaster relief team that undertook a rapid assessment of needs and prepared health-related recommendations as part of the joint response.

Besides protein-energy malnutrition, anaemia, VAD and IDD, micronutrient deficiencies such as scurvy, pellagra and beriberi are frequently encountered in populations that are

entirely dependent on food aid. The risks increase in proportion to levels of civil instability, food shortage, inadequate aid delivery and access to health services – all of which are conditions

that the unfortunate victims of complex emergencies have little or no prospect of controlling.

The response

International humanitarian aid agencies and Member States frequently call on WHO to provide assistance with the assessment and management of nutrition needs during emergencies, including capacity building at all levels. NHD responds in part through its normative and standard-setting work, including through:

- provision of manuals and guidelines on managing nutrition in major emergencies; rapid nutritional assessment; prevention and control of scurvy, pellagra and thiamine deficiency; feeding infants and young children; and caring for the nutritionally vulnerable;
- close collaboration with the Office of the United Nations High Commissioner for Refugees (UNHCR), the United Nations Children's Fund (UNICEF), the World Food Programme (WFP), the Food and Agriculture Organization of the United Nations (FAO), the United Nations Development Programme (UNDP) and a number of globally active nongovernmental organizations (NGOs).



Guiding food aid for development

The challenge

Hunger afflicts one in every seven people on Earth. For many households, the need to provide for the next meal is so pressing that the smallest investment of time or energy in tomorrow is practically impossible. For hungry people, survival is a struggle and development an impossible dream.

Women who spend hours each day in search of food, water and firewood are unlikely to attend a prenatal clinic or watch the demonstration of new agricultural technology. Hungry people are unable to take full advantage – perhaps none at all – of opportunities for training, health care, education and credit.

Eradicating hunger cannot be achieved without creating conditions that promote self-reliance. Food aid can act as a vital catalyst among the poorest of the poor who are often bypassed by more mainstream development efforts and left with no bridge to a better life.

The response

Promoting self-reliance through food aid can provide the missing bridge. It can be crucial in breaking the persistent cycle of hunger, poverty and ill-health. When linked to interventions, such as disease control, environmental health and the promotion of good health and nutrition habits, self-reliance can help solve the major causes and contributing factors of malnutrition.

Partnerships. WHO, through its Food Aid for Development (FAD) office, is one of several partners serving in a unique advisory capacity to the World Food Programme (WFP), which began in 1963 as the food-aid arm of the United Nations system. WFP supplies food aid to save lives during emergencies, improve the nutrition and quality of life of vulnerable groups, help build infrastructure, and promote self-reliance among the poor and in communities.

Through its networking, FAD provides a channel for a wide range of WHO expertise in the development and implementation of WFP-assisted programmes. FAD contributes to the elaboration of WFP's policies, operational guidelines and country programmes. FAD thus assists WFP in the identification, formulation and evaluation of supplementary feeding programmes involving schools and maternal and child health care centres and food-for-work programmes. These programmes aim to expand access to safe water and adequate sanitation to food insecure communities.



Pupils at a WFP-assisted school receive their noon meal, prepared by a school staff member and parent volunteers. For many, this is their first meal of the day. Food aid means that more children, especially girls, attend school, giving them more opportunities for a brighter future.

Developing effective food and nutrition policies and programmes

The challenge

Eliminating hunger and malnutrition is technically feasible. The means are there. The challenge lies in generating the requisite political will, developing realistic policies and taking concerted actions nationally and internationally.

During the last decade, there has been a number of attempts to set specific goals and targets for eliminating or reducing various kinds of food and nutrition insecurity and all the major forms of malnutrition. However, progress towards these targets has been lagging far behind of what was intended and a continuation of present trends would leave millions of people undernourished and suffering from all the major forms of malnutrition in the next millenium.

The response

Building on a series of global conferences in the 1990s – especially the 1992 International Conference on Nutrition and the 1996 World Food Summit – countries have developed national nutrition plans and policies in nine major strategic action areas that:

- mainstream nutrition goals into development policies and programmes,
- improve household food and nutrition security,
- protect consumers through improved food quality and safety,
- prevent and manage infectious diseases,
- promote breastfeeding,
- care for the socioeconomically deprived and nutritionally vulnerable,
 - prevent and control specific micronutrient deficiencies,
 - promote appropriate diets and healthy life-styles, and
 - assess, analyse and monitor nutrition situations.

As evidence of the higher priority that governments are giving to nutrition, as of July 2000, 149 (78%) of WHO's Member States had given effect to their commitments while another 17 (9%) had plans and policies under preparation.

Through this globe-spanning initiative, WHO is providing technical and financial support for the development and implementation of national policies and programmes that effectively address food and nutrition problems that are influenced by rapid change in today's world and successfully meet tomorrow's nutrition challenge.

IMPROVING HOUSEHOLD FOOD AND NUTRITION SECURITY FOR THE VULNERABLE

A WHO multicountry study

WHO sees household food and nutrition security as a basic human right. Since 1995, NHD has been undertaking a multicountry study in China, Egypt, Indonesia, Ghana, Myanmar and South Africa. Bringing together experts from fields as diverse as nutrition, anthropology, sociology, psychology, agricultural economics, economic geography, communication and education, this study is examining malnutrition's main causal factors. On this basis, guiding principles will be prepared for protecting the nutritional needs of the most vulnerable and enhancing understanding of women's productive, reproductive, nurturing, educational and economic roles.



World Health Organization: focus on nutrition

Vision

Anchored in our belief in the intrinsic value of human life and in the importance of human and national development, our vision is one of a world in which all people – without distinction as to age, sex, race, religion or political conviction – enjoy their fundamental rights to freedom from hunger and malnutrition and to adequate, nutritionally sound and environmentally safe and sustainable food.

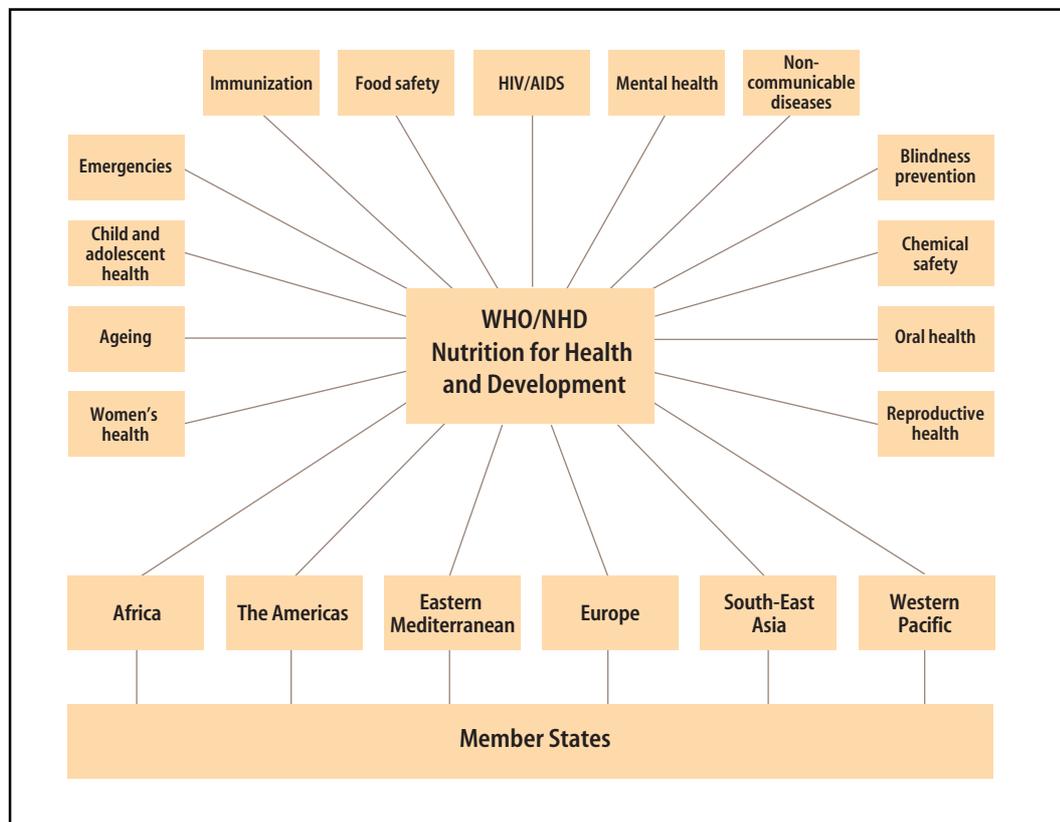
Mission

Our mission is to promote the enjoyment of the highest attainable standard of health as one of the fundamental rights of every human being.

Position

Nutrition has been a core component of WHO's work since the Organization's founding in 1948. Acutely aware of nutrition's crucial role for the survival and well-being of all people, WHO supports its 191 Member States via its global and regional structure and through a host of external partners. It provides science-based policy and programme guidance as part of a worldwide effort to prevent, reduce and eliminate malnutrition in all its forms.

Collaborative linkages



Developing global nutrition data banks

Gathering and sharing vital information

As a unique service, WHO/NHD operates seven specialized global nutrition data banks to analyse global and regional malnutrition trends and assess progress towards national and global goals.

Global Database on Child Growth and Malnutrition

Provides essential data on the nutritional status of some 550 million children, or over 90% of the world's under-5-year-olds. Web site: www.who.int/nutgrowthdb

The Micronutrient Deficiency Information System (MDIS)

MDIS currently contains data on deficiencies of iodine, vitamin A and iron.

Global Database on Iodine Deficiency Disorders (IDD)

Provides a global evidence base covering all people at risk of iodine deficiency disorders and serves as an advocacy tool for salt iodization and other means of combating irreversible IDD-induced mental retardation and cretinism.

Global Database on Vitamin A Deficiency (VAD)

Provides estimates of VAD and populations at risk by tracking the magnitude and distribution of Vitamin A Deficiency in preschool and school-aged children worldwide.

Global Database on Anaemia (being established)

Will provide data on anaemia in pregnant and non-pregnant women worldwide, and among infants, preschoolers, school-age children and adolescents in 85 countries.

Global Database on Breastfeeding

Monitors the progress of the WHO/UNICEF Baby-friendly Hospital Initiative in 94 countries and rates of breastfeeding prevalence and deviation among 65% of the world's infant population under one year of age. Web site to be inaugurated in 2000.

Global Database on Obesity & Adult Body Mass Index (BMI)

Provides survey data from 91 countries and BMI data for around 80 countries covering almost 80% of the world's adult population. This database serves as an early warning system for the rapidly rising prevalence of obese adults worldwide.

Global Database on National Nutrition Policies & Programmes

Monitors progress in WHO's 191 Member States with preparation and implementation of nutrition plans, policies and programmes (e.g. multisectoral action, nutrition-related demographic and epidemiological data, dietary guidelines and surveys).

The global network of collaborating centres in nutrition

More than two dozen institutions worldwide have been formally designated as WHO collaborating centres, part of an international network carrying out specialized nutrition activities involved in:

- research, development and technology application for nutrition;
- training, including research training, in nutrition;
- collaborative nutrition research with, or under, WHO supervision; and
- coordination of nutrition-oriented activities carried out by multiple institutions.



As of February 2000, there were WHO collaborating centres in: Argentina, Brazil, Chile, Cuba, Denmark, Egypt, France, Greece, India, Indonesia, Islamic Republic of Iran, Italy, Kazakhstan, Netherlands, Norway, Peru, Poland, Sweden, Thailand, United Kingdom of Great Britain and Northern Ireland, United Republic of Tanzania, and USA.

Major partners

WHO helps its Member States build national capacity, primarily by providing technical, but also some financial support, particularly in developing countries. Because of the fundamental role that nutrition plays in health, agriculture and development, WHO collaborates closely with many international organizations, multilateral and bilateral agencies, nongovernmental organizations, international scientific consultative groups and international research and training institutions.

United Nations Administrative Committee on Coordination	United Nations specialized agencies	Other agencies of the United Nations system	International scientific consultative groups	Countries participating in WHO-coordinated research and training	
Sub-committee on Nutrition, which includes 16 UN organizations with an interest in nutrition, some 15 bilateral development agencies, and NGO observers	FAO UNESCO ILO IFAD IAEA World Bank	UNICEF UNDP UNHCR UNFPA UNU WFP	ICCIDD IVACG INACG IUNS IDECG IFPRI MI PAMM	Brazil China Egypt Ghana India Indonesia	Myanmar Norway Oman South Africa USA

Acronym key:

FAO: Food and Agriculture Organization, UNESCO: United Nations Education, Scientific and Cultural Organization, ILO: International Labour Organization, IFAD: International Fund for Agricultural Development, IAEA: International Atomic Energy Agency.

UNICEF: United Nations Children's Fund, UNDP: United Nations Development Programme, UNHCR: Office of the United Nations High Commissioner for Refugees, UNFPA: United Nations Population Fund, UNU: United Nations University, WFP: World Food Programme.

ICCIDD: International Council for Control of Iodine Deficiency Disorders, IVACG: International Vitamin A Consultative Group, INACG: International Nutritional Anaemia Consultative Group, IUNS: International Union of Nutritional Sciences, IDECG: International Dietary Energy Consultative Group, IFPRI: International Food Policy Research Institute, MI: Micronutrient Initiative, PAMM: Programme Against Micronutrient Malnutrition.

Further reading

WHO publications and documents:

- Nutrition for Health and Development: Progress and Prospects on the Eve of the 21st Century (document WHD/NHD/99.9).
- Nutrition for Health and Development: A global agenda for combating malnutrition (document WHO/NHD/00.6).

Protein-energy malnutrition

- Management of severe malnutrition: a manual for physicians and other senior health workers. Geneva, World Health Organization, 1999.
- Physical status: the use and interpretation of anthropometry. Report of a WHO Expert Committee (WHO Technical Report Series, No. 854).
- WHO Global Database on Child Growth and Malnutrition: <http://www.who.int/nutgrowthdb>

Micronutrient malnutrition

- WHO, International Council for Control of Iodine Deficiency Disorders. Hyperthyroidism and other thyroid disorders. A practical handbook for recognition and management (document WHO/AFRO/NUT/99.1). Harare, World Health Organization, Regional Office for Africa, 1998.
- Houston R et al. (ed.). Assessing country progress in universal salt iodization programs. Iodized salt program assessment tool (ISPAT). Ottawa, Micronutrient Initiative, 1999.
- International Nutritional Anemia Consultative Group, WHO and UNICEF. Guidelines for the use of iron supplements to prevent and treat iron deficiency anemia. Washington, DC, International Life Sciences Institute, 1998.
- Indicators for assessing vitamin A deficiency and their application in monitoring and evaluating intervention programmes (document WHO/NUT/96.10).

Infant and young child feeding

- WHO and Wellstart International. The Baby-friendly Hospital Initiative. Monitoring and reassessment: tools to sustain progress (document WHO/NHD/99.2).
- Promoting breastfeeding in health facilities – a short course for administrators and policy-makers (document WHO/NUT/96.3).
- Complementary feeding: family foods for breastfed children (document WHO/NHD/00.1).

Complementary feeding of young children in Africa and the Middle East (document WHO/NHD/99.3).

Complementary feeding of young children in developing countries: a review of current scientific knowledge (document WHO/NUT/98.1).

Household food and nutrition security

- Achieving household food and nutrition security in societies in transition. Proceedings of the joint WHO/FAO workshop held at the 8th Asian Congress of Nutrition, Seoul, Republic of Korea, 29 August-2 September 1999 (document WHO/NHD/00.5).
- WHO multicountry study on improving household food and nutrition security for the vulnerable: Ghana. Achieving urban food and nutrition security for the vulnerable in Greater Accra (document WHO/NHD/00.2).
- WHO multicountry study on improving household food and nutrition security for the vulnerable: South Africa. A qualitative study on food security and caring patterns of vulnerable young children in South Africa (document WHO/NHD/00.4).

Obesity, diet-related diseases and nutrition transition

- Obesity: preventing and managing the global epidemic. Technical Report Series. Geneva, World Health Organization (in preparation).
- Behavioural and socio-cultural aspects of preventing obesity and its associated problems: report of a WHO consultation. Tokyo, 14-16 December 1998 (in preparation).

Nutrition in emergencies

- The Management of Nutrition in Major Emergencies. Geneva, World Health Organization, 2000.
- Field Guide on Rapid Nutritional Assessment in Emergencies. Alexandria, WHO Regional Office for the Eastern Mediterranean, 1995.
- Scurvy and its prevention and control in major emergencies (document WHO/NHD/99.11).
- Thiamine deficiency and its prevention and control in major emergencies (document WHO/NHD/99.13).

World Health Organization Regional Contacts for Nutrition

Regional Office for Africa – Harare, Zimbabwe

Regional Officer, Nutrition
Tel: 263 4 703580
Fax: 263 4 72 89 98/ 79 89 98/79 01 46

Regional Office for the Americas – Washington, D.C., USA

Programme Coordinator, Food and Nutrition
Tel: 202 974 3510
Fax: 202 974 3682

Regional Office for South-East Asia – New Delhi, India

Regional Adviser, Nutrition for Health and
Development and Food Safety (NHD)
Tel: 91 11 331 7804/7823
Fax: 91 11 331 8607
91 11 332 7972

Regional Office for the Eastern Mediterranean – Alexandria, Egypt

Regional Adviser, Nutrition, Food Security
and Safety (NFS)
E-mail: NFS@who.sci.eg
Tel: 203 4870090/9/8/7/6
Fax: 203 483 8916
203 486 4329

Regional Office for Europe – Copenhagen, Denmark

Regional Adviser, Nutrition Policy, Infant Feeding
& Food Security Programme (NIF)
Tel: 45 39 17 17 17
Fax: 45 39 17 18 18
Fax (NIF): 45 39 17 18 54

Regional Office for the Western Pacific – Manila, Philippines

Regional Adviser, Nutrition and Food Safety
Tel: 632 528 80 01
Fax: 632 521 1036/5260279/5260362

Credits:

Text: Adrea Mach, Design: Marilyn Langfeld, Illustrations: Janet Petitpierre.

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“Nutrition is a key element in any strategy to reduce the global burden of disease. Hunger, malnutrition, obesity and unsafe food all cause disease, and better nutrition will translate into large improvements in health among all of us, irrespective of our wealth and home country.”

Dr Gro Harlem Brundtland,
Director-General, WHO
at the World Economic Forum 2000



For further information, please contact:
Nutrition for Health and Development (NHD)
World Health Organization
20, Avenue Appia
CH-1211 Geneva, Switzerland
Tel. (4122) 791 2111 Fax: (4122) 791 4156
Website: www.who.int/nut