

Produce prescription: A novel strategy for NCDs in Pakistan

Dev Das, Asher Ahmed

Dear Editor, Non-communicable diseases (NCDs), such as diabetes, cardiovascular disease, and hypertension, have seen a rapid surge in Pakistan in recent years, placing a significant burden on both the healthcare system and household incomes. While pharmacological treatment and basic lifestyle counselling remain the foundation of management, structured dietary interventions are poorly integrated into medical care.

In countries like the United States, the 'Food as Medicine' model has led to initiatives such as produce prescription programmes, where patients with chronic diseases are prescribed fresh fruits and vegetables, combined with local food delivery systems and nutrition education. A recent study by Caraballo et al. found that home-delivered produce improved dietary habits, reduced food insecurity, and were well received by families.¹

Global and national studies show that insufficient consumption of healthy foods contributes significantly to NCD-related mortality. The Global Burden of Disease study, published in *The Lancet* showed that low intake of fruits, vegetables, and whole grains are major risk factors for mortality from cardiovascular disease, diabetes, and other NCDs.² Additionally, a national study by Malik et al. reported that a large proportion of deaths in Pakistan are

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Third year MBBS Student, Liaquat University of Medical and Health Sciences, Jamshoro, Pakistan.

Correspondence: Asher Ahmed. e-mail: drasherahmed@gmail.com

ORCID ID: 0009-0001-1510-5978

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due to NCDs, with most patients consuming inadequate amounts of fruits and vegetables.³

Together, these findings emphasise the urgent need for structured dietary programmes aimed at enhancing nutrition to reduce NCD-related mortality. We suggest piloting produce prescription models through primary care, assisted by local research to evaluate impact and viability. Integrating nutrition into routine family medicine could strengthen Pakistan's NCD response.

It is time for Pakistan to officially recognise food as a medical tool and include nutrition-based interventions in its national strategy to reduce the burden of NCDs.

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References

1. Caraballo G, Muleta H, Parmar A, Patel S, Lappin H, Naik A, et al. Qualitative analysis of a home-delivered produce prescription intervention to improve food and nutrition security. *Nutrients*. 2024;16:4010. doi:10.3390/nu16234010
2. GBD 2017 Diet Collaborators. Health effects of dietary risks in 195 countries, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017. *Lancet*. 2019;393:1958–72. doi:10.1016/S0140-6736(19)30041-8
3. Malik ZI, Iqbal S, Zafar S, Anees M, Khalid A, Raza M, et al. Lifestyle-related determinants of noncommunicable diseases across various age groups in Pakistan. *Int J Nutr Pharmacol Neurol Dis*. 2024;14:177–84.

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