Studying Anti-inflammatory Properties of Eggplant Stalks in PBMC [†]

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Abstract: Acne vulgaris is the most common problem faced by adolescents and young adults. It is caused by *Propioni bacterium acnes* that live underneath our skin. Many studies have been reported that the resident microbes influence the immune functions of the skin, leading to acne and other inflammations. Since inflammation is a response of the immune system that various factors can trigger, the studies on *P. acne* revealed that this bacterium could convert non-inflammatory molecules to an active compound that causes inflammation when triggered by a cascade of chemicals. To overcome this acne-related inflammation, several studies have been conducted, with drugs and anti-inflammatory foods as the lead compounds. The current study is more focused on using phytochemicals in treating acne. Results showed that the stalks of the eggplant (*Solanum melongena)* are rich in phenolic compounds such as cinnamic acid with potent inflammatory properties, and also they have been used as a medicine for treating acne in both topical and oral application. The proposed study aimed at understanding the efficacy of stalks extracts from different varieties of eggplants for their anti-inflammation properties.

Keywords: propionic acid; inflammation; PBMC; acne; cytokines; *Propioni bacterium.*

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Conflicts of Interest

The authors declare no conflict of interest.