Conversation between GiveWell (Elie Hassenfeld and Rebecca Trupin), Good Ventures (Cari Tuna) and DFID (Anna Taylor), July 30, 2012

Note: this is not a verbatim transcript. It is a set of summary notes compiled by GiveWell in order to give an overview of the major points made in the conversation.

<u>DFID's strategy for improving nutrition:</u>

DFID goes through a rigorous process of testing out nutrition program investments before they're made. There are several stages to this process. The first stage is the strategic case, which consists of laying out the problem that the investment is intended to address. The next stage is the appraisal case, which lays out the best available options for solving the problem. Next, these options are evaluated for the strength of evidence supporting them and for their cost-effectiveness. Finally, DFID makes a decision as to what program to invest in.

DFID recently published a position paper about its approach to reducing child undernutrition. The approach involves focusing on the nutrition of children from conception to age two in South Asia, sub-Saharan Africa and Yemen. There are two tracks to the approach. One track is to promote proven, high-impact nutrition interventions that need to be scaled up. It is thought that implementing these interventions at scale would reduce early childhood stunting by one third. The other track is to research other programs that may reduce stunting but are not currently supported by a strong evidence base. Examples of these are agricultural programs, food security programs, cash transfer programs, and water sanitation programs. DFID has only gotten seriously interested in working on improving childhood nutrition over the past few years and so there hasn't been enough time for DFID's research to yield results.

DFID published an evidence paper in 2009 synthesizing evidence concerning nutrition. This paper used the Lancet series of papers on maternal and child undernutrition from 2008 as its primary reference point. DFID intends to update this paper soon to incorporate evidence that has emerged since the Lancet series was written.

The position paper highlights areas where there's a paucity of evidence concerning whether an intervention improves nutrition. One example of such an area is that it's unknown to what extent improving agriculture improves nutrition. Most people who have studied the effects of agricultural advancement have focused on its effect on economic growth and poverty reduction and have not tracked effects on nutrition.

Exclusive breastfeeding:

Exclusive breastfeeding is a promising area in nutrition. There's a strong evidence base for exclusive breastfeeding for the first six months of children's life

significantly reducing child mortality rates. Globally, rates of exclusive breastfeeding have been decreasing rather than increasing, so there's more work to be done in this area. There have been randomized controlled trials in three or four countries showing that peer counseling programs substantially increase exclusive breastfeeding rates. These programs haven't been scaled up in countries with low rates of exclusive breastfeeding because the countries have weak health systems that don't have the capacity to provide the necessary degree of support to mothers. Work to increase rates of exclusive breastfeeding would involve work to improve health system infrastructure in general.

The Scaling Up Nutrition movement might provide a good starting point for GiveWell to investigate opportunities in the cause of increasing rates of exclusive breastfeeding (and improving nutrition in general). The organization currently consists of 28 countries, many CSO groups, UN agencies, and donors. The group helps donors coordinate their nutrition investments.

Interventions through food suppliers:

A promising cause in nutrition is the fortification of commonly consumed foods (staple foods) such as flour and vegetable oil with vitamins and minerals. One could potentially have a large impact with a small investment in getting the government to work with the private sector to put a fortification system in place. Good organizations to talk with about this are Canada's Micronutrient Initiative and the Global Alliance for Nutrition. DFID funds fortification of staple foods in Tanzania.

Two other potentially promising interventions involving food suppliers are:

- (a) Improving storage of food so as to reduce aflatoxin. Reducing alfatoxin consumption may reduce early childhood stunting. DFID is currently funding research into this.
- (b) Reducing the extent to which milling processes extract nutrients from grains before the grains are processed.

Note there are a range of other interventions along the value chain which may enhance nutrition which are being explored through research and programmes.

Salt iodization:

Salt iodization coverage rates are fairly good in general, but countries with very weak infrastructure struggle to keep rates high. One obstruction to salt iodization is that sometimes people harvest salt themselves and this salt cannot be iodized. Canada is a good country to talk about this topic because it has funded a great deal of salt iodization.

DFID funds fortification of salt with iron and iodine in India.

Sprinkles:

Sprinkles have been shown to reduce anemia. However, the evidence base for other nutritional benefits of Sprinkles is small. There is no strong evidence that Sprinkles have an impact on children's growth. It is unknown whether Sprinkles can substitute for vitamins and minerals other than iron.

There was a hope that Sprinkles could compensate for a generally poor diet, but this doesn't appear to be the case. Children need not only micronutrients but also fatty acids and protein with amino acids.

<u>Treatment of diarrhea by zinc and oral rehydration salts (ORS):</u>

DFID is supporting treatment of diarrhea with zinc and ORS in Zambia.

Sanitation and handwashing:

The 2008 Lancet series on maternal and child undernutrition suggested that handwashing leads to improved nutrition on account of preventing diarrhea. DFID and the Gates Foundation are funding a large trial in Zimbabwe testing whether there's another causal pathway through which handwashing improves child growth. If this potential causal pathway is found, then promoting sanitation will look to be a good investment.

Severe acute malnutrition (SAM):

Most funding for treating SAM is provided for programs in emergency settings. However, the vast majority of children who suffer from SAM are not in emergency settings, but rather in chronically poor settings. The cost of SAM treatment is prohibitively high for many health systems that are struggling for resources. However, the intervention is highly cost-effective on account of having a good chance of saving the patient's life. Some of the work that needs to be done in this area concerns delivery of the intervention by local health systems. Other work that needs to be done in this area concerns reducing the cost of the food needed for treatment, which can involve promoting local production of ready-to-use therapeutic food so that the food doesn't need to be imported in from foreign countries at a high cost. Good organizations to talk with about this intervention are UNICEF, Children's Investment Fund Foundation (CIFF) and Valid International.

<u>Direct iron or zinc supplementation:</u>

Groups have found it difficult to conduct daily distributions of pills. It is difficult to reliably distribute iron pills or iron drops and ensure that the recipients comply with the supplementation treatment. People view Sprinkles as a food and so

compliance rates for Sprinkles are higher than for iron pills and iron drops.

Iron supplementation can increase the risk of hospitalization and death from malaria in children who are not anemic.