

## Mediterranean diet and GERD symptoms: A case control study in Lebanese adults

Jacqueline H Doumit<sup>1</sup>, Antoine Aoun<sup>1</sup> and Mary Joe Youssef<sup>2</sup>

<sup>1</sup>Notre Dame University-Louaize, Lebanon

<sup>2</sup>Holy Spirit University of Kaslik, Lebanon

**Background:** The prevalence of gastro esophageal reflux disease (GERD) is increasing worldwide and its symptoms are associated with several risk factors such as diet and stress. Our aim was to assess the association between GERD symptoms and both lifestyle and dietary factors among adult men and women in Lebanon, a Mediterranean country with specific characteristics.

**Methods:** This case control study was carried between January and March 2016. A convenient sample of 264 adults was equally divided into GERD group and control group. Socio-demographic, dietary and lifestyle data were collected from a face-to-face interview performed by a trained local dietician.

**Results:** GERD symptoms were associated with high body mass index ( $p < 0.001$ ), smoking ( $p < 0.001$ ), family history of GERD ( $p < 0.001$ ), low physical activity ( $p = 0.01$ ), and high stress level ( $p = 0.02$ ). These symptoms were also associated with the following dietary habits: eating large

volume meals ( $p < 0.001$ ), irregular meal pattern ( $p < 0.001$ ), eating out ( $p < 0.001$ ), rapid eating (in less than 10 min) ( $p < 0.001$ ), late-evening meals (short before bed-time) ( $p = 0.001$ ) and eating between meals ( $p < 0.001$ ). Heartburn was the most common symptom. Coffee (OR, 5.81; 95% CI, 1.93-17.45) and carbonated beverages (OR, 3.09; 95% CI, 1.31-7.30) were significantly correlated with GERD symptoms. Moreover, coffee emerged as the strongest predictor for heartburn, globus sensation and hoarseness, while carbonated beverages were the strongest risk factor for dyspepsia. Among several Lebanese traditional dishes, only labneh with garlic (OR, 3.71; 95% CI, 1.72-8.03) and pomegranate molasses (OR, 2.86; 95% CI, 1.39-5.86) were associated with GERD symptoms aggravation.

**Conclusion:** Some lifestyle factors and components of the Lebanese Mediterranean diet may increase the symptoms of GERD.

### Biography

Jacqueline H Doumit is currently an Associate Professor in the Faculty of Nursing and Health Sciences at Notre Dame University-Louaize (NDU) Lebanon, where she has been teaching biology, nutrition and biochemistry courses since 1999. Her research interests are largely in food quality, nutrition, the well-being of adults and epidemiological research on elderly.

[jdoumit@ndu.edu.lb](mailto:jdoumit@ndu.edu.lb)

 Notes: