Author’s response to reviews

**Title:** Possible relation between consumption of different food groups and depression

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Cover letter indicating point-by-point response to reviews

**Reviewer 1**

The authors are grateful for the reviewer's comments, which have allowed the quality and clarity of the paper to be significantly improved.

1.- According to the reviewer, the first sentence of the paper has been modified, and the prevalence of depression in Spain is indicated (Page 4 , lines 1-3).

2.- Information about tryptophan and inositol rich foods it is now explained at the end of the introduction (page 5, lines 5-7).

3.- The fourth to last sentence of the introduction was totally changed.

4.- Initially, the period of the retrospective study was indicated exclusively in the Methods section. Now, following the indications of the Review, it is also mentioned in the introduction (last paragraph).

5.- All available information about the participants of each group has now been included (page 6 , lines 4-18; page 7, lines 1-6).

6.- The dietary questionnaire used (translated to English) now it is included as a supplement.

7.- Reference about BDI cut-off is pointed out (page 8, line 3).
8.- T-Student test has been replaced by Student’s t-test (page 8, line 9).

9.- The information related to the food groups studied, are included in the introduction section (page 5, lines 5-7, 10-12, 14).

10.-Explanation about “oxygen species” is now included (Page 10, last sentence).

11.-Information about the effects of sugars on depression is included in the discussion section (page 10, lines 14-17).

Reviewer 2

We thank the reviewer for remarks and corrections that clearly improve the level of the paper.

1.- The term “e.g.” has been replaced by “e.g.,”.

2.- The term depression has been replaced by depressive symptoms and the term no depression has been replaced by no depressive levels, both terms throughout the paper, following the indications of the reviewer.

3.- The use of “no”, “low” and “high” consume groups have been defined according to the consumptions considered as adequate in the Mediterranean diet. The corresponding reference has been added (page 7, lines 15-16).

4.- Data about the sample (males, females, age) have been included in the Abstract section.

5.- The sentence “the two groups had no significant differences in the consumption chocolate” has been replaced by “the two groups had no significant differences in the consumption of chocolate”.

6.- Part of the introduction section has been rewritten, including more information about potential causal pathways (page 5, lines 5-7, 10-12).

7.- The term “subjects” has been changed by “participants”(pages 6 and 7 ).

8.- “table 1” has been changed by “Table 1” (page 9, line 12).

9.- We thank the reviewer for the remarks on the use of Cramer’s V statistics, nevertheless we have followed a previous editor’s suggestion that ask us to calculate the estimated size effects using Cramer’s V as a magnitude of association between depression and the high, low or no
consumption of the food groups. The effect sizes are resistant to sample size influence and thus provide a truer measure of the magnitude of the effect or association between variables. Estimated effect sizes indicated and small-medium association between depression and low consumption of legumes, fruits and vegetables; and high consumption of sweets and refined sugar. As can be seen, we comment the estimated effect size in Result section. So, follow editor’s suggestion, we decide not to replace the Cramer's V results with the OR results in Table 1.

10.-We followed the suggestion of the reviewer, and we have changed the decimal place in Table 1 according to its indications.

11.- Following the reviewer's instructions, some references from the discussion section have been moved to the introduction section (Refs 13, 17). In general, all references have been revised.

12.-In limitations, the sentence “also we cannot rule out a “third” explanation where there is no causal relationship between diet and depression”, it has been included, following the indications of the reviewer.

13.- All the references have been revised and when it has been possible, the doi information has been included.

14.- We have followed all the reviewer's suggestions. Changes are indicated above:

a) Data are presented as “number (%)” means frequency (percentage). We have changed the caption

b, c) We have removed all vertical lines and all horizontal lines except the first two and the last.

d) We have remove "Mean" in the second last column header

e) We have change the last column header from "p-value" to "p".

f) We have added the header “Diet category" for the first column.