

# Malnutrition *in older adults*

**B**ecause of the potential risks of malnutrition among the elderly, the American Academy of Family Physicians, the American Dietetic Association, and the National Council on Aging have created the Nutrition Screening Initiative (NSI) to promote nutrition screening and better nutritional care of older persons.<sup>1</sup> Unfortunately, “malnutrition” can encompass a wide range of deficiencies (e.g., protein-energy) and excesses (e.g., obesity), which may or may not be clearly associated with adverse health outcomes.<sup>2</sup> However, one area of malnutrition—undernutrition—has emerged as a priority area in caring for older persons, with one expert panel ranking it as one of the top three conditions for which quality improvement efforts would enhance the functional health of older persons in hospital and home care sites.<sup>3</sup>

The latter point is critical, since the burden of acute and chronic disease for older people—and, hence, their nutritional requirements—varies across three sites: community-dwelling, hospitalized, and institutionalized (nursing home). The following are some results from the literature focused on undernutrition (and obesity) among the three populations:

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*Involuntary weight loss among community-dwelling older persons predicts an increased risk of two-year mortality, with one cohort study showing that involuntary weight losers had greater than a two-fold increased risk of mortality.<sup>4</sup>*

*Among hospitalized persons, low energy intake (<30 percent of estimated needs) and low serum albumin predict adverse events, including in-hospital complications, longer hospital stays, more frequent re-admissions, in-hospital mortality, and increased mortality at 90 days and at one year.<sup>5-19</sup>*

*In nursing home settings, a qualitative study shows that many residents who sustain weight loss do so because they are not adequately fed, which is partly the result of limitations in nursing resources.<sup>20</sup>*

*A meta-analysis of clinical studies reveals that hospitalized persons with malnutrition who were started on some type of nutritional intervention on the third hospital day or before had an average length of stay 3 days less than those started on the fourth or later hospital day.<sup>21</sup>*

*Several randomized clinical trials support nutritional supplementation in hip fracture patients. It is uncertain whether all hip fracture patients should receive protein or energy supplementation, or whether these supplements should be restricted only to those with anthropometric, energy intake, or biochemical evidence of malnutrition.<sup>22-25</sup>*

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Although there has been voluminous research on malnutrition in older persons, the research has not systematically focused on issues of quality of care. Thus, substantial knowledge gaps exist: most of the proposed quality indicators are not supported by randomized clinical trials, and those trials that do exist often suffer from methodological flaws. Thus, there is a clear need for more carefully designed research in this field.

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