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Food Insecurity Screening Detects Patients with Poor Diet Quality

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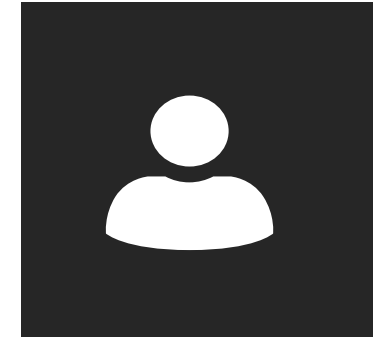
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Title: Food Insecurity screening detects patients with poor diet quality



PRESENTER:
Aaron Allison

BACKGROUND: 1/8 of US households are facing food insecurity¹. Food insecurity **Worsens** health outcomes^{2,3}. **Children** and women are disproportionately affected by food insecurity. **Hunger Vital Sign** is a 2-question survey designed and validated to identify food insecurity at risk households⁴.

METHODS

1. We collected 607 self-reported surveys from the patient population of an urban clinic.
2. Food security risk determined via hunger vital sign and diet quality measured via Rapid Eating Assessment for Participants – Shortened version (REAP-S) on a scale from 0 to 39.
3. Analyzed relationship between food security risk, diet quality, and BMI via analysis of variance (ANOVA).
4. Analyzed relationship between risk of food insecurity and demographics or barriers to healthful diets.



Barriers individuals at risk for food insecurity were more likely to select on our survey ($p \leq .007$)

Food insecurity risk status associated with poor diet quality and higher BMI

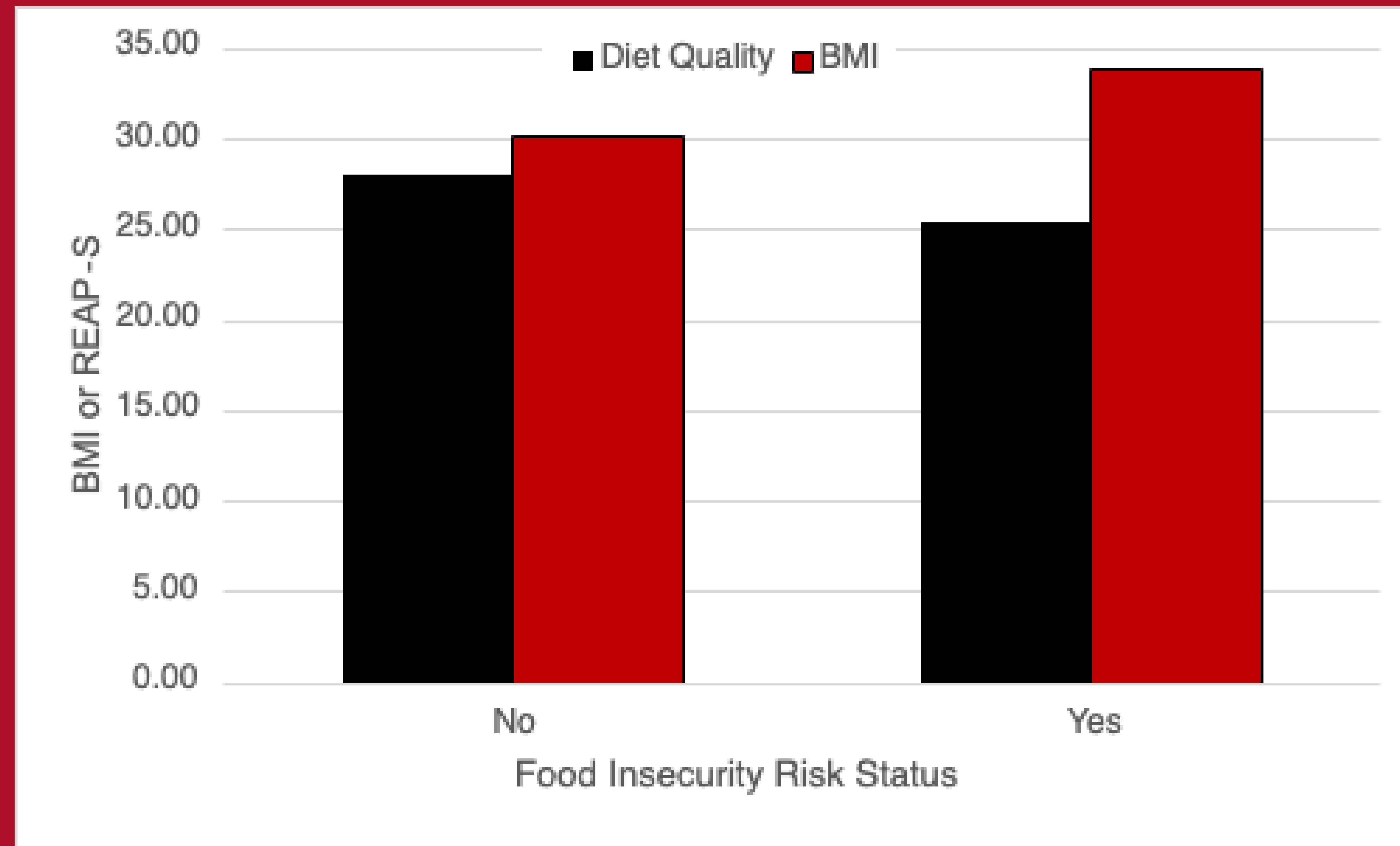


Figure 1. Mean REAP-S score and BMI of participants grouped by food insecurity risk status. At risk participants were more likely to have a higher BMI ($p < .001$) and Lower REAP-S score ($p < .001$) than their food secure counterparts.



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Results

Our findings demonstrate a significant difference in diet quality between food insecurity in at risk patients (Mean=25.33, SD=4.5) and not at risk patients (Mean=28.00, SD= 4.6; $p < .001$). At risk patients were more likely to have a higher BMI (Mean= 33.85, SD=9.2) than food secure patients (Mean=30.1, SD=8.0, $p < .001$). Women and underrepresented minorities were more likely to be at risk of food insecurity ($p = .023$ and $p < .001$ respectively).

DISCUSSION

Our findings demonstrate the need for widespread food insecurity screening throughout primary care clinics. The screening tools are available and there are services we can provide to improve patients' food security. Additionally, the removal of societal barriers to access, such as food deserts or the higher cost per calorie of whole foods could be highly beneficial to patient well-being.

FAQ

What national resources can I provide to patients?

FeedingAmerica.org has a graphic to compare resources and who qualifies for aid.

What research topic is next?

We would like to determine the effect patient education and assistive resources have on diet quality and food security status following screening.

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