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**Proceedings Paper:**

Kurien, M., Aziz, I., Trott, N. et al. (7 more authors) (2016) How Much Gluten Is The General Population Consuming and Does It Relate to Symptoms? In: GUT. BSG 2016, 20-23 Jun 2016, Liverpool, UK. <http://doi.org/10.1136/gutjnl-2016-312388.221>, 65 . BMJ Publishing Group , A124-A124.

<https://doi.org/10.1136/gutjnl-2016-312388.221>

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# BSG 2016 - Abstract Submission

*Neurogastroenterology: functional disorders, motility and clinical physiology*

BSG16-ABS-1128

## HOW MUCH GLUTEN IS THE GENERAL POPULATION CONSUMING AND DOES IT RELATE TO SYMPTOMS?

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**Does this abstract contain original data?:** Yes

**Will this abstract be published/presented prior to June 2016?:** No

**This abstract is:** None of the above

**Does your Endoscopy abstract include a video?:** No

**Preferred presentation type:** Oral or Poster

**Introduction:** Gluten is a ubiquitous part of a western diet. It is implicated for causing an array of disorders, which have both intestinal and/or extraintestinal manifestations. Our understanding of this heterogeneous group of gluten-related disorders is advancing, however uncertainty exists as to how much gluten the general population is consuming. This study aims to address this knowledge gap and also assess the prevalence of self-reported gluten sensitivity within the general population.

**Methods:** Between September and October 2015 a population-based survey was undertaken in Sheffield, UK. Members of the general public, all over the age of 16 years, were invited to complete a modified version of a previously validated written questionnaire. This questionnaire assessed demographic information, GI conditions and also determined the presence of gluten sensitivity (GS). In addition, total gluten consumption was calculated using a food frequency questionnaire. Participants were asked about their use of a gluten free diet (GFD), and whether they had seen a healthcare professional for their symptoms. A diagnosis of coeliac disease (CD) was determined if individuals had a doctor diagnosis of CD, and were also taking a GFD.

**Results:** 1003 adults completed the population-based survey (59% female, median age 31 years (16-86years). The mean consumption of gluten per day for this group was 13.2g (s.d=9.2g). The self-reported prevalence of GS was 32.5% (326/1003, female 70% [P < 0.0001], age range 17-82, median age 35yrs), with 3.7% (38/1003) on a GFD and 1.1% (12/1003) having CD. The proportion of GS individuals who had seen a doctor for their symptoms was 18.3% (65/326). Individuals with GS had an increased prevalence of fulfilling the Rome III criteria for irritable bowel syndrome, in comparison with those without GS (31.3% vs. 5.61%, odds ratio 7.66, p < 0.0001). In addition, mean daily consumption of gluten was considerably lower in this GS group compared to the non GS group (10.8g vs. 14.4g, p<0.0001).

**Conclusion:** This is the first study assessing gluten consumption in a UK population. Findings from our work highlight that sensitivity to gluten-based products is common, and that affected individuals have a higher prevalence of IBS. Although only a minority of individuals maintained a gluten-free diet, individuals with gluten related symptoms evidently were electing to reduce their gluten consumption.

**Disclosure of Interest:** None Declared