

Nutritional change and cardiovascular health among the Tsimane' of lowland Bolivia. M Vento, J Vento, WR Leonard. *American J Human Biology* [abstract]. In press. 2009

Cardiovascular and metabolic disease risk factors such as central obesity, high blood pressure and elevated cholesterol, triglyceride and glucose levels have traditionally been seen among older adults of industrialized nations. Only recently has it become apparent that similar chronic disease risk profiles are occurring among the poor in lower income countries. Evidence exists that early life nutritional deprivation followed by overnutrition later in life may be contributing to the growing prevalence of obesity and chronic disease among the developing poor. However, few metabolic risk profiles are available from nonindustrialized populations, including contemporary Amazonian groups who are facing unprecedented social, economic, and environmental changes. In this investigation, we report preliminary results on blood pressure, measures of central adiposity, and fasting plasma cholesterol, HDL-C, and glucose levels among the Tsimane' of lowland Bolivia, a foraging-horticultural society experiencing the early stages of a transition to a market economy. Analyses from 41 adults (21 men; 20 women; >16yrs) show low metabolic risk profiles, despite relatively high rates of overweight, particularly in women. These results suggest that although the Tsimane' are undergoing marked dietary change with integration to the market economy, good cardiovascular health is being maintained (e.g., low BP, plasma lipids and glucose levels). Ongoing research is measuring both dietary intake and energy expenditure in this sample. These data will allow us to clarify the roles of both components of energy balance in shaping metabolic health within a population undergoing the nutrition transition.

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