



## 1.15 Launch a new alliance to end anaemia

**The Solution:** The global health community has coalesced in principle around the need to address anaemia, one of the oldest known diseases. Yet no country is on target to meet World Health Assembly Targets,<sup>1</sup> and the prevalence of anaemia has remained largely unchanged over the past decades.<sup>2</sup> Anaemia is a multi-causal disease that requires action across sectors. Yet the evidence and actions to address anaemia have been generated and advanced in silos. This solution proposes *a cross-sector Alliance, the ‘Strong Blood Alliance’, that brings together science, policy, and programmes across the food and health sectors (including sexual and reproductive health, child and adolescent health, infectious diseases, and haematology) to fix the apparently intractable problem of anaemia prevention and control.*

Grounded in the commitment to accelerate progress on SDG2, this Alliance will: 1) convene discussions and debates on the causes, responses and measurement of anaemia, generate joint research agendas to address remaining biological and programmatic issues that constrain progress, resulting in evidence-based programme and policy recommendations for countries and donors; 2) engage with existing multi-stakeholder initiatives to advocate for further investment and coordinated action to address anaemia. Women’s empowerment is at the core of this solution. Women often eat last and least, are at highest risk related to demands of pregnancy, and often lack timely and adequate care. Women bear the greatest burden of anaemia and therefore have the greatest potential to benefit, making coordinated action to end anaemia an equity and fairness issue.<sup>3</sup> Under the umbrella of the Alliance, specific commitments will be developed for action in the food, health, and other relevant sectors. In this note, we focus on the Alliance approach and the specific actions to accelerate progress within the food system.

**Source of the Solution:** The solution emerged from discussions among working group members based on their experience in research and programmatic activities to address anaemia. The urgency stems from the documented lack of progress and the impetus generated by the addition of anaemia as a key SDG2 indicator in 2019.<sup>4</sup>

**Problem addressed within food systems:** Action track 1 aims to reduce the burden of all forms of malnutrition. Micronutrient malnutrition, particularly deficiency in iron, folate, and vitamins A and B<sub>12</sub>, is one of the primary causes of anaemia. Anaemia, like many forms of malnutrition, has inadequate diets at its core: the food system and the policies and approaches that govern and support it have failed to ensure that foods rich in micronutrients (naturally and through fortification) are available and affordable to all. However, actions beyond improved diets are needed to address all forms of malnutrition. For anaemia, significant progress can be made only if we break the silos that have existed and address anaemia in a holistic fashion. The Alliance thus proposes coordinated activities across sectors, which will translate into actionable, impactful commitments within each.

**How this solution will address that problem:** The inclusion of anaemia in women of reproductive age as an indicator for SDG2 is ground-breaking. It puts women’s health – their own health and that of the next generation - at the forefront of the agenda. The Strong Blood Alliance will ensure that the global community coalesces to achieve this goal. The Alliance will be centred initially around the opportunity presented by the FSS and N4G. Food and health systems actions are central to addressing anaemia and provide needed impetus for more direct collaboration. The Alliance will bring together stakeholders from all relevant sectors to:

<sup>1</sup> Global Nutrition Report 2018: <https://globalnutritionreport.org/reports/global-nutrition-report-2018/>

<sup>2</sup> World Bank: [Our World in Data](#) (accessed October 2020)

<sup>3</sup> <https://www.devex.com/news/sponsored/opinion-are-we-failing-on-maternal-nutrition-98727>

<sup>4</sup> <https://unstats.un.org/sdgs/metadata/?Text=&Goal=2&Target>



1. **Bring new evidence for effective action.** New evidence permits more accurate identification of those who can benefit from anaemia interventions<sup>5,6,7,8</sup> and provides critical tools to adapt the package of interventions needed, in a given context, to accelerate change.<sup>9</sup> Through convening discussions and debates on the causes, responses, and measurement of anaemia, the Alliance will develop evidence-based programme and policy recommendations for countries and donors and generate joint research agendas to address remaining biological and programmatic issues that constrain progress. Leading this translation through the multi-sector Alliance can break down silos to ensure that anaemia prevention and control strategies are based on up-to-date evidence and foster coordinated cross-sector action. Highlighting such evidence and proof of success will drive further commitment and inform approaches beyond the FSS and N4G.
2. **Foster commitments, investment, and action.** Through advocacy and aligned with FSS and N4G, the Alliance will mobilise sector-specific commitments and direct actions to deliver proven interventions. For food systems,<sup>10</sup> this includes staple food fortification (rice and double/multiple fortified salt), and actions to improve availability and affordability of nutrient-rich foods such as animal source foods and legumes, with particular emphasis on support for women entrepreneurs.

**Solution's alignment to the 'game changing and systemic solution' criteria:** New evidence illustrates the need for a radical change in approach that cannot be achieved without collaboration across sectors. The Alliance will advance coordinated action across sectors with implications for FSS and N4G, and the breaking down of silos to advance evidence and action through joint research, policy, and programmes. This approach will unlock *impact at scale* that has been constrained by insufficient attention to the multi-sector nature of anaemia. At the same time, it will ensure *actionability* and *sustainability* by fostering commitments for the scale up of proven approaches within each sector. In this manner, the Alliance combines a novel approach to engagement and cooperation, while building evidence, momentum, and resources for actionable efforts needed in countries.

**Existing evidence:** Alliances have been an effective way to galvanise interest and mobilise resources to solve big problems that cut across sectors. The most prominent example is the Global Fund to Fight AIDS, Tuberculosis and Malaria (the Global Fund), which has advanced evidence, policy and programmes, mobilised significant funding, and demonstrably improved the lives of millions.<sup>11</sup> The Global Alliance for Vaccines and Immunization (GAVI) has helped vaccinate more than 800 million children.<sup>12</sup> Like these examples, the central premise of the Strong Blood Alliance is to bring key stakeholders together around a common mission that will advance the resolution of research issues, advance programmes, and mobilise resources at a scale and speed that could not be achieved by a single sector working alone. Robust evidence also exists for food systems-specific actions related to anaemia reduction.<sup>Error! Bookmark not defined.</sup> Systematic reviews have demonstrated reductions in anaemia from improved micronutrient intakes,

<sup>5</sup> Neufeld LM, Larson LM, Kurpad A, Mburu S, Martorell R, Brown KH. Hemoglobin concentration and anemia diagnosis in venous and capillary blood: biological basis and policy implications. *Annals of the New York Academy of Sciences*. 2019;1450:172–89.

<sup>6</sup> Rappaport AI, et al. Variability in haemoglobin concentration by measurement tool and blood source: an analysis from seven countries. *Journal of Clinical Pathology* [Internet]. BMJ Publishing Group; 2020

<sup>7</sup> <https://www.who.int/nutrition/events/2019-meeting-guideline-development-group-6to8Nov/en/>

<sup>8</sup> <https://www.advancingnutrition.org/what-we-do/monitoring-evaluation-and-learning/anemia-task-force>

<sup>9</sup> Wirth, J. P. et.al. (2017). Predictors of anemia in women of reproductive age: Biomarkers Reflecting Inflammation and Nutritional Determinants of Anemia (BRINDA) project. *The American Journal of Clinical Nutrition*, 106(suppl\_1), 416S-427S.

<sup>10</sup> The Alliance will also seek sector-specific action based on proven interventions in other sectors, for example through N4G: malaria and infection control, antenatal care and maternal micronutrient supplementation, etc.

<sup>11</sup> Friebel, Rocco, et al. "On results reporting and evidentiary standards: spotlight on the Global Fund." *The Lancet* 393.10184 (2019).

<sup>12</sup> Brugha, R., Starling, M., & Walt, G. (2002). GAVI, the first steps: lessons for the Global Fund. *The Lancet*, 359(9304), 435-438.



including through fortification.<sup>13</sup> Fortification has a very good benefit-cost ratio (8:1 for iron in wheat or maize flour) for averted disease, improved earnings, and enhanced work productivity.<sup>14,15</sup> Today, rice represents over 20% of daily energy and protein intake for 3.5 billion people but is a poor source of micronutrients, and <1% of rice is currently fortified. This highlights enormous potential for scale. Similarly, leveraging the unmitigated success of salt iodisation and the ubiquity of salt<sup>16</sup> presents enormous potential for impact at scale of double-fortified (DFS – iron and iodine) or multiple-fortified salt.<sup>17</sup> Several countries have adopted DFS as part of social safety net programmes, for example reaching 60 million people in India. Beyond fortification, working with SMEs in the nutritious food (e.g., animal-source foods, fruit/vegetables, pulses) sector and ensuring they have access to technical and financial opportunities to grow and optimise processes across the food value chain can substantially increase availability and affordability of nutrient-dense foods.<sup>18</sup> In this regard, women entrepreneurs are of particular focus. There are systemic barriers to access and participation at all stages of the food system for women entrepreneurs.<sup>19</sup> Placing women's empowerment at the centre of the Alliance can help shift this balance.

**Current/likely political support:** The inclusion of anaemia as an SDG2 indicator has created unprecedented interest and commitment. New evidence has already sparked actions from WHO to update diagnostics<sup>20</sup>, from others to strengthen data quality and availability,<sup>21</sup> and new public-private partnerships to accelerate scale-up of specific interventions (such as the Healthy Mothers Healthy Babies Initiative).<sup>22</sup> Several country governments have already made concrete commitments to advance the agenda of several of the actions described, for example rice fortification in India and the Philippines. The Alliance, grounded in women's empowerment, can bring in a diverse range of existing and new stakeholders, including the Bill and Melinda Gates Foundation, Children's Investment Fund Foundation, Women Deliver, Micronutrient Forum, USAID, UNILife, BASF, DSM, and academics across sexual and reproductive health, haematology, nutrition, malaria, and infectious disease. The Scaling Up Nutrition (SUN) Business Network can be leveraged to engage with SMEs supplying nutrient-rich foods in LMICs.

**Contexts for which this is well suited:** The alliance would be global, with a focus on countries with the highest burden of anaemia

<sup>13</sup> Keats, E. C., Neufeld, L. M., Garrett, G. S., Mbuya, M. N., & Bhutta, Z. A. (2019). Improved micronutrient status and health outcomes in low-and middle-income countries following large-scale fortification: Evidence from a systematic review and meta-analysis. *The American journal of clinical nutrition*, 109(6), 1696-1708.

<sup>14</sup> <https://www2.gatesfoundation.org/Ideas/Articles/food-fortification-to-fortify-the-future>

<sup>15</sup> Nordhagen S. Supporting gender equity through food system businesses in lower-income countries. GAIN Working Paper #11. Geneva, Switzerland, 2020. DIO: <https://doi.org/10.36072/wp.11>

<sup>16</sup> The World Health Organization has reviewed and concluded that the fortification of salt is compatible with parallel sodium reduction efforts: [https://apps.who.int/iris/bitstream/handle/10665/101509/9789241506694\\_eng.pdf?ua=1](https://apps.who.int/iris/bitstream/handle/10665/101509/9789241506694_eng.pdf?ua=1)

<sup>17</sup> Mkumbula, P., Mbuya, M. N., Rowe, L. A., Sablah, M., Friesen, V. M., Chadha, M., ... & Gorstein, J. (2020). The unfinished agenda for food fortification in low-and middle-income countries: quantifying progress, gaps and potential opportunities. *Nutrients*, 12(2), 354.

<sup>18</sup> Morris S, and Haddad L. Selling to the world's poorest. The potential role of markets in increasing access to nutritious foods. Global Alliance for Improved Nutrition (GAIN). Working Paper Series #14. Geneva, Switzerland, 2020. <https://doi.org/10.36072/wp.14>.

<sup>19</sup> Nordhagen S, Condes S. Supporting gender-equitable food systems through access to finance for small and medium-sized companies. Global Alliance for Improved Nutrition (GAIN). Working Paper Series #13. Geneva, Switzerland, 2020. <https://doi.org/10.36072/wp.13>.

<sup>20</sup> <https://www.who.int/nutrition/events/2019-meeting-guideline-development-group-6to8Nov/en/>

<sup>21</sup> <https://www.advancingnutrition.org/what-we-do/monitoring-evaluation-and-learning/anemia-task-force>

<sup>22</sup> <https://micronutrientforum.org/goalkeepers/accelerator-updates/>