 individuals with higher testosterone reported a higher grade point average (rho = 0.28, p = 0.045), less frequent attraction of short-term mates (rho = -0.31, p = 0.026), and lower number of lifetime unprotected sex partners (rho = -0.35, p = 0.011). These results suggest that testosterone levels may possibly modulate some of the physiological aspects of behavior; however it may not play as strong a role in mate attraction as previous studies have shown.

**P: 31**

Food consumption in economically disadvantaged women in Cali, Colombia 1990-95 and 2008: Evidence of a nutrition transition? RL Bender¹, DL Dufour¹, JC Reina². ¹Department of Anthropology, University of Colorado, Boulder; ²Centro Medico Imbanaco, Cali, Colombia.

The objectives are to assess the changes in food choice and dietary intake of women of low socioeconomic status in Cali, Colombia between 1990-95 and 2008, and compare these changes to those expected in other countries undergoing a nutrition transition. Food choice and dietary intake were based on 24-hour dietary recalls in each study. Food choice was defined as the frequency of different food items in the diet. Dietary intake for energy and macronutrients was calculated using literature values, laboratory analyses of samples, and software written for the project. The data suggest little change in the overall diet between 1990-95 and 2008. The types of foods consumed and the patterns of meals were similar. However, there was an increase in the consumption of vegetables and fruit juices, and a decrease in the consumption of soft drinks and complex carbohydrates like roots, tubers, and legumes. The consumption of processed foods and food prepared away from home remained minimal. Preliminary analysis of the energy and macronutrient content of the diet suggests little change in either energy or macronutrient intake, although fat intake as % of total energy did increase in 2008. The increased consumption of vegetables and fruit juices, and the decreased consumption of soft drinks, are contrary to what is expected in countries undergoing a nutrition transition. Despite there being little evidence of change in the overall diet, overweight and obesity among economically disadvantaged women in Cali, Colombia increased in the past two decades.

Supported by NSF SGER 0707.05 and NIH 5-R22-DK39734.

**A: 9:15 a.m.**

Can higher pathogen prevalence lead to better growth? Epidemiological patterns in growth and immunoglobulin E in two Amazonian populations. AD Blackwell¹, M Gurven¹, LS Sugiyama³, FC Mademinos³, MA Liebert³, M Martin³, H Kaplan⁴, JJ Snodgrass⁵. ¹Integrative Anthropological Sciences, University of California, Santa Barbara; ²Department of Anthropology, University of Oregon; ³Department of Anthropology, University of New Mexico.

The peak shift model predicts that the age at which a pathogen's prevalence peaks in a population depends
Depression and anxiety among British Pakistani women: bargaining at mid-life? MT Brell. Dept Anthropology, Durham University, UK.

Depression has been suggested to be an unconscious bargaining strategy on the part of individuals whose suffering requires the help of their fellow group members in order to be alleviated. This strategy would aim to compel others to renegotiate the social contract in order to create a fitness benefit for individuals suffering a fitness cost. This bargaining model of depression predicts depression to be associated with social costs, circumstances in which individuals cannot act unilaterally to ameliorate social costs, and a conflict of interest between those suffering and those who can alleviate suffering. Women, particularly those from groups in which fertility is highly prized, may be more vulnerable to social costs as their fecundability declines in middle age. British Pakistanis have a kin-based social organization which makes switching social partners difficult and thus is a group in which these predictions can be explored. Semi-structured interviews were carried out with 257 middle-aged British Pakistani women living in West Yorkshire, UK for a biocultural study of menopause. Data on anxiety and depression were collected via the Pakistan Anxiety and Depression scale (PADS), a validated index. Anxiety and depression were found to be significantly associated with factors likely to be out of the control of the participant herself (consanguineous marriage, age at migration to the UK, age at marriage, and markers of social status) but not with any measure of reproductive fitness. The role of consanguineous marriage within kin-based social organization for the bargaining model of depression is complex and requires further study.