



Summary Outcome Paper for Discussion

SCIENCE TO SOLUTIONS DIALOGUE 1 Putting Food in Food

EAT and the World Business Council for Sustainable Development (WBCSD) through FReSH convened a series of Science to Solutions Dialogues. The first dialogue which took place in London, U.K., on 13-15 March 2018, brought together business scientists, academic scientists and civil society to dialogue about three challenges within the food system: how to improve the nutritional content and environmental sustainability of processed foods; how can processing and packaging avoid food waste and loss; and how to bring the consumer along. The following paper summarizes the discussion and emerging solutions space for business to provoke initial discussion and feedback.

Food systems – all the processes involved in feeding the global population – are key to supporting good health and well-being and are a critical part of the biosphere underpinning prosperous societies and economies.¹ Yet current food systems are not providing for people or the planet. Despite progress on improving nutrition, the burden of malnutrition remains stubbornly high: 815 million people are hungry,² 2 billion are deficient in critical micronutrients,³ and 2.1 billion adults are overweight or obese,⁴ contributing to the upsurge in diet-related diseases.

Beyond nutritional outcomes, food systems are also a main contributor to environmental damage, responsible for 19-29% of greenhouse gas emissions⁵ and agriculture being responsible for 70% of available global freshwater use^{6,7} and driving deforestation, biodiversity loss and land degradation.

Businesses are a crucial element of food systems as nearly all food consumed around the world is produced, processed or supplied by them: be it large

agribusinesses, smallholders, or small and medium enterprises. This puts large and small businesses at the heart of the potential for food system transformations.

FReSH is a joint project, between EAT and WBCSD that provides a platform for businesses to tackle the greatest health, environmental and social challenges stemming from food systems.

FReSH members will test the solutions developed against the outcomes of the report from the EAT-Lancet Commission on Healthy Diets from Sustainable Food Systems. The EAT-Lancet Commission has brought together more than 30 international experts in nutrition, environmental sciences, food systems and policy to produce scientific targets that define the safe operating space for global diets and sustainable food production. FReSH members will work to translate these scientific targets into science-based targets for business that guide FReSH's transformational goals, shared ambition and Science to Solutions Dialogues (SSD).

Figure 1. Critical path for solution development



The challenge:

Improving the nutritional content and sustainability of processed food to address over- and under-nutrition

Common understanding of the challenge

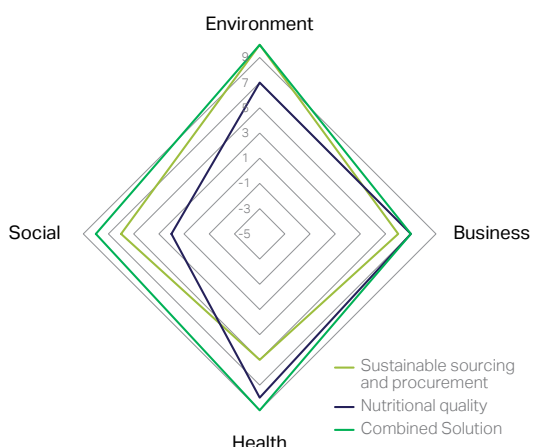
Food processing can play a pivotal role in addressing both under- and over-nutrition. A focus on the quality of packaged foods often stresses nutritional rather than environmental impacts, yet the methods used to produce the inputs of processed foods can have significant impacts on water and land use, biodiversity, climate and nutrient (nitrogen and phosphorous) cycles.

Thus, solution spaces must focus on creating net positive impacts for both health and the environment. Additionally, the social impacts of packaged foods need to be better understood.

Solution space

Two key solutions emerged. First, to improve the nutritional quality of processed foods, reformulation, innovation and renovation are key tools that companies can use to optimize the healthiness of ingredients and to show that taste and nutrition are not mutually exclusive. Second, companies can develop sourcing and procurement standards to procure healthy ingredients from sustainable production systems. For maximum impact, and as illustrated below, mainstream procurement standards that promote high quality (healthy + sustainable) foods based on the EAT-Lancet Commission report outcomes should combine these two solutions.

Figure 2. Prioritization of solutions for challenge one*



* Note that impacts are indicative, based on the best estimates of the group, and do not reflect a final analysis of the impact of the solution.

The challenge:

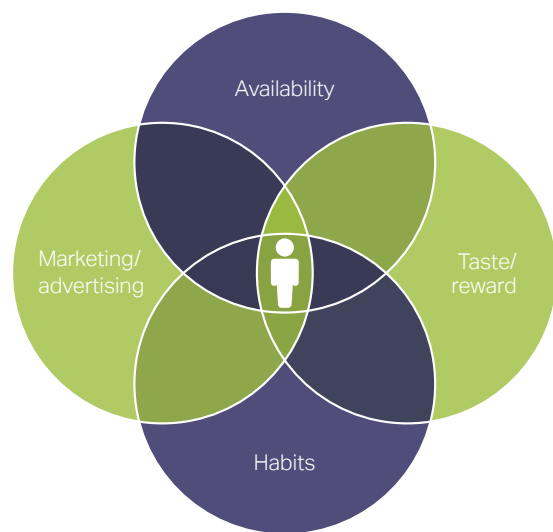
Bringing the consumer along

Common understanding of the challenge

Reframing the current discourse will harness the power of individuals to embrace and drive change. It requires putting individual well-being at the core of business solutions rather than viewing consumers as reluctant followers of business trends.

Any approach to influencing consumer choice should account for the four main drivers of choice: marketing/advertising, availability (e.g. costs, supply), taste/reward, and habits/familiarity/cultural preferences.

Figure 3. Four main drivers of choice



Solution space

A multifaceted consumer behavior change program that addresses the four drivers of consumer choice should complement the introduction of innovative and reformulated processed foods to support health, well-being and the environment (a solution identified in the first challenge above). A holistic package of interventions targeting each driver will have a synergistic rather than additive effect. Focal areas for interventions include:

- Marketing/advertising: optimize marketing and advertising to increase acceptability of healthy and sustainable food. Use innovative language to sell healthier/more sustainable foods without the healthy/sustainable label.
- Availability: equivalent costs for healthy/sustainable and unhealthy/unsustainable foods could lead to equivalent acceptability.
- Taste/reward: incrementally improve the health and sustainability quotient of food while preserving taste and acceptability.
- Habit/familiarity/cultural preferences: use teachable moments and behavior change programs to shift individuals' food habits.

The challenge:

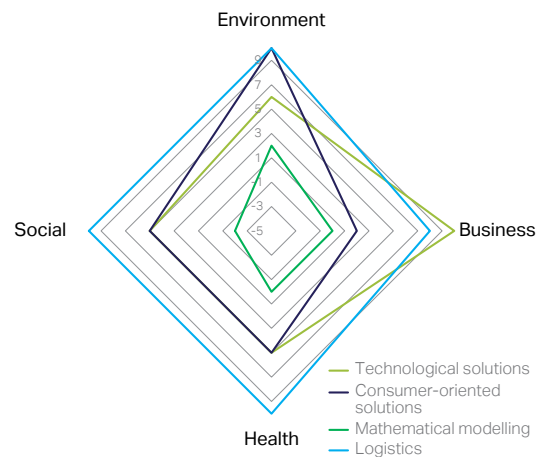
Reducing food losses and waste (FLW) associated with food processing and packaging

Solution space

Four main solution spaces underscore the need for evidence to enable the development of specific solutions:

- Technologies to optimize processing and preservation (with a particular focus on preserving fresh foods to increase their shelf life)
- Logistics (length of supply chain and delivery method, storage facilities)
- Consumer behavior (portion size, replenishment and leftover management – technologies and apps)
- Mathematical modelling (in order to limit the number of experiments that would produce FLW)

Figure 4. Prioritization of solutions for challenge 3



References

- ¹ FAO (Food and Agriculture Organization of the United Nations) (2016). *Food and Agriculture: Key to achieving the 2030 Agenda for Sustainable Development*. Rome: FAO, 2016.
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- ³ WHO (World Health Organization), FAO (Food and Agriculture Organization of the United Nations) (2006). *Guidelines on food fortification with micronutrients*. Geneva: WHO.
- ⁴ WHO (World Health Organization). Global Health Observatory (GHO) data: overweight and obesity. 2018. http://www.who.int/gho/ncd/risk_factors/overweight_text/en/ (accessed 4 January 2018).
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- ⁶ Foley, J.A., Ramankutty, N., Brauman, K.A., et al. Solutions for a cultivated planet. *Nature* 2011; 478(7369): 337-42.
- ⁷ Comprehensive Assessment of Water Management in Agriculture (2007). *Water for Food, Water for Life: A Comprehensive Assessment of Water Management in Agriculture*. London: Earthscan; Colombo: International Water Management Institute.

Participants

We would like to thank the participants who contributed to the discussions with open minds and ideas.

Research Scientists

Saul Morris, GAIN
Susan Roberts, Tufts University
Joanna Kane-Potaka, CGIAR/ICRISAT

Business representatives

Alyson Greenhalgh, Kellogg
Alice Durand-Réville, Danone
Daniel Dorantes, Sigma Alimentos
Karin van het Hof, Unilever
Denise Jacobs, DSM
Chris Brown, Olam

Civil society representatives

Duncan Williamson, WWF International
Saul Morris, GAIN

FReSH representatives

Alison Cairns, FReSH
Alexi Ernstoff, FReSH/Quantis
Fabrice DeClerck, EAT
Alain Vidal, CGIAR and FReSH
SSD Lead

Facilitator

Amanda Harding, Convene

EAT Science writer

Amanda Wood, EAT/Stockholm Resilience Centre



**World Business Council
for Sustainable Development**

Maison de la Paix
Chemin Eugène-Rigot 2B
CP 2075, 1211 Geneva 1
Switzerland

www.wbcasd.org

