Responses for reviewers

Reviewer #1

A detailed table or diagram to show the trend of the gastric level during centuries is suggested.

Response

Thank you for your comments. Since pH may change due to accumulated gene mutation, actual decrease of pH will be revealed over thousands of years. Therefore, it is impossible to show the trend of the gastric acid level at this point.

Reviewer #2

T*he author should provide more supporting materials, such as the data reflecting the change trend of gastric acid level and pH value in humans, or other information to support the conclusion of this paper.*

Response

Thank you for your comments. Since pH may change due to accumulated gene mutation, actual decrease of pH will be revealed over thousands of years. Therefore, it is impossible to show the trend of the gastric acid level at this point. For easier comprehension, data of gastric acid of mammals and avian species summarized by Beasley DE, et. al. referenced in this paper, was schemed and added as a figure. Their data is really perfect and do not need any modification, which is mentioned in the legend.

Reviewer #3

The author listed several possible explanations in order to draw the conclusion (widely used PPI; total gastrectomy; carrion-eating animals). However, the pH of gastric acid in human was much lower than that of most animals, including anthropoids, which seems to be contrary to the disinfection theory. If the main role of the gastric acid is disinfection, most animals should have significantly lower pH gastric acid than humans, since there are more bacteria in animal's diet. A reasonable explanation is needed.

Response

Thank you for your comments. The anthropoids are basically quadrupedal walking animals and

different from humans of complete erect bipedalism. In addition, normal carnivorous animals eat freshly-killed meat, which is not decayed nor contaminated from putrefactive bacteria. Non-dead plants have very few bacteria since sunlight and an antibacterial agent produced from the plant sterilize them. Necrophagous animals need to sterilize highly virulent bacteria because they ingest the putrescence-related bacteria. Therefore, there is no problem in my logical composition and the above information was added to the text.

Reviewer #4

I hope you can write a review in the next step to provide more detailed information on the foreseeable benefits and risks of ecological changes in our gastrointestinal digestion in the future.

Response

Thank you for your advice. I will try to write a detailed review on human digestion system comparing to other animals in the near future.

Response for editorial office

Science editor

The authors need to complete the Conflict-of-Interest Disclosure Form.

Response

Please find the attached COI. I appreciate the judgement of the editorial office.

Editorial office director

Please add some figures or tables in the manuscript.

Response

Thank you very much for your evaluation. For easier comprehension, data of gastric acid of mammals and avian species summarized by Beasley DE, et. al. referenced in this paper, was

schemed and added as a figure. Their data is really perfect and do not need any modification, which is mentioned in the legend.

Company editor-in-chief

Before final acceptance, the author(s) must add a table/figure to the manuscript.

Response

Thank you very much for your evaluation and decision. For easier comprehension, data of gastric acid of mammals and avian species summarized by Beasley DE, et. al. referenced in this paper, was schemed and added as a figure. Their data is really perfect and do not need any modification, which is mentioned in the legend.