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Letter to Editor

Beyond the rainbow: Embracing diversity in food choices while moderating food colouring consumption in India

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Sir,

Many immigrants are entering India to taste the Indian cuisine and serving them nutritious, non-harmful food has become an important responsibility. With good hygienic food, the demand to taste the food increases. Every food product is instinctively examined closely with the naked eye before being chosen for eating or purchase. Food colours are used as a trump card by people in the food industry to attract customers to consume their products, ranging from age groups of children to adults. According to the prevention of food adulteration Act 2008, The highest amount of synthetic food colouring that is allowed to any food item is 100 parts per million of the finished meal or drink that is intended for human consumption.

In a study conducted in Pune city by Pawar D.G et al, presence Rhodamine B dye was detected in tomato, red chilli and schezwan sauces in street food joints.[1] The Rhodamine B affects largely the brain cells and its functions such as motor coordination, learning, sleep–wake cycle, respiratory and cardiovascular control.[2] When Rhodamine B is ingested, it can lead to several illnesses, such as cancer, toxicity, irritation of the respiratory and digestive systems, and poisoning the body's cytochrome P450 breaks down the xenobiotic molecule Rhodamine B to produce free radicals, which change the way Superoxidase Dismutase (SOD) functions and lead to oxidative stress, damage, and a rise in cell death.[3] According to the study done by Huda R et al, Rhodamine B can reduce the number of ovaries' primary follicles, which may contribute to the occurrence of infertility disorders.[4] In India this issue first came to light when the food safety officers lab tested a popular soft confectionery among children named “cotton candy” and discovered presence of Rhodamine B in it.[5]

Many health issues are caused by the widespread, unrestricted use of synthetic colourants. Because of reports about potential health and environmental risks associated with synthetic food colouring, some consumers are making educated decisions and choosing natural and organic food products. They have also become very particular about natural food flavourings and colourants. Truthful labelling of ingredients, promoting the use of pure natural colourants and moderating their usage in food products necessitates the combined efforts of regulators, vendors, and customers. These measures will provide nutritious food not only to its people but also to everyone around the world making India the No.1 Culinary tourism destination. The Irish author Oscar Wilde once quipped, "Everything in moderation, including moderation."

1. Conflict of Interest

None.

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References

1. Pawar DG, Kulkarni PN. Detection of rhodamine b dye in tomato, red Chilli and szechuan sauces served by street food joints in Pune city (India). *J Glob Biosci.* 2022;11(6): 9311–4.
2. Nithish G, Prashanth S, Chandru S, Moushmi A. A review article on the sweet scandal: the truth behind rhodamine B. *Glob J Health Sci Res*. 2025;3:1–3.
3. Sulistina DR, Martini S. The effect of Rhodamine B on the cerebellum and brainstem tissue of *Rattus norvegicus. J Public Health Res [Internet]*. 2020;9(2):1812.
4. Rohmawati H, Fitriasnani ME, Purnani WT, Dewi RK. Effect of rhodamine b against the number of primary follicles in white rats (Rattus norvegicus). *J Phys: Conf Ser*. 2021;1899(1):012070.
5. Bhardwaj Y, Raj R, Thoo R, Kumar A, Tripura N, Singh H. Rhodamine B in cotton candy: a wakeup call for food safety and standards of India. *Vigyan Varta*. 2024;5(4):275–8.

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