

Anti-inflammatory Response of *Solanum tuberosum* (Potato) Peel on the Induced Inflammation of Peripheral Blood Mononuclear Cell by Propionic Acid †

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Abstract: The use of phytochemicals to treat various diseases, including microbial infections, is a traditional practice worldwide. The current study is focused on understanding the anti-inflammatory properties of potato peel extracts with a target to cure acne-related inflammation. Potatoes are a very common daily ingredient of diets in every Indian household. The use of potato peel for acne treatment is known, although not much discussed. The main objective of this brief study will be to analyze the anti-inflammatory properties of potato peel extracts collected for different varieties. Isolated PBMCs will be stimulated with propionic acid, a well-known inflammatory stimulant produced by the acne-causing bacteria (*Propionibacterium*). The peel extracted will be added to the activated PBMCs to observe inflammatory cytokine alterations (IL1- β , IL6, TNF- α , IL4, IL12, TGF- β).

Keywords: propionic acid; inflammation; PBMC; acne; cytokines; *Propionibacterium*.

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Conflicts of Interest

The authors declare no conflict of interest.