## Eggs for complementary feeding

This note last updated: May 2021

Current status: No further work planned

Complementary feeding refers to feeding infants some solid food in addition to breast milk.<sup>1</sup> Complementary feeding diets in low- and middle-income countries often lack nutrition, which is thought to affect longer-term development.<sup>2</sup> Programs in which chicken eggs are distributed to families to feed to infants have been proposed to ensure that the infants receive adequate nutrition.<sup>3</sup>

We conducted a light literature review<sup>4</sup> on distributing eggs for early complementary feeding and constructed a rough <u>cost-effectiveness analysis</u>. We modeled the primary benefit of egg distribution programs as increasing infants' height for age, which we estimate leads to higher earnings when these infants become adults. While our best guess is that egg distribution programs have a modest effect on earnings later in life, the high costs of the program limit cost-effectiveness. As a result, we estimate that cost-effectiveness of distributing eggs for complementary feeding is below the range of cost-effectiveness of programs we would consider directing funding to.<sup>5</sup>

Due to low estimated cost-effectiveness, we do not plan to prioritize further work on this program. We may review alternative complementary feeding programs in the future and would be willing to consider other programs that increase egg consumption at lower costs.

<sup>&</sup>lt;sup>1</sup> "Around the age of 6 months, an infant's need for energy and nutrients starts to exceed what is provided by breast milk, and complementary foods are necessary to meet those needs. An infant of this age is also developmentally ready for other foods. This transition is referred to as complementary feeding." World Health Organization. "Complementary Feeding."

<sup>&</sup>lt;sup>2</sup> "Complementary feeding diets in low- and middle-income countries are generally inadequate to meet requirements for growth and development." <u>Lutter et al. 2021</u>, Abstract.

<sup>&</sup>lt;sup>3</sup> "We hypothesized that introducing eggs early during complementary feeding would improve child nutrition." <u>Jannotti et al. 2017</u>, Abstract.

<sup>&</sup>lt;sup>4</sup> The light literature review found two randomized controlled trials (RCTs), one in Ecuador (<u>lannotti et al. 2017</u>, <u>lannotti et al. 2020</u>) and one in Malawi (<u>Lutter et al. 2021</u>, <u>Stewart et al. 2019</u>), that evaluated egg distributions. Our rough cost-effectiveness analysis is based on results from those RCTs.

<sup>&</sup>lt;sup>5</sup> Our rough cost-effectiveness analysis estimates that an egg distribution program might be about <u>1.6 times as cost-effective</u> as GiveDirectly's unconditional cash transfer program. As of 2021, we expect the marginal dollar we recommend will be about 10 or more times as cost-effective as GiveDirectly. For an example of the cost-effectiveness of our recommendations, see <u>this page</u>. See also the cost-effectiveness analysis for our recommendations <u>here</u>.