Reviewer's report

Title: Guava pomace: a new source of anti-inflammatory and analgesic bioactives.

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Reviewer: Yuan Shiun Chang

Reviewer's report:

This manuscript evaluated the anti-inflammatory and antinociceptive potential of guava pomace, a processing waste from manufacturing process of the juice industry. The guava pomace extract (GPE) showed anti-inflammatory activity by carrageenan, dextran, serotonin, histamine-induced paw edema and neutrophils migration in the peritoneal cavity models (p < 0.05). The GPE also demonstrated antinociceptive activity by acetic acid-induced abdominal writhing and formalin test (p < 0.05). The value of phenolic total was 3.40 ± 0.09 mg GAE/g and epicatechin, quercetin, myricetin, isovanilic and gallic acids were identified by GC/MS analysis. The authors suggested that guava pomace could be an interesting source of anti-inflammatory and analgesic substances.

The results are interesting and make use of discarded guava pomace from the juice industry. The manuscript is well written and will be recommended for publication in BMC Complementary and alternative Medicine after satisfactorily answering the queries listed below:

1. In Table 1 and table 2, the GPE were administered via ip and po routes. In Table 3 and table 4, the routes of administration were not given.

2. In Table 1 – 4, please leave a space before and after ±. Leave a space between the numeric value and unit. Please go over the manuscript and revise accordingly.

3. In Plant material, the Latin name of guava should be given in full with author’s name and family name (Myrtaceae).

4. Line 1 on page 4, “the aim of the present study was determinate - - -” should be revised as “the aim of the present study was to determinate - - -”

5. Line 19 on page 11, [fig.1] should be revised as [Fig.1].

6. et. al., should be italicized as et. al.,

7. The format of page number in the Reference was inconsistent. Please follow the format of the Journal and revise accordingly.

8. Reference 3, the name of the Journal “Trends in food science & technology” should be revised as “Trends in Food Science & Technology”.

The following additional comment the authors may choose to neglect:

This manuscript found high contents of phenolic compounds such as epicatechin, quercetin, myricetin, isovanilic and gallic acids in the waste guava pomace and
found waste guava pomace exhibited anti-inflammatory and analgesic activities. These results imply that the extraction in the juice industry was not efficiently carried out. Any suggestion for the juice industry?

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests