# DASH Therapy and Hypertension: A Novel Approach to Manage Blood Pressure

Dear Editor,

Globally, approximately 1.28 billion adults aged 30-79 grapple with hypertension, with the majority (two-thirds) located in low- and middle-income countries. A startling 46% of adults identified with hypertension remain unaware of their condition, while fewer than half (42%) receive both a diagnosis and suitable treatment. Merely 21% of adults with hypertension successfully manage to control their condition. This health issue significantly contributes to premature death on a global scale. As part of the global health objectives concerning noncommunicable diseases, there exists a target to reduce the prevalence of hypertension by 33% from 2010 to 2030.<sup>[1]</sup> Hypertension persists as an ongoing worldwide health challenge, emerging as a major risk factor for cardiovascular diseases. An effective nonpharmacological approach for managing high blood pressure is the Dietary Approaches to Stop Hypertension (DASH) diet.<sup>[2]</sup> The idea of DASH treatment and how it affects hypertension control are explored.

The DASH diet places an emphasis on consuming foods high in nutrients, such as fruits, vegetables, whole grains, lean protein, and low-fat dairy products, while lowering salt intake. A heart-healthy, nutrient-rich eating plan is produced by combining these dietary changes. DASH treatment seeks to maximize these dietary selections to reduce and maintain blood pressure within healthy values [Table 1].<sup>[3]</sup>

Studies have demonstrated that DASH treatment, when used regularly, can considerably lower both systolic and diastolic blood pressure in hypertensive people. The dietary strategy promotes general cardiovascular health while addressing the underlying causes of hypertension, such as vascular stiffness and salt retention.<sup>[4]</sup>

 Table 1: Sample Dietary Approaches to Stop Hypertension

 diet chart with an Indian touch, daily menu

| Meal/Time           | Food group                                 | Examples   |
|---------------------|--|--|
| Breakfast           | Whole grains, fruits,<br>dairy             | Upma (semolina porridge)<br>with vegetables, curd, mango |
| Snack               | Nuts and seeds                             | Mixed nuts (almonds, walnuts)                            |
| Lunch               | Vegetables, lean<br>proteins, whole grains | Chickpea (chana) salad, roti,<br>spinach curry           |
| Snack               | Vegetables, hummus                         | Cucumber and carrot sticks with hummus                   |
| Dinner              | Fish or tofu,<br>vegetables, brown rice    | Grilled fish, mixed vegetable sabzi, brown rice          |
| Snack<br>(optional) | Dairy or dairy alternative                 | Lassi (buttermilk) with a pinch of cumin                 |

The DASH diet is linked to weight control, better lipid profiles, a decreased risk of stroke, and other cardiovascular events, in addition to its beneficial effects on blood pressure. DASH treatment is positioned as a beneficial tool for healthcare professionals and patients looking to manage hypertension and maintain cardiovascular health due to its efficacy as well as its simplicity and accessibility. The DASH diet is also flexible and adjustable, making it appropriate for a range of demographics and culinary customs. DASH treatment offers a comprehensive and long-lasting method to managing hypertension as a nonpharmacological intervention, potentially lowering the dependency on antihypertensive drugs.<sup>[5]</sup>

Conclusion: The DASH treatment, based on the DASH diet, offers a practical, scientifically supported approach to hypertension. It emphasizes achievable dietary changes aligned with preventive medicine principles, supporting long-term cardiovascular health. Effectively employed, DASH treatment contributes to improved health and lowers the risk of cardiovascular issues.

# Financial support and sponsorship

Nil.

### **Conflicts of interest**

There are no conflicts of interest.

#### Ram Kumar Garg

Department of Community Health Nursing, Teerthanker Mahaveer University, College of Nursing, Moradabad, Uttar Pradesh, India

#### Address for correspondence: Dr. Ram Kumar Garg,

Department of Community Health Nursing, Teerthanker Mahaveer University, College of Nursing, Moradabad, Uttar Pradesh, India. E-mail: ram.nursing@tmu.ac.in

## REFERENCES

- World Health Organization. Hypertension. World Health Organization. 2023. Available from: https://www.who.int/news-room/fact-sheets/ detail/hypertension. [Last accessed on 2023 Nov 20].
- Siervo M, Lara J, Chowdhury S, Ashor A, Oggioni C, Mathers JC. Effects of the Dietary Approach to Stop Hypertension (DASH) diet on cardiovascular risk factors: A systematic review and meta-analysis. Br J Nutr 2015;113:1-15.
- Mayo Clinic. DASH diet: Healthy Eating to Lower Your Blood Pressure. Mayo Clinic. 2021. Available from: https://www.mayoclinic. org/healthy-lifestyle/nutrition-and-healthy-eating/in-depth/dash-diet/ art-20048456. [Last accessed on 2023 Nov 20].
- 4. Filippou CD, Tsioufis CP, Thomopoulos CG, Mihas CC, Dimitriadis KS, Sotiropoulou LI, et al. Dietary Approaches to Stop Hypertension (DASH) diet and blood pressure reduction in adults with and without hypertension: A systematic review and meta-analysis of randomized controlled trials. Adv Nutr 2020;11:1150-60.

775

 Challa HJ, Uppaluri KR. DASH Diet (Dietary Approaches to Stop Hypertension). Nih.gov. StatPearls Publishing; 2023. Available from: https://www.ncbi.nlm.nih.gov/books/NBK482514/. [Last accessed on 2023 Nov 20].

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

| Access this article online |                                  |  |
|----------------------------|----------------------------------|--|
| Quick Response Code:       | Website:<br>www.ijcm.org.in      |  |
|                            | DOI:<br>10.4103/ijcm.ijcm_793_23 |  |

**How to cite this article:** Garg RK. DASH therapy and hypertension: A novel approach to manage blood pressure. Indian J Community Med 2024;49:775-6.

Received: 26-11-23, Accepted: 03-12-23, Published: 24-06-24 © 2024 Indian Journal of Community Medicine | Published by Wolters Kluwer - Medknow