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intervention and noted its potential for designing precision interventions. For this purpose, psychosocial phenotyping must be scalable and identify mediators that can serve as intervention targets along with related moderators and behaviors. Mixed membership models, including Latent Dirichlet Allocation (LDA) and UPhenome, are machine-learning methods used for clinical phenotyping. Whereas LDA treats mediators, moderators, and behaviors as a single data type, UPhenome handles them separately, learning phenotypes that represent each equally. These data-driven models have not yet been applied in behavioral nutrition.

Objective: We assessed the utility of LDA and UPhenome for automatic learning of psychosocial phenotypes from survey data.

Study Design, Setting, Participants, Intervention: We extracted individual's ($n = 5,883$) psychosocial characteristics from surveys collected during a cohort study of a predominantly Latino New York City community affected by high levels of chronic disease and health disparity. We conducted a secondary analysis of these data using UPhenome and LDA.

Outcome Measures and Analysis: Participant responses were tokenized ($n = 4,604$) and used as input to LDA and UPhenome to identify phenotypes ($k = 10$). Domain experts ($n = 4$) assessed internal consistency among phenotypes resulting from LDA; a heatmap ($n = 3,233$) depicted dietary patterns for each phenotype.

Results: Experts found within-phenotype consistency and between-phenotype discrimination. Differences in dietary patterns were visually detected. UPhenome identified more specific intervention targets than LDA.

Conclusions and Implications: LDA and UPhenome can identify psychosocial phenotypes in a large cohort of Latino New Yorkers and could advance Precision Behavioral Nutrition. Future research will assess generalizability of psychosocial phenotypes and integrate psychosocial phenotyping into behavioral nutrition interventions.

Funding: NIH Sackler Institute for Nutrition Science at the New York Academy of Sciences.

P195 Eat Smart Idaho Uses Strong Partnerships as the Backbone for Smarter Lunchroom Success

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Objective: Eat Smart Idaho, the Coeur d'Alene School District Food Service staff and two local fire departments entered into a unique partnership to boost all 10 elementary schools up to Gold Status by the fall of 2018 using the Smarter Lunchroom Assessment Tool. In the fall of 2015, before the implementation of this partnership, eight schools received Bronze Status and two received Silver Status.

Target Audience: The Coeur d'Alene School District includes 10 elementary schools serving over 5,200 youth; 50.4% of youth are on free or reduced lunch.

Theory, Prior Research, Rationale: A smarter lunchroom nudges kids towards nutritious foods. Cornell University's Smarter Lunchroom is a program giving opportunity for kids to select and consume a balanced diet. It applies research-based principles leading children to make healthy choices.

Description: Several concepts were implemented to raise schools to Gold Status: local firefighters from two departments were used as healthy role models for the district; Harvests of the Month were implemented to encourage healthy eating habits; hundreds of youth were used to creatively name each vegetable, fruit, main dish and dairy offering served in the district, and monthly breakfast and lunch menus have been revamped with nutrition messaging.

Evaluation: All 10 elementary schools were re-evaluated in September 2017 using the Smarter Lunchrooms Scorecard. The scorecard contains 60 simple lunchrooms strategies to increase consumption of healthy foods. Each elementary school in the district reached our goal of Gold Status.

Conclusions and Implications: The partnerships created to increase the success of Smarter Lunchroom in the Coeur d'Alene School District has been invaluable. Through Eat Smart Idaho's outreach, the Post Falls School District and their local fire department have initiated talks to implement a similar program. Additionally, the Healthy Eating, Active Living (HEAL) Community Healthy Initiative Youth Sub-Committee group has initiated talks to bring these ideas statewide.

Funding: Supplemental Nutrition Assistance Program—Education, Idaho's Department of Health and Welfare, Coeur d'Alene School District.

P196 Feasibility of Visual Estimation Using Digital Template Photos to Assess Children's Dietary Intake in Childcare Settings

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Background (Background, Rationale, Prior Research, and/or Theory): Within childcare settings, it is estimated children consume up to 75% of daily calories, making food consumed within childcare environments a key component of children's daily nutrition. To assess children's nutritional intake in childcare settings, direct observation by weighing each food item before and after consumption is considered the gold standard. However, this method can be disruptive in the classroom and resource-intensive. Therefore, a simple and accurate method to estimate children's dietary intake is needed.

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