

USANA Technical Bulletin

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Olive Fruit Extract

Technical Background

- Mediterranean cultures have above-average lifespans and remarkably low levels of coronary heart disease, despite the high fat content of their diets.¹ One component responsible for these health benefits is an abundant use of olives and olive oils.
- Olives contain a number of bioactive compounds, the most distinguishing of which are the polyphenols. These phenolic antioxidants are structurally distinct from the vitamins, carotenoids, bioflavonoids, proanthocyanidins, and antioxidants found in other fruits and vegetables.
- The best-documented benefit of olive and olive oil is a lower incidence of heart disease.² Epidemiological studies have shown that the incidence of heart disease and all-cause death rates is low in populations that consume olive oil as the main source of dietary fat.³ A number of studies have found that olive oil consumption lowers hypertension.⁴
- Olives and olive oil have also been associated with a lower risk of certain cancers, including breast⁵ and colon cancers.^{6,7}
- Olive polyphenols have many other benefits, including anti-inflammatory activity,⁸ improving immune function,⁹ preventing oxidative damage to DNA,¹⁰ reducing markers of oxidation,^{11,12} protecting the cardiovascular system by reducing platelet aggregation,¹³ reducing LDL oxidation,^{14,15} and increasing HDL levels.¹⁶

Sources and Recommended Intake

- A traditional Mediterranean diet provides about 5 to 10 mg/day of olive polyphenols.
- The only dietary sources of olive polyphenols are olives and olive oil.

Abstracts

Psaltopoulou T, Naska A, Orfanos P, Trichopoulos D, Mountokalakis T, Trichopoulou A. Olive oil, the Mediterranean diet, and arterial blood pressure: the Greek European Prospective Investigation into Cancer and Nutrition (EPIC) study. Am J Clin Nutr. 2004 Oct;80(4):1012-8. BACKGROUND: Diet has been reported to influence arterial blood pressure, and evidence indicates that the Mediterranean diet reduces cardiovascular mortality. OBJECTIVE: The objective was to examine whether the Mediterranean diet, as an entity, and olive oil, in particular, reduce arterial blood pressure. DESIGN: Arterial blood pressure and several sociodemographic, anthropometric, dietary, physical activity, and clinical variables were recorded at enrollment among participants in the Greek arm of the European Prospective Investigation into Cancer and Nutrition (EPIC) study. Of these participants, 20 343 had never received a diagnosis of hypertension and were included in an analysis in which systolic and diastolic blood pressure were regressed on the indicated possible predictors, including a 10-point score that reflects adherence to the Mediterranean diet and, alternatively, the score's individual components and olive oil. RESULTS: The Mediterranean diet score was significantly inversely associated with both systolic and diastolic blood pressure. Intakes of olive oil, vegetables, and fruit were significantly inversely associated with both systolic

and diastolic blood pressure, whereas cereals, meat and meat products, and ethanol intake were positively associated with arterial blood pressure. Mutual adjustment between olive oil and vegetables, which are frequently consumed together, indicated that olive oil has the dominant beneficial effect on arterial blood pressure in this population. CONCLUSIONS: Adherence to the Mediterranean diet is inversely associated with arterial blood pressure, even though a beneficial component of the Mediterranean diet score-cereal intake-is positively associated with arterial blood pressure. Olive oil intake, per se, is inversely associated with both systolic and diastolic blood pressure.

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