Diet Quality, Diet Motives, and Nutrition Literacy of Vegans, Vegetarians and Semi-Vegetarians

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BACKGROUND

• Plant-based individuals have shown favorable dietary behaviors and diet quality.

• Evidence suggests that certain diet motivations and nutrition literacy can predict greater dietary quality.

OBJECTIVES

• To assess diet quality, diet motives and nutrition literacy in vegans, vegetarians, & semi-vegetarians.

• To investigate the association between diet motives and dietary quality.

METHODS

• Online cross-sectional survey-based study.

• Diet motives, measured by the Food Choice Questionnaire (FCQ).

• Nutrition literacy, measured by the Nutrition Literacy Assessment Instrument (NLit).

• Dietary quality, measured by the Diet History Questionnaire III (DHQ III) and scored by the Healthy Eating Index-2015 (HEI-2015).

• Statistical analysis: ANOVA and multilinear regression.

• Participants (n=223): 117 vegans, 51 vegetarians, 55 semi-vegetarians.

RESULTS

Table 1: Diet Quality and Nutrition Literacy Among Groups

<table>
<thead>
<tr>
<th></th>
<th>Total (n=223)</th>
<th>Vegan (n=117)</th>
<th>Vegetarians (n=51)</th>
<th>Semi-vegetarians (n=55)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEI-2015 (0-100)</td>
<td>78.5 ± 7.8</td>
<td>80.8 ± 6.5</td>
<td>75.3 ± 9.0</td>
<td>76.8 ± 7.5</td>
<td>&lt;0.001</td>
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<tr>
<td>Total NLit (0-64)</td>
<td>58.9 ± 3.3</td>
<td>59.2 ± 3.1</td>
<td>58.6 ± 3.6</td>
<td>58.4 ± 3.5</td>
<td>0.381</td>
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<tr>
<td>Vegetarian Literacy</td>
<td>5.53 ± 0.72</td>
<td>5.73 ± 0.16</td>
<td>5.45 ± 0.7</td>
<td>5.2 ± 0.84</td>
<td>&lt;0.001</td>
</tr>
</tbody>
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DISCUSSION

• Vegans had higher diet quality scores.

• Low variability in NLit scores may be explained by characteristics of sample.

• Those motivated by sensory appeal likely to have higher intake of "undesirable" nutrients.

• Extrinsic motivations may predict unfavorable dietary choices and adherence.

Strengths:

• Comprehensive: includes three different diet types.

• Novel: assesses nutrition literacy in a plant-based population.

Limitations:

• Time-intensive, two-part nature of the study provided low power and potential selection bias.

CONCLUSION

• Plant-based individuals have high diet quality and nutrition literacy.

• Health and natural content motivations were associated with higher diet quality.

• Weight control and sensory appeal motivations were associated with lower diet quality.

• Nutrition literacy was not associated with diet quality.

ACKNOWLEDGEMENTS & REFERENCES

• This study was funded by the SJSU Circle of Friends Research Assistance Award.

• References:

1) Clarys et al. (2014). Nutrients, 6(3).
2) Le et al. (2018). Nutrients, 10(5).
5) Souza et al. (2020). Nutrients, 12(5).