Motivational interviewing (MI) enhances intrinsic behavior change motivation by determining and strengthening the value of sustained behavior change. MI is an effective strategy in improving dietary behaviors, particularly when MI occurs at multiple intervals over a long period of time. Participant-centered communication during MI emphasizes empathy, partnership, and collaboration between the interventionist and participant. University of Kentucky (UK) nursing researchers partnered with doctoral students in UK’s Colleges of Nursing and Communication to evaluate the influence of the relationship between a MI nurse interventionist and study participants on changes in dietary behaviors. The purpose of this mixed-methods study was to investigate relationships between trust, disclosure and dietary outcomes during a 12 month dietary behavior-change intervention in rural Central Appalachia. Factors influencing dietary decisions were also analyzed. The open-ended nature of MI prompts individuals to self-expose, self-affirm, and share personal narratives about their relationship with food. Trust can precede self-disclosure in the interpersonal exchange and self-disclosure is related to perceived interpersonal connectedness. In the participant-interventionist interaction, self-disclosure allows the interventionist to assess the individual needs of the participant and identify barriers to health improvement. A sense of trust with an interviewer will precede self-disclosure.

In the quantitative evaluation, study participants were asked to rank levels of trust with the interventionist and self-disclosure during motivational interviews. At the conclusion of the longitudinal intervention, participants in the MI condition (n=54) returned completed surveys including two adapted instruments: the revised self-disclosure scale, and the individualized trust scale. Surveys were completed approximately four weeks after the final MI session in order to reduce response bias. The Revised Self-Disclosure Scale is a validated, 31-item 7-point Likert scale ranging from strongly agree to strongly disagree instrument that asks participants to report perceptions of their own self-disclosure behavior across five dimensions (i.e., intent, amount, valence, depth, honesty). In this study, participants were asked to indicate the amount (using 5 items on scale, range 0-5) to which they engaged in self-disclosure with the interventionist. The Individualized Trust Scale is a 15-item instrument (7-point Likert scale ranging from strongly agree to strongly disagree) that asks participants to report perceptions of their own self-disclosure behavior across five dimensions (i.e., intent, amount, valence, depth, honesty). In this study, participants were asked to indicate the degree to which they placed trust in the MI interventionist.

The qualitative data described how Appalachians participating in nutrition interventions communicate about the sociocultural influences, both positive and negative, that shape their dietary decisions. Line-by-line analysis of the narratives of the MI interviews were conducted by two communication researchers. Self-disclosure statements related to dietary and cooking goals were thematically coded. Data immersion, coding discussions, and multiple iterations were conducted until interrater reliability reached 80%.

Residents from six Kentucky Appalachian counties (n=150) were enrolled in monthly cooking skills/nutrition education classes. Motivational interviewing was provided to participants in three of the counties. Based on a semi-structured interview template, an MI-trained nurse interventionist engaged individuals in audiotaped monthly discussions about dietary choices, specifically the lifestyle barriers associated with consuming more fresh fruits and vegetables and eating more home-cooked meals. Intervention fidelity was ensured via analysis by a MI expert nurse researcher.

Discussion Both trust (M = 4.48, SD = .93) and disclosure scores (M = 4.16, SD = .99) ranged from 1-5 (0-5 possible for each score). Linear regression analysis showed positive relationships between trust and increased fruit and vegetable consumption, F (1, 35) = 13.44, p=.04 with an R2 of .28. Self-disclosure was not predictive of increased fruit and vegetable consumption (p=.87). Participants disclosed information about financial hardship (i.e., food insecurity, poverty), self-reliance (i.e., pragmatism and control), the burden of chronic illness, family dynamics (e.g., willingness to try new foods, personal dietary preferences), and culturally ingrained beliefs (i.e., food traditions and rituals) about dietary behaviors during motivational interviews. Our study affirmed relationship between trust in healthcare provider-participant relationships and increased fruit and vegetable consumption during the dietary intervention. These results suggest that trust in a healthcare provider may serve a functional role in eliciting disclosures of health behavior barriers and improving health behaviors. Motivational interviewing can enhance lifestyle behavior change motivation. While fidelity assessment ensured consistency of MI interventions, the evaluation of trust and disclosure were predictive of dietary behavior change in this group of Central Appalachian residents enrolled in a cooking skills class.