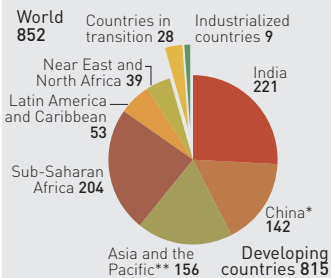


# INSTITUTE FOR HEALTH AND SOCIAL JUSTICE focus on issues HUNGER AND HEALTH: Combating pandemic co-infections of hunger, malnutrition and disease

## KEY FACTS

- **Hunger and malnutrition are the number one risk to global health, killing more people every year than AIDS, malaria, and tuberculosis combined.**
- **Every year, nearly six million children die before reaching their fifth birthday as a result of hunger and malnutrition. That amounts to about one child dying every five seconds in a world that produces enough food to provide everybody with 4.3 pounds of food per day.**
- **Globally, 852 million people were chronically undernourished in 2000-2002, the vast majority living in developing countries.**

### Undernourished 2000-2002 (millions)



\* includes Taiwan Province of China  
\*\* excluding China and India

Source: FAO

- **Hunger drives people to adopt survival strategies that increase their risk of HIV infection. Frequently hungry people are forced to migrate for work or to enter into risky sexual relationships in order to obtain food and money.**
- **Nutrition interventions for AIDS patients have been shown to improve adherence to drug regimens, enhance weight gain, and improve ability to fight infection.**

*"Everyone has the right to a standard of living adequate for ... health and well-being ..., including food, clothing, housing and medical care and necessary social services..."*

—Universal Declaration of Human Rights

More than half a century after the nations of the world endorsed that ringing declaration, hundreds of millions of people suffer and die from hunger and disease. Worldwide, more than 800 million people suffer from chronic hunger. An estimated 15 million people die each year as a result of diseases that are routinely prevented and effectively treated in rich countries.

Hunger and malnutrition are both a major cause of disease and a major obstacle to effective treatment. Hunger weakens bodies and immune systems and greatly increases the likelihood of falling ill with and dying from many common, infectious diseases. For those who have already been infected with HIV or TB, malnutrition undermines treatment, increases vulnerability to opportunistic infections and accelerates the progression of the disease.

The twin plagues of hunger and infection can be defeated together or not at all. Food is essential medicine for both prevention and treatment in community-based health programs.

## FOOD—KEY TO PREVENTING DISEASE AND DEATH

Hunger and malnutrition are the underlying cause of more than half of all child deaths, killing nearly 6 million children each year. The vast majority of these deaths are caused not by starvation but by neonatal disorders and common infectious diseases like pneumonia, diarrhea and measles that are frequently fatal to children who are hungry or malnourished.

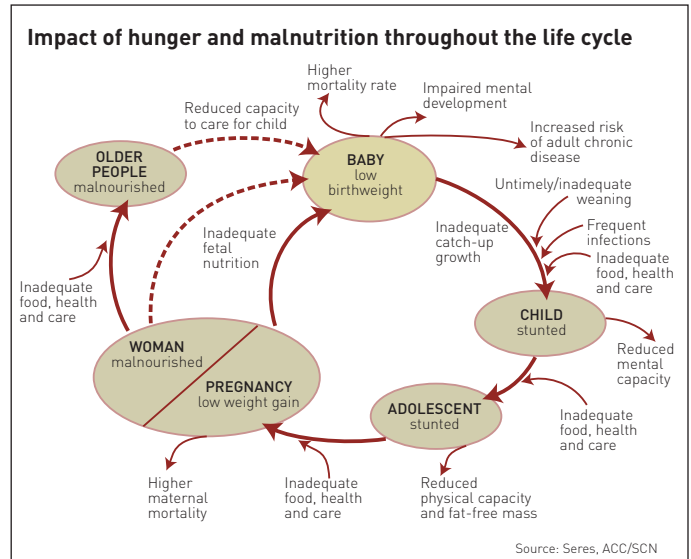
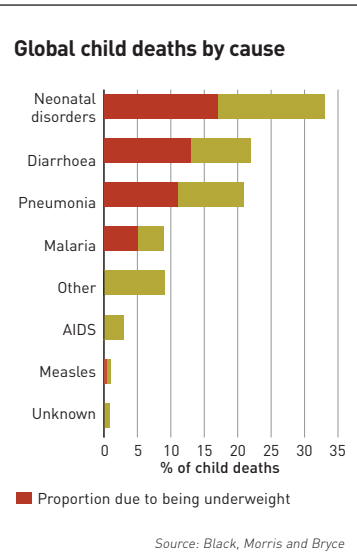
Children who are mildly underweight are twice as likely as better nourished children to die of infectious diseases. For children who are moderately to severely underweight the risks of dying from infectious diseases are five to eight times higher than for well-nourished children.

Recent studies indicate that 45 percent of measles

deaths and more than 60 percent of all diarrheal deaths were a result of being underweight.

Hunger and malnutrition also increase the incidence and fatality rate of conditions such as anemia, hemorrhage and sepsis that cause a majority of more than half a million maternal deaths each year during pregnancy and childbirth.

Malnourished mothers and women who were malnourished during childhood are more likely to give birth to low-birth weight babies. These babies, in turn, are at greatly increased risk of growing up to be poor, stunted and malnourished themselves ... and to give birth to another generation of children at high risk of hunger, malnutrition, and extreme poverty.



## FOOD—ESSENTIAL MEDICINE FOR HIV AND OTHER INFECTIOUS DISEASES

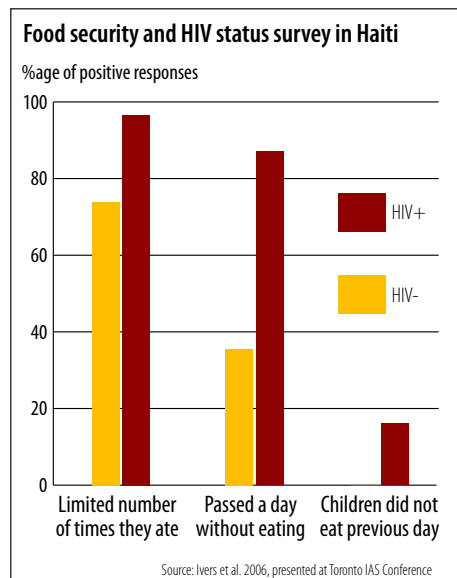
Just as hunger is a leading cause of illness and death from disease, food is an essential ingredient of any treatment program. Clinical evidence bears out the wisdom expressed in a statement derived from a frequently quoted Haitian proverb: **“Giving a patient medicine with no food is like washing your hands and drying them in the dirt.”**

Food is particularly important for people living with consumptive diseases like HIV and TB. Asymptomatic HIV-positive individuals require 10 percent more calories and symptomatic HIV patients 20 to 30 percent more than HIV-negative people of the same age, sex, and physical activity level.

People living with HIV need more food, but they usually get less. A PIH study in rural Haiti found that HIV-positive patients were nearly 10 times more likely to have limited the number of times they ate in the previous month and 12 times more likely to have passed a day without eating than HIV-negative or untested

individuals (see graph).

Hunger decreases the ability of HIV-positive patients to adhere to treatment regimens, recover from weight-loss, or to fight off opportunistic infections.



Individuals who are malnourished when beginning antiretroviral therapy (ART) experience a lower degree of response to treatment, slower weight gain, and greater risk of AIDS-related illnesses and infections.

HIV infection affects the nutrition and health of entire families and communities. By the year 2020, the pandemic will have claimed one-fifth or more of the agricultural labor force in most southern African countries. Already, more than half of all farm households in some severely affected areas are headed by women (30 percent, of whom most are widows), grandparents (20 percent), and orphaned children (almost 5 percent).

Nutrition interventions provide a broad range of benefits for HIV-positive patients, including improved adherence to drug regimens, weight gain, increased body cell mass, longer survival time, reduced HIV RNA levels, improved CD4 counts, and increased ability to fight infection.

## THE PIH MODEL: PROVIDING FOOD AS MEDICINE FOR PATIENTS, VACCINE FOR CHILDREN

Partners In Health firmly believes that food and nutrition are essential components of health care. In Haiti, Rwanda and Peru, PIH provides monthly food packages to needy patients and their families. By the end of our first year working in Rwanda, PIH's Rwandan partner organization Inshuti Mu Buzima was distributing an average of 1,200 food packages a month, providing food security for the families of all patients receiving antiretroviral therapy or TB treatment.

In June 2006, Partners In Health/Zanmi Lasante began working with the UN World Food Program (WFP) to distribute 1,000 metric tons of food assistance to 2,575 HIV-positive patients and their families in Haiti. Packages of rice, beans, vegetable oil and other staples are being distributed to HIV-positive patients based on need, using socioeconomic and clinical criteria determined by ZL staff.

To combat child malnutrition, PIH's Child and

Maternal Health Program in Haiti provides dietary supplements for malnourished children and distributes free school lunches to 28 schools in Cange and the surrounding area, giving more than 7,000 children at least one nutritious meal to look forward to each day.

As one PIH staff member reported shortly after the program began, “Some of the children have that one meal for the day and dream at night of the next meal. This is a special program in changing lives.”

PIH has begun to build local responses for the thousands of our patients who must contend with daily food and agricultural insecurity. Our partnership with Zanmi Agrikol (Partners In Agriculture) created a demonstration plot in Cange, Haiti, and a large working farm in a nearby village to support inpatient-feeding programs with its harvested produce. Most recently, the peanuts harvested by Zanmi Agrikol have fueled local production of a pro-



tein-rich, therapeutic food we have named “nourimanba” that is given to malnourished children. Additionally, agricultural workers are being trained in sustainable agricultural techniques, using the community health worker model, with the aim of having those trained teach more people and encourage the community to improve agricultural practices.

## For further information about fighting for food, health, and social justice, contact:



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### RECOMMENDED READING

Mukherjee, *Basing Treatment on Rights Rather Than Ability to Pay: 3 by 5*. Lancet 2004;363(9414):1071-1072. Available at [www.pih.org/inforesources/Articles](http://www.pih.org/inforesources/Articles)

Burns, Paluzzi & Mukherjee, *Poverty, Health and Human Rights: Time for Action*. Global Pulse 2006;2(1):40-45. Available at [www.globalpulse-journal.com/2006\\_spring\\_issue.html](http://www.globalpulse-journal.com/2006_spring_issue.html)