Mother/Child Eating and Drinking Patterns by Weight and Ethnicity

Jane Kolodinsky, Ph.D., Chair; Jeffrey Castle, M.S. candidate
Department of Community Development and Applied Economics at the University of Vermont

Background: Academic research examining relationships between time spent in food related activities and obesity using nationally representative data is emerging in the literature and suggests that spending more time in food related activities, including food preparation and primary eating are associated with lower probabilities of obesity or decreased BMI (Kolodinsky and Goldstein, 2011; Zick, Stevens and Bryant, 2011).

The addition of race and ethnicity to the investigation of the relationship between food behaviors and obesity adds complexity to an already complicated problem. For example, Black and Hispanic women have a greater prevalence of both overweight and obesity compared to White women in the U.S. In 2009-2010, 58.6 percent of black and 40.7 percent of Hispanic women were obese (BMI>=30) compared to 33.4 percent of White women and a prevalence of 33.4 percent overall (Flegal et al., 2012). In addition, the rate of increase in obesity for Black women is higher than for White women, including severe obesity (BMI>=35) (Jungvall and Zimmerman, 2012). There is a dearth of literature that examines food related time use in subpopulations defined by race and ethnicity.

Objective: to examine time spent eating in twelve different groups of women residing in two adult households with children under the age of 18. Groups are defined by race/ethnicity and body weight, including White, Black, Asian, and Hispanic, and healthy weight, overweight, and obese classifications.

Data: Data are drawn from the 2008 American Time Use Survey and the accompanying Eating and Health Module (ATUS). The ATUS provides nationally representative estimates of how, where, and with whom Americans spend their time, and is the only federal survey providing data on the full range of nonmarket activities. In the ATUS (http://www.bls.gov/tus), respondents sequentially report activities completed between 4 a.m. on the day before the interview until 4 a.m. on the day of the interview. The final sample contains 1754 households.

Measures: We focus on time spent in primary eating and drinking, secondary eating, and secondary drinking, both in total for the female respondent in the household and with children. Three weight categories were created from body mass data: Healthy weight, Overweight and Obese. Respondents self-identified race and further classified themselves as being of Hispanic ethnicity. Data were coded first on race and then on ethnicity (omitting “other”). The literature highlights several variables that should be controlled for in a study relating time use with obesity. These include whether a respondent is the primary cook, immigration status, education, income/poverty, employment and wages, age, age of children and household type.

- HW White and Asian mothers spend more time in primary eating and more time with their children in primary eating compared to HW Black and Hispanic women.
- OW Hispanic mothers spend more time in primary eating with their children
- Obese White mothers spend the more time in primary eating with their children
- HW Black mothers spend more time in secondary eating.
- Obese White mothers spend less time with children in secondary eating compared to HW, OW and Obese white women.
- Black, Asian and Hispanic OW and Obese mothers spend less time in secondary eating with children compared to HW mothers.

- White mothers of every weight spend more time in secondary drinking with children compared to other race mothers
- Healthy weight mothers spend a greater percentage of their secondary drinking time with children.
- Healthy weight mothers spend more of their secondary eating and drinking time with their children—perhaps modeling that these behaviors can fit into a healthy diet.
- OW and Obese mothers spend less of their secondary eating and drinking time with their children.

References