



Expanding Meal-Assistance Programs for Better Nutrition and Quality of Life

Gollub, E., & Weddle, D. (2004). Improvements in nutritional intake and quality of life among frail homebound older adults receiving home-delivered breakfast and lunch. *Journal of the American Dietetic Association*, 104(8), 1227-1235.

Why are home-delivered meals important for older adults?

Older adults living on their own in the community are at an increased risk for malnutrition as their access to food becomes restricted. This may be for several reasons including a lack of knowledge about their dietary needs and a decreased mobility, which can make grocery shopping and preparing meals more difficult. Older adults may turn to community initiatives such as meal-assistance programs that provide wholesome meals to clients in the comfort of their home. These home-delivered meals help older adults overcome some of the barriers to food security and have been found to improve quality of life.

What was done?

The study involved 381 older adults between the ages of 60 and 100. Participants were recruited from five Elderly Nutrition Programs involved in the Morning Meals on Wheels breakfast service demonstration project in five states. Participants were assigned to one of two study groups. The breakfast group received home-delivered breakfast and lunch five days a week (minimum two thirds of the Dietary Reference Intake [DRIs]) and the comparison group received only home-delivered lunch five days a week (minimum one third of the DRIs). Participants in the study were currently receiving home-delivered meals continuously for at least six months, were at least 60 years old, had at least two functional limitations, lived on limited or low income, and were at risk for malnutrition based on their Nutrition Screening Initiative (NSI) score. Information was collected using three questionnaires that gathered demographic information, nutritional risk, meal composition, 24-hour intake of food, and quality of life questions based on health, loneliness, food enjoyment, food security, and depression. The 24-hour recall and the quality of life information were collected through in-home interviews. A trained administrator was at each site and assisted with the study coordination from the recruitment process right through to the interviews.

What was found?

Data from the 24-hour recall revealed positive results for the breakfast group in terms of energy and nutrient intake. Participants in this group consumed approximately 300kcal, 14g of protein, 36g of carbohydrate, 12g fat and 4g fibre more than the comparison group. As for micronutrients, the breakfast group participants also consumed significantly more potassium, folate, calcium, iron, magnesium, and zinc as well as greater levels of vitamins A, B-6, B-12, and D. There were no significant group differences in the consumption of vitamins C or E. Responses from the quality of life scales also found positive results for the breakfast group over the comparison group. The responses indicated that breakfast group participants had significantly greater levels of food security and significantly fewer depressive symptoms than the comparison group. Breakfast group participants were also less bothered by dietary restrictions, money problems, and difficulties with cooking, whereas the comparison group participants were more concerned about whether or not they would eat well because they needed help grocery shopping and with food

preparation. The comparison group also seemed to worry more about whether they could afford food. Other positive results were that the breakfast group participants were in good spirits and were happy most of the time. Breakfast group participants also enjoyed getting up in the morning and less often got bored, felt worthless, or believed their situation was hopeless. There were no group differences in global quality of life and loneliness, quality of health or food enjoyment.

Importance of this research

Although participants in this study were more functionally limited than the average meal assistance client, important implications can be drawn from this study. Meal assistance provides convenience and supports greater intake of key nutrients and energy to meet daily recommendations. This study also found that home-delivered meal assistance programs not only improve nutritional status, but improve quality of life and food security.

Applying what was found

Home-delivered meal assistance programs should consider adding an additional meal such as breakfast to the program. If it is not feasible for the program to provide all clients with an additional meal, the program could consider expanding the meal-assistance service for only the neediest older adults in the community such as those who have a low income or those who have one or more limitations that may put them at a greater risk for malnutrition. By providing older adults with the nutrition they need, these programs help facilitate the prevention of diet and age related diseases and prolong healthy living.

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