

Review of: "Concrete Advices For Longevity From Wholistic Medication in The Light of Modern Molecular Chemistry–Physiology–Nutrition"

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Potential competing interests: No potential competing interests to declare.

In evaluating the manuscript "Concrete Advices for Longevity from Wholistic Medication in the Light of Modern Molecular Chemistry – Physiology – Nutrition," I have several points to address, focusing on clarity, scientific rigor, and potential improvements:

Strengths:

Integration of Traditional Medicine and Modern Concepts: The manuscript successfully attempts to bridge traditional Chinese medicine (TCM) and modern molecular chemistry. The philosophical approach, including the Wu Xin (five elements) and Five-storied pagoda principles, offers a unique perspective on health and longevity.

Holistic Perspective: The emphasis on viewing the human body as an interconnected whole rather than a set of individual parts aligns with emerging trends in integrative medicine.

Focus on Practicality: The manuscript's practical suggestions on nutrition, stress reduction, and ergonomic improvements provide readers with tangible actions they can take to improve their health.

Weaknesses:

Lack of Scientific Validation: While the paper refers to TCM principles, there is insufficient citation of current scientific literature to validate claims. Concepts such as the Five Elements theory, though philosophically interesting, lack direct modern scientific support. More references to peer-reviewed studies on the biochemical effects of suggested interventions, such as alkaline water or antioxidant food, are needed.

Over-reliance on Philosophy: While the philosophical approach is interesting, it dominates the scientific discourse. Readers might find the manuscript speculative at times, with assertions such as "wind is to be interpreted as oil, and cosmos as the mind" lacking empirical support.

Clarity and Structure: The paper sometimes lacks clarity in how traditional principles are practically applied. Concepts such as "conflict of fire and water" are not easily digestible for readers unfamiliar with TCM. Providing clearer analogies or

descriptions of these elements in modern medical terms would improve accessibility.

Unsubstantiated Health Claims: Statements like "longevity depends on Japanese natural water" or "soft water and ergonomically comfortable facilities in Japan" as reasons for longevity are speculative and lack robust scientific backing. It's important to either substantiate these claims with solid epidemiological data or frame them more cautiously as hypotheses.

Conclusion and Actionable Steps: While the manuscript offers practical suggestions, it could be strengthened by emphasizing evidence-based actions. Some recommendations, like the use of specific Chinese herbs (e.g., Astragalus, Dang Kuei), are well-documented but could benefit from a more detailed explanation of their mechanisms, supported by current clinical studies.

Recommendations for Revision:

Incorporate More Scientific Evidence: Strengthen the paper by including more peer-reviewed articles, particularly in sections discussing the health effects of specific dietary or lifestyle interventions. For instance, antioxidants' role in mitigating oxidative stress should be supported by more recent studies from molecular biology and nutrition science.

Reduce Speculation: While holistic approaches are valuable, they should be grounded in scientific reasoning where possible. Where evidence is limited, the authors should acknowledge this and refrain from presenting hypotheses as established facts.

Clarify Terminology: Simplify complex philosophical principles like Yin-Yang or Five Elements for a broader audience. Use modern medical terms and explanations alongside traditional concepts to help readers understand the parallels between TCM and biochemistry.

Improve the Structure: The paper can benefit from a clearer structure that first introduces the problem (e.g., oxidative stress, inflammation) and then outlines specific interventions supported by both TCM and modern medicine. This would provide a more cohesive narrative that connects traditional and contemporary approaches.

Expand on Ergonomics: The section on ergonomics and stress reduction is well-intentioned but lacks depth. Modern ergonomics is a well-researched field, and providing more detailed, scientifically backed advice would enhance the paper's credibility in this area.

Final Assessment:

The manuscript has an interesting approach and offers practical recommendations for longevity, combining elements of both TCM and modern science. However, the speculative nature of some claims and the lack of scientific rigor reduce its potential impact. Strengthening the manuscript by incorporating more evidence-based research and making the content more accessible to a broad audience would make it a stronger contribution to the field.

