A Scoping Review of Food Behaviors Questionnaires for a Non-Alcoholic Fatty Liver Disease Population

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BACKGROUND

• One third of the world’s population has non-alcoholic fatty liver disease (NAFLD)1 (see Figure 1)
• NAFLD and metabolic syndrome (MS) - which manifests as obesity, insulin resistance (IR), and high blood pressure - are known to be associated1–4.
• There is a clear relationship between diet and NAFLD risk factors, but further research is needed to clarify this link.
• Examining the consumption of specific nutrients or foods does not encompass dietary habits.
• Patients’ food behaviors – non-nutritional factors associated with eating which influence food intake – may play a role in disease progression.
• Although existing research demonstrates a link between certain specific food behaviors and the related conditions of MS, obesity, or IR, no research has been done in a NAFLD population.

PURPOSE

The purpose of this research project was to compose a scoping review of the existing literature about surveys, questionnaires, or other measurement instruments that assess food behaviors in NAFLD patients or related populations (such as the MS patient population). This review will direct the development of an instrument specific for use in the adult NAFLD patient population.

METHODOLOGY

Using the Arksey & O’Malley (2005)5 method, 17 PROQUEST or EBSCO databases were searched (see Table 1 & Figure 2)

Table 1: Search terms used for Scoping Review

<table>
<thead>
<tr>
<th>SEARCH TERMS</th>
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<tbody>
<tr>
<td>‘survey OR questionnaire’</td>
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<tr>
<td>AND ‘eat* OR food OR meal OR diet’</td>
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<tr>
<td>AND ‘habit OR pattern OR behavio* OR belief’</td>
</tr>
<tr>
<td>AND ‘obes* OR “metabolic syndrome” OR MS OR diabetes OR “insulin resistan*” OR IR’</td>
</tr>
<tr>
<td>NOT ‘freqen* OR record OR FFQ OR history OR recall OR diar* OR disorder*’</td>
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</tbody>
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Inclusion Criteria:
• English language articles
• Scholarly journal articles
• Human studies
• Adult or adolescent studies

Exclusion Criteria:
• Studies that used secondary data
• Studies assessing nutrient, energy, specific food intake
• Studies related to clinically-diagnosed eating disorders
• Instruments related to emotional eating (not a stable habit)

RESULTS

Nine articles/instruments were ultimately included for review6–14

Food behaviors assessed in reviewed instruments include:
• Eating before bed
• Eating between meals
• Feeling hungry
• Restrictive eating or overeating
• Eating beyond satiation
• Snacking
• Food as reward
• Meal-replacement
• Internal regulation
• Eating while doing something else
• Frequency of eating
• Places of eating
• Timing of meals
• Choosing “healthy”/light foods
• Thoughts about food
• Eating rate
• Calorie counting
• Food avoidance
• Compensatory behaviors
• Meal-to-sleep interval
• Intra-meal fluid intake
• Eating when bored
• History of dieting

CONCLUSION

No instrument currently exists to assess food/eating behaviors in a NAFLD population. Several of the instruments reviewed have salient components, but creating a new questionnaire is the best means of accurately assessing the eating behaviors of the NAFLD population. This questionnaire could be used by health care professionals to direct care of NAFLD patients or by researchers to learn more about disease progression.

REFERENCE