Testimony of
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Mr. Chairman, thank you for the opportunity to join you again, this time to share with you an overview of USAID's strategy to combat hunger among children of the world. Here at the table with me are the true experts in that field, but I am glad to represent the experts at U.S. Agency for International Development (USAID) who partner with the experts in these great organizations around the world.

Across the world some 10.8 million children under five years of age die every year. Most of these deaths are preventable and almost all occur in poor countries. I recognize the enormous impact of child hunger and malnutrition on future development and as an underlying cause of the deaths of these millions of children. For that reason, I welcome this opportunity to discuss what USAID is doing to reduce this awful and unnecessary blight on the world's future.

According to UN estimates, currently, 296 million undernourished children live in the developing world. Other estimates are even higher. For many of these children the damage from hunger and malnutrition can be life-long. Almost all nutritional deficiencies impair immune function and other host defenses leading to a cycle of longer lasting and more severe infections and ever–worsening nutritional status. Hunger leads to physical stunting, lowers intelligence, and increases susceptibility to diseases, dramatically increasing health care costs and severely limiting their full potential to contribute to nation building.

USAID programs recognize that well nourished children rarely die from diarrhea and common childhood infections, and maintaining good nutritional status is an integral part of improving child survival. USAID interventions are designed to decrease child and maternal mortality; reduce crippling healthcare costs; and boost intellectual and physical potential and national productivity.

I would like to tell you what USAID is doing in five key areas of child hunger and nutrition: 1) reducing micronutrient deficiencies; 2) food fortification; 3) expanding exclusive breastfeeding and appropriate infant feeding; 4) nutrition in emergencies, and 5) sanitation, hygiene and nutrition

1. Reducing Micronutrient Deficiencies

Vitamins and minerals – micronutrients – are essential components of good nutrition. Without micronutrients, bodies and minds are weakened and cannot resist many common diseases. For decades, USAID has been a leader in addressing micronutrient deficiencies, primarily through support of targeted supplementation and food fortification programs. USAID

supports developing countries to ensure national distribution of vitamin A supplements to young children every six months and in the development and implementation of programs that fortify commonly consumed foods with combinations of vitamins and minerals missing or limited in the diet.

USAID supported much of the initial research that identified the crucial links between micronutrients and child health and then helped developing countries deliver these essential nutrients to their children. USAID supports advocacy, policy development, health worker training and supervision, monitoring, logistics and distribution support.

Vitamin and mineral deficiencies contribute to extensive health problems and deaths throughout developing countries. Three of them—vitamin A, iron and iodine – have been shown to profoundly affect child survival, women's health, educational achievement, adult productivity, and overall resistance to illness. More recently, with evidence from new USAID-supported research showing the importance of zinc deficiency and increased morbidity and mortality during diarrhea episodes, USAID has included zinc in its programs.

Women and children commonly make up the most vulnerable segment of societies with high rates of micronutrient deficiencies. Micronutrient deficiencies can result in serious health consequences including birth defects, maternal death, childhood mortality, blindness, anemia and increased vulnerability to infections. Additionally non-health consequences include lower IQ, poor academic performance, and reduced work productivity.

Vitamin A Supplementation

Vitamin A deficiency alone affects as many as 120 million children under-five, reducing their ability to survive common childhood illnesses and causing a million child deaths each year. These children suffer more severe and prolonged illnesses and are more likely to die from common infections such as measles and diarrhea than a well nourished child. Approximately half a million children deficient in vitamin A become blind every year. Half die within a year of becoming blind.

For more than 20 years, USAID has supported research into vitamin A. Vitamin A mobilizes the body's immune system and makes it stronger, and it heals submicroscopic cracks between cells in the body 's armor —the epidermis and intestine and lungs —which blocks invasion by outside organisms. USAID-funded research has demonstrated that vitamin A supplementation prevents child blindness and reduces child mortality by an average of 23% in deficient populations. USAID is also supporting groundbreaking scientific inquiry into the role of vitamin A in reducing maternal deaths.

USAID sponsored National Immunization Days (NIDs) for polio have provided many countries with the opportunity to supplement children with vitamin A at the same time making this distribution mechanism one of the most successful in the world. But as progress towards eradication of polio is made, NIDs are being phased out in countries, and new solutions need to be developed for vitamin A supplementation programs. One of the solutions pioneered by USAID in the late 1990s was Child Health Weeks, which are now the primary method of distribution in 15% of countries and achieve 70% coverage on average.

- USAID and its partners have helped increase global vitamin A coverage in children 6-59 months from 50% in 1999 to 68% in 2004. In 2004 alone UNICEF estimates that 500,000 children were saved.

- USAID is currently working on vitamin A supplementation in 17 key countries where this is a major health problem.

Anemia Prevention

Anemia affects about two billion people across the globe. Half of all cases of anemia are due to iron deficiency. Iron deficiency anemia often goes unreported because there are no outward symptoms to report. The anemia prevention package promoted by USAID programs includes de-worming, malaria prevention and treatment and iron supplementation activities.

Overall, about 24% of maternal and 22% of perinatal mortality in developing countries is attributable to iron deficiency anemia. Even modest reductions in the severity of anemia can reduce deaths. USAID's strategic approach is focused on two key areas. First, USAID conducts research on the safe delivery of iron to women and children, including those in malaria endemic areas. Second. USAID is expanding Anemia Intervention Packages to tackle the main causes of anemia, namely inadequate intake/poor absorption (food fortification, iron supplementation), malaria (Intermittent Preventive Therapy, bed-nets, Indoor Residual Spraying), and intestinal parasite (de-worming).

In order to reduce the anemia that increases the risk of a mother dying in childbirth, as well as the likelihood that the baby will be born prematurely or with low birth weight, USAID has worked to raise the profile of anemia control for women and children on country national health agendas, and USAID is helping governments develop programs to address the multidimensional problem with an integrated approach.

Since l995, USAID has supported anemia programs in more than 25 countries, including:

- Nicaragua, where coverage with prenatal iron rose from 70% to 88%, and the prevalence of anemia in pregnant women fell by one-third from 2000-2003. In the same time period, coverage of children ages 6-59 months with iron supplements improved from 37% to 62%, and anemia fell from 29% to 23%.

- India, where the prevalence of anemia fell by 25% among participants in a USAID program to increase intake of iron folic acid supplements (IFA) and control infections with malaria and parasitic worms in pregnant women. Service delivery was improved by using Anganwadi Centers as distribution sites for IFA for both pregnant women and adolescents; and, using the twice-annual 'catch-up' rounds to distribute IFA to pregnant women.

Iodine

In 1990, about 1.6 billion people, or 30% of the world's population, lived at risk of Iodine Deficiency Disorder (IDD); some 750 million people suffered from goiter, mainly because of chronically low iodine intake. An estimated 43 million were affected by some degree of brain damage as a result of inadequate iodine intake before or during infancy and early childhood - largely the consequence of living in mountainous or flood-plain regions where erosion has caused the local soil and crops to contain too little iodine for healthy thyroid function.

Since 1999, USAID has funded over $22 million for universal salt iodization (USI) and elimination of iodine deficiency disorders in 43 countries through a partnership with UNICEF

and Kiwanis. This has resulted in a dramatic increase in the consumption of iodized salt. Today, thanks to these efforts 82 million newborns are now being protected from learning disabilities caused by iodine deficiency disorders. Overall consumption of iodized salt has increased in poor countries from 20% of households in l990 to over 70% today. Successes include:

- In sub-Saharan Africa, the regional average for households using salt containing 15ppm or more of iodine is 64%. Two notable countries are Uganda and Kenya, where USAID has invested US$589,000 and $250,000 respectively since 1999. As a result, over 90% of households in both countries consume adequately iodized salt.
- In Asia, USAID has invested heavily in Bangladesh and Indonesia. Both countries have obtained household coverage rates that are significantly higher than the regional average coverage of 49%-70% and 73% respectively.

Zinc

Zinc supplementation, a simple and inexpensive intervention, not only decreases the duration and severity of diarrheal disease, but also reduces the risk of occurrence of diarrhea among children under 5.

In the last six years, USAID has sponsored research on zinc in both the prevention and treatment of major illnesses like acute respiratory infections, diarrheal diseases, malaria and low birthweight.

Diarrhea remains a leading cause of child deaths worldwide. Every year more than 1.5 million children under the age of five die as a result of acute diarrhea despite the availability of effective low cost therapies to manage diarrhea cases. Clinical and field studies have consistently shown that when children with diarrhea receive 20 mg of elemental zinc for 10-14 days in conjunction with oral rehydration solution, the duration of the episode shortens by 24%, severity is reduced (24% less admission to hospital),and there is a preventive effect for future episodes. Overall diarrhea incidence rates decrease 15%, and there is a 42% reduction in treatment failure or death. USAID has been a major contributor to the research leading to these findings. In 2004 WHO and UNICEF issued a joint statement recommending the use of zinc during diarrhea as an adjunct treatment to oral rehydration therapy (ORT).

USAID is disseminating and implementing these recommendations to decrease the burden of disease related to diarrhea and improve the immunity of children by focusing on ensuring the availability of low cost, quality zinc products for international procurement by working with the private sector internationally and in country.

By 2007 USAID will be supporting the introduction and expansion of this program in 15 countries. In order to achieve this, USAID is working with partners to ensure that policy is translating into standard treatment guidelines and training materials for health workers. Partnering with pharmaceutical companies is facilitating the production of zinc dispersible tablets, and leveraging their marketing and distribution divisions to accelerate the distribution of zinc to public and private sector health facilities. NGOs and social marketing groups subsidize the treatment for those with limitations to pay.

2. Food Fortification

Food fortification is perhaps the most generally applicable approach to micronutrient deficiencies. Beginning in the 1940's, the industrialized world has broadly embraced fortification, fortifying flour, salt, milk, and butter and margarine with a range of nutrients. Food fortification in now being introduced into the developing countries as large scale food processing has become available.

More than two billion people worldwide lack sufficient quantities of zinc, vitamin A, iron and iodine, which are now being added to processed foods such as rice and sugar under USAID-supported programs.

USAID is improving the micronutrient content of basic foods by expanding research, development and dissemination of biofortified crops -- enhanced vitamin A, iron and zinc maize; enhanced iron and zinc beans; and vitamin A enhanced sweet potato and through supplementation.

Food fortification is a proven way for public and private sectors to join in ending nutrition deficiencies for a sustainable solution. USAID has been working to fortify foods for three decades and continues to accelerate and expand food fortification programs as one of the most effective, long-term strategies to reduce micronutrient malnutrition. USAID and the Centers for Disease Control and Prevention (CDC) are working together to improve monitoring and evaluations systems to ensure public health impact.

Through the Global Alliance for Improved Nutrition (GAIN), USAID is directly supporting twenty-two programs in nineteen countries around the world that fortify staple foods and condiments with iron, iodine, vitamin A and other micronutrients. When at scale, these programs are expected to reach over 486 million people with fortified foods such as corn meal, wheat flour and soy sauce.

USAID and the Bill and Melinda Gates Foundation joined forces to create GAIN and this successful collaboration continues in order to identify new partners for this alliance. GAIN is an excellent example of the public and private sectors working together for global change, cited by Ending Child Hunger and Undernutrition Initiative. GAIN will serve as a catalyst to mobilize the efforts, expertise, and resources of the public and corporate sectors, toward the shared vision of reducing micronutrient malnutrition. Commercial sector companies in both developing and developed countries are critical partners in the success of GAIN.

- Since 1993, 30 countries have implemented food fortification programs with USAID support, either through a centrally-funded program, bilaterals, or our partnership with GAIN.
- With USAID funding, these 30 countries have fortified more than 10 kinds of food, determined by food consumption patterns in each country (for example, fish sauce in Vietnam and cottonseed oil in Burkina Faso), with 6 different fortificants (iron, folic acid, B vitamins, vitamin A, zinc, iodine).
- In the 1970s, all Central American countries suffered from high levels of vitamin A deficiency. With USAID assistance over the past 3 decades, El Salvador, Guatemala, Honduras, and Nicaragua all developed sustainable sugar fortification programs. Today, vitamin A deficiency is virtually nonexistent in these four countries.

- Since 1997, Zambia has fortified maize meal and sugar with vitamin A with USAID assistance. In a series of surveys the prevalence of vitamin A deficiency in children decreased from 65.7% in 1997 to 54.1% in 2003.

And, fortification is cost-effective. Every $1 spent on vitamin A fortification returns $7 in increased wages and decreased disability. A dollar spent on iodized salt returns $28; iron fortification, $84.

3. Expanding Exclusive Breastfeeding & Appropriate Infant Feeding

More than two-thirds of malnutrition-related infant and child deaths are associated with a failure to grow in children under 5 years of age. Within this time period, the sharpest increase in malnutrition occurs between six and 24 months of age, the time when children grow most rapidly. This situation is made worse by the fact that less than a third of infants in most countries are exclusively breastfed during the first six months of life. In addition, early cessation of breastfeeding and the introduction of nutritionally inadequate complementary foods is a common occurrence. This compounds the danger for infants who are at highest risk of mortality because of their exposure to disease and limited access to health services.

Mothers and babies form an inseparable biological and social unit. The health and nutrition of one group cannot be divorced from the health and nutrition of the other. A well nourished mother gives birth to a healthy baby with sufficient nutrient stores to grow and develop. To continue the child's well being, the mother needs to have her nutritional needs satisfied so that she can produce high nutritional quality breast milk and actively take part in the care of her child. A sick or malnourished woman is in danger of succumbing to illness and to being unable to accomplish all the tasks of childbirth and child rearing. USAID programs recognize the importance of women's nutrition both to themselves, their children and families and include them in programs.

USAID also supports efforts to identify, and support safer infant feeding strategies in communities affected by HIV. Optimal infant feeding is a key component of prevention of mother to child transmission (PMTCT), as well as a critical intervention to ensure overall child survival.

USAID supports programs to counsel all mothers about the risks of mother to child transmission and the need to know their HIV status. USAID's new Infant and Young Child Feeding (IYCF) program will develop innovative interventions that build on 1) proven positive impact, 2) effective behavior change and communication to target populations, and 3) improve household food quality through small and large scale fortification.

Ensuring optimal nutrition involves various interventions coordinated at key points in the healthcare setting and community. USAID has developed the universally recognized and adopted Essential Nutrition Actions (ENAs) consisting of proven, high impact, feasible program interventions which implemented at the community level have a significant impact on nutritional status and child survival. The Ending Child Hunger and Undernutrition Initiative recognizes the importance of these "Essential Packages." These include:

- exclusive breastfeeding up to 6 months,
- appropriate Infant and Young Child Feeding through 23 months,
- optimal nutritional care of sick children,
- prevention of vitamin A deficiency,

- prevention of anemia,
- prevention of iodine deficiency, and
- optimal nutrition for women.

P.L. 480 Title II food assistance programs and community based maternal and child health and nutrition activities implemented by USAID's child survival and health grants recipients are especially effective ways to increase the impact of these life saving interventions. For example, between 40 and 50% of Title II non-emergency resources support multi-year community-based maternal and child health and nutrition programs that distribute food, much of it micronutrient fortified, and monetize to fund the implementation of proven interventions to improve child survival and nutrition. These include promotion of exclusive breastfeeding and appropriate complementary feeding, prevention and treatment of preventable childhood diseases, including diarrhea, increased micronutrient consumption, and improvements in ante-natal care. Title II MCHN programs also create linkages between health and nutrition activities and Title II-funded activities in the agriculture sector so that improvements in agricultural productivity and income translate into better nutrition for households, mothers and children.

USAID has been at the forefront of efforts to increase the focus on and coverage of children in the 6-23 month age group, and to take a preventative rather than curative approach to undernutrition. Title II food-assisted development programs are encouraged to provide universal coverage of all children under two rather than focusing only on those who are currently malnourished. Recent USAID-funded research in Haiti led by the International Food Policy Research Institute found that this kind of food-assisted preventative program achieved significantly greater impacts on child malnutrition - stunting and underweight - than recuperative programs do.

In addition to food aid resources from USAID's Food for Peace program, USDA administers the McGovern-Dole International Food for Education (FFE) and Child Nutrition Program. The key objectives of the FFE program are to reduce hunger and improve literacy and primary education, especially for girls. By providing school meals, teacher training, and related support, FFE projects help boost school enrollment and academic performance. The FFE program also provides nutrition programs for pregnant women, nursing mothers, infants, and preschool youngsters to sustain and improve the health and learning capacity of children before they enter school.

In fiscal 2005, the FFE program made approximately $91 million available to provide 118,000 tons of food to 3.4 million children in 15 developing countries in Africa, Asia, Latin America, and Eastern Europe.

4. Nutrition in Emergencies

Children in emergency and conflict situations are especially vulnerable to hunger. USAID supports activities for the nutritional rehabilitation of malnourished children in these situations. A new program direction, pioneered by USAID, Community Therapeutic Care (CTC) in Malawi and Ethiopia has shown greater impact in rehabilitation than traditional Therapeutic Feeding Centers in emergency situations.

CTC is a community-based approach of care for managing large numbers of severely malnourished children and adults at home using outreach teams to promote community participation and behavioral change. CTC aims to build community capacity to manage and to

better respond to repeated cycles of relief and recovery. Providing appropriate Ready-to-Use-Therapeutic Food (RUTF) like "Plumpynut", which is similar to F-100 Therapeutic Milk, is central to the home-based care of the severely malnourished.

USAID is focused on establishing international guidelines on the use of CTC and ensuring their adoption through training, monitoring and evaluation across implementing agencies. Current programs are exploring the possibilities for local production of RUTF in formulations appropriate to the population. Manufacturers of Plumpynut are enthusiastic partners with USAID in devising ways to transfer the technology involved in the preparation of rehabilitation foods.

5. Sanitation, Hygiene and Nutrition

Extensive research has established the important link between diarrhea, intestinal parasites, and poor nutritional status of children under five. To reduce nutrition losses (macro- and micronutrients) and maximize the impact of nutrition interventions, the incidence of diarrhea and intestinal parasites needs to be reduced through hygiene improvement.

Hygiene improvement focuses on the behaviors that are the key determinants of diarrhea risk, especially drinking safe water, sanitary disposal of feces, and washing hands with good technique at appropriate times. Each of these practices typically results in a 30–40 percent reduction in diarrhea prevalence. Solid evidence indicates that improvements in sanitation alone or in sanitation and water supply together are associated with significant increases in children's nutritional status. Data from eight countries showed sanitation improvements were associated with a reduction in height deficit, relative to the reference standard, ranging from 22% and 53% for urban children and from 4% to 37% for rural children.

Conclusion

USAID supports the objectives of the Ending Child Hunger and Undernutrition Initiative (ECHUI). The face of child hunger is too stark and the needs are too great. Forging a strong alliance of collaborators from among national governments, international agencies, the private sector, and other sectors of civil society has been an important part of the way USAID nutrition programs have worked in the past and will continue to work in the future.

The five nutrition areas I have described today: 1) reducing micronutrient deficiencies; 2) food fortification; 3) expanding exclusive breastfeeding & appropriate infant feeding; 4) nutrition in emergencies, and 5) sanitation, hygiene and nutrition, all are stronger because of the partnerships they bring to the table. And partnerships will be important for the challenges these areas will meet in the future.

Vitamin A supplementation programs have significantly increased coverage rates since they were appended to NIDS. The winding down of NIDS programs presents a challenge in terms of sustainability of vitamin A supplementation coverage, and new partners and platforms will need to be identified.

Since most children in poor countries suffer from more than a single nutrient deficiency, the ability for nutrition programs to deliver multiple nutrients at the limited points of contact is an imperative. USAID, together with partners, is researching the optimal combination of vitamins and minerals for women of reproductive age and children.

Supplementation and nutritional rehabilitation programs are only a short term answer to chronic malnutrition. USAID will increase its efforts to work with other agencies and host country counterparts to improve the food and nutrition policy, strategy and program development in assisted countries in order to improve equity and improved health benefits.

Despite considerable progress in iodizing salt and preventing IDD, large differences exist in the consumption of adequate iodized salt among regions of the developing world. In 33 countries less than half of households consume adequately iodized salt, and 37 million newborns in the developing world are born every year unprotected from iodine deficiency and its lifelong consequences. Progress in ensuring universal salt iodization needs to be accelerated.

Finally, food fortification presents a cost-effective, sustainable alternative that shares the cost with some very important partners --consumers and the private sector.

USAID has been combating child hunger for a long time. We will continue to do so, in step with our existing partners and welcoming our new partners and initiatives. The millions of children who die before they reach their fifth birthday of hunger related causes and the hundreds of millions of undernourished children who will bear the damage from hunger and malnutrition for the rests of their lives deserve nothing less.

Thank you.