together. This innovative youth program can be replicated by health and nutrition educators even after the pandemic subsides.

**Funding:** None

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**P014 Nutrition Knowledge, Attitudes, Beliefs, and Practices among Adults in Urban and Rural Areas in the Free State, South Africa**

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**Background:** Designing comprehensive nutrition education programs requires understanding nutrition-related knowledge, attitudes, beliefs, and practices (NKABP) of people. Globally, previous studies primarily focused on NKABP of children, adolescents, and adults. There are differences in living standards, dietary practices, and prevalence of diseases between rural and urban areas. Therefore, understanding the differences in NKABP between these communities is important.

**Objective:** To understand the differences and correlations between NKABP among adults in urban and rural settings.

**Study Design, Setting, Participants:** Assuring Health for All in the Free-State is a cross-sectional study to determine how living in urban and rural areas predisposes population to chronic diseases. It was approved by the Ethics Committee of the Faculty of Health Sciences, University of Free State. The rural and urban parts of the study were conducted in 2007 and 2009, respectively. Participants were adults aged 25-64 years.

**Measurable Outcome/Analysis:** The outcomes are NKABP, measured by a reliable questionnaire. Shapiro-Wilk test was used for normality testing. Due to non-normal distribution, Mann-Whitney tests were performed to compare continuous data. Spearman correlation analyzed the associations between NKABP domains.

**Results:** The sample included 363 (42.91%) urban and 483 (57.09%) rural adults, predominantly females (78.17%). The preliminary analysis shows adults in rural areas have significantly higher nutrition knowledge (9 ± 2 vs. 8 ± 2, \( P < 0.001 \)), attitudes (7 ± 1 vs. 5 ± 1, \( P < 0.001 \)), and beliefs (5 ± 0 vs. 4 ± 1, \( P < 0.001 \)) compared to those in urban areas. There were significant positive correlations in both urban and rural areas between knowledge and attitudes \( r = 0.11 (P = 0.03) \); \( r = 0.272 (P < 0.001) \) knowledge and beliefs \( r = 0.128 (P = 0.01) \); \( r = 0.2 (P < 0.001) \), and attitudes and beliefs \( r = 0.199 (P < 0.001) \); \( r = 0.401 (P < 0.001) \). However, associations between knowledge and practices \( r = 0.122 (P = 0.007) \), and beliefs and practices \( r = 0.113 (P = 0.01) \) were significant in rural areas and association between attitudes and practices \( r = 0.122 (P = 0.02) \) was significant in urban areas.

**Conclusions:** Adults in rural areas have better NKAB, and their knowledge and beliefs were correlated with practices. Future nutrition education interventions are required to increase NKAB and translating them into practices, especially among adults in urban areas in the Free State province.

**Funding:** The National Research Foundation (NRF) supported Assuring Health for All in the Free-State (AHA-FS) study financially, however, this part of the research is not funded.

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**P015 Nutrition Literacy Level Differentiates by Age, Gender, and Income in a Sample of Brazilian Adults**

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**Background:** Nutrition literacy (NL) is the capacity to obtain, process, and understand nutrition information and skills needed to make appropriate nutrition decisions. NL is associated with sociodemographic characteristics and predicted adherence to healthy or unhealthy diet patterns among adults with chronic diseases and pregnant women in the US. However, little is known about the association of NL with sociodemographic characteristics in developing countries.

**Objective:** To assess the NL level and its association with sociodemographic characteristics in bank employees.

**Study Design, Setting, Participants:** Non-probabilistic, quantitative and cross-sectional study carried out in 2020 in the Federal District (DF), Brazil with 1,174 workers aged ≥ 18 years old recruited from a financial institution.

**Measurable Outcome/Analysis:** NL was measured by the Nutrition Literacy Assessment Instrument for Brazilians (NLit-Br). We used the online version, validated with confirmed substantial reliability (ICC > 0.75). Sociodemographic questions (age, biological sex, Monthly Household Income (MHI) and education level) preceded NLit-Br. Descriptive analyses were used for NL and sociodemographic characteristics. Student’s t-test and Analysis of Variance (ANOVA) were used to measure associations between NL with sociodemographic characteristics.

**Results:** Most participants were male (61%), with a graduate degree (74%) and with a MHI higher 7 minimum wages (MW), US$ 1515.31 (85%). The diagnosis of moderate NL level predominated among the population studied (62.3%). Participants who were females aged less than...
40 years old and with MHI above US $1,515.31 had statistically significant higher NL than participants who were male, aged over 49 years old and with an MHI below US $1,082.36 (P = 0.00).

**Conclusions:** In this study, participants men, middle and older age (≥ 50 years old), and with a MHI below US $1,298.84 (< 6 MW), had statistically significant lower NL scores. This is one of the first studies to report NL inequality for biological sex and age in Brazil. Future studies should further explore the NL inequality observed for Brazilian males, middle to older adults, and lower household income impacts on their dietary and health outcomes.

**Funding:** None

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**P016 Nutrition Literacy Predicts Diet Quality in College Undergraduate Students**

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**Background:** Nutrition Literacy (NL) is the degree to which individuals can obtain, process, and understand nutrition information/skills to make appropriate nutrition decisions and can be categorized into three domains (functional, interactive, and critical). Limited studies have been conducted examining the relationship between the different NL domains and diet quality (DQ) in young adults.

**Objective:** To explore the influence of NL on DQ in undergraduate students.

**Study Design, Settings, Participants:** A cross-sectional convenience sample of undergraduate students completed an online survey that assessed health characteristics/behaviors including NL and DQ.

**Measurable Outcomes/Analysis:** Nutrition literacy was measured using the Young Adult Nutrition Literacy Tool. Diet quality was assessed using the Short Healthy Eating Index (sHEI). Scores for NL were on a scale of 1-5, and DQ 1-100, with higher scores indicating higher NL and more healthful DQ. Multiple regressions were used to determine if total NL predicted DQ and, if so, which domains of NL (functional, interactive, or critical) were significant in predicting DQ.

**Results:** Participants (n = 841) were an average of 20.9 (± 2.3) years old, mostly White (89%), and female (70%). The average sHEI score was 49.4 (± 10.3), indicating poor to moderate DQ. The mean total NL score was 3.50 (± 0.45). Mean functional, interactive, and critical NL scores were 3.33 (± 0.62), 3.55 (± 0.61), and 3.61 (± 0.52), respectively. Total NL was a significant predictor of DQ (r² = 0.113, F (1,880) = 111.760, P < 0.001). Two domains of NL (interactive and critical) explained 12.8% of variance in DQ (r² = 0.131, F (3,878) = 44.229, P < 0.001). Interactive NL (β = 0.267, P < 0.001) and critical NL (β = 0.122, P = 0.001) significantly predicted DQ, but functional NL did not.

**Conclusions:** Nutrition literacy was significant in predicting diet quality in undergraduate students. These findings justify the need for increased efforts to understand NL in college students, as well as highlight the potential of improving DQ by improving NL in this population.

**Funding:** USDA National Institute of Food and Agriculture, Hatch project number #ME013054538 through the Maine Agricultural & Forest Experiment Station

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**P017 Project DINE: Improving Diet Quality in Pregnant Women through the University of Georgia EFNEP**

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**Background:** Georgia’s maternal mortality rates are 60% higher for African American women compared to all racial/ethnic groups. There is also evidence that father involvement in prenatal maternal health initiatives may positively influence health outcomes. Nutrition education during pregnancy may also promote positive nutrition outcomes.

**Objective:** A primary goal of Project DINE (Dads in Nutrition Education) is to improve maternal nutritional outcomes and to increase father involvement through family participation in UGA (the University of Georgia) EFNEP (Expanded Food and Nutrition Education Program), an evidence-based community nutrition program.

**Study Design, Setting, Participants:** Participants were recruited by Morehouse School of Medicine and community partners, and were divided into two groups: single moms and expectant couples with father/male involvement. Inclusion criteria were African American pregnant women or men expecting a baby and Healthy Start program participants. UGA EFNEP provided an eight-week virtual nutrition education program in both metro and rural counties.

**Measurable Outcome/Analysis:** Data analyses were completed via WebNEERs, the centralized database for NIFA EFNEP at the federal level. Overall diet quality indicators (i.e., fruit/vegetable intake, sweet beverage intake, dinner at home) were measured pre/post analysis of the validated and federally mandated survey.

**Results:** Twenty single moms (SM) and 6 couples (C) (n = 32) graduated from Project DINE EFNEP (FY21). Overall diet quality improved in 97% of all graduates. When