

A blend of sesame oil and rice bran oil lowers blood pressure and improves the lipid profile in mild-to-moderate hypertensive patients



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BACKGROUND: Sesame oil and rice bran oil are known for their unsaturated fatty acids and antioxidants contents and have been reported to reduce the cardiovascular risk.

OBJECTIVE: To determine the effect of a blend of 20% unrefined cold-pressed lignans-rich sesame oil and 80% physically refined γ -oryzanol-rich rice bran oil (Vivo) as cooking oil in mild-to-moderate hypertensive patients.

METHODS: In this prospective, open-label dietary approach, 300 hypertensive patients and 100 normotensives were divided into groups as: (1) normotensives treated with sesame oil blend, (2) hypertensives treated with sesame oil blend, (3) hypertensives treated with nifedipine, a calcium channel blocker (20 mg/d), and (4) hypertensives receiving the combination of sesame oil blend and nifedipine (20 mg/d). Sesame oil blend was supplied to respective groups, and they were instructed to use it as the only cooking oil for 60 days. Resting blood pressure was measured at days 0, 15, 30, 45, and 60, whereas the fasting lipid profile was measured at days 0 and 60.

RESULTS: Significant reduction in blood pressure (systolic, diastolic, and mean arterial) from days 0 to 15, 30, 45, and 60 were observed in hypertensives treated with sesame oil blend alone ($P < .001$), nifedipine alone ($P < .001$), and combination of sesame oil blend and nifedipine ($P < .001$). Sesame oil blend with nifedipine-treated group showed greatest reduction in blood pressure. Total cholesterol, low-density lipoprotein cholesterol, triglycerides, and non-high-density lipoprotein cholesterol levels reduced, whereas high-density lipoprotein cholesterol levels increased significantly only in hypertensives treated with sesame oil blend alone and the combination of sesame oil blend and nifedipine ($P < .001$).

CONCLUSION: We demonstrate for the first time that using a blend of sesame oil and rice bran oil as cooking oil showed a significant antihypertensive and lipid-lowering action and had noteworthy additive effect with antihypertensive medication.

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