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## Editorial

# Recommendation of a customized diet focusing on blood group: An alternative intervention

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## ARTICLE INFO

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The book "Eat Right 4 Your Type" by P.J. D'Adamo in 1996 established a connection between the ABO blood type and dietary patterns, resulting in the widespread adoption of 'Blood-Type' diets. Such diet type refers to consuming a balanced and nutritious diet tailored to an individual's needs and requirements. The type, also called the blood-type diet, posits that adopting a lifestyle that aligns with one's blood type might enhance well-being and decelerate aging processes. According to prevailing theories, those with blood type O considered the ancestral blood group, may benefit from adhering to heavy animal protein diets reminiscent of the hunter-gatherer age. Group A should stick to a vegetarian diet, but Group B should incorporate dairy products from nomadic tribes. However, persons with an AB blood group should follow an intermediate diet.<sup>1</sup> The diet also posits that specific foods may induce agglutination unsuitable for an individual's blood group. Extensive research has been conducted on the ABO blood type, a categorization of blood determined by the structural and functional differences of a carbohydrate antigenic component found on the surface of red blood cells (RBC). This classification has been closely examined for its potential correlation with various disorders, including cancer, malaria, and cholera.<sup>2,3</sup> The study reported that inhibiting agglutination, in which lectins (proteins that bind to carbohydrates) interact with blood

cell antigens, can enhance health by helping with weight control, fighting cancer, and preventing heart disease.<sup>1</sup> The ABO blood group system plays a significant role in cardio metabolic disorders, with blood group O exhibiting lower levels of von Willebrand factor and less chance of venous thromboembolism.<sup>4</sup> Conversely, blood group B is associated with low E-selectin and a higher risk of type II diabetes.<sup>5</sup> These findings underscore the relevance of the four blood groups in understanding the pathophysiology of these conditions. A research investigation revealed that some dietary patterns correlate with advantageous cardio metabolic disease risk profiles. However, these associations do not align with the blood type, refuting the theory proposed by the 'Blood-Type' diet. A clinical trial was conducted to assess if the connections between this dietary intervention and biomarkers are influenced by an individual's ABO genotype, despite the limited scientific information on this topic.<sup>6</sup> According to a study, including dietary modifications, such as increasing the daily purchase of grains, legumes, fruits, and vegetables, is advantageous for persons of all blood types and should not be restricted to particular populations.<sup>7</sup>

Further, there are various popular, trending diet patterns globally, but stakeholders need to be more concerned about the safety of the implications of such diet patterns. Additionally, the recommendations for exercises and medications are other crucial factors. Therefore, considering food and drug interactions is essential, as patients are

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advised to carefully choose suitable meals and medications per their physician's prescription to prevent adverse health effects and difficulties.<sup>8</sup> The efficacy of blood-type diets has yet to be substantiated by a rigorous investigation utilizing a PICO (patient/population, intervention, comparison, and outcomes) framework and comprehensive exploration of medical databases.<sup>9</sup> Yet, the evidence is associating particular blood types with distinct disorders. The most common diet types are veg and non-veg, which are already proven effective for various lifestyle disorders, including obesity, hypothyroidism, diabetes, and kidney or liver disorders.<sup>10</sup> In conclusion, the claimed health benefits of following blood group-based diets, widely promoted in the health sector, need more empirical proof and clarification. However, the diet type may be an alternative intervention subject to sufficient scientific evidence.

### Conflict of Interest

None.

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