



SDI Review Form 1.6

Journal Name:	European Journal of Nutrition & Food Safety
Manuscript Number:	Ms_EJNFS_49691
Title of the Manuscript:	Incorporation of Spirulina Platensis in Traditional Egyptian Cookies as a Source of Natural Bioactive Molecules and Functional Ingredients: Development and Sensory Evaluation of Nutrition Snack for School Children
Type of the Article	

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	<p>The title need to be reformulate</p> <p>P of platensis is not in capital letter</p> <p>Abstract</p> <p>542 words is too long for a research paper, reduce it to maximum 250-300 words. Here show only most important results not all results as you did. Completely rewrite the abstract.</p> <p>Line 6, You can say omega 3 fatty acid, not omega 3 oil</p> <p>The objective of your work is "to assess the effect of adding <i>Spirulina</i> into traditional Egyptian cookies on its sensory properties".</p> <p>Give a summary methodology before going to results.</p> <p>You have too many keywords, reduce to maximum 6 or 8.</p> <p>Introduction</p> <p>Line 47 add s to suffer</p> <p>Line 48, add reference for that sentence.</p> <p>You started with three specific diseases including anemia, obesity and stunting. What are solutions for each of them? What are their limits? And now what is did locally by Egyptian population to face these limits? what is the place of spirulina ?....</p> <p>Because what you said from line 78 to line 83 is too general,</p> <p>Rewrite that sentence: "No one fruit, vegetable or meat can provide all the nutrition elements the human body demands as <i>Spirulina</i>".</p> <p>Merge information's from table 1 to 6 in only one table. In that tables just focus on nutrients which are more important for nutrition and health (link to anaemia, obesity and stunting).</p> <p>Objective can be state as "Evaluate the effect of incorporating spirulina at different concentration into traditional Egyptian cookies, on its sensory properties."</p> <p>Materials and methods</p> <p>Start with list of ingredients, and provide information's their origin, sampling and others.</p> <p>Then justify the choice of concentration in spirulina to be incorporating in cookies, why do you replace wheat flours by spirulina? did spirulina contained elements like gluten which</p>	



	<p>had an important role in cookies texture? By replacing wheat flour with spirulina, it seems like the problem you want to solve is wheat flour like gluten intolerance.</p> <p>10 evaluators for sensorial analyses? What are the qualification of these panels regarding the product to evaluate? were they expert? what oriented the choice of these specific person? They are missing information's regarding your methodology. Define all sensorial parameters assessed.</p> <p>Specify the AOAC method used for each nutritional parameter accessed and a brief methodology.</p> <p>Statistical analyses section of your work is missing, without this section (number of trials, number of replication, the statistical method used to analyse data...), your work is not reproducible and non-acceptable for publication.</p> <p>Results and discussion</p> <p>Use spider graph to present the results of sensorial analyses</p> <p>Start with what you assimilate to texture in your work, because there are eyes texture, touch texture, mouth texture...which texture was assessed.</p> <p>Provide texture score for each percentage of fortification, which kind of sensorial analyses you did? is it hedonic, describing or other...</p> <p>Look that sentence for example</p> <p>"The cookies that received no <i>spirulina</i> (control samples) had smoother texture and moist-smooth mouth feel whereas those received <i>spirulina</i> had sandy-courses texture and heavy-chewy mouth feel. Increasing the percentage of spirulina made the surface of the cookies more sandy-courses and made the mouth feel more firmer and chewier."</p> <p>How do you evaluate the degree of smoother texture on a 1 to 9 scale, with this you can easily compare the different sample and say which sample get the highest score.</p> <p>Line 212 to 223, authors just listed reported studies, where is the link with authors works? excessive citation of published work is not discussion or interpretation of data. Authors should say here what could explain the modification of texture while spirulina is added? what is the biochemical mechanism of that texture modification? Is it lack of wheat flour which explain what is observed? And base on texture which spiking percentage get good score?</p> <p>Same comments for other sensorial parameter assessed in this study.</p> <p>Regarding colour which is green, where are the results of overall acceptability of each</p>	
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	<p>sample? How authors explain these colour change? What is the implicated mechanism?</p> <p>Line 367 to 369 what can explain the taste which decreases when spirulina concentration increases? Are there bitter compounds in spirulina which could justify the lost in sweet taste?</p> <p>In table 12, where are standard deviation? Authors must perform ANOVA to compare the nutrient content of the different spiked sample. Also in methodology part spiking was carried out at 0,5, 10, 15 and 20%, why in table 12 the level is different?</p> <p>In table 12, add a column of the composition of spirulina,</p> <p>When I look line protein in table 12, spirulina at 0% have 5.44% of protein and fortification at 20% (6.91%), something is wrong the protein content should be more than that because spirulina is mostly made of protein.</p> <p>Same with carbohydrates, why replacing wheat flour which is mainly made of carbohydrates by spirulina which is mainly made of protein, normally, carbohydrates content should decrease.</p> <p>Sample with 0% spirulina presents 5.44% of protein but no amino acid, is it normal?</p> <p>When we see which ingredient were used "soft butter (100 g), sugar (100 g), wheat flower (280 g), 2 eggs (109 g), baking powder (10 g), salt (1 g), vanilla (1 g)" Authors are saying that even egg only did not contain any vitamin or mineral? Otherwise why there are no results?</p> <p>Line 397 to 412, the way of presenting and interpreting results is not good. What is important here is to explain the increase or decrease in nutrient of each sample when the level of spirulina is increased.</p> <p>Authors must perform principal component analysis of the chemical composition of spirulina, the spiking level and their sensorial parameter assessed; in other to visualize which nutrient are link to a specific sensorial parameter. This will enable author to choose the sample with good sensorial score and nutritional value.</p> <p>Conclusion</p> <p>Line 414, check the way of writing conclusion</p> <p>Rewrite the entire conclusion.</p> <p>Table 13 to 18 remove, it is not a review paper.</p> <p>Line 510 – 548, what is this section after conclusion?</p>	
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Minor REVISION comments		
Optional/General comments		

PART 2:

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

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