



Food and Agriculture Organization  
of the United Nations

## Global Forum on Food Security and Nutrition • FSN Forum

### TOPIC NOTE

Discussion No. 154 • 23.10.2018 – 13.11.2018

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## Eggs: harnessing their power for the fight against hunger and malnutrition

Dear all,

In spite of the increasing prevalence of obesity and non-communicable diseases, undernutrition remains a critical issue for many of the world's poorer countries. In each of Eastern and Southern Africa, Western and Central Africa, and South Asia, more than a third of children are stunted. In fact, nearly 151 million children under five in the world were still stunted in 2017. For many of these children, the poor growth which will blight their entire lives began in their mothers' wombs. Poor quality food is one major contributor to poor growth both in the womb and during the vulnerable first years of life. But which foods should we be promoting to make a difference to these figures? And how should we go about making the most nutritious foods accessible to world's poorest populations?

The humble egg seems increasingly likely to offer a practical and impactful opportunity to tackle these problems. Eggs are almost pure protein, of very high quality. They also provide virtually the entire Adequate Intake, for young children, of vitamin B<sub>12</sub> and choline. The essential fatty acid content of eggs may be especially important in pregnancy. Nearly the whole world - with the notable exception of the vegetarian belt of India - likes to eat eggs, and they can be produced at prices which make them accessible even to the moderately poor.

Since the publication of a landmark trial last year (Iannotti, 2017), we have known that daily consumption of eggs can markedly improve the linear growth of young children. The journal *Maternal and Child Nutrition* has now published a special supplement (<https://onlinelibrary.wiley.com/toc/17408709/2018/14/S3>), which summarizes a wealth of additional information on the value of eggs and feasible ways of increasing access.

The first paper provides an overview of the role of eggs in the diet of maternal and child nutrition and updated data on egg consumption (Lutter et al., 2018) while the second summarizes how social marketing was used in a randomized controlled trial of eggs early in the complementary feeding period to foster high compliance, as well as empowerment of participants and policy change in Ecuador (Gallegos-Riofrio et al., 2018).

The third and fourth papers examine how a controlled intervention to foster poultry production affected child dietary diversity and nutritional status in Ghana (Marquis et al., 2018) and Zambia (Dumas et al., 2018) while the fifth paper reviews successes and lessons learned from a project on small-scale poultry production to increase egg production and household egg intake in four diverse African contexts (Nordhagen & Klemm, 2018).

A novel approach to use chicken eggshells to improve dietary calcium intake in rural sub-Saharan Africa is reported in the sixth paper (Bartter et al., 2018), while the seventh paper reports on business models for poultry production in East Africa and India (Beesathuni et al., 2018).

The multiple roles, systems and challenges and options for sustainable poultry production through a Planetary Health lens are reviewed in the eighth paper (Ayers et al., 2018) and the supplement closes with a paper on how universal access to eggs might be achieved through large scale poultry production (Morris et al., 2018).

Taking advantage of these latest studies, we would like to invite you to join a discussion around this important topic. Your experience and knowledge will be of great value to operationalize the findings and to raise awareness of the role that eggs can play in the fight against hunger and malnutrition.

1. In order to increase access to eggs for the world's poorer populations, what should be the right balance between small-scale production, large-scale commercial production, and long-distance trade? If countries do increasingly move towards large-scale production, how do we balance the interests of better nutrition with concerns about smallholder livelihoods?
2. What are the different ways that we could increase demand for eggs, other than increasing availability and reducing price? What are some examples of successful initiatives?
3. How can we mitigate the potential downsides of large-scale egg production on animal welfare and carbon emissions?
4. What do we need different stakeholders (governments; private sector; academia; normative agencies) to do to accelerate access to eggs in poor communities?

We hope that you will find this interesting and look forward to receiving your thoughts and comments.

All the best

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