and advance thoracic perioperative management with attention to all.

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Commentary: Enhanced recovery in thoracic surgery: You are what you eat?

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The core principle of “enhanced recovery” is that perioperative care should be guided by evidence rather than tradition. Yet, converting this principle into practice is harder than it seems. Which evidence do you believe? Data from abdominal surgery may not be generalizable to thoracic patients, where pain is more severe and bowel function is less relevant. What specific protocols do you choose? Enhanced recovery programs typically implement bundled interventions across multiple domains. It is difficult to parse the relative contribution of each domain and decide which elements are essential.¹ Even within key areas like pain

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CENTRAL MESSAGE

Incorporating a simple preoperative nutrition intervention into an enhanced recovery protocol may improve outcomes after thoracic cancer resections.

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control, there remains significant controversy around optimal regimens (regional anesthetic techniques, dosing of non-narcotic pain medications, etc).² Finally, which outcomes matter to which stakeholders?³ Patients may appreciate the pain reduction from liposomal bupivacaine, but hospitals may not be willing to pay for it unless there is an associated decrease in length of stay. All of these questions are important to consider when crafting an enhanced recovery program.

Robinson and colleagues⁴ provide a focused contribution to the enhanced recovery literature in thoracic surgery. They describe the effect of a preoperative nutrition intervention

that includes immunonutrition supplements, carbohydrate loading, and probiotics. Their key findings include faster return of bowel function, decreased length of stay, decreased hospital costs, and decrease in a composite complication end point that persists after propensity score matching. The cost reductions are substantially greater than the cost of the nutrition program.

The study is notable for several strengths. The cohorts are well balanced and reflect standardized treatment by a single surgeon with a mature practice. Importantly, the intervention was a limited, discrete addition to an otherwise-stable, long-standing enhanced recovery program. This study design makes it easier to attribute the observed differences to the specific nutrition interventions, rather than the summative effects of the comprehensive programs typically described. A prospective randomized approach would have been a more powerful way to eliminate unmeasured confounders. Furthermore, since return of bowel function was a prerequisite for discharge, it is possible that accelerated bowel recovery drove the reduced length of stay and thus the cost reductions. These findings may be less applicable to programs in which bowel function does not influence discharge status. Yet, it is unlikely that the modest effect on bowel function alone was responsible for what is otherwise a surprisingly significant impact from this simple intervention.

Perhaps the greatest strength of this study is the way it is packaged for the consumption of thoracic surgeons evaluating their own perioperative protocols. The authors provide justification that preoperative nutritional enhancement, well described in abdominal surgery, may also be useful in nutritionally replete thoracic surgery patients. The intervention is safe, cheap, reproducible, and easy to deploy. In addition, it generates benefits to multiple stakeholders from both clinical and financial perspectives. Comprehensive enhanced recovery programs require considerable planning and staff education to successfully execute. In contrast, this nutrition intervention can be easily added to any existing perioperative care plan.

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