



Preventing Malnutrition in At-risk Children

ALIMA's Experience with Routine SQ-LNS in Niger 27 June 2022

Hosted by the Nutrition subgroup

Photo credit: UNICEF/URC-CHS, accessed from the USAID Advancing Nutrition-UNICEF IYCF Digital Image Bank iycf.advancingnutrition.org



Small Quantity Lipid-based Nutrient Supplements (LNS-SQ)

Evidence for effectiveness



LNS-SQ

Lipid-based nutrient supplements (LNS)

	Application			
	Prevention		Treatment	
	Amount of LNS used			
	Small daily dose		Large daily dose	
Small Quantity LNS		Medium Quantity LNS		Large Quantity LNS
Growell				
~<125 calories per day ~10-20 grams per sachet			~200 k	~500 calories per packet cal/kg/day for ~6-8 wk treatment 92 grams per sachet

Source: Dewey KG. 2022. FAQs for SQ-LNS (unpublished)

Effectiveness

Summary of relative reductions in adverse outcomes

Growth	Relative reduction (95% CI) %
Stunting (LAZ < -2 SD)	12 (9, 15) %
Severe stunting (LAZ < -3)	17 (10, 22)
Wasting (WLZ < -2 SD) (cross-sectional prevalence)	14 (7, 20)
Severe wasting (WLZ < -3)	31 (14, 45)
Underweight (WAZ < -2 SD)	13 (9, 17)
Acute malnutrition (WLZ < -2 SD or MUAC < 125 mm)	14 (7, 20)
Low MUAC (MUACZ < -2 SD or MUAC < 125 mm)	18 (11, 25)
Small head circumference (HCZ < -2 SD)	9 (5, 14)
Development	
Low language development score	16 (8, 24)
Low motor development score	16 (8, 24)
Low social-emotional development score	19 (11, 26)
Anemia & micronutrient status	
Anemia (Hb < 110 g/L)	16 (13, 19)
Moderate-severe anemia (Hb < 100 g/L)	28 (24, 32)
Iron deficiency (Ferritin < 12 μg/L)	56 (50, 61)
Iron deficiency anemia (Hb < 110 g/L & ferritin < 12 μg/L)	64 (56, 70)
Vitamin A deficiency (RBP < 0.70 μmol/L)	56 (30, 73)
Mortality	27 (11, 41)

Source: Dewey, Kathryn G., Christine P. Stewart, K. Ryan Wessells, Elizabeth L. Prado, and Charles D. Arnold. 2021. "Small-Quantity Lipid-Based Nutrient Supplements for Prevention of Child Malnutrition and Promotion of Healthy Development: Overview of Individual Participant Data Meta-Analysis and Programmatic Implications." Am J Clin Nutr. 2021 Nov 2;114(Suppl 1):35-145. doi:10.1093/ajcn/ngab279.

Cost-Effectiveness

• Webinar on Effectiveness and Cost-Effectiveness of Small-Quantity Lipid-Based Nutrient Supplements

Adams, Katherine P, Stephen A Vosti, Charles D Arnold, Reina Engle-Stone, Elizabeth L Prado, Christine P Stewart, K Ryan Wessells, and Kathryn G Dewey. 2022. "The Cost-Effectiveness of Small-Quantity Lipid-Based Nutrient Supplements for Prevention of Child Death and Malnutrition and Promotion of Healthy Development: Modeling Results for Uganda." Preprint. Health Economics. <u>https://doi.org/10.1101/2022.05.27.22275713</u>.

 Hiebert, Lindsey, Kevin Phelan, Moumouni Kinda, Nafissa Dan-Bouzoua, Maurice Kyungu, Thomas Bounameaux, Sani Sayadi, Oumarou Maidadji, and Robert Hecht. 2021. "Costs of Implementing an Integrated Package of Maternal and Pediatric Interventions Including SQ-LNS in Rural Niger." *Food and Nutrition Bulletin* 42, no. 4 (2021): 567-583. <u>https://doi.org/10.1177/03795721211039869</u>.

Today's Speaker



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Connect with the us



Engage with the **co-chairs**:

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What topics do you want the subgroup to address? Tell us: <u>https://bit.ly/NutritionTopics</u>

Subgroup information, recordings and presentations from previous meetings and webinars are available on the subgroup page of the Child Health Task Force website: www.childhealthtaskforce.org/subgroups/nutrition

*The recording from this webinar will be available on this page later today

Suggestions for improvement or additional resources are welcome. Please email **childhealthtaskforce@jsi.com**.



The Child Health Task Force is managed by JSI Research & Training Institute, Inc. through the USAID Advancing Nutrition project and funded by USAID and the Bill & Melinda Gates Foundation.

This presentation was made possible by the generous support of the American people through the United States Agency for International Development (USAID), under the terms of the Contract 7200AA18C00070 awarded to JSI Research & Training Institute, Inc. The contents are the responsibility of JSI and do not necessarily reflect the views of USAID or the U.S. Government.