

ANSWERING REVIEWERS



May 25, 2015

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 18348-review.doc).

Title: Effects of Exercise on Antibody Production

Author: Kotaro Suzuki

Name of Journal: *World Journal of Immunology*

ESPS Manuscript NO: 18348

The manuscript has been improved according to the suggestions of reviewers:

→“Running title: Exercise induces antigen specific antibody production.” was added in title section.

→“Conflict-of-interest: The authors declare no conflict of interest.” was added in title section.

Comment [A2]: Please check. I am somewhat unsure as to your point here. It appears that exercise affects the risk of infection, but did these results indicate a positive or negative association? Please clarify.

→“Positive results from these early studies indicated that exercise affected infection.” was changed in section.

Comment [A3]: Please check that my changes retain your intended meaning. I found this sentence quite difficult to understand.

I agree with your proposal

Comment [A4]: In order to attract readers to read your full - text article, we request that the first author make an audio file describing your final core tip. This audio file will be published online, along with your article. Please submit audio files according to the following specifications: Acceptable file formats: .mp3, .wav, or .aiff Maximum file size: 10 MB To achieve the best quality, when saving audio files as an mp3, use a setting of 256 kbps or higher for stereo or 128 kbps or higher for mono. Sampling rate should be either 44.1 kHz or 48 kHz. Bit rate should be either 16 or 24 bit. To avoid audible clipping noise, please , make sure that audio levels do not exceed 0 dBFS.

Comment [A5]: I am very confused as to what you mean by this. You also mentioned this in you Abstract. Do you perhaps mean the protective effects conferred by antibodies? OR possibly antibody production? Please clarify and I can then suggest alternative changes in a subsequent round of editing.

→“protective antibodies.” was changed as follow “extend antibody half-life”.

Comment [A6]: I have deleted a lot of this because you appear to be repeating yourself. Again, please clarify what you mean by "protection of antibody".

→“protective antibodies.” was changed as follow “extend antibody half-life”.

Comment [A7]: Please check that my changes retain your intended meaning.

→I agree with your proposal.

Comment [A8]: Please check that my changes retain your intended meaning.

→I agree with your proposal.

Comment [A9]: This was very confusing to me. Please check that I have understood you.

→ I confirmed it.

Comment [A10]: This entire section on antibody responses was very confusing. I have tried to modify according to my immunology knowledge. Please check my changes.

→ I confirmed it.

Comment [A11]: I deleted this sentence as it was highly repetitive. I incorporated the relevant information into the previous sentence.

→ I confirmed it.

Comment [A12]: This all appears to be very repetitive and also confusing, therefore I have deleted it.

→ I confirmed it.

Comment [A13]: I was unable to discern your intended meaning, but it did appear to be repetitive. Please provide a clarification of your intended meaning so that I can suggest suitable modifications accordingly.

→“These findings indicate that is valuable information encouraged exercise immunologists to investigate other additional components affecting the immune response. Thus, since an early era, investigations of exercise effects on immunity, which reflect the secondary antibody response during exercise.”was changed as follows“ Exercise induce secondary antibody response to antigen is valuable information and encouraged exercise immunologists. Thus, since an early era, investigations of exercise effects on immunity were beginning”

Comment [A14]: Please check. Does this retain your original meaning?

→I agree with your proposal.

Comment [A15]: It is not clear to me why you have gone into such detail to describe this study. I think it is sufficient to just state a summary of the findings. If a reader wants details into how the experiments were conducted then they can access the cited reference.

→“They investigated the effects of exercise on the number of cells producing TT-specific IgG in male C57BL/6N mice. Mice were intraperitoneally immunized with TT to induce primary and secondary antibody responses. ELISPOT assays ^[14] were used to identify TT-specific antibody production;” was changed as follow“ They investigated the effects of exercise on the number of cells producing specific IgG in mice by using ELISPOT assays ^[14].”

Comment [A16]: Please check that my changes retain your intended meaning.

→I agree with your proposal.

Comment [A17]: The mechanism of what? Are you referring to antibody production? Please clarify.

→“This mechanism most likely involves.....”was changed as follow “Exercise induced secondary antibody production mechanism most likely involves.....”

Comment [A18]: Please check that my changes retain your intended meaning.

→I agree with your proposal.

Comment [A19]: Please check that my changes retain your intended meaning.

→I agree with your proposal.

Comment [A20]: I really struggled to understand your meaning in this passage of text. Please check that my changes have not altered your meaning.

→I agree with your proposal.

Comment [A21]: It would be helpful to the reader to provide some indication of what you consider 'low' and 'high' concentrations.

→ “At low concentrations,” was changed as follow “At low concentrations of IgG,”

Comment [A22]: I am unaware of what a phase secondary antibody response is. Perhaps you just mean secondary antibody response?

→“The secondary antibody response.....” was changed as follow “Exercise induced secondary antibody response.....”

Comment [A23]: I deleted this sentence because you have already stated this earlier in the paragraph.

→I agree with your proposal.

Comment [A24]: Again, in my opinion you have gone into too much detail regarding a past study. The findings could be summarized in one sentence, and then their implications in a following sentence.

→“Kapasi et al. focused on age-related changes in immune function and the effects of exercise [45]. Young mice (6–8 weeks) did not exhibit suppression of the secondary antibody response following intense exercise. Older mice (22–24 months) exhibited a secondary antibody response similar to that seen in young control mice after exercise. Kapasi et al. concluded that intense exercise exerts some positive effects on the secondary antibody response in old animals.” was changed as follow “Kapasi et al. focused on age-related changes in immune function and the effects of exercise [45], and their study clearly showed that older mice exhibited a secondary antibody response similar to that seen in young control mice after exercise. Thus, intense exercise exerts positive effects on the secondary antibody response in old animals.”

Comment [A25]: This passage of text was somewhat difficult to understand. Please check that my changes are accurate.

→ I confirmed and your changes are accurate.

Comment [A26]: You have said this previously in this paper. I have deleted because it is repetitive.

→ I agree with your proposal.

Comment [A27]: Are you able to indicate age ranges here?

→ "in young and old men." was deleted.

Comment [A28]: I have deleted as it appears to repeat what you have just said in the last 2 sentences.

→ I agree with your proposal.

Comment [A29]: Please check that my changes retain your intended meaning.

→ I agree with your changes.

Comment [A30]: I found this to be confusing. Are you referring to infections or vaccinations here? I have removed this for the time being as I could not understand it. If you explain in very simple terms what you wish to say I can then suggest some alternatives in a subsequent round of editing.

→ I did it following your advice.

Comment [A31]: I have checked the formatting of your references for consistency.

→ Thank you for your confirmation.

Comment [A32]: Please add PubMed citation numbers and DOI citation to the reference list and list all authors. Please revise throughout. For those references that have not been indexed by PubMed, a printed copy of the first page of the full reference should be submitted. PMID (<http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=PubMed>) DOI (<http://www.crossref.org/SimpleTextQuery/>) (Please begin with DOI: 10.**)

3 References and typesetting were corrected

→ PMID and DOI were attached in reference section.

Thank you again for publishing our manuscript in the *World Journal of Immunology*.

Sincerely yours,

Kazumi Tagami, PhD

Kazumi Tagami, Faculty of Health and Sport Sciences, University of Tsukuba 1-1-1 Tenoudai, Tsukuba, Ibaraki 305-8574, Japan

E-mail address: tagk@taiiku.tsukuba.ac.jp

Telephone: +81-29-853-2734;

Fax: +81-29-853-6507.