mother-infant dyads (n=151) using data from Project REPA (Reproduction and Ecology in Provincia Aroma), a longitudinal study of reproduction and health in 30 rural altiplano communities (altitude 4000 m). The same investigator (VJV) periodically measured the anthropometrics (height and weight; arm, calf, and thigh circumferences; and six skinfolds) of breastfeeding study participants. An initial cross-sectional analysis, using only the first observation for each woman, suggests little change in maternal anthropometrics with time post-partum but did reveal substantial variance, peaking between 6 and 12 months postpartum, in several measurements. Marked seasonality in workloads and food availability, and heterogeneity in economic strategies and breastfeeding structure may underlie the high variance in maternal anthropometrics and may be masking individual post-partum changes in maternal soma. We are now investigating these and other factors using longitudinal multi-level modeling.

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Associations between dietary diversity and post-partum depression among low-income new mothers from São Paulo, Brazil. A Rudzik, A Webb Girard. 1Department of Anthropology, University of Toronto; 2Hubert Department of Global Health, Rollins School of Public Health at Emory University.

Food insecurity and lack of dietary diversity (DD) are associated with a variety of mental health issues including maternal depression. However, the associations between DD and post-partum depression have not been explored in the Latin American context. As part of a larger study of breastfeeding and stress, data on DD and post-partum depression were collected from 65 low-income women from São Paulo, Brazil. During bi-weekly interviews conducted from 2 to 12 weeks postpartum, women were asked to list all foods consumed in the previous 24-hours. Dietary data were coded using a Dietary Diversity Index developed in Latin America, and the mean DD score was calculated for each participant. At 2 and 12 weeks women completed the Edinburgh Post-partum Depression scale (EPDS), with scores above 12 indicating post-partum depression. Associations between DD and EPDS were examined using multiple linear regression, adjusting for age and planned pregnancy. DD was inversely related to EPDS (β = -0.349, 95%CI: -0.342, 95%CI: -2.366– -2.013– -0.250) and at 12 weeks postpartum (β = -0.342, 95%CI: -2.366– -2.013– -0.250). The impact of DD on the odds of scoring ≥12 on the EPDS was assessed using logistic regression, controlling for age and planned pregnancy. Each one-point increase in DD decreased the odds of post-partum depression at 2 weeks (OR: 0.454; 95% CI: 0.257–0.803) and at 12 weeks (OR: 0.590; 95% CI: 0.375–0.931). This study is among the first to document an association between Dietary Diversity (DD) as an indicator of food security and post-partum depression in the Latin American context.

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The Shuar health and life history project: Effects of market integration and diet on hemoglobin in two lowland Ecuadorian populations. TJ Rueckert, JJ Snodgrass, MA Liebert, FC Madimenos, AD Blackwell, LS Sugiyama. 1Department of Anthropology, 2Institute of Cognitive and Decision Sciences, University of Oregon; 3Center for Evolutionary Psychology, University of California, Santa Barbara.

Hemoglobin (Hb) levels below normal thresholds are a major health problem in developing countries. While iron-deficiency is the primary cause of anemia in the developed world, in Amazonia, macro-parasitic infection by helminths and malaria are also implicated. Access to iron-rich foods and reductions of pathogen exposure that occur with increasing market integration (MI) may affect anemia prevalence. This study explores the relationship between MI and Hb through work with the Shuar, an indigenous population from lowland Ecuador, and the local non-indigenous population (colonos). While some Shuar in remote areas east of the Cutucu River primarily subsist as forager-horticulturalists in malaria rich zones, Shuar in the Upano Valley (UV) purchase a wide-range of market items. We compare anemia prevalence rates of both Shuar groups with rural colonos from the UV and examine associations between dietary and lifestyle factors. Participants include 278 Shuar and 214 colonos. Hb was measured using a HemoCue Hb201+ instrument, and lifestyle/dietary data were gathered using structured interviews and food-frequency questionnaires. Market-integrated Shuar have higher Hb concentrations than Trans-Cutucu Shuar, while there is no significant difference between Hb levels of UV Shuar and colonos. Finally, while Hb levels are not significantly correlated with lifestyle factors in either group, lifestyle/dietary data accounts for 28% of the variance of Hb levels among interior Shuar, and 5.5% among UV Shuar. Dietary factors are correlated with Hb but dependent on location, perhaps due to pathogen exposure and health care.

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The geographic spread of the Spanish influenza epidemic on the island of Newfoundland: Is there a measles connection? L Sattenspiel. Dept Anthropology, University of Missouri, Columbia.

Over 1800 of Newfoundland’s 250,000 residents died during the 1918-19 influenza epidemic. The southwestern part of the island and the Northern Peninsula experienced much less severe epidemics than the rest of the island.

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