

Commentary

Is “small quantity lipid nutrition supplement” (SQ-LNS) a sustainable and pragmatic strategy to prevent malnutrition?

Arun Gupta, MD, FIAP^{1a}, Patti Rundall, Dip AD, ATC²,
Nomajoni Ntombela, CNM, Nurse Midwife, Post Graduate in Advances Clinical Fellowship in Lactation Management³,
Harshpal Singh Sachdev, MD, FRCPC⁴

¹ Nutrition Advocacy in Public Interest, ² IBFAN Global Advocacy, Baby Milk Action, ³ IBFAN Africa, ⁴ Pediatrics and Clinical Epidemiology, Sitaram Bhartia Institute of Science and Research

Keywords: food fortification, infant and young child feeding, prevention of malnutrition, developing countries, development assistance, conflict of interest, breastfeeding, complementary feeding, corporate capture, ultra-processed foods

<https://doi.org/10.26596/wn.2023141103-112>

World Nutrition 2023;14(1):103-108

Young child malnutrition and food insecurity is the result of many factors including social and economic inequities, disempowerment of women, inadequate support for breastfeeding, degraded environments, poor sanitation, unsafe water, violence, and conflict. In this complex context, humanitarian agencies have a responsibility to guard against unintended consequences and ensure that the promotion of “quick fix” interventions does no harm. One such intervention is the Small Quantity Lipid Nutrition Supplements (SQ-LNS), that UNICEF is recommending for introduction into national nutrition programs to prevent malnutrition and reduce mortality. The authors believe this recommendation is based on questionable evidence. We point to a fundamental flaw – that trials compared “an intervention (SQ-LNS)” with “no comparable food-based intervention” – in effect, a pre-determined outcome. Also present is a conflict of interest, with support and intellectual input coming from interested food companies. Other concerns include: SQ-LNS is an ultra-processed food (UPF), as defined by Nova Classification; daily feeding to children with poor diets will not improve dietary diversity and may undermine confidence in more culturally appropriate, nutritious, and lower cost family foods; the double burden of malnutrition and the emerging pandemic of overnutrition; the environmental impact of packaging and most importantly the clear potential for commercial exploitation. The widespread use of SQ-LNS in the face of food poverty is viewed as an unsustainable, unsafe, excessively expensive, and nutritionally inappropriate response. UN and humanitarian agencies should use their considerable diplomatic influence to challenge corporate-led food systems and support governments in their efforts to protect, promote and support breastfeeding and the provision of diverse complementary foods.

INTRODUCTION

For several years, and especially since the launch of Scaling Up Nutrition Initiative (SUN) and the Global Alliance for Improved Nutrition (GAIN) there has been pressure on UN and humanitarian agencies to collaborate with transnational food corporations on the promotion and provision of fortified products for malnourished children. On 17 Febru-

ary 2023, UNICEF announced its support for countries globally to introduce Small Quantity Lipid Nutrition Supplements (SQ-LNS)¹ into their national nutrition programmes. Referring to evidence that was also used by the Lancet² and World Bank, UNICEF suggests that SQ-LNS could result in 27% reduction in mortality, 31% reduction in severe wasting and 65% reduction in iron deficiency anaemia.³ Soon afterwards, a Devex story appeared “Nutrition Experts call for child malnutrition supplement scale-up,”⁴ followed by DSM,

a Corresponding author: arun.ibfan@gmail.com

1 <https://www.unicef.org/documents/nutrition/SQ-LNS-Guidance>

2 [https://www.thelancet.com/journals/lanchi/article/PIIS2352-4642\(20\)30274-1/fulltext](https://www.thelancet.com/journals/lanchi/article/PIIS2352-4642(20)30274-1/fulltext)

3 <https://www.worldbank.org/en/events/2022/05/04/effectiveness-and-cost-effectiveness-of-small-quantity-lipid-based-nutrient-supplements>

4 <https://www.devex.com/news/nutrition-experts-call-for-child-malnutrition-supplement-scale-up-104953/amp>

the global manufacturer of infant formula ingredients, promoting SQ-LNS as “A novel lipid-based nutrient supplement,” labelling it as a “complementary food supplement” and offering to “work with you to build brighter futures.”⁵ A flurry of webinars by GAIN, the Micronutrient Forum and other SUN Business Network members are now calling for a new WHA Resolution on fortification. The International Baby Food Action Network (IBFAN) believes that these strategies are based on unethical and questionable research, and that they are unsustainable with nutritional risks. IBFAN is calling on all humanitarian agencies to reconsider their support for and promotion of SQ-LNS until the wider risks, outlined below, are evaluated by people free of conflict of interest. This commentary explains why we think this is necessary

CONCERNS AND EXPLANATIONS

IBFAN agrees that the prevention and control of child malnutrition is an urgent problem that must be addressed. However, as all humanitarian agencies know, child malnutrition and food insecurity is the result of many factors including: social and economic inequity; marginalization of poor communities; women’s disempowerment; lack of access to productive resources; environmental contamination and degradation; unsafe and adulterated foods and the intolerable violence and conflicts. In relation to young child feeding, lack of affordable health care, inadequate support for breastfeeding and optimal infant and young child feeding practices and insufficient safe water for drinking and sanitation all lead to repeated bouts of diarrhoeal and respiratory disease and subsequent growth failure in children. In this complex context, humanitarian agencies have a responsibility to guard against unintended consequences and ensure that interventions do no harm or mislead the general public. The risks of ultra-processed foods, the double burden of malnutrition, the pandemic of overnutrition and related cardio-metabolic risks, the inevitable commercial exploitation that is helped by inappropriate humanitarian appeals are hardly addressed in the guideline.

An integral part of IBFAN’s advocacy over the past 40 years has been to urge UN agencies and governments to prioritise these underlying causes. However, with concern we note that the solutions promoted for addressing child malnutrition, especially its prevention, are becoming commercialised and medicalised with the increasing use of nutrition products as “quick fixes.” IBFAN recognises that over the years government managed, augmented home food supplies have helped to improve public health, *but none of these initiatives have been market-led or commercially ex-*

ploited. In this initiative, the long-term vision of children sustained by local nutritious foods is absent. It seems to be built on dependence by external actors. Below we provide some explanations of why we are particularly concerned about SQ-LNS.

1. THE DESCRIPTION OF A COMMERCIAL ULTRA-PROCESSED FOOD PRODUCT AS A TYPE OF FORTIFICATION IS CONCEPTUALLY FLAWED

SQ-LNS is an ultra-processed food (UPF) product as defined by Nova Classification. See [Text Box 1](#).

Text Box 1. Ingredients of SQ LNS (Enov’ Nutributter’ By Nutriset)

Peanuts, Sugar, Vegetable oils (rapeseed, palm in variable proportion), skimmed milk powder, mineral and vitamin complex, stabilizer (fully hydrogenated vegetable fat), emulsifier (mono and diglycerides), vegetable lecithin (soya or sunflower)

UPFs are industrial formulations of substances derived from food ingredients but containing little or no whole food and very often with added colourings, flavourings, emulsifiers, thickeners and other cosmetic additives to make them palatable or even hyperpalatable.⁶ There is limited literature on UPF consumption and health outcomes in the maternal-child population, but the highest UPF consumption negatively impacted nutrition and disease development indicators in pregnant, lactating women and children.⁷ Increased consumption of UPFs has the potential to lead to harmful impacts on human body, which is independent of dietary quality or pattern, questioning the utility of reformulation to mitigate against the obesity pandemic and wider negative health outcomes of UPFs.⁸

According to UNICEF,⁹ millions of young children suffer from ‘child food poverty’ and are not fed with the minimum diverse diet they need in early childhood to grow and develop to their full potential. UNICEF recognises that 1 in 3 children under five are fed poor diets, lacking in nutrient-rich foods. These are the children at risk for whom SQ-LNS is being proposed and can be given on a daily basis within nutrition programmes.

There is confusion as to whether SQ LNS is a food, a medicine, or a fortification product. The UNICEF guidance

⁵ https://www.dsm.com/content/dam/dsm/human-nutrition/pdfs/tn-ni_tswaka_study_results_infographic.pdf

⁶ Monteiro CA, Levy RB, Claro RM, Castro IRRD, Cannon G. Uma nova classificação de alimentos baseada na extensão e propósito do seu processamento. *Cadernos de saúde Pública.* (2010) 26:2039–49.

⁷ <https://www.frontiersin.org/articles/10.3389/fnut.2022.821657/full#B1>

⁸ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8747015/>

⁹ *Child Food Poverty: A Nutrition Crisis in Early Childhood*, Oct 2022. <https://data.unicef.org/resources/child-food-poverty/>

says, “SQ-LNS are nutrition supplements embedded in a small amount of food paste ... are considered a type of home fortification, much like multiple micronutrient powders, because they can be mixed with foods prepared for infants and young children in the home, they can also be eaten straight from the sachet.”

“SQ-LNS is a generic term that encompasses formulations available from various producers that use varying global and country-specific brand names; ...The food base usually includes a vegetable oil rich in omega-3 fatty acids, a legume (such as peanut, chick-pea, lentil or soybean) and milk powder, and the typical formulation is fortified with 22 vitamins and minerals...”¹⁰

IBFAN fears that through this programme, SQ-LNS a UPF, may be legitimised as a complementary food but will escape the safeguards and controls that apply to complementary foods simply because it is described as fortification product. This is not as per WHO 's definition of fortification.^{11,12} To describe SQ-LNS as a type of home fortification is misleading. SQ-LNS ingredients are foods such as oil, milk and legumes. At the same time, WHO's Guidance and the accompanying Manual on Ending the Inappropriate Promotion of Foods for Infants and Young Children,¹³ states: "Vitamin and mineral food supplements and home-fortification products such as micronutrient powders and small-quantity lipid-based nutrient supplements are not covered by this guidance, as they are not foods per se, but fortification products."

IBFAN believes that UN support for a roll out of SQ-LNS as a key prevention of malnutrition is not a sound, safe or sustainable strategy. With none of the essential legally binding safeguards to prevent exploitation and inappropriate messaging in place, SQ-LNS may be legitimised and perceived by parents and carers as a 'magic bullet' complementary food that saves children's lives. We believe this will undermine mothers' and carers' confidence in bio-diverse, minimally processed and more culturally appropriate family foods.¹⁴

There will undoubtedly be commercial interest in growing the market for this product and for a host of other ready-to-use packaged pastes or spreads. This may lead to unnecessary and inappropriate use (spill-over) to the over-

all detriment of millions of vulnerable children in food insecure populations. Indeed, one of the producers, Nutriset is already promoting 'Growell' and 'Enov' Nutributter' for use during the 6–24-month period using claims such as 'Prevents stunting', 'Promotes the children's growth, their motor and cognitive development.' Nutriset, while describing its product, and need after 6 months, suggests that "A high quality food supplement then becomes indispensable to compensate for this deficit, but this is sometimes unavailable or inaccessible in a large number of developing countries,"¹⁵ implying that adequate food is not possible to fill the energy gap after 6 months.

The market for SQ-LNS and 'functional foods' is growing rapidly¹⁶ as one market projection report predicts rapid growth in the sales of products recommended for the prevention of malnutrition in children. The top strategic priority of many food and agro-industry corporations has, for many years, been to change traditional food patterns and cultures in low- and middle-income countries and encourage the consumption of corporate branded ultra-processed products.

This also raises safety concerns for the millions of vulnerable children in food insecure populations. As per UNICEF guidance "Once a sachet is open, it should be used within 24 hours. If the product is mixed with other food, it should be consumed within 2 hours. Sachets should be stored in a clean, cool place..." This is totally unrealistic in many settings for the proposed target group. How can families follow this guidance, especially to be "consumed within 2 hours of opening when mixed with other food." Who is going to monitor these stringent conditions?

While it is challenging to address overweight and undernutrition at the same time, would the promotion of energy dense ultra-processed food, SQ-LNS, given on a daily basis run counter to the now widely accepted strategy of preventing overweight¹⁷ in low-income countries? For example, in India 56% children aged 5-16 years are already showing metabolic biomarkers of NCDs.¹⁸

10 Aguayo, V.M., Baker, S.K., Dewey, K.G. *et al.* Benefits of small-quantity lipid-based nutrient supplements for child nutrition and survival warrant moving to scale. *Nat Food* (2023). <https://doi.org/10.1038/s43016-023-00703-2>

11 https://www.who.int/health-topics/food-fortification#tab=tab_1

12 "Fortification is the practice of deliberately increasing the content of one or more micronutrients (i.e., vitamins and minerals) in a food or condiment to improve the nutritional quality of the food supply and provide a public health benefit with minimal risk to health.

13 WHO Guidance on ending the inappropriate promotion of foods for infants and young children A69/7 Add.1 13 May 2016. https://apps.who.int/iris/bitstream/handle/10665/252656/A69_7Add1-en.pdf?sequence=1&isAllowed=y

14 Improve the food security of farming families affected by volatile food prices. Food and Agriculture Organisation (FAO) and the EU www.youtube.com/watch?v=0rUX6F7ieVY

15 <https://www.nutriset.fr/products/en/enov-nutributter>

16 <https://www.futuremarketinsights.com/reports/lipids-market>

17 Huse O, Lobstein T, Jewell J, Zahr S, Williams D, Leond K & Watsona F-Perspectives Healthy weight in childhood : Bull World Health Organ 2023;101:226–228. <http://dx.doi.org/10.2471/BLT.22.289049>

18 Sachdev HS, Porwal A, Sarna A, Acharya R, Ramesh S, Kapil U, Kurpad AV. Intraindividual double-burden of anthropometric undernutrition and "metabolic obesity" in Indian children: a paradox that needs action. *Eur J Clin Nutr.* 2021;75:1205-1217.

Table 1. Estimated nutrient intakes from recommended quantities of Small Quantity Lipid Nutrition Supplements

Nutrients	Nutrient added per 20 g LNS	TUL	Nutrient as % of TUL
Retinol (ug)	678	600	113
Iodine (ug)	148.4	200	74
Magnesium (mg)	56	65*	86
Zinc (mg)	11.2	7	160

TUL: Tolerable Upper Limit, as defined by ICMR/NIN for children 1-3 years

https://www.nin.res.in/RDA_Full_Report_2020.html

Values in Red – Beyond 100% TUL,

*TUL cut-off for a pharmacological agent

2. CHOICE OF EVIDENCE IS QUESTIONABLE AND UNETHICAL

A paper that¹⁹ documents the benefits of SQ-LNS is based on trials that claim to show relative reduction in mortality, wasting and iron deficiency anaemia. [Table 1](#) in the same paper shows a summary and a footnote that says, “Data are the relative reduction (95% confidence interval (CI) in the prevalence of each outcome in the SQ-LNS group compared with the control group (which received no intervention other than standard messages promoting recommended feeding practices, or an intervention without any type of LNS or other child nutrition supplement) from meta-analyses of data from 14–18 randomized controlled trials.”

By not providing diverse adequate and home-cooked food as a positive control against the ‘product,’ a bias has been created that unfairly supports a predetermined outcome. The authors do acknowledge the fact that counselling interventions alone can improve IYCF practices, but they say that these have less impact on survival, growth, development, and anaemia. However, the researchers still chose to keep counselling interventions as a control group without adding foods. At a stage of rapid growth in infancy in very deprived settings, it is likely that many other well-designed interventions, including an adequate and diverse diet, will work.

IBFAN believes that it is a fundamental flaw to compare an intervention (SQ-LNS) with no comparable intervention (IYCF messages). The best evidentiary practice would be for SQ-LNS to be compared with the provision of an optimal home-cooked diet to the child. Having no comparable intervention makes a self-fulfilling prophecy that the prevention of undernutrition “requires a supplement that comple-

ments the daily diet...,” and calls into question the ethics of such study designs. This ‘splitting’ of the basic definition of complementary feeding and the proposal that such a challenging and risky intervention should be scaled up and integrated into national nutrition programmes is not acceptable – especially when it uses a commercial product, for the following reasons:

a) Pitching this proposal as a prevention intervention is not in harmony with the Global Strategy for Infant and Young Child Feeding,²⁰ which states that, “As a global public health recommendation, infants should be exclusively breast-fed for the first six months of life to achieve optimal growth, development, and health. Thereafter, to meet their evolving nutritional requirements, infants should receive nutritionally adequate and safe complementary foods while breastfeeding continues for up to two years of age or beyond.” This approach, if properly implemented, is the safest way to prevent malnutrition in children, yet according to the reports on policy programmes, countries are still struggling to mainstream optimal breastfeeding and infant and young child feeding practices.²¹ Evidence clearly suggests that the remaining policy gaps are partly the result of interference from those with a commercial interest.²² It is hard to see how an intervention that increases involvement with globally trading corporations can take us in the right direction. We fear it will detract the limited public funds available away from support for re-lactation, continued breastfeeding, optimal complementary feeding and work entitlements that women so urgently need.

b) IBFAN believes that “messages” via counselling on IYCF are not enough to ensure adequate complementary feeding. Yet, these are the only identified controls in these trials. Adequate and efficient support for exclusive and con-

19 Aguayo, V.M., Baker, S.K., Dewey, K.G. *et al.* Benefits of small-quantity lipid-based nutrient supplements for child nutrition and survival warrant moving to scale. *Nat Food* (2023).

20 World Health Organization & United Nations Children’s Fund (UNICEF). (2003). Global Strategy for Infant and Young Child Feeding. World Health Organization. <https://apps.who.int/iris/handle/10665/42590>

21 <https://www.worldbreastfeedingtrends.org/resources/peer-reviewed-articles>

22 Russ, K., Baker, P., Byrd, M., Kang, M., Siregar, R. N., Zahid, H., McCoy, D. What You Don’t Know About the Codex Can Hurt You: How Trade Policy Trumps Global Health Governance in Infant and Young Child Nutrition. *International Journal of Health Policy and Management*, 2021; 10(Special Issue on Political Economy of Food Systems): 983-997. doi: 10.34172/ijhpm.2021.109

tinued breastfeeding from birth, good antenatal care, maternity entitlements at work, availability of adequate complementary feeding - all are recommended actions and potentially act as evidence-based double duty actions²³ meaning to address both undernutrition and overweight.

c) According to UNICEF,²⁴ "Far too many children are not fed at the right time or with the right frequency and dietary diversity needed to grow and develop to their full potential." More than one in four children aged 6–8 months (28 per cent) were not fed any solid, semi-solid or soft food. One in two children aged 6–23 months (50 per cent) were not fed the minimum number of meals or snacks recommended each day. More than two in three children aged 6–23 months (69 per cent) were not fed foods from at least five of the eight recommended food groups. Despite the recommendation that children aged 6–23 months be fed eggs, fish, or meat on a daily basis, more than half of children (53 per cent) did not consume any of these nutrient-rich foods during the previous day. Globally, over 2 in 5 children (41 per cent) aged 6–23 months did not consume fruits or vegetables during the previous day.

UNICEF's Programme Guidance²⁵ and Action Framework aims to help countries move towards "Good diets for young children 6–23 months: Improved access to and consumption of nutritious, safe, affordable and sustainable diets for young children." We wonder how the provision of SQ-LNS can fit safely into such a framework, given the risks outlined above and the underlying determinants?

d) Over the years UNICEF and WHO have produced numerous papers calling for more people-centred, *One Health* approaches to food. As public understanding of the harm caused by corporate-led food systems increases, we feel that the UN should be at the forefront of the move to more culturally acceptable local food solutions, biodiversity, sustainable food production and security?²⁶ The promotion of SQ-LNS as a quick-fix with no safeguards against commercialisation and spill-over is a major diversion from people's real needs. IBFAN challenges the logic for promoting SQ-LNS and other highly processed products as supplementary feeding solutions instead of real food.

3. COSTS AND FEASIBILITY

There are major concerns around costs and feasibility. According to a study from Uganda, "Providing SQ-LNS daily to all children in rural Uganda (>1 million) for 2 months (from 6-18 months of age) via the existing Village Health Team sys-

tem would cost ~\$52 per child (2020 US dollars)." Authors call for tax breaks, but even without them, project it to be cheaper than provision of complementary foods. "...In this context, SQ-LNS may be more cost-effective than other options such as MNP or the provision of complementary food, although the total cost for a program including all age-eligible children would be high. Strategies to reduce costs, such as targeting to the most vulnerable populations and the elimination of taxes on SQ-LNS, may enhance financial feasibility."²⁷ Management capacity that exists in small-scale pilot projects or research projects, is rarely found at scale. Indeed, cost projections rarely factor in huge training costs and higher staff salaries that would be required, a major reason that attempts are so rarely even made to take pilot projects to scale. In any case, the true cost of scaling up if such a gigantic undertaking was to work, would have to be much higher. The purchase of these products most likely would divert the funding of resource-poor countries and development assistance agencies from other health and support services and community initiatives.

4. THE TRIALS AND REVIEWS HAVE NOT ESTIMATED THE GAPS IN ENERGY OR NUTRIENTS

Nor have they evaluated the risk of overnutrition-related harms. An analysis of the intended intake of different micronutrients with 20g LNS/day that will provide 125 calories, shows that the intake, just from the SQ-LNS, discounting intake from diet or other supplements, will exceed the stated TUL: Tolerable Upper Limit, as defined by ICMR/NIN²⁸ for vitamin A and zinc in India. It comes close for iodine and magnesium. Table 1 shows selected micronutrient intakes from the SQ-LNS (as stated in WFP²⁹ website). The SQ-LNS intake values are taken as the highest in the suggested range for each nutrient. Has the issue of toxicity been considered?

5. CONFLICTS OF INTEREST IN THE TRIALS

Four out of five systematic reviews (References 11-15) mentioned in Table 1 of the evidence shown in the UNICEF communication demonstrate association with one of the major SQ-LNS producers (Nutraset). We found that there were conflicts of interest in at least 10 out of the 23 trials, with support or co-authorship from Nutraset. Other supporters included Nestle, DSM, Heinz, and GAIN. Nutraset is listed as a global member of the SUN Business Network (SBN)³⁰ of which GAIN is the Co-convenor. Among many

23 <https://apps.who.int/iris/bitstream/handle/10665/255414/WHO-NMH-NHD-17.2-eng.pdf>

24 <https://data.unicef.org/topic/nutrition/diets/>

25 <https://www.unicef.org/documents/improving-young-childrens-diets-during-complementary-feeding-period-unicef-programming>

26 COP27 – Can lessons be learned and the UPF trade controlled? IBFAN Statement 2022. <https://www.babymilkaction.org/archives/35311>

27 <https://www.medrxiv.org/content/10.1101/2022.05.27.22275713v1.full.pdf>

28 https://www.nin.res.in/RDA_Full_Report_2020.html ICMR, National Institute of Nutrition, Government of India

29 <https://docs.wfp.org/api/documents/WFP-0000106806/download/intake>

30 <https://sunbusinessnetwork.org/network/global-members/>

other food businesses, Nutriset is active in Codex negotiations, attempting to undermine essential global safeguards. Nutriset already has large markets in several countries.³¹ This proposal seems to us to be the result of pressure to form public private partnerships with food and agricultural companies – many of whom profit from products and processes that are detrimental to human and planetary health.³² We note that the policy of the Bill and Melinda Gates Foundation, a major donor for the work on SQ-LNS, is to promote PPPs, especially in low-income countries.³³ IBFAN has produced many reports and analyses of how this approach benefits the for-profit sector, increases its influence of global agendas, and creates rather than reduces risks to human rights.³⁴

6. ENVIRONMENTAL CONCERNS

The production and trade of UPF products in single use plastic packets exacerbates the serious global environmental problem of plastic waste and microplastics. Waste disposal and the burning of rubbish increases methane emissions. *“Plastics do not fully decompose and instead just continually break down into smaller and smaller pieces called microplastics. These microplastics pose a huge risk to wildlife and are extremely difficult to clean up. ...The best way to reduce the impact of single-use plastics on climate change is to stop using this type of plastic.”*³⁵

CONCLUSIONS

SQ-LNS is a UPF and may negatively impact children's health. The intervention is projected as a fortification product without a comparable intake in the control group, so cannot be judged. In a poor population without adequate food and knowledge, verbal advice to take food cannot be compared with supervised feeding of SQ-LNS. This is a major defect of the efficacy trial. The supply of SQ-LNS will disempower caregivers and health workers who are working to promote appropriate family diets.

It seems quite clear that the widespread use of SQ-LNS in areas where food poverty exists for millions of children is an unsustainable and nutritionally inappropriate response.

The safety of this product is also a concern. SQ-LNS are not currently included in WHO's healthy diet recommendations.³⁶ However, already other leading agencies such as the World Bank and WFP are using the same questionable evidence to promote SQ-LNS as a panacea/magic bullet solution for under-nutrition. Is the plan to re-position SQ-LNS as a part of a “good diet?” If so, this does not augur well within the sustainable development agenda.

This new proposal raises serious questions of food sovereignty. Who will really benefit from such interventions? The children, or the producers of SQ-LNS? Families, or the many companies that promote their food products as preventing malnutrition? Communities or the multitude of humanitarian organisations whose simplistic funding-appeals ignore the risks and focus on products rather than the protection of optimal and safe infant and young child feeding?

IBFAN believes that instead of promoting SQ-LNS, UN and humanitarian agencies should use their resources to mobilise national governments to make adequate diets available. The UN can and must use its considerable diplomatic influence to support governments in their efforts to protect, promote and support recommended breastfeeding and provide adequate and diverse complementary foods as a pillar of preventing the double burden of malnutrition. All agencies must respect and fulfil their commitments to the right to adequate food – a fundamental right that is enshrined in Article 25 of Universal Declaration of Human Rights, Article 12 of the International Covenant on Economic, Social and Cultural Rights and Article 24 of the Convention on the Rights of the Child. The Right to adequate food (not to commercial products) should remain an overarching factor while defining the strategy, framework of action, commitments, and research agenda in the field of nutrition. We suggest that all future research design for alternative interventions during this age group should include a control group that is supplemented with diverse diets.

Submitted: March 20, 2023 BRT, Accepted: March 31, 2023 BRT



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-4.0). View this license's legal deed at <http://creativecommons.org/licenses/by/4.0> and legal code at <http://creativecommons.org/licenses/by/4.0/legalcode> for more information.

31 <https://www.groupenutriset.fr/en/international-presence>

32 Patay, D., Ralston, R., Palu, A. *et al.* Fifty shades of partnerships: a governance typology for public private engagement in the nutrition sector. *Global Health* 19, 11 (2023). <https://doi.org/10.1186/s12992-023-00912-1>

33 Stevenson M, Youde J. Public-private partnering as a modus operandi: Explaining the Gates Foundation's approach to global health governance. *Glob Public Health*. 2021 Mar;16(3):401-414. doi: 10.1080/17441692.2020.1801790.

34 When the Sun casts a Shadow, the human rights risks of multi-stakeholder partnerships: the Case of Scaling Up Nutrition (SUN). SID, FIAN, IBFAN 2020. <https://www.babymilkaction.org/archives/24042>

35 <https://www.colorado.edu/ecenter/2021/02/25/climate-impact-single-use-plastics>

36 <https://www.who.int/news-room/fact-sheets/detail/healthy-diet>