

The efficacy and safety of a proprietary onion-pumpkin extract (OPTain120) on blood pressure: an open-label study

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ABSTRACT

Background: Nutraceuticals and functional foods are increasingly being used to help manage hypertension. Treatment with either pumpkin or onion can significantly lower systolic and diastolic blood pressure in animal studies. Traditionally, pumpkin has been used to support healthy blood pressure, glucose tolerance and lipid levels. Onion contains high levels of flavonoids, including quercetin, which decreases blood pressure and promotes restoration of healthy endothelial function. However, human trials on these food sources are limited, and the combined effects of pumpkin and onion have not been examined yet.

Objective: We performed an open-label clinical study to evaluate the effects of a proprietary onion-pumpkin extract (OPTain120) on systolic and diastolic blood pressure.

Methods: Healthy adults with systolic blood pressure (SBP) and diastolic blood pressure (DBP) in the elevated range of 140-159 and 80-90 mmHg, respectively, were enrolled in this study. Subjects consumed one capsule of onion-pumpkin extract twice daily for 12 weeks. Daily Home Blood Pressure Measurement (HBPM) was taken upon waking and before bed. Office Blood Pressure Measurement (OBPM) was taken in-clinic at Week 0, 6, and 12.

Results: 52 subjects were screened and 12 were enrolled in the study, with a total of 10 subjects completing the study. Systolic HBPM taken before bed demonstrated a statistically significant reduction from baseline (147.23 mmHg) to Week 12 (138.14 mmHg), representing a reduction of 9.09 mmHg (6.17%, $p=0.021$). Diastolic HBPM taken before bed demonstrated a decrease of 4.06 mmHg (4.46%, $p=0.085$), a significant reduction from baseline (91.07 mmHg) at Week 12

(87.02 mmHg). Non-statistically significant reductions were seen in the early morning Systolic (3.14%) and Diastolic (2.57%) HBPM and in the Systolic (1.36%) OBPM.

Conclusion: OPTain120 was safely consumed over a 12-week period. OPTain120 appears to be effective in lowering Systolic Blood Pressure at bedtime in healthy individuals with slightly elevated blood pressure. This study suggests that onion-pumpkin extract may aid individuals who manage their cardiovascular risk factors with diet and lifestyle.

Key Words: pumpkin, onion, extract, blood pressure