Association of Nutritional Support with Clinical Outcomes Among Medical Inpatients Who are Malnourished or at Nutritional Risk

An Updated Systematic Review and Meta-analysis

Gomes F, Baumgartner A, Bounoure L, Bally M, Deutz NE, et al. *JAMA Network Open*. 2019;2(11): e1915138.

Introduction:

Malnutrition affects up to 30% of hospitalized medical patients, resulting in high morbidity, mortality and increased healthcare costs. Nutrition screening to identify patients at risk for malnutrition and the use of nutritional support during hospitalization improves the clinical outcomes for these vulnerable patients.

Study design:

Systematic review and meta-analysis of 27 trials (published from 1982-2019; n=6803 patients). Search conducted from January 1, 2015-April 30, 2019

Study population:

Non-critically ill hospitalized medical patients who were malnourished or at nutritional risk receiving nutritional support or usual care (no nutritional support).

Results:

Primary outcome

Patients on nutritional support (dietary advice, food fortification, supplements, snacks, oral nutritional supplements, and enteral nutrition) had significantly lower all-cause mortality rates at discharge and up to 6 months after hospitalization.

Sensitivity analysis revealed that the reduction in mortality was even greater in patients diagnosed with malnutrition compared to patients at nutritional risk, and in trials with high patient compliance with nutritional support.

Secondary outcomes

Patients receiving nutritional support during hospitalization had:

- Significantly higher energy and protein intake during the hospital stay resulting in significant body weight increases
- No significant difference between groups in nosocomial infection rate, length of stay or functional outcomes
- Significant reduction in non-elective hospital readmissions

Conclusions:

All patients admitted to the hospital should be screened for malnutrition risk. Nutritional support should be initiated for at-risk patients and for all malnourished hospitalized patients as a strategy to improve clinical outcomes, reduce hospital readmission rates, and increase survival.

Summary prepared by Nestlé Health Science.

The complete study may be accessed online:

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