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Heartburn: impact on physical activity level

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Physical activity has been demonstrated to be a trigger factor in patients with gastro-oesophageal reflux disease[1]. This effect has not been demonstrated in those suffering from heartburn alone.

The aim of the present study was to investigate the impact of heartburn on the level of physical activity undertaken in Caucasian patients with heartburn. Ethical approval was gained from the Bedfordshire Local Research Ethics Committee. Twenty-three healthy males (mean age 46.3 (range 30–65) years), twenty-seven healthy females (mean age 44.8 (range 28–65) years), ten male patients (mean age 53.1 (range 43–64) years) and twelve female patients (mean age 53.1 (range 31–63) years) were recruited from Bedfordshire, UK. All participants completed a lifestyle questionnaire including self-reported height and weight and the international physical activity questionnaire (IPAQ)[2].

Mean BMI calculations showed no difference between each group. When assessing the overall IPAQ scores no difference was seen, as each group had a mean score categorising moderate physical activity levels. Within the control and heartburn groups no differences were identified between the genders. On further examination of calculated values for the metabolic equivalent of task (MET) for the individual dimensions of IPAQ it can be seen that the heartburn group did less MET-min/week for all dimensions.

Table. IPAQ dimension mean values

	Heartburn group (*n* 22)	Control group (*n* 50)
Total MET-min/week	2700*	5881
Vigorous MET-min/week	262*	1804
Moderate MET-min/week	771	1056
Walking MET-min/week	1667	3020
Sitting on a weekday (min)	505*	389

Mean values were significantly different from those for the control group (independent samples *t* test): *$P<0.05$.

Heartburn may affect the ability to undertake vigorous activity and encourage sitting. Changes in posture have been reported to precipitate symptoms of gastro-oesophageal reflux disease[3]. It could be suggested that certain types of physical activity may trigger heartburn symptoms; thus, it may discourage the patient from undertaking further activities. In light of these interesting findings more investigation is needed to identify the types of physical activity perceived to trigger the onset of symptoms. Recommendations are therefore required to promote the participation of physical activity in this patient group.

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