

Exercise, Healthy Eating Before Surgery Boosts Recovery

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Actively preparing for major surgery by exercising and improving diet (known as “prehabilitation”) is associated with fewer complications, less time in the hospital, and improved recovery and quality of life in adults, according to a recent study.

For the study, researchers trawled databases for randomized controlled trial involving adults preparing for major surgery who received prehabilitation interventions or usual care. A total of 186 relevant trials involving 15,684 participants (average age 62; 45% women) that investigated individual or combinations of prehabilitation components (exercise, nutritional, cognitive, and psychosocial support) for seven or more days before surgery were included.

After accounting for other potentially influential factors such as surgery type, they found that exercise was associated with a 50% reduced risk of complications compared with usual care, while nutritional support was associated with a 38% reduced risk. Combined exercise, nutritional, and psychosocial support was associated with a 36% reduced risk.

Combined exercise and psychosocial support was associated with 2.44 fewer days in the hospital compared with usual care, while combined exercise and nutritional support was associated with 1.22 fewer days. Individually, exercise and nutrition were associated with 0.93 and 0.99 fewer days, respectively.

Combined exercise, nutritional and psychosocial prehabilitation was most likely to improve health-related quality of life and physical recovery. Individually, exercise and nutrition were most likely to improve all critical outcomes.

The authors caution that the certainty of the evidence was low for many of the included trials, but the results for exercise and nutritional prehabilitation were “robust” after excluding trials with a high risk of bias.