Introduction For individuals with gluten-related disorders (GRD) eating out has traditionally been difficult, and socially impacting, due to concern over the lack of appropriate gluten-free products. However, the recent rise in media coverage highlighting these conditions may have altered knowledge amongst community members.

Aims To assess whether there has been a change in awareness of GRD, and a GFD, amongst the general public and chefs over a ten year period.

Methods A face-to-face questionnaire survey about coeliac disease (CD) and gluten sensitivity (GS) was performed on the general public and chefs based in Sheffield, United Kingdom. The assessment was first conducted in 2003 and repeated in 2013. Chefs were also asked about their workplace (takeaway or restaurant) and whether or not they had formal qualifications. Additional questions for the 2013 cohort included correct recognition of the cross-grain symbol to identify gluten-free products and whether they displayed a notice/sign for gluten-free products.

Results Public survey: 513 public members in year 2003 (mean age 49.2, 62% female) were compared to 575 public members in year 2013 (mean age 37.8, 57% female). Adjusting for age and sex, there was a significant rise in the awareness of GRD from the years 2003 to 2013; CD (44.2 to 74.4%, OR 3.94 [CI: 1.99–7.98]), p < 0.0001. Chef Survey: 322 chefs in year 2003 (mean age 37.6, 15.2% female, qualified 51.2%, restaurant chefs 50%) were compared to 265 chefs in year 2013 (mean age 27.1, 38.1% female, qualified 93.2%, restaurant chefs 83%), p < 0.0001. Adjusting for age, sex, workplace and qualifications, there was a significant rise in the awareness of GRD from the years 2003 to 2013; CD (17.1 to 78.1%, OR 12.5 [CI: 7.9–19.6]) and GS (9.3 to 87.5%, OR 65.7 [CI: 35.4–122]), p < 0.001.

Whereas in 2003 the public were significantly more aware of GRD than chefs, by 2013 there was a similar prevalence of awareness in both groups. In addition, the correct recognition of the gluten-free symbol was 44% for the public and 40% for chefs (p 0.28). Furthermore, in the year 2013, 41% of restaurants and 27% of takeaways displayed selling gluten-free products (p 0.07).

Conclusion There has been a dramatic rise in both the public and chefs awareness of GRD. This suggests that individuals with GRD can take greater confidence discussing and ordering a GFD whilst eating out.

Disclosure of Interest None Declared.
patients with CD\(^1\) and the British Society of Gastroenterology guidelines state that DEXA should only be done after introduction of a gluten-free diet on the subgroups of patients in whom the risk of osteoporotic fracture is high\(^2\). This was however followed up by a guidance document in 2010 stating that BMD assessment should always be performed at diagnosis. Meanwhile the American guidelines suggest testing for vitamin and micronutrient deficiencies\(^3\). The aims of this study were to determine, the prevalence of osteopenia and osteoporosis among patients who are newly diagnosed with CD, and any risk factors which would increase patients’ risk of osteopenia and osteoporosis.

**Methods** We carried out a prospective cohort study, where newly diagnosed CD patients were recruited. DEXA scanning was done at diagnosis. Data with regards to smoking, BMD and histology was entered into a database and analysed using SPSS software package.

**Results** 137 patients with a histological diagnosis of CD were recruited. 76.6% were females. Mean age at diagnosis was 37.1 years (95% CI: ±3.19 years). 21.9% (n = 30) of patients were osteoporotic and another 51.1% (n = 72) were osteopenic at diagnosis. A total of 14.9% (n = 17) had a previous history of fracture/s prior to diagnosis. Osteoporosis at the spine was significantly associated with the female gender (p = 0.04) and with an older age at diagnosis (50.3 years p = 0.01; 95% CI: ±6.6 years). Patients with Marsh 3c disease at diagnosis were also more likely to have a normal BMD at the spine than patients with Marsh 3a or 3b (p = 0.04). Mean BMI between osteopenic (24.15 kg/m\(^2\) 95% CI: ±1.29) and osteoporotic (23.37 kg/m\(^2\) 95% CI: ±2.81) patients was slightly different but not statistically significant (p = 0.07).

**Conclusion** This data demonstrates a high rate of osteopenia and osteoporosis among CD patients at diagnosis. DEXA scanning should therefore be considered at diagnosis. This is of greater importance in female patients diagnosed at or above the age of 50 years and with Marsh 3c disease.

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**PTH-117 THYMIC STROMAL LYMPHOPOIETIN IS PRIMARILY REDUCED IN REFRACTORY COELIAC DISEASE DUODENAL MUCOSA**

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**Introduction** Thymic stromal lymphopoietin (TSLP), a cytokine released by enterocytes and gut dendritic cells, promotes the development of Foxp3+ regulatory T cells and at the same time inhibits the development of pro-inflammatory T helper (Th)1 and Th17 cells. While mucosal TSLP expression is down-regulated in untreated coeliac disease (CD), its levels are unknown in refractory CD (RCD), in which the transformation of aberrant intraepithelial T cells predisposes to the emergence of enteropathy-associated T cell lymphoma. Therefore, we evaluated the

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Osteoporosis In Patients With Coeliac Disease

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