

Dietary strategies for the prevention of hypertension

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Abstract

Elevated blood pressure emerges from a combination of natural and hereditary components and the interactions of these factors. A substantial body of evidence from animal studies, epidemiologic studies, meta-analyses, and randomized controlled trials has demonstrated that certain dietary patterns and individual dietary elements play a prominent role in the development of hypertension. Changes in diet can lower blood pressure, prevent the development of hypertension, and decrease the risk of hypertension-related complications. Dietary techniques for the prevention of hypertension incorporate diminishing sodium intake, restricting liquor utilization, increasing potassium intake, and adopting an in general dietary design such as the Dash (Dietary Approaches to Stop Hypertension) diet or a Mediterranean diet. In order to decrease the burden of blood pressure-related complications, endeavours that centre on environmental and person behavioural changes that empower and promote healthier nourishment choices are warranted

Keywords: Hypertension, High blood pressure, Prevention, Diet, Fruits and vegetables, Dietary patterns, Sodium, Potassium, Magnesium, Calcium, Alcohol, Fiber, Functional foods

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Dietary strategies

Dietary alterations have been widely regarded as a lifestyle adjustment strategy with enormous potential for preventing hypertension at a cost that is regularly less than current pharmacologic interventions. Such successful historical interventions are reflected in dietary recommendations advocating weight loss, reduced intake of dietary sodium, and moderation in alcohol consumption, and more recently revised to reflect the blood-pressure lowering effect of potassium supplementation and a dietary pattern.

Dietary Patterns

The DASH dietary pattern, which emphasizes a diet rich in fruits, vegetables, and low-fat dairy products and reduced saturated and total fat, has been tested in multiple randomized controlled trials in particular populations including obese hypertensive and people with type 2 diabetes, both alone and in combination with other way of life mediations, with consistent results [1].

The Mediterranean dietary design has numerous similarities with the Dash dietary design but is generally higher in fat, essentially monounsaturated fat from olive oil, nuts, and seeds

(commonly close to 40 % of daily energy) [2]. The Prevención con Dieta Mediterránea (PREDIMED) Study examined the impacts of a Mediterranean dietary design with extra-virgin olive oil or nuts as compared to a low fat dietary design on cardiovascular disease and blood pressure among 772 men and women aged 55–80 years [3]. In any case, significant heterogeneity between trials blocked the pooling of results in this survey. Significant decreases in blood pressure were show among three of five trials for both systolic and diastolic blood pressure [4]. While the evidence is restricted, taken as a whole [5], it is suggestive of a blood-pressure-lowering impact of Mediterranean style dietary patterns. Manipulations of macronutrients, including protein, fat, and carbohydrates, have been a foundation of procedures for weight loss and moving forward the cholesterol profile for many years. The prove that specific macronutrients are also effective in reducing blood pressure is quite strong [6].

Conclusion

Dietary approaches to modify blood pressure should be an important strategy of cardiovascular health promotion. There is extensive literature demonstrating that multiple individual dietary components and several dietary patterns affect blood

pressure. The strongest evidence for lowering blood pressure or avoiding hypertension through dietary intervention incorporates adopting a dietary design such as the DASH diet or a Mediterranean diet, eating less saturated fat and total fat, getting plenty of potassium, limiting the amount of sodium in the diet, and constraining liquor utilization. It is likely that other dietary factors, such as magnesium and fiber, may affect blood pressure, but the current evidence to support their recommendation is unsubstantiated. Additional research that includes population subgroups and explores the role of other nutrient factors, functional nourishments, and dietary designs in anticipating hypertension is warranted. In spite of the demonstrated benefits of a dietary design, there are many cultural and societal forces and commercial interests that have an impact on whether people adopt and follow such a diet.

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