Business Contributions to Setting New Research Agendas:

Business Platform for Nutrition Research (BPNR)
Purpose

- How can we promote more investment into public research?
- How can we promote improved uptake of research results into programs, policies and products?
- How can we more systematically engage business in partnerships which contribute to the public good and meet business bottom line?
What is the global state of nutrition science?

• Nutrition is a relatively new science and it is tremendously complex. Consequently there is a lot we don’t yet know.

• Addressing undernutrition in developing countries has historically been the mandate of the public sector. With limited resources and capacity governments and NGO’s will need support to meet the growing demands of a complex health context.

• The private sector can be the engine to meet the evolving demands on the global food and nutrition system but there will need to be an increased commitment beyond the current investment in R&D which is limited to only approximately 1-2% of total sales with even fewer resources being invested into innovative solutions to malnutrition in developing countries.

• The incentive for private sector investment in early stage research is limited because the links to the core business are not clear. Moreover, ill-regulated markets, lacking consumer demand and limited purchasing power mean that the potential rewards often do not outweigh the risk of new market entry.
What is the consequence?

Global malnutrition $\rightarrow$ Not enough cost effective solutions

Urgent need for Innovation in:  
- Products  
- Delivery channels  
- Approaches to behavior change

+ Donors  
+ Governments  
+ NGO’s  
+ Academia  
+ Private sector R&D

Building evidence and consensus to unlock new products and services

In order to partner (and pool resources) we need to identify a research agenda which can be explored pre-competitively
Is the political will in place to change this?

- More than 2 billion people around the world suffer from malnutrition.
- Undernutrition is responsible for 45% of the 3.1 million child deaths per year.
- It is responsible for up to 11% of total GDP loss in Africa and Asia is as a result of undernutrition.
- To address this, in 2010 the UN launched the Scaling Up Nutrition movement and more than 45 countries have already joined.
- Policymakers are quickly warming to the idea that business can be an important contributor to tackling malnutrition.
- So far very few proposals have been put on the table of how to do it.
A New Model: the Business Platform for Nutrition Research (BPNR)

Announced at the G8 Nutrition for Growth Summit in June 2013 and formally launched at the UN General Assembly in September, the BPNR is a multi-stakeholder platform for defining, funding and disseminating new research to improve nutrition.

For private sector:
Sharing the cost of R&D for key nutrition issues will make it easier for the private sector, which produces and delivers food, to apply its product development and marketing capabilities to unlock solutions to malnutrition.

For the public sector:
To better leverage its investments and ensure that research results don’t merely sit on the shelf of academic libraries, but are reflected in new products and delivery models that actually reach lower income groups and contribute to reduction of malnutrition world-wide.
What is the target market for this platform?

- Low and middle income populations in developing countries, most often in rural settings but increasingly moving into cities and also high income populations as well.

- Seek solutions to undernutrition for low income consumers, but it is expected that research will also be applicable for higher income groups which may fit better with traditional commercial products.

- Research may also support solutions for people with little or no purchasing power, who are served through institutional channels.
How will the platform operate?

• The BPNR will serve as an umbrella structure, connecting business, donors, and academia together to jointly define and invest in research which will be conducted by research institutions.

• Funding can flow either competitively, or through strategic partnerships to select research partners.

• Academic institutions will publish all research results, and the BPNR will aggregate results, helping to build cross-sector learning and promote the uptake of research in new policies, programs and commercial R&D.

• The BPNR may also develop capacity to support initiatives such as open data, and knowledge and technology exchange.
Supporting Companies
How does business add value?

• Investing additional financial resources into important public goods
• Bringing business skills and expertise to the table
• Helping to focus the research agenda with the aim of promoting uptake

Why should business care?

• Leverage funds (both public and private) to address relevant basic research
• Build evidence through a transparent and credible platform
• Engage in a more systemic approach to integrating business perspective in research
• Build pathways to integrating research outcomes into policies and programs
Roles of different actors

**Private Sector**
Co-investing to build the global evidence base; helping to shape research priorities so that research outcomes can be applied in downstream product development and program delivery.

**Academia**
Helping to shape research priorities so that research fills key gaps in the global evidence; conducting independent research.

**Communities**
Testing interventions to ensure solutions are relevant and easy-to-use; working with other national stakeholders to prioritize research and interventions which meet needs of the underserved.

**NGO’s**
Supporting research implementation and integrating research results into new program design.

**Donors**
Co-investing to build the global evidence base; aligning research investments with BPNR investments to leverage funding.

**National Governments**
Identifying research priorities for country-level program design and implementation; encouraging knowledge/technology transfer and capacity development.

**GAIN**
Enabling dialogue between stakeholders, brokering partnerships and disseminating learning.
The hard part

• How to define a research agenda which is:
  
  • Adding to existing research and in support of the public good
  • Relevant from a commercial standpoint
  • Pre-competitive
Nutrition Research Framework
(many of these research streams are cross-cutting)

**Biomarkers/**
**Bioavailability/**
**Diagnostics**
(how to assess presence of malnutrition in humans; and which nutrients in which forms have the most impact, considering different delivery vehicles and nutrient combinations)

**Formulation/**
**Composition**
(which combinations of nutrients are most effective by population and delivery vehicle and what ingredients can be substituted to improve the overall nutritional quality, cost effectiveness and local sourcing)

**Food Packaging**
(what are the most cost effective ways to deliver quality controlled nutrition products)

**Safety/**
**Quality/**
**Waste**
**Tools & Diagnostics**
(what measures exist for ensuring and testing food safety and nutrient density in the field and for reducing nutritious food waste)

**Consumer Behavior/**
**Delivery Channels**
(which vehicles, delivery channels, messages, price points are most acceptable to target consumers)

**Broader Human**
**Health Links**
(what are the links between malnutrition and broader human health)
## Potential Research Streams

<table>
<thead>
<tr>
<th>Research Stream</th>
<th>Research Questions</th>
<th>Commercial Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Links</td>
<td>• What are the links between malnutrition and human health issues such as the microbiome, infectious disease, chronic disease and obesity?</td>
<td>• Greater understanding of the links (in both directions) between malnutrition and broader human health leads to broader set of product offerings impacting nutrition</td>
</tr>
</tbody>
</table>
| Biomarkers/ Bioavailability/ Health Diagnostics | • What biomarkers best evidence micronutrient deficiencies?  
• What forms/combinations of nutrients is the body best able to absorb and what is the impact of different delivery vehicles on nutrient absorption?  
• What tools are available/must be developed to demonstrate real time, accurate diagnosis of micronutrient deficiency in the field? | • Greater understanding of biomarkers could lead to institutional demand for new products to address detectable deficiencies  
• Global guidelines on bioavailable forms of nutrients/nutrient combinations by vehicle could inform product standards and health claims  
• Easy to use, portable and non-invasive diagnostic tools lead to better consumer and national government awareness of malnutrition, leading to greater demand for nutritious products |
| Formulation/ Composition | • What are the gaps in current intake and what is the most appropriate formulation for products targeted to maternal nutrition?  
• What available substitutes exist to replace/partially replace animal source proteins and fat sources? | • Global formulation guidelines leads to product standards and health claims for targeted maternal nutrition products  
• Alternative sources of protein and fat lead to new protein rich products for low income consumers |
| Food Safety/ Quality/Waste | • What technologies and methods are available to ensure that inputs into nutritious foods are safe, that foods retain their nutrients throughout the value chain and that food loss is averted? | • New field tested technologies and methodologies for ensuring food safety and quality can lead to greater enforcement of product claims of competitors, and improvements in food waste can prevent product loss |
| Consumer Behavior        | • What are the drivers of behavior motivating low income consumers to purchase foods?  
• What is the methodology for exploring these drivers for nutrition? | • Deeper understanding of consumer preference and purchasing power leads to more targeted product offering and messaging, and ultimately more nutritious product uptake |
Structure and Governance

Advisory Board on Research Integrity and Transparency

BPNR Secretariat

**Research 1**
- Business A
- Business B
- Business C
- Donor A
- Academic A

**Research 2**
- Business C
- Business D
- Donor B
- Donor C
- Academic B

**Research 3**
- Business D
- Donor D
- Academic C

**Research 4**
- Business A
- Business B
- Business C
- Business D
- Academic D

**Business Partners**
- Business A
- Business B
- Business C
- Business D

**Donor Partners**
- Donor A
- Donor B
- Donor C
- Donor D

**Academic Partners**
- Academic A
- Academic B
- Academic C
- Academic D
Functions of BPNR Secretariat

- Helping **to refine the scope** of research briefs and to distil potential research questions under those streams, which will be vetted by the Global Advisory Group and by members of academia;

- **Engaging** with the broader development and research communities to identify entry points and avoid duplication;

- **Brokering** partnerships between the interested players;

- **Coordinating/mobilizing** resource contributions for each stream/activity;

- Facilitating **cross research** stream partnership and learning;

- **Linking** with global and national standards bodies to ensure that research results feed into key policy decisions, guided by input from the Global Advisory Group and members of the research stream steering committees;

- **Disseminating learning** coming from the research;

- **Managing and coordinating** the Global Advisory Group and enabling its public reporting;

- **Communications** and platform representation;

- Facilitating knowledge and technology **transfer to public and private sector actors** in developing countries, including local businesses, government, civil society and academia.
Advisory Board on Research Transparency and Integrity (Terms)

The primary objectives of the Advisory Board:

- Help identify key evidence gaps in nutrition and prevent overlap with existing research efforts;
- Highlight potential entry points/interest areas for private sector;
- Propose new products/technologies needed in the field and stimulate discussion on research needed to de-risk new product development;
- Review the scope of research briefs.

Additional operational functions:

- Advise on processes for selecting research streams and research partners;
- Develop guidelines for ensuring research benefits intended beneficiaries and establish public health criteria for market based delivery for nutrition;
- Develop conflict of interest principles (hopefully light touch given the platform is pre-competitive).
Potential Products and Interventions a pre-competitive R&D platform might unlock

Develop **affordable, portable diagnostic tools/devices** to be used at scale for assessing quality and safety of products in the market, as well as health impact.

Ensure that companies **compete on which products taste the best**, are most affordable, etc. and **not on which products are least likely to kill you**.

Provide solutions to **reduce costs and promote more local sourcing** for food and nutrient supplements (including RUTF, RUSF).

Promote **links with health and hygiene products** through understanding of links between undernutrition and microbiome, and better understanding of the double burden of malnutrition.

Identify affordable, effective and scalable **solutions to improve maternal nutrition** in order to reduce perinatal and neonatal mortality, and positively impact child nutrition through
- research on impact of product formulation and product formats,
- effective delivery channel, and
- impactful behavior change approaches.
Questions?

Thank you!