

Eat Orange!

A Partnership to:

Promote the cultivation and consumption of orange-fleshed sweetpotatoes (OFSP) to improve food security and to combat vitamin A deficiency (VAD), a major cause of mortality in African children.

Our challenge...

In sub-Saharan Africa, 42% of under-five children are vitamin A deficient (VAD), a condition that greatly increases their risk of death, as well as becoming blind. As many as 645,000 children die each year from VAD related causes.

(Aguayo & Baker, *Food & Nut. Bull.* 2005)

Vitamin A capsules distributed by health workers and fortifying food with vitamin A are good strategies for combating VAD but not enough in the long term. Other food based strategies, such as OFSP, are critical for **sustained** VAD control.

Eliminating VAD is an important intervention to achieve MDG4 by 2015 (reducing <5 mortality by two thirds).

One innovative solution...

Orange-fleshed sweetpotatoes can help control VAD and improve overall food security and nutrition. OFSP are also a good source of energy and easy to grow. Research shows OFSP can play a significant role in developing countries as a viable long-term food-based strategy for controlling VAD. (Van Jarrsveld *et. al.*, *AJCN* 2005.)



OFSP are very high in β -carotene, which is converted by the body to vitamin A, compared to the more widely grown white-fleshed variety. In a controlled study trial in Mozambique, the promotion of OFSP production and consumption led to a marked decrease in VAD, from 60% to 36%, in children from participating households (Low *et. al.* *TSNI/CIP Report 2005*). Farmers will adopt OFSP, but need guidance and encouragement to do so. Activities to promote its consumption, particularly by children and women, must also be considered.



Current Successes!

Burkina Faso:

Reached approximately 10,000 families with OFSP. Our goal is 150,000. 50 schools adopted OFSP as part of school gardens.

Mozambique:

Reached approximately 90,000 families with OFSP. OFSP is part of an integrated agriculture/nutrition approach emphasizing market development to ensure sustained adoption. OFSP included in farmers' package for flood rehabilitation

Niger:

Reached approximately 15,600 families with OFSP. Our goal is 35,000.

Value-added interventions: Complementary health interventions, such as deworming, have been initiated in some sites to improve the health impacts of OFSP. We work with agricultural extension services to focus resources on women.

Future Goals:

- ✓ mobilize **additional resources** to expand OFSP in both existing and in new countries (Cameroon, Côte d'Ivoire, Democratic Republic of Congo, Mali, Senegal, Tanzania, and Zimbabwe);
- ✓ develop **different OFSP varieties** better suited for specific eco-zones (drought resistance, pest & disease resistance);
- ✓ develop **on-farm storage** techniques for fresh OFSP and improve solar drying techniques to ensure beta-carotene retention;
- ✓ link with **appropriate micro-enterprise and commercial strategies** for sustainable production and dissemination of OFSP planting material; and
- ✓ integrate further with other **health and nutrition interventions**.

We are an international partnership of agriculturalists and nutritionists working together at the country level to introduce locally-suitable OFSP varieties into food insecure areas. We encourage farmers, many of whom are women, to adopt the cultivation and consumption of OFSP to improve household food security and nutritional status.

Helen Keller International (HKI): HKI promotes OFSP with behavior change and demand generation strategies, integrates OFSP into health/nutrition activities, and provides training to front-line workers. HKI works in 13 African countries.

International Potato Center (CIP): CIP coordinates the Vitamin A for Africa initiative bringing together multi-sectoral partners from 10 Sub-Saharan Africa countries to promote OFSP. CIP staff and national collaborators in sub-Saharan Africa breed and adaptively test OFSP varieties and provide clean planting material and technical guidance in OFSP production and promotion to development organizations and public sector institutions.

HarvestPlus: HarvestPlus increases opportunities for the expansion of OFSP by providing technical expertise to enhance multi-disciplinary research through new partnerships and links with other CGIAR scientists working on biofortified crops.

Our other partners include a network of key government, research and NGOs groups that have helped us leverage money as well as roll out activities to reach more families in need.

Burkina Faso: UNICEF, The McKnight Foundation, and Plan International now provide co-funding. The Ministries of Agriculture and Education, INERA and APRG help to implement.

Mozambique: The Bill and Melinda Gates Foundation and HarvestPlus are current funders; our implementation partners include World Vision, National Resource Institute, Nutrition Division of Health Zambezia, and the National Institute for Agriculture and Livestock Investigation.

Niger: USAID and DANIDA provided co-funding; the Ministry of Agriculture and Niger Institute of Agricultural Research help to implement.

