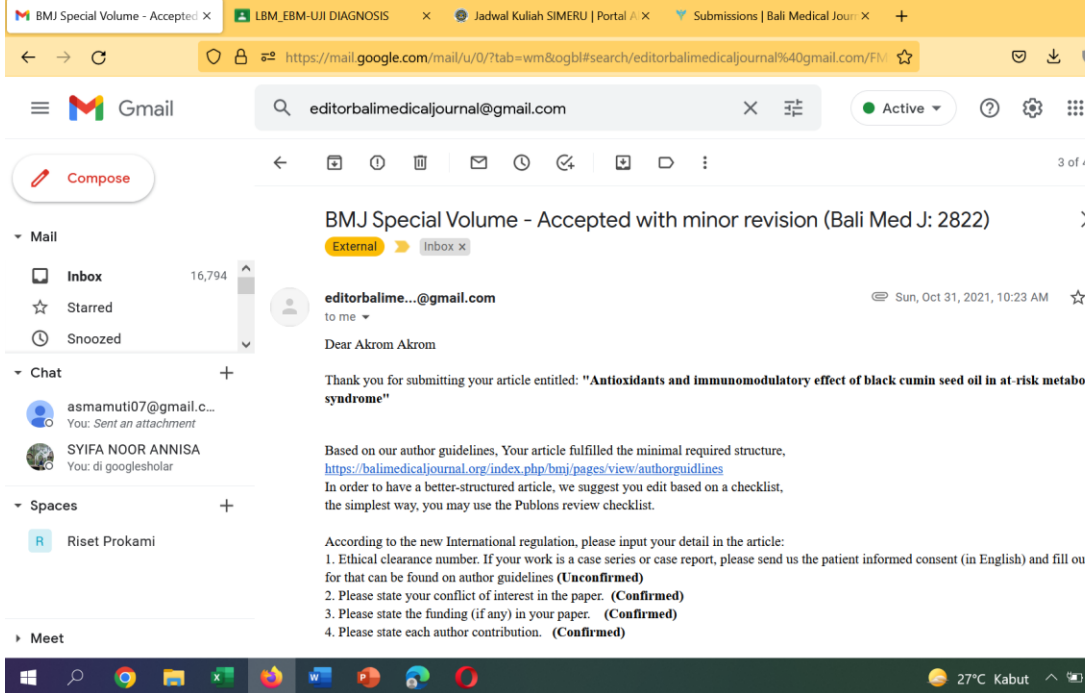
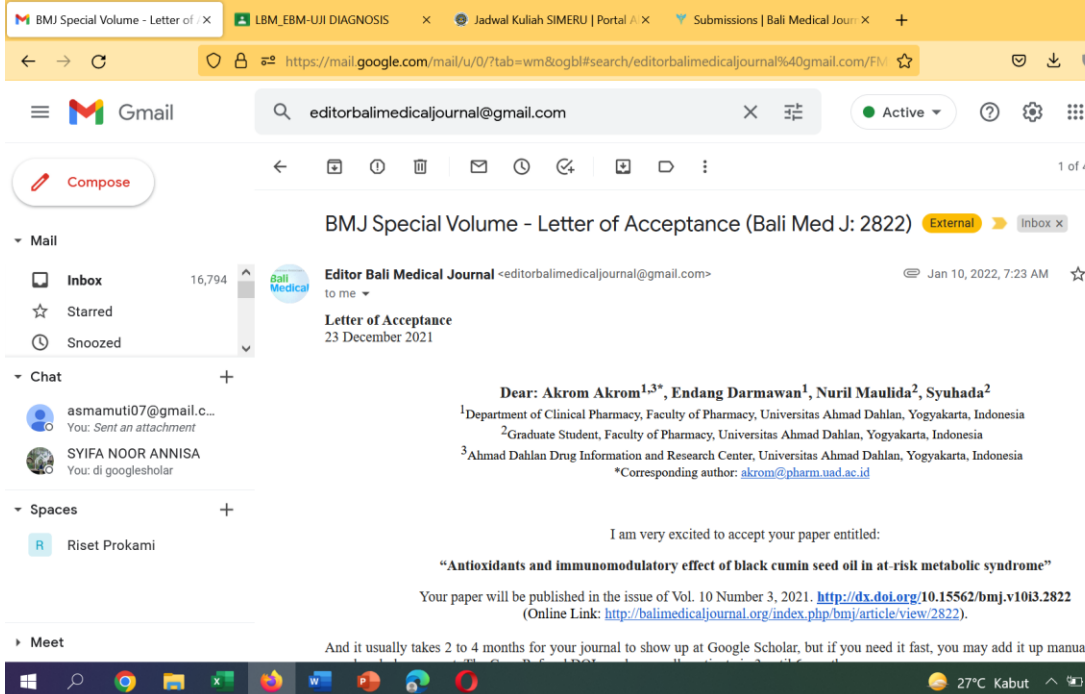


Dokumen review artikel

|            |   |
|------------|---|
| Title      | Antioxidants and immunomodulatory effect of black cummin seed oil in at-risk metabolic syndrome   |
| Jurnal     | Balimedical Journal   |
| SJR        | 0.11  |
| Submission |  <p>BMJ Special Volume - Accepted with minor revision (Bali Med J: 2822)</p> <p>Dear Akrom Akrom</p> <p>Thank you for submitting your article entitled: "Antioxidants and immunomodulatory effect of black cummin seed oil in at-risk metabolic syndrome"</p> <p>Based on our author guidelines, Your article fulfilled the minimal required structure, <a href="https://balimedicaljournal.org/index.php/bmj/pages/view/authorguidelines">https://balimedicaljournal.org/index.php/bmj/pages/view/authorguidelines</a><br/>     In order to have a better-structured article, we suggest you edit based on a checklist, the simplest way, you may use the Pablon review checklist.</p> <p>According to the new International regulation, please input your detail in the article:</p> <ol style="list-style-type: none"> <li>1. Ethical clearance number. If your work is a case series or case report, please send us the patient informed consent (in English) and fill out for that can be found on author guidelines. <b>(Unconfirmed)</b></li> <li>2. Please state your conflict of interest in the paper. <b>(Confirmed)</b></li> <li>3. Please state the funding (if any) in your paper. <b>(Confirmed)</b></li> <li>4. Please state each author contribution. <b>(Confirmed)</b></li> </ol>   |
| Accepted   |  <p>BMJ Special Volume - Letter of Acceptance (Bali Med J: 2822)</p> <p>Editor Bali Medical Journal &lt;editorbalimedicaljournal@gmail.com&gt;<br/>to me</p> <p>Letter of Acceptance<br/>23 December 2021</p> <p>Dear: Akrom Akrom<sup>1,3*</sup>, Endang Darmawan<sup>1</sup>, Nuril Maulida<sup>2</sup>, Syuhada<sup>2</sup></p> <p><sup>1</sup>Department of Clinical Pharmacy, Faculty of Pharmacy, Universitas Ahmad Dahlan, Yogyakarta, Indonesia<br/> <sup>2</sup>Graduate Student, Faculty of Pharmacy, Universitas Ahmad Dahlan, Yogyakarta, Indonesia<br/> <sup>3</sup>Ahmad Dahlan Drug Information and Research Center, Universitas Ahmad Dahlan, Yogyakarta, Indonesia<br/>     *Corresponding author: <a href="mailto:akrom@pharm.uad.ac.id">akrom@pharm.uad.ac.id</a></p> <p>I am very excited to accept your paper entitled:</p> <p>"Antioxidants and immunomodulatory effect of black cummin seed oil in at-risk metabolic syndrome"</p> <p>Your paper will be published in the issue of Vol. 10 Number 3, 2021. <a href="http://dx.doi.org/10.15562/bmj.v10i3.2822">http://dx.doi.org/10.15562/bmj.v10i3.2822</a><br/>     (Online Link: <a href="http://balimedicaljournal.org/index.php/bmj/article/view/2822">http://balimedicaljournal.org/index.php/bmj/article/view/2822</a>).</p> <p>And it usually takes 2 to 4 months for your journal to show up at Google Scholar, but if you need it fast, you may add it up manual</p> |

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← Antioxidants and immunomodulatory effect of black cumin seed oil in at-risk metabolic syndrome 🔍 ⬆ ⬇ 1042 (1 of 6) - + Automatic Zoom ⬇

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**ORIGINAL ARTICLE**

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 **Antioxidants and immunomodulatory effect of black cumin seed oil in at-risk metabolic syndrome**   
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Akrom Akrom<sup>1,3\*</sup>, Endang Darmawan<sup>1</sup>, Nuril Maulida<sup>2</sup>, Syuhada<sup>2</sup>

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**ABSTRACT**

**Introduction:** Black Cumin Seed Oil (BCSO) is a traditional medicine widely used as an antioxidant and immunomodulator. **Objective:** The purpose of this study is to investigate the effect of dose variation of BCSO (1.5 ml/day versus 3 ml/day) on IL-10 activity and MDA levels in patients at risk of MS at Jetis 1 Public Health Center (J1PHC), Bantul Regency, Yogyakarta, Indonesia. **Methods:** We conducted an analytical cross-sectional study. 66 patients at risk of metabolic syndrome (MS) were divided into two groups. In stage 1, group 1 received a 1.5 ml/day dose, and group 2 received 3 ml/day for 20 days. The clinical parameters of MS, IL-10 activity, and MDA levels were measured at the end of the study stages. **Results:** The mean activity of IL-10 in the 1.5 ml/day dose group was 4.83 and in the 3 ml/day dose group was 5.49, which showed an increase of around 13.66% ( $p = 0.300$ ). The mean MDA level in the 1.5 ml/day group was 3.92  $\mu\text{mol/L}$ , which increased to 4.31  $\mu\text{mol/L}$  in the 3 ml/day group or approximately 9.95% ( $p = 0.802$ ). Statistically, IL-10 activity and MDA levels in the two-dose groups did not differ significantly.

<sup>1</sup>Department of Clinical Pharmacy, Faculty of Pharmacy, Universitas Ahmad Dahlan, Yogyakarta, Indonesia;  
<sup>2</sup>Graduate Student, Faculty of Pharmacy, Universitas Ahmad Dahlan, Yogyakarta, Indonesia;  
<sup>3</sup>Ahmad Dahlan Drug Information and Research Center, Universitas Ahmad Dahlan, Yogyakarta, Indonesia;

\*Corresponding author:

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