



Letter to the Editor

Reply on comments. CLNESP-D-26-0000740. Original article: “Artificial intelligence in clinical nutrition. A narrative review.”

Dear Editor,

We thank our colleagues for their thoughtful and constructive comments on our review [1]. We address the four points raised in turn.

Stratification of clinical evidence. Our article was written as a narrative review under the SANRA framework, not as a formal evidence grading exercise. Its purpose was to introduce clinicians to AI (artificial intelligence) concepts and applications in an accessible way, while highlighting that the field is still evolving. The methodological breadth of the cited studies reflects the current state of the field, in which proof-of-concept work and emerging validation studies legitimately coexist. We agree that readers benefit when distinctions between exploratory findings and more mature validation work are made as explicit as possible, and we believe the Key Messages and Risks and Pitfalls sections already emphasize the need for human oversight and careful interpretation.

Large language model failure modes. We agree that LLM (large language models) limitations deserve prominent attention in clinical contexts. In the review, we explicitly note that ChatGPT is not fully reliable for nutritional advice, describe the hemodialysis menu example reported by Chatelan and colleagues, and state that such tools cannot be used without expert oversight. We also recommend cross-checking outputs against established guidelines such as ESPEN.

Operationalizing HITL (Human-in-the-Loop) oversight. We agree that effective oversight requires more than a general principle. At the same time, specific review criteria, override thresholds, and documentation standards are typically determined by institutional governance, local workflows, and regulatory context. Our intent was to introduce HITL as a foundational safeguard and to illustrate its clinical relevance, rather than to prescribe implementation protocols that necessarily vary across healthcare systems and clinical fields.

Bias and population-specific validation. We agree that this is an important point. AI models in clinical nutrition must be validated in populations that reflect the intended clinical use. Population-specific reference standards for anthropometric

parameters make underrepresentation in training data a concrete clinical safety issue rather than an abstract ethical concern, as the GLIM acknowledgment of Asian-specific cut-offs already illustrates. The review highlights possible biases and cites these population-specific considerations, and we appreciate the opportunity to sharpen this message further as a prerequisite for deployment rather than a future aspiration.

In conclusion, we are grateful for the thoughtful critique. We believe it strengthens the discussion around evidence hierarchy, LLM safety, workflow governance, and population validation, all of which are central to responsible AI integration in clinical nutrition.

Funding

No funding was received for this paper.

Conflict of interest

The authors declared no conflict of interest.

Reference

- [1] Belkhouribchia J, Pen JJ. Artificial intelligence in clinical nutrition. A narrative review. *Clin Nutr ESPEN* 2026 Apr;72:102822.

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10 May 2026