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Diet and lifestyle triggers for gastro-oesophageal reflux disease: symptom identification

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Previous studies have determined that diet and lifestyle may trigger the onset of symptoms of gastro-oesophageal reflux disease^(1,2). It remains unclear as to how these triggers precipitate the onset of specific symptoms.

The aim of the present study was to investigate possible diet and lifestyle trigger factors in Caucasian patients with heartburn. Ethical approval was gained from the Bedfordshire Local Research Ethics Committee. Ten male patients of mean age 53.1 (range 43–64) years and twelve female patients of mean age 53.1 (range 31–63) years were recruited from a general practitioner surgery in Bedfordshire, UK. All participants completed a symptoms and triggers diary for seven consecutive days, indicating the time of symptom onset, the type of symptom, severity and associated trigger factors. Symptoms were categorised using the validated gastro-oesophageal reflux disease questionnaire, the GERD impact scale⁽³⁾. This scale is used in the primary-care setting to assess how frequently symptoms are reported and the impact of these symptoms on patient’s daily lifestyle.

As there were no significant differences between the genders they were analysed together.

Trigger factor	GERD impact scale symptom Pain or burning sensation		Trigger factor	GERD impact scale symptom Other acid-related symptoms	
	% (n 22)	n		% (n 22)	n
Fatty foods	36	8	Spicy foods	27	6
Stress	36	8	Large meal	23	5
Alcohol	32	7	Time of eating	23	5
Eating quickly	27	6	Stress	18	4
Large meal	27	6	Citrus fruits	14	3
Bending down	23	5	Coffee	14	3
Spicy foods	23	5	Lying down	14	3
Time of eating	18	4	Sitting	14	3
Chocolate	14	3	Smoking	14	3
Citrus fruits	14	3	Alcohol	9	2
Eating whilst slouching	14	3	Bending down	9	2
Lying down	14	3	Eating quickly	9	2
Coffee	9	2	Fatty foods	9	2
Sitting	9	2	Chocolate	5	1
Sleeping on right side	9	2	Eating whilst slouching	5	1
Smoking	5	1	Sleeping on right side	5	1

The results suggest that there are many trigger factors associated with symptoms of gastro-oesophageal reflux disease. It can be identified that there are different symptoms reported in response to certain trigger factors. Fatty foods and stress were the most reported to precipitate the onset of pain or burning in the chest area. In comparison, spicy foods was the most reported trigger factor for other acid-related symptoms, which includes acid regurgitation, pain or burning in the upper stomach and sore throat. In light of these interesting findings further investigation is needed to gain a better understanding of these diet and lifestyle trigger factors and their role in the onset and manifestation of symptoms.

1. Nilsson M, Johnsen R, Ye W *et al.* (2004) *Gut* **53**, 1730–1735.
2. El-Serag HB, Satia JA & Rabeneck L (2005) *Gut* **54**, 11–17.
3. Jones R, Coyne K & Wiklund I (2007) *Aliment Pharmacol Ther* **25**, 1451–1459.