

Peer Review Report

Review Report on Seasonal Variation of Total and Bioavailable 25-Hydroxyvitamin D (25(OH)D) in Healthy Adult Slovenian Population

Original Research, Acta Biochim. Pol.

Reviewer: Michal A Zmijewski

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Article DOI: 10.3389/abp.2024.13108

EVALUATION

Q 1 Please summarize the main findings of the study.

Thank you very much for an opportunity to review interesting manuscript concerning "Seasonal Variation of Total and Bioavailable 25-Hydroxyvitamin D (25(OH)D) in Healthy Adult Slovenian Population". The major conclusion is that skin production of vitamin D in summer not only increase the serum level of 25(OH)D but also an increase in free 25(OH)D3 was observed.

Q 2 Please highlight the limitations and strengths.

see point 4

Q 3 Please comment on the methods, results and data interpretation. If there are any objective errors, or if the conclusions are not supported, you should detail your concerns.

see point 4

Check List

Q 4 Please provide your detailed review report to the editor and authors (including any comments on the Q4 Check List)

Dear Editor,

Thank you very much for an opportunity to review interesting manuscript concerning "Seasonal Variation of Total and Bioavailable 25-Hydroxyvitamin D (25(OH)D) in Healthy Adult Slovenian Population". The major conclusion is that skin production of vitamin D in summer not only increase the serum level of 25(OH)D but also an increase in free 25(OH)D3 was observed.

Major comments.

1. First, the structure of the manuscript has to be improved. There is no text in the results section. Results are included in the discussion section. Discussion is divided into subtopics; please use paragraphs and try to build narrative. Please use citation for discussion (From Line 311 to 437; 4 pages without citation!).
2. The limitation of the study has to be acknowledged and discussed. A small group of subjects recruited (87). The research group is not balanced (84% of females).
3. Please limit the discussion.
4. Please note that Endocrine Society (US), is not the only organization providing guidelines concerning vitamin D. Please read and comment (Nutrients. 2023 Jan 30;15(3):695.)
5. Figure 1, I do not think you need the question mark (6). This is a physiological process with high impact on vitamin D level.
6. Please explain why you are showing Figures 2-4?
7. Figure 4. Please provide statistical evaluation of the data not the equation.
8. Please provide units while discussing data (Lines 365, 372 etc.)

Q 5 Is the English language of sufficient quality?

Yes.

Q 6 Is the quality of the figures and tables satisfactory?

No.

Q 7 Does the reference list cover the relevant literature adequately and in an unbiased manner?

No.

Q 8 Are the statistical methods valid and correctly applied? (e.g. sample size, choice of test)

No.

Q 9 Are the methods sufficiently documented to allow replication studies?

Yes.

Q 10 Are the data underlying the study available in either the article, supplement, or deposited in a repository? (Sequence/expression data, protein/molecule characterizations, annotations, and taxonomy data are required to be deposited in public repositories prior to publication)

Yes.

Q 11 Does the study adhere to ethical standards including ethics committee approval and consent procedure?

Yes.

Q 12 Have standard biosecurity and institutional safety procedures been adhered to?

Yes.

QUALITY ASSESSMENT

Q 13 Originality



Q 14 ➤ Rigor

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Q 15 ➤ Significance to the field

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Q 16 ➤ Interest to general audience

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Q 17 ➤ Quality of the writing

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Q 18 ➤ Overall quality of the study

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