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Letter to the Editor
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Balanced Proportion of Omega-6/Omega-3 Fatty Acids through Blending and Interesterification of Sunflower Oil with Perilla Oil Exhibit Lowers Cholesterol in Rats

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Fatty acids (FA) play an imperative role in the human diet. A higher proportion of omega-6/omega-3 fatty acid prime to oxidative stress, atherosclerosis, prone to inflammation and cause cancer. Investigators subjugate current growths in the arena of modified oils for the distribution of augmented the amount of omega-3 fatty acids through there gime. Hence, the purpose of the present study was to prepare a balanced proportion of omega-6/omega-3 fatty acids through blending and enzymatic Interesterification of sunflower oil (SFO) with perilla oil (PO).PO is a good source of α-linolenic acid (ALA, omega-3 FA) however an SFO contains a higher amount of linoleic acid (omega-6 FA) and devoid of omega-3 fatty acids. To incorporate omega-3 FA into SFO and to attain omega-3/omega-6 ratios, blends of sunflower oil with perillaoil was performed in different proportions. The perfect blend was selected based on fatty acid composition and subjected to enzymatic Interesterification to improve the functional properties. Amid the blends, 50:50 ratio shown perfect omega-6/omega-3 fatty acid near to 1:1. The triacylglycerol (TAG) molecular species exhibited Interesterification of oil alter the composition of major TAG molecular species even howeveroverallFA composition of blended and interesterified oils relics the same. This reshuffle of fatty acids enhances beneficial for cholesterol lowering properties. Hence, the influence of blending and Interesterification with SFO+PO was studied on various lipid parameters in experimental animals for 60 days. Rats fed blended oil and interesterified oil showed adecrease in serum total cholesterol (25% and 35%↓) and LDL cholesterol (34% and 60%↓) as compared to SFO. Rats given blended and interesterified oil showed an amalgamation of ALA and translation of docosahexaenoic acid in serum and liver lipids. These modified oils could be beneficially used for enriching diets with omega-3 fatty acids for vegetarian inhabitants.

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