



## City Research Online

### City, University of London Institutional Repository

---

**Citation:** Hawkes, C., Demaio, A. R. & Branca, F. (2017). Double-duty actions for ending malnutrition within a decade. *The Lancet Global Health*, 5(8), e745-e746. doi: 10.1016/s2214-109x(17)30204-8

This is the published version of the paper.

This version of the publication may differ from the final published version.

---

**Permanent repository link:** <https://openaccess.city.ac.uk/id/eprint/17727/>

**Link to published version:** [https://doi.org/10.1016/s2214-109x\(17\)30204-8](https://doi.org/10.1016/s2214-109x(17)30204-8)

**Copyright:** City Research Online aims to make research outputs of City, University of London available to a wider audience. Copyright and Moral Rights remain with the author(s) and/or copyright holders. URLs from City Research Online may be freely distributed and linked to.

**Reuse:** Copies of full items can be used for personal research or study, educational, or not-for-profit purposes without prior permission or charge. Provided that the authors, title and full bibliographic details are credited, a hyperlink and/or URL is given for the original metadata page and the content is not changed in any way.

---

---

---

City Research Online:

<http://openaccess.city.ac.uk/>

[publications@city.ac.uk](mailto:publications@city.ac.uk)

---

## Double-duty actions for ending malnutrition within a decade



Malnutrition has many forms. Undernutrition can see children dangerously thin for their height (wasting), or their growth permanently impeded (stunting). Inadequate intake of key nutrients may weaken immune systems, impair brain development, and worsen the risk of conditions such as anaemia and blindness. Diets rich in calories well beyond the body's metabolic needs drive the burden of overweight and obesity, while excess dietary fat, sugar, and salt can increase the risks of non-communicable diseases (NCDs).

New worldwide estimates suggest that stunting among children younger than 5 years declined from 198 million to 155 million between 2000 and 2016.<sup>1</sup> According to the Global Nutrition Report,<sup>2</sup> scores of countries are on track to achieve global targets for stunting and wasting reduction among the under-5s by 2025. In adult men, age-standardised global prevalence of low body-mass index (BMI) decreased from 13.8% in 1975 to 8.8% in 2014; corresponding levels for women are 14.6% and 9.7%.<sup>3</sup> Yet progress on ending all forms of malnutrition is still limited and insufficient, and it remains a serious concern for most regions and nations.

About 52 million children remain wasted, more than two-thirds of whom live in Asia.<sup>1</sup> As a group, low-income countries have more stunted children now than in 2000.<sup>1</sup> South Asia has a high prevalence of low adult BMI (23.4% in men and 24.0% in women in 2014) and rates are also high in central and east Africa.<sup>1</sup> Micronutrient deficiencies have remained stubbornly high, with about 264 million women of reproductive age affected by iron-amenable anaemia.<sup>4</sup>

At the same time, overweight, obesity, and diet-related NCDs are growing steadily. Recent estimates suggest that 1.9 billion adults (38% of the global adult population) and 41 million children younger than 5 years are overweight, while related heart disease and stroke are the number one and two causes of deaths worldwide, respectively.<sup>1,3,5</sup>

The result is that many countries now face a “double burden of malnutrition”—a coexistence of undernutrition and overweight, obesity, or non-communicable diseases.<sup>6</sup> In 2016, 57 of 129 countries surveyed had significant levels of either stunting or

anaemia plus adult overweight (defined as prevalence of stunting or anaemia<sup>3</sup> 20% and high BMI<sup>3</sup> 35%). There are also biological connections between the different forms of malnutrition—for example, a stunted child is more likely than a child of normal height to be overweight or affected by NCDs as an adult. The combination of malnutrition also occurs within households, and even individuals.<sup>6</sup>

This double burden of malnutrition presents an urgent health challenge to the global community, but through shared drivers across contrasting forms of malnutrition, new and effective opportunities for intervention emerge. This is the potential of “double-duty actions”—interventions, programmes, and policies that have the ability to simultaneously reduce the risk or burden of both undernutrition and overweight, obesity, or diet-related NCDs.<sup>7</sup> Double-duty actions offer an integrated approach to addressing malnutrition. WHO proposes three levels for increasing the efficiency of nutrition actions through a double-duty approach.<sup>6</sup>

First, through ensuring that current interventions, policies, and programmes designed to address one form of malnutrition do not inadvertently increase the risk of another. This “do not harm” approach emerges from the historical focus of the agriculture sector on addressing undernutrition. As more and more public and private investment poured into increasing productivity of a small range of staples, limited attention was paid to the impact on more micronutrient-rich, indigenous crops or, indeed, the risk of consuming too much of the wrong types of food.<sup>8</sup> The laudable intention of this revolution in crop productivity was to ensure food adequacy—but it may have inadvertently given rise to other nutrition challenges. In the future, ensuring that current programmes designed to address one type of malnutrition do not raise the longer-term risks posed by other forms will be key.

Second, there is a need to leverage existing actions designed to address one type of malnutrition to simultaneously reduce other types. Without this “retrofit” approach, policymakers will miss opportunities for more efficient, integrated action, as evidenced by the experience of Latin America. There, albeit with diverse

*Lancet Glob Health* 2017  
Published Online  
May 18, 2017  
[http://dx.doi.org/10.1016/S2214-109X\(17\)30204-8](http://dx.doi.org/10.1016/S2214-109X(17)30204-8)

trends, there has been an overall significant decline in stunting—accompanied by a rapid increase in obesity.<sup>9</sup> Investments proven to be effective in reducing stunting, such as cash transfer programmes, better sanitation, women’s education, and access to health care, were not leveraged to encourage and enable healthy, nutritious diets. For example, cash transfer programmes could have been designed to play a greater role in enhancing healthy diets to reduce the risk of obesity.<sup>10</sup> Likewise, school meal programmes focused on reducing food insecurity could have been leveraged to include more nutrition education<sup>9</sup> and ensure that sugary drinks and snacks were kept out of schools. In the future, integrating actions to address all forms of malnutrition through these existing programmes could reap double returns.

The third level is to identify the shared drivers between different forms of malnutrition to proactively identify *de novo* actions for reducing all forms of malnutrition. While many drivers are different—diarrhoea, for example, is culpable for undernutrition but not obesity—at a deeper level one can identify food systems and associated food environments, deeply entrenched social norms, socioeconomic status, and biology as some shared causes and therefore shared opportunities for action.

Nutrition is a cross-cutting determinant for many health and development challenges, with the ability to catalyse the achievement of key global goals and targets. In the broader context of ending malnutrition in all its forms, the intersection of seemingly contrasting and often confounding forms of malnutrition provides a critical point for renewed focus, as well as policy and programme interventions. As highlighted in two new policy briefs published by WHO this week,<sup>6,7</sup> addressing the double burden of malnutrition through double-duty

actions will be of critical importance in achieving both the ambitions of the UN Decade of Action on Nutrition and the Sustainable Development Goals.

Corinna Hawkes, \*Alessandro R Demaio, Francesco Branca  
Centre for Food Policy, School of Arts and Social Sciences, City University, London, UK (CH); and Department of Nutrition for Health and Development, World Health Organization, Geneva, Switzerland (ARD, FB)  
demaioa@who.int

ARD and FB are staff members of the World Health Organization. The authors alone are responsible for the views expressed in this publication and they do not necessarily represent the official position, decisions, policy, or views of the World Health Organization. We declare no competing interests.

© 2017 World Health Organization; licensee Elsevier. This is an Open Access article published under the CC BY-NC-ND 3.0 IGO license which permits users to download and share the article for non-commercial purposes, so long as the article is reproduced in the whole without changes, and provided the original source is properly cited. This article shall not be used or reproduced in association with the promotion of commercial products, services or any entity. There should be no suggestion that WHO endorses any specific organisation, products or services. The use of the WHO logo is not permitted. This notice should be preserved along with the article’s original URL.

- 1 UNICEF/WHO/World Bank Group. Joint child malnutrition estimates: key findings of the 2017 edition. UNICEF/WHO/World Bank Group, 2017.
- 2 IFPRI. Global Nutrition Report 2016. Washington DC: IFPRI, 2016.
- 3 NCD Risk Factor Collaboration. Trends in adult body-mass index in 200 countries from 1975 to 2014: a pooled analysis of 1698 population-based measurement studies with 19.2 million participants. *Lancet* 2016; **387**: 1377–96.
- 4 WHO. The global prevalence of anaemia in 2011. Geneva: World Health Organization, 2015.
- 5 WHO. The top 10 causes of death (fact sheet). Geneva: World Health Organization, 2017.
- 6 WHO. The double burden of malnutrition. Policy brief. Geneva: World Health Organization, 2017. <http://apps.who.int/iris/bitstream/10665/255413/1/WHO-NMH-NHD-17.3-eng.pdf> (accessed May 17, 2017).
- 7 WHO. Double-duty actions. Policy brief. Geneva: World Health Organization, 2017. <http://apps.who.int/iris/bitstream/10665/255414/1/WHO-NMH-NHD-17.2-eng.pdf> (accessed May 17, 2017).
- 8 Global Panel on Agriculture and Food Systems for Nutrition. Food systems and diets: facing the challenges of the 21st century. London: Global Panel on Agriculture and Food Systems for Nutrition, 2016.
- 9 FAO Latin America Office. Panorama alimentaria y nutricional. Santiago: FAO, 2017. <http://www.fao.org/3/a-i6747s.pdf> (accessed May 15, 2017).
- 10 Fernald LC, Gertler PJ, Hou X. Cash component of conditional cash transfer program is associated with higher body mass index and blood pressure in adults. *J Nutr* 2008; **138**: 2250–57.