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Letters to the editor

MAFLD treatment: Emphasizing the concept of "homology in medicine and food"

To the Editor,

With great interest, we have read the article by Zhou M et al., which explores the key interaction between the gut-liver axis and oxidative stress, and its crucial role in the etiology and progression of MASLD [1]. The authors' perspective particularly captured our attention. After carefully reviewing the study, we would like to respectfully offer some thoughts and insights that may further contribute to the understanding of this important topic.

In the treatment of MAFLD, drugs targeting bile acid regulation have largely failed to gain approval for clinical use due to side effects such as pruritus and gastrointestinal reactions. Current treatment protocols primarily address related complications, such as elevated triglyceride levels and abnormal blood glucose levels, but lack highly targeted medications [2]. Against this backdrop, we would like to emphasize the application of the concept of "homology of medicine and food" in MAFLD treatment.

In traditional Chinese medicine, many foods are considered both nourishment and medicine, capable of preventing and treating diseases. Many modern research findings provide strong evidence supporting this view. Studies have shown that diet plays a vital role in maintaining bile acid homeostasis and gut microbiota balance. Natural foods such as *Coptis chinensis* (berberine), lotus leaf (nuciferine), turmeric (curcumin), honeysuckle (luteolin), wolfberry (*Lycium barbarum* polysaccharides), citrus fruits (hesperetin), apples (phlorizin), and beets (betaine) can modulate gut microbiota composition and their metabolites, maintain intestinal microecological balance, protect the intestinal mucosal barrier, and improve hepatic inflammation and steatosis [3,4]. A diet rich in vegetables, fruits, and whole grains, which is low in calories, high in fiber, and low in fat, can help reduce the risk of MAFLD, while the intake of red and processed meats, saturated and trans fats, ultra-processed foods, added sugars, and alcohol consumption should be minimized [5].

The global prevalence of MAFLD underscores the urgency of accelerating drug development. However, the "homology of medicine and food" approach also holds significant promise. Future research should further clarify the medicinal value of natural foods, methods for purify their active components, and determine effective dosages. Additionally, for special populations such as children, pregnant women, and patients with hepatic or renal failure, is this approach safer and more feasible than synthetic chemical drugs? Against the backdrop of modern agriculture, how can we mitigate the impact of pesticide residues on human health and therapeutic efficacy? These questions warrant further investigation.

In conclusion, we commend the authors for their valuable contributions to this complex field and appreciate their efforts in addressing this critical issue. We hope that our suggestions provide additional perspectives for future research in this area.

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Authors' contributions

Yuqing Zhang drafted the manuscript and performed revisions, Hongqiang Gao and Chengchou Pa critically appraised and revised the manuscript.

Declaration of interests

None.

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