P80 (continued)

Outcomes Measures and Analysis: Construct validity was evaluated by Spearman correlation between total scores on the SAHL-S and the NLit-S. Reliability was measured by Cronbach's alpha.

Results: Most participants were female (76%), with a mean age of 35 years (range 18-63, SD: 12.85). Mexico was the most prevalent country of origin (74.5%). Approximately half of the participants (51%) had an annual income lower than 20,000 dollars. The primary language of the participants was Spanish, where 74.5% reported to speak only Spanish or more Spanish than English at home. NLit-S construct validity was significant ($r = .51$, $p < .01$), and reliability was excellent ($\alpha = .92$).

Conclusions and Implications: The NLit-S is a potential tool for measuring the nutrition literacy of Spanish speaking populations, though testing in a larger sample is needed.

Funding: NIH, Frontiers: The Heartland Institute for Clinical and Translational Research, supported by a CTSA grant to the University of Kansas Medical Center from the NIH National Center for Advancing Translational Science (NCATS; grant # UL1TR000001)

P81 Folate and Iron Status Do Not Differ Between Women of Childbearing Age Following Gluten-Free and Conventional Diets

Jacob Carlton, drewcarlton1414@ufl.edu, University of Florida, 3028 McCarty Hall D, Gainesville, FL 32611; K. Shelmutt, PhD, RD; C. Dunn, MS, RD, University of South Carolina; C. Coker, University of Florida; G. Kauwell, PhD, RD, LDN; A. Sokolow, BS; M. Knutson, PhD; R. Coffey, BS

Objective: To determine differences between biochemical measures of folate and iron between women of childbearing age following either a gluten-free diet (GFD) or conventional diet (CD).

Design, Setting, and Participants: A convenience sample of women of childbearing age (18-45 y) following either a GFD ($n=18$) or CD ($n=8$) and not taking a folate/iron-containing multivitamin underwent a one-time, fasting blood draw and completed a 24-hour recall and dietary/demographic survey.

Outcome Measures and Analysis: GFD was confirmed with a 24-hour recall. Blood samples were analyzed to determine folate (red blood cell folate, serum folate) and iron (hematocrit, serum ferritin) status. Independent samples t-tests were used to determine differences in biochemical indicators between the two groups using SPSS.

Results: No significant differences were observed for any measures of folate or iron between the women following a GF or CD ($p > .05$).

Conclusions and Implications: GFDs do not include cereal grains fortified with folic acid or enriched with iron, important nutrients for pregnancy. While intake of the synthetic form of these nutrients is low, these women may be consuming enough naturally occurring folate and iron to maintain blood levels. The current recommendation for neural tube defect risk reduction is for all women of childbearing age to consume 400 μg folic acid every day from sup-

plements or fortified foods in addition to folate from a varied diet. Women in this age group following a GFD should be encouraged to consume a daily multivitamin.

Funding: University of Florida's Institute of Food and Agricultural Sciences Research Dean

P82 The Role of Social Support in Breastfeeding Experiences Among Rural Women in Southern Appalachia

Amanda Clark, MS, clarkam@appstate.edu, Appalachian State University, 261 Locust Street, Boone, NC 28608; L. Ball, PhD; M. Gutschall, PhD, RD, LDN; K. Thompson, MS, RD, CNSC, LDN; N. Gregory

Objective: This study's objectives are: to describe breastfeeding experiences and level of social support received among WIC participants in southern Appalachia, to examine perceived types and effectiveness of social support received including emotional, instrumental, informational, and appraisal.

Design, Setting, and Participants: Data was collected using a semi-structured qualitative interview ($n = 7$). Breastfeeding and postpartum WIC participants were recruited to participate via the placement of flyers in WIC clinics in western North Carolina.

Outcome Measures and Analysis: A semi-structured interview was conducted to assess breastfeeding experiences, barriers, and level of support received. Interviews were transcribed verbatim. Grounded theory approach (Glaser, 1967) was applied and themes were organized as they emerged. Themes were confirmed, rejected, or modified with study progression by three investigators. Interviews were coded using Nvivo software.

Results: Each interview lasted approximately one hour. The mean age was 29 and the average monthly income was \$1,723. Participants reported a high level of support from partners (e.g. husbands), professionals (e.g. lactation consultants and WIC), and the maternal grandmother of the infant. Commonly reported themes included receipt of professional support (11 mentions), difficulty breastfeeding (13 mentions), and desire to breastfeed for health benefits and bonding (27 mentions).

Conclusions and Implications: Little is understood about the role social support plays in influencing breastfeeding decisions among WIC participants in rural Appalachia. A better understanding of the barriers in social support related to breastfeeding may help design interventions to increase breastfeeding rates in rural areas.

Funding: Cratis D. Williams Graduate Research Grant

P83 Why Popular Diets Don't Work: A Systemic Review and Implications for Educators

Katherine Clavijo, katerinacavijo@gmail.com, San Marino Unified School District, 1921 South Los Robles Avenue, San Marino, CA 91108; B. Wu, MD, PhD, University of Southern California

Objective: The quality of the adolescent diet in the western world has become of increasing concern to researchers

Continued on page S41