

Nicaraguan women of reproductive age (18–49 years old) in rural and urban clinics associated with UNAN-León in León, Totogalpa, and Sabana Grande, Nicaragua. Surveys were orally administered in Spanish by medical students and translators. 212 women were selected by convenience sampling at clinics from May 11th to June 5th, 2015. The survey was anonymous with collection of only broad demographic data, and oral informed consent was obtained from participants. The study was approved by the UC Davis IRB and the Director of UNAN-León.

Findings: Of the 212 women who participated, 52.3% reported living in rural settings while 45.8% reported living in urban centers. 42.5% were between the ages of 18–25 and 57.5% were between the ages of 26–49. Social attitudes preliminary data shows that more rural women reported that their partner is who should decide if they obtain birth control (31.5%) compared to urban women (17.5%). For access, more urban women (90.7%) reported knowing where they could obtain birth control, as opposed to rural women (63%). For education, 90.1% of urban women and 88.7% of rural women reported having seen information or received education about family planning. For contraceptives use, 32% of urban women report using no form of contraception compared to 29% of rural women.

Interpretation: Our findings suggest that differences in social attitudes, access, education, and use of modern contraceptives in Nicaraguan women are not as significant as expected. The study is limited by participant selection and clinic location, limiting its generalizability.

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The short-term response of breast milk micronutrient concentrations to a lipid-based nutrient supplement in Guatemalan women

J.A. Haber^{1,2}, N.W. Solomons³, D.A. Hampel^{1,2}, M. Orozco^{3,4}, L.H. Allen^{1,2}; ¹University of California, Davis, CA, USA, ²USDA, ARS Western Human Nutrition Research Center, Davis, CA, USA, ³Center for Studies of Sensory Impairment, Aging and Metabolism, Guatemala City, Guatemala, ⁴Center for Atitlán Studies, Universidad del Valle de Guatemala, Sololá, Guatemala

Background: Malnutrition is highly prevalent in the Guatemalan population. Impaired nutritional status in lactating women results in decreased micronutrient content of breast milk. Supplementation with a lipid-based nutrient supplement (LNS) during lactation could augment breast milk nutrient content. Our objective was to assess the efficacy of LNS comparing two dosing methods for increasing milk micronutrients in Guatemalan women.

Methods: The randomly-allocated, cross-over design included 30 mother-infant dyads 4–6 months postpartum in Quetzaltenango, Guatemala. In three 8-hour milk collection visits the participating mother received a single bolus dose of 30 g LNS (B), 10 g of LNS divided over 3 time points (D), or no LNS (C). Mid-feed milk samples were collected at each infant feed and total milk consumption measured. Maternal blood was collected at baseline, maternal dietary intake was assessed, and maternal and infant anthropometry was measured. The

primary outcome was area- under-the-curve (AUC) of breast milk B-complex vitamins. [Clinicaltrials.gov](https://clinicaltrials.gov/ct2/show/study/NCT02464111) (NCT02464111on).

Findings: Of 26 dyads completing the study, results for 8 are included in this preliminary data analysis. For milk riboflavin, the mean increase in AUC vs. C was 300±173% for B (p=0.002) and 164±105% for D (p<0.0001). For milk thiamin, this comparison was 25±19% for B (p=0.049) and 24±24% for D (p=0.087). For milk pyridoxal, the B increase was 65±61% (p=0.015) and D was 45±62% (p=0.123). Neither B nor D supplementation strategy increased milk niacin with respect to C, with B increasing 55±137% (p=0.689) and D, decreasing 6±37% (p=0.591).

Interpretation: Supplementation with the bolus dose rapidly and substantially increased the amount of thiamin, riboflavin, and pyridoxal in breast milk, but did not significantly affect niacin. With the current preliminary number of dyads, interpreting the responses for D remains provisional.

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Improving women's confidence and motivation related to healthy lifestyle goal attainment through group-centered meetings at a community based organization

Audrey Hertenstein¹, Jennifer Saluk¹, Elizabeth Stranges¹, Adelle White², Amy Blair, M.D.³; ¹Loyola University Chicago Stritch School of Medicine, Maywood, IL, USA, ²Department of Health Education at CommunityHealth, Chicago, IL, USA, ³The Center for Community and Global Health, Loyola University Chicago Stritch School of Medicine, Maywood, IL, USA

Program/Project Purpose: Obstacles such as stress and chronic disease often prevent women from achieving wellness. The purpose of Grupo de Bienestar para Mujeres is to use group-based learning and support network development to empower Latina women to achieve lifestyle driven health goals. The program began in January 2014 at CommunityHealth, the largest free clinic serving the uninsured in Illinois, to fulfill the need for culturally competent and sustained sources of support in health goal attainment.

Structure/Method/Design: The program's goals are to:

- 1) Deliver health information through peer-driven exchange and discussion of approaches to healthy eating, exercise, and stress reduction.
- 2) Increase participants' knowledge, confidence, and motivation related to health information and goal attainment.
- 3) Foster an environment of sustained support to increase individual and community health.

Groups consist of Spanish-speaking women in the community served by CommunityHealth. Participants are recruited directly by provider referral, attendance at other health-education courses, or through response to advertisement.

During weekly group meetings, women participate in a discussion-based session utilizing health information materials and