



Estimating the Self-reported Prevalence of Non-celiac Gluten Sensitivity in the Korean Population

TO THE EDITOR: We have read with interest the study by Cha et al,¹ 2022. The authors inform about the prevalence of non-celiac gluten sensitivity (NCGS) in a Korean population. However, there are some issues that we believe are worthwhile to address to further clarify key points of the research. First, the third section of the questionnaire was extracted from another non-Korean language questionnaire and the fourth section was designed by the authors, but a methodological approach to validate these sections was not reported. Translation/back translation from a different language is essential to ensure both the quality of the translated questionnaire and the correct interpretation of the questions by participants. The questionnaire should also be validated to determine how well the translated questions measure what they are supposed to measure.² We believe that questionnaires translated into a different language or new sections designed should be evaluated at least for clarity and comprehension to ensure the correct interpretation of the questionnaire.^{3,4} Second, the authors define self-reported NCGS as the reporting of symptoms at least once a week after gluten intake and a visual analog scale score of symptom discomfort ≥ 8 . However, the rationale for an undemanding NCGS definition should be given since, from some studies,^{5,6} some questions could be raised: why not consider the triggering of the symptoms always or most of the time after gluten ingestion? How do the authors discriminate between NCGS and a potential wheat allergy? How many participants already have a physician's diagnosis of celiac disease/wheat allergy? Third, the main conclusions are the prevalence rates (PRs) of NCGS in the non-irritable bowel syndrome (IBS) population (5.8%) and in IBS patients (33.6%). However, these and other PRs given throughout the manuscript lack confidence intervals (CIs). CIs indicate with some certainty the range of possible values within which the statistical measure of a population can be found; "the narrower the margins of the CIs are, the higher the estimate accuracy is."⁷ Furthermore, the sample size needed for the study was not declared, although the authors claimed that the "study had a large enough sample size to estimate NCGS prevalence." The sample sizes inferred from the study are around 147 (IBS) and 223

(non-IBS), which would hardly be enough to properly estimate the NCGS PRs (expected PRs of 20.0%/3.9% [IBS patients/non-IBS population]).⁸ Proportioning information related to the issues addressed above could help to better interpret the results of Cha et al.¹

Oscar G Figueroa-Salcido,¹ Jesús G Arámburo-Gálvez,^{1,2}
and Noé Ontiveros^{3*}

¹Faculty of Nutrition Sciences, Nutrition Sciences Postgraduate Program, University of Sinaloa, Culiacán, Mexico; ²Division of Biological and Health Sciences, Postgraduate Program in Health Sciences, University of Sonora, Hermosillo, Mexico; and ³Division of Sciences and Engineering, Department of Chemical, Biological, and Agricultural Sciences (DC-QB), Clinical and Research Laboratory (LACIUS, URS), University of Sonora, Navojoa, Mexico

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