

# **FOOD AND NUTRITION FOR LIFE: MALNUTRITION IN OLDER AMERICANS BIBLIOGRAPHY**



**AARP Program Resource Department, Administration on Aging. *A Profile of Older Americans.* (Washington, DC: American Association of Retired persons, 1992).**

*This brochure summarizes recent statistics about older persons' marital status, living arrangements, racial and ethnic composition, geographic distribution, income, employment, education and health and health care*

**Abbasi AA, Rudman D. Observations on the prevalence of protein-calorie undernutrition in VA nursing homes. *J Am Geriatr Soc.* 41:117-121 (1993).**

*This study determined the prevalence of underweight and hypoalbuminemia in VA nursing home residents and the frequency with which physicians, nurses and dietitians document their awareness of these problems, and found a high prevalence of calorie and protein undernutrition among 2,811 residents, with wide variation across 26 nursing homes, and a frequent lack of documentation of these problems by physicians and nurses*

**Abraham NE, Stroh K. Establishing linkages in a community setting-Delaware Nutrition Screening Program. *Nutrition Screening 2: New Approaches to Care, An Interdisciplinary Strategy.* [May 10,1993: Washington, DC] Washington, DC: Nutrition Screening Initiative, 1993.**

*This presentation outlined the planning, development and implementation of a statewide nutrition screening program, its multidisciplinary approach and its findings that use the DETERMINE Checklist on 1,000 senior citizens at 40 senior centers, 54% of elderly women scored at nutritional risk compared to almost 48% of elderly men*

**Administration on Aging. *Native American Elders Report.* (Washington, DC: Administration on Aging, 1993).**

*This report describes service delivery and financial data for 209 out of 212 grantees of Title VI-Grants for Native Americans of the Older Americans Act, for the 1991 budget period*

**Administration on Aging. *Overview to State Performance Reporting Requirements.* (Washington, DC: Administration on Aging, 1994).**

*This report packet contains updated requirements for the State Program Performance Report for Older Americans Act Titles III and VI*

**Ahmed FE. Effect of nutrition on health of the elderly. *J Am Diet Assoc.* 92:1102-1108 (1992).**

*This article reviews nutrition and its effects on the health of the elderly, including nutritional requirements for select individual nutrients, and comments on directions for future research*

**Albert SM. Do family caregivers recognize malnutrition in the frail elderly? *J Am Geriatr Soc.* 41:617-622 (1993).**

*This was a study of 98 daughter caregivers for community dwelling elders to determine if caregivers are aware of the severely underweight elder's risk of malnutrition and accordingly increase nutritional care efforts. The study found caregivers were aware of their elder's risk of malnutrition and were significantly more likely to give protein supplements, to make food accessible, and to encourage and pressure the elder to eat. However, it appears caregivers recognize the risk and intensify feeding concern for the elder only at more severe levels of undernourishment rather than at earlier and less severe stages of undernutrition and nutritional risk.*

**Area Office on Aging of Northwestern Ohio, Inc., Northwestern Ohio Community Action Commission. *Ohio Department of Aging Home-Delivered Nutrition Services Demonstration Grant: Developing a Meal Delivery System to Reach Homebound Seniors in Isolated Rural Areas.* (Columbus, Ohio: Ohio Department of Aging, November, 1993).**

*This report details the outcome of a special grant project that developed a HomeDelivered system using frozen meals, a specially adapted vehicle and newly developed computerized delivery software to bring home delivered meals to isolated rural areas in northwestern Ohio*

***Nutrition in the Elderly.* In Shils ME, Olson JA, Shike M, ed.: *Modern Nutrition in Health and Disease, 8th Edition.* (Philadelphia: Lea & Febiger, 1994)**

*This chapter reviews multiple aspects of nutrition in the elderly, including theories of aging, nutritional status and factors affecting nutritional status, nutritional requirements and drug-nutrient interaction*

**Balsam AL, Bottum CL, Rogers BL. Project director characteristics in the elderly nutrition program. *J Nutr Elder* 11:33-44 (1992).**

*This article describes characteristics of project directors taken from a national survey of elderly nutrition programs about service innovations. Key findings include: the number of minority program directors remains low, and those directors managing programs serving large numbers of low-income or minority elderly had less education and ;lower salaries*

**Balsam AL, Carlin JM, Rogers BL. Weekend home-delivered meals in Elderly Nutrition Programs. *J Am Diet Assoc* 92:1125-1127 (1992).**

*This article describes the 50% of elderly nutrition programs that serve weekend home-delivered meals from a 1986-87 national survey of nutrition programs, and the findings that areas with a higher concentration of minority elderly were least likely to offer weekend meals and were less innovative in services in general*

**Balsam AL, Osteraas G. Developing a continuum of community nutrition services: Massachusetts Elderly Nutrition Programs. *J Nutr Elder* 6:51-67 (1987).**

*This article describes the elderly nutrition program service innovations in Massachusetts within a framework of an elderly health continuum*

**Balsam AL, Rogers BL. *Service Innovations in the Elderly Nutrition Program: Strategies for Meeting Unmet Needs.* (Medford, Massachusetts: Tufts University School of Nutrition, July, 1988)**

*This 105 page report describes the results of national survey of elder nutrition service providers about program innovations implemented in their service areas. Information on program finding, staffing and program director characteristics in relation to service innovations was also collected*

**Bartholomew A, et al. Food frequency intakes and sociodemographic factors of elderly Mexican-Americans and non-Hispanic whites. *J Am Diet Assoc.* 90:1693-1696 (1990).**

*A food frequency of 254 low-income Mexican-American and non-Hispanic white elderly aged 60-96 was conducted in San Antonio, Texas. Significant differences were found between the two groups' food choices; for example, Mexican American elderly drank less skim milk and ate less fruits and vegetables*

**Bartlett BJ. Characterization of anorexia in nursing home patients. *Educational Gerontology.* 16:591-600 (1990).**

*This is a study to determine the extent of unexplained anorexia and poor weight status in residents in six nursing homes and to describe some factors associated with these conditions. Key findings include: the prevalence of geriatric anorexia and involuntary weight loss was 59% of 164 charts reviewed and existed in about two-thirds of the cases on admission to the nursing home, and the single most common associated condition was confusion, present in 44% of the subjects*

**Bartlett BJ. (Columbus, Ohio: Bartlett, Ohio Dietetic Association, October 4, 1988).**

*This testimony describes the need for nutrition assessment, planning and monitoring in a community based long-term care program for the elderly and discusses nutrition and functional status, case management and professional health assessment*

**Bennet J. Hidden malnutrition worsens health of elderly. (New York: October 10, 1992)**

*This news article describes hidden malnutrition in the elderly in New York City, discussing how it often goes unrecognized and untreated, the problem in research defining and measuring elderly malnutrition, the difficulties in determining how many elders are affected, and the complicating effects of aging, chronic disease and poverty*

**Berkman B, Foster LWS, Companion E. Failure to thrive: parigm for frail elder. *Gerontologist.* 29: 654-659 (1989).**

*This retrospective study of 82 elderly patients with "failure to thrive" is an attempt to clarify the clinical picture of failure to thrive and concludes that failure to thrive is diagnosed when patients' functional ability to live with multi-system diseases, patients' coping with ensuing problems and patients' managing their own care are markedly diminished*

**Undernutrition in the elderly: a physiological or pathological process? In Munro H, Schlierf G, ed: *Nutrition of the Elderly, Nestle Nutrition Workshop Series, Volume 29.* (New York: Raven Press, 1992)**

*This chapter discusses the theory that undernutrition of the elderly is a process to slow the progress of various disease processes, in particular atherogenesis and tumerogenesis, rather than being a pathological process*

**Pharmacology, nutrition, and the elderly: interaction and implications. In Chernoff R, ed.: *Geriatric Nutrition: The Health Professional's Handbook.* (Gaithersburg, Maryland: Aspen Publishers, Inc., 1991)**

*This chapter discusses the issues of drug use by the elderly, age related changes affecting medication use, drug effects on nutritional status, and the effects of food on drugs*

**Boldt M, Area Agency on Aging PSA 10B, Inc. Ohio Department of Aging Home-Delivered Nutrition Services Demonstration Grant: The Effects of Home-Delivered Meals and Dietary Supplementation on the Nutritional Status of Homebound Elderly. (Columbus, Ohio: Ohio department of Aging, 1993).**

*This report describes the outcome of a public-private partnership in nutrition research on the effects of supplementing the diets of home-delivered meal (HDM) clients. The majority of underweight HDM clients given extra meals or liquid nutrition supplements gained weight and lean body mass, while the majority of underweight HDM clients given regular HDM clients given regular HDM service lost weight and lean body mass*

**Hip fracture, femoral bone mineral density, and protein supply in elderly patients. In Munro H, Schlierf G, ed.: Nutrition of the Elderly, Nestle Nutrition Workshop Series, Volume 29. (New York: Raven Press, Ltd, 1992)**

*This chapter discusses hip fractures in the elderly, including information about the relationship between femoral bone mineral density and hip fracture, nutrition and hip fracture, and the benefits of oral dietary supplements and protein*

**Braun JV, Wykle MH, Crowling WR. Failure to thrive in older persons: a concept derived. Gerontologist. 28: 809-812 (1988).**

*This article describes how the concepts of failure to thrive from pediatrics can be redefined and used in caring for older persons and includes information about physical and cognitive function and depression*

**Braun KL, Horowitz KJ, Kaku JM. Successful foster caregivers of geriatric patients. Heath and Social Worker. Winter:25-34(1988).**

*The purpose of this study was to report on the success of foster caregivers in Honolulu and Baltimore and specific caregiver characteristics; of noted is that approximately 79% of the clients needed special diets*

**Breslow RA, et al. The importance of dietary protein in healing pressure ulcers. J Am Geriatr Soc. 41: 357-362 (1993).**

*This study examined the effects of dietary protein on healing of pressure ulcers in malnourished nursing home patients and found that when compared to a supplement with 14% protein, a higher protein supplement (24%) given either orally or through tube feeding and over eight weeks, significantly improved healing of pressure ulcers.*

**Burns JT, Jensen GL. Nutritional indices of elderly subjects admitted to different hospital services: a problem of physician awareness. Nutrition Screening 2: New Approaches to Care An Interdisciplinary Strategy. [May 10,1993: Washington, DC] Washington, DC: Nutrition Screening Initiative, 1993.**

*In this one-year retrospective hospital chart review, 6% of elderly patients admitted had two or more positive measures for malnutrition, the very old had more positive signs of malnutrition and the most common diagnoses associated with malnutrition were digestive disorders, infection or cancer. The authors concluded that due to the different levels of recognition of malnutrition found in different hospital service areas, more training of professional staff in nutrition screening is needed*

**Burt MR.** *Hunger Among The Elderly: Local and National Comparisons, Final Report of a National Study on the Extent and Nature of Food Insecurity among American Seniors.* (Washington, DC: The Urban Institute, November 1993).

*This report discusses the results of a national survey on food insecurity among the elderly. Key findings include. 1) high number of elderly experience food insecurity, even those with incomes well above poverty, 2) Factors with the strongest causal impact on food insecurity were income, health conditions and race/ethnicity, and 3) those elders using food assistance and meal programs still experience food insecurity*

**Buto K.** *Statement of Kathy Buto, Director, Bureau of Policy Development, The Health Care Financing Administration, Testimony before the House Select Committee on Aging.* [July 30,1992] Washington, DC: HCFA, DHHS

*This article discusses food security and insecurity: their definitions, measurement, risk factors, the potential consequences of food insecurity and the need for further research*

**Carr JG, et al.** Prevalence and hemodynamic correlates of malnutrition in severe congestive heart failure secondary to ischemic or idiopathic dilated cardiomyopathy. *Am J Cardiol.* 63:709-713(1989).

*This article describes the evaluation of 48 patients with sever chronic congestive heart failure finding malnutrition common and associated with increased right atrial pressure and tricuspid regurgitation*

**Chandra RK.** Effect of vitamin and trace -element supplementation on immune response and infection in elderly subjects. *Lancet.* 340:1124-1127(1992).

*This study examined the effect of physiological amounts of vitamins and trace minerals on immunocompetence and occurrence of infection related illness in 96 independently living, healthy elderly randomly assigned to receive nutrient supplementation or placebo.*

*Supplementation with a modest physiological amount of micronutrients was found to improve immunity and decrease the risk of infection in old age*

**Chapman N, Sorenson A.** Health promotion and aging: nutrition. *Surgeon General's Workshop: Health promotion and Aging Background Papers.* Washington, DC [Washington, DC: US Public Health Service, 1988].

*This nutrition and aging background paper, written for a health promotion and aging workshop, is based on scientific literature and discusses the characteristics of older persons, the effects of aging and chronic diseases, and major policy*

*Nutritional support in the elderly.* In Chernoff R, ed.: *Geriatric Nutrition: The Health Professional's Handbook.* (Gaithersburg, Maryland: Aspen Publishers, Inc., 1991)

*This chapter discusses nutritional therapies for the elderly such as oral supplements and enteral and parenteral feeding, including indications for nutritional support, procedures and potential complications, and in-home nutritional support*

**Clark RL, et al.** *Who Uses Food Assistance Programs?: Factors Associated with Use Among Elderly.* (Washington, DC: The Urban Institute, September, 1993).

*This report examines the factors associated with using food stamps, home-delivered meals and congregate meals. Key findings include: receipt of food stamps depends on race, income, receipt of welfare and ability to drive; receipt of home delivered meals depends on physical health,*

*limitations of functional abilities, living arrangements and sex; and use of congregate meals depends on age, race, sex, living arrangements, income, ability to drive and whether an individual has an eating-related health condition*

**Cockram DB, Baumgartner RN. Evaluation of accuracy and reliability of calipers for measuring recumbent knee height in elderly people. *Am J Clin Nutr.* 52:397-400(1990).**

**Cohen NL, Ralston PA. *Final Report: Factors Influencing Dietary Quality of Elderly Blacks.* (AARP Andrus Foundation, 1992.)**

*This study describes sociodemographic, health, nutritional, formal and informal support factors and their relationship to dietary quality in 80 elderly blacks in Springfield, Massachusetts. Subjects could usually buy food to eat, consumed traditional and cultural foods, often daily or weekly, ate diets on average very low in energy, calcium and vitamin B-6, and slightly low in protein, thiamin, riboflavin and iron. Dietary quality was related to the use of home health aides, perception of health and the number of meals consumed, with slightly over 12% of subjects eating only one meal per day, and an additional 45% reporting they usually ate only two meals per day*

**Compilation of the Older American Act of 1965 and the Native American Programs Act of 1974 as Amended through December 31, 1992. (Washington, DC: US Government Printing Office, 1993)**

*This booklet contains the final 1992 amended version of the Older Americans Act of 1965 and the Native Programs Act of 1974*

**Congress of the United States, Office of Technology Assessment. *Hip Fracture Outcomes in People Age 50 and Over: Mortality, Service Use, Expenditures, and Long-term Functional Impairment.* (Washington, DC: Office of Technology Assessment, 1993).**

*This OTA background paper provide information about in-hospital treatment, in-hospital and long-term mortality, post-hospital and outpatient service use and long-term functional impairment following a hip fracture*

**Congress of the United States, Office of Technology Assessment. *Preventive Health Services for Medicare Beneficiaries: Policy and Research Issues.* (Washington, DC: Office of Technology Assessment, 1990)**

*This special report is part of the Office of Technology and Assessment's study of preventive services for the elderly, and examines the strengths and weaknesses of the Medicare program as a vehicle for funding the delivery of preventive services to the elderly*

**Coulston AM, et al. Comparison of the NSI's checklist with traditional nutrition assessment criteria in a population applying for meals-on-wheels. *Nutrition Screening 2: New Approaches to Care, An Interdisciplinary Approach.* [May 10,1993: Washington, DC] Washington, DC: Nutrition Screening Initiative, 1993.**

*This study compared elderly nutritional risk assessed by DETERMINE Checklist and nutritional risk assessed by more traditional criteria, and found in elderly meals-on-wheels applicants, 96% scored at risk using DETERMINE Checklist versus 66% using more traditional measures and criteria*

**Davis MA, et al. Living arrangements and dietary quality of older US adults. *J Am Diet Assoc* 90:1667-1672(1990).**

*This study compared living arrangements and other factors (income, employment and health*

*status, energy intake, body mass index, use of supplements) with dietary quality for 4,402 adults aged 55 years or older in the Nationwide Food Consumption Survey 1977-78. More men living alone, particularly those 75+, consumed a poor quality diet than did men living with a spouse. A significant difference in dietary quality between women living alone and women living with a spouse was found in the 55-64 year old age group. Energy intake was the most important variable to account for the relationship between living arrangement and dietary quality; older adults living alone were not making poorer food choices, but instead consuming fewer calories*

**Davis MA, Murphy SP, Neuhaus JM. Living arrangements and eating behaviors of older adults in the United States. *J Gerontology* 43: S96-S98 (1988).**

*This study looked at the association between living arrangements and eating behaviors using data from over 4000 survey respondents aged 55+. Persons 75+ had the lowest proportion of people eating away from home, the largest caloric consumption in the morning and, correspondingly, the lowest evening consumption, the lowest proportion of calories from snacks, and the largest proportion of calories from ready-to-eat cereals. Authors conclude there is reason to believe that lower caloric intake by elderly people makes it more difficult for them to obtain recommended nutrients and places them at greater risk of nutrient inadequacy*

**Delhey DM, Anderson EJ, Laramée SH. Implications of malnutrition and diagnosis-related groups (DRGs) *J Am Diet Assoc* 89:1448-1451(1989).**

*This study diagnosed 8.6% of 185 Medicare patients (65-69 years old admitted to an acute-care tertiary hospital) as malnourished based on two of four measures (serum albumin, total lymphocyte count, percent ideal body weight, and percent weight loss) and found 1) the average length of stay (LOS) was 14 days (range 5-31 days) 2) 20% were readmitted within one month of discharge, 3) further studies are necessary to assess the frequency of malnutrition in medicare patients and impact on hospital resources, LOS and DRG reimbursement, and 4) early diagnosis/ treatment of malnutrition may decrease LOS and costs incurred by hospitals*

**Dempsey DT, Mullen JL, Buzby GP. The link between nutritional status and clinical outcome: can nutrition intervention modify it? *Am J Clin Nutr.* 47: 352-356(1988).**

*This article is chronological review if studies relating poor nutritional status with increased morbidity*

**Department of Health and Human Services (US), Public Health Service. *The Surgeon General's Report on Nutrition and Health.* (Washington, DC: US Government Printing Office, 1988).**

*This report reviews and summarizes research on the role of diet in health promotion and disease prevention, and based on the scientific evidence that relates dietary excesses and imbalances to chronic diseases, recommends dietary changes that can improve the health of many Americans*

**Dodds JM, et al. The New York State Food and Nutrition Policy Council:experience in interagency coordinates. *J Nutr Ed.* 24:202-206(1992).**

*This article describes the initiation and first two years of operation of a statewide food and nutrition policy council in New York State*

**Dwyer J. *Screening Older Americans' Nutritional Health: Current Practices and Future Possibilities.* (Washington, DC: Nutrition Screening Initiative, 1991).**

*This report reviews literature concerning aging and nutrition, emphasizing current elderly-related nutrition problems, prevention of those problems and successful problem solving interventions*

**Edwards DL, et al. Home-delivered meals benefit the diabetic elderly. *J Am Diet Assoc* 93:585-587(1993).**

*This study examined the impact of home-delivered meals (HDM) on food insecurity, dietary practices and diabetic control and reports HDM had a positive impact on food insecurity and dietary diversity (but without making a difference in blood glucose levels), and may lessen the risk of diabetes-related hospitalizations*

**Egbert AM. The dwindles: failure to thrive in older patients. *Postgrad Med.* 94:199-212(1993).**

*This review defines, characterizes and analyzes the factors that can contribute to failure to thrive in older persons, including normal aging, malnutrition and weight loss, and specific physical, psychological and/or social precipitants such as chronic disease, dementia, depression, drugs, dysphagia, isolation and poverty*

***Biomarkers: The 10 Determinants of Aging You Can Control.* (New York: Simon & Schuster, 1991)**

*This book outlines a program that applies current research findings to health promotion and disease prevention behaviors that all adults can adopt to prevent premature physical decline*

***Pressure sores and nutrition.* In Morely, JE, Glick Z, Rubenstein LZ, ed: *Geriatric Nutrition.* (New York: Raven Press, Ltd., 1990)**

*This chapter discusses nutrition as a risk factor for pressure sores, the biology of wound healing, specific nutritional requirements, and the management of nutritional factors associated with pressure sores.*

**Finn SC. ADA's nutrition & health campaign for women promotes research and behavioral change. *Perspect Appl Nutr.* 1:3-7(1993)**

*This article discusses the American Dietetic Association's Nutrition and Health Campaign for Women with specific information included on women and cardiovascular disease, breast cancer and osteoporosis, and research and nutrition education needs for women*

**Finn SC. *Adequate Nutrition: The Difference Between Sickness and Health for the Elderly, Testimony Before the House Select Committee on Aging.* Washington, DC: The American Dietetic Association, July 30,1992.**

*This testimony describes nutrition's role in maintaining the health, independence and quality of life of older Americans, including the greater risks for malnutrition in the elderly, cost saving through nutrition services, barrier to nutrition services for older persons, and recommendations to improve the availability of nutrition services for the elderly*

**Fischer J, Johnson MA. Low body weight and weight loss in the aged. *J Am Diet Assoc.* 90:1697-1706(1990).**

*This review article discusses the significance, the incidence and causes of factors related to weight loss in the elderly, including the effects of low body weight and weight loss on mortality and morbidity, the limitations of anthropometric assessment standards for the elderly, involuntary weight loss and physical disease, weight loss and psychiatric disorders including depression and dementia, changes in body composition in the elderly, energy intake of the elderly and the effects of aging on food intake, taste acuity, dentition, gastrointestinal function, functional abilities, drug use, income status, and social isolation*

**Ford AB, et al. Health and function in the old and very old. *J Am Geriatr Soc.* 36:187-197(1988).**

*This study of 113 elderly recruited from a longitudinal study of a representative sample of the*

*elderly population of Cleveland, OH, separately assessed medically diagnosed conditions and self-report functional disability. Results indicate that the interview self-report can provide useful estimates of the presence of medical conditions, but alone it is not sufficiently sensitive for diagnosis. The authors recommend a three-dimensional classification with functional disabilities matched against specific medical conditions*

**Ford AB, et al. Impaired and disabled elderly in the community. *Am J Public Health.* 81:1207-1209(1991).**

*This study reports information about the distribution between community care and institutional care of a representative sample of almost 1600 urban elderly over a nine-year period; two to eight times as many impaired or disabled elderly are cared for in the community as in institutions*

**Frongillo EA, et al. Characteristics related to elderly persons' not eating for 1 or more days: implications for meal programs. *Am J Public Health.* 82:600-602(1992).**

*This study of over 4,000 elderly home-delivered meal clients and 2,600+ elderly congregate meal clients living within New York City and throughout New York State examined how social, economic, location, health and food need characteristics are related to elderly persons' not eating for one or more days. The percentage of clients not eating was 3.4% for congregate and 17.5% for home-delivered. The variables of ethnicity, location, receipt of Medicaid, living alone, health problems, mobility, age less than 80 years, cancer, nausea, difficulty swallowing, diarrhea, loss of appetite, and receipt of food from a food pantry were all related to not eating in allocation of meal program funds and as screening criteria for meal program participation*

**Frongillo EA, et al. Continuance of elderly on home-delivered meals programs. *Am J Public Health.* 77:1176-1179(1987).**

*This article describes a study to determine the reasons why home-delivered meal clients remain on the program, with findings suggesting three groups of clients with distinctly different duration's of program participation: short-, intermediate-, and long-duration groups*

**Implementing Nutrition Screening and Intervention Strategies. (Washington, DC: Nutrition Screening Initiative, 1993)**

*This manual reviews the purpose, structure and goals of the NSI and includes discussion, tips and models for community-based, acute care, long-term care and ambulatory screening and education programs, using examples from successfully implemented programs*

**Malnutrition: A Hidden Cost in Health Care. (Columbus, Ohio: Ross Product Division, Abbott Laboratories, 1993)**

*This 42-page manual was developed for health care industry and documents the extent of and costs associated with malnutrition in formal health care settings and the importance of identifying and treating malnutrition*

**Gaps Between Poor and Nonpoor Elderly Americans. (Washington, DC: General Accounting Office, 1992).**

*This report includes an appendix discussing the association between poverty and nutrition among elderly and concludes that no national survey data existence at the time of this report provides a comprehensive picture of the nutritional intake of the elderly, and that there are no definitive guidelines concerning the actual nutritional needs of the elderly*

**Gluck ME, Wagner JL, Duffy BM. *Preventative Health services Under Medicare: The Use of Preventative Services by the Elderly.* (Washington, DC: Congress of the United States, Office of Technology and Assessment, Health Program, 1989).**

*This Office of Technology and Assessment staff report examines the implications of potential Medicare coverage for the use of preventive services by analyzing current use and the determinants of that use, providing information on the number of elderly using preventive services, which elderly use preventive services, and implications for policy*

**Goodwin JS. Social, psychological and physical factors affecting nutritional status of elderly subjects: separating cause and effect. *Am J Clin Nutr.* 50:1201-1209(1989).**

*This article discusses three factors affecting the nutritional status of the elderly; alcohol intake, cognitive status and institutionalization*

**Cardiac Cachexia. In Morley JE, Glick Z, Rubenstein LZ, ed.: *Geriatric Nutrition.* (New York: Raven Press, Ltd, 1990)**

*This chapter discusses cardiac cachexia, including causes, drugs and anorexia, and management of the condition*

**Grandjean AC, Patil K, Reimers KJ. NSI-getting started in Nebraska. *Nutrition Screening 2: New Approaches to Care, An Interdisciplinary Strategy.* [May 10, 1993: Washington, DC] Washington, DC Nutrition Screening Initiative, 1993.**

*This statewide nutrition screening intervention project (funded in three stages by a Nebraska-based private foundation) began with a 33-question telephone interview of a representative sample of independently-living Nebraskan elders and reports 40% at nutritional risk*

**Haboubi NY, Hudson PR, Pathy MS. Measurement of height in the elderly. *J Am Geriatr Soc.* 38:1008-1010(1990).**

**Hamilton MS. *Oswego County Senior Services Breakfast Program.* Fulton, New York: Oswego County Opportunities, Inc., 1993.**

*This conference workshop handout describes the Oswego Senior Services Breakfast Program, including menus and computerized nutrient calculations*

**Harel Z. Nutrition site service users: does racial background make a difference? *Gerontologist.* 25:286-291(1985).**

*This study examined racial differences in well-being among older persons using services at Older Americans Act-funded nutrition sites. Compared to white elders, black aged were more disadvantaged in economic security, health and functional status, social integration, and knowledge about and access to services; however, the life perspectives of blacks was more positive than that of whites*

**Harel Z. Older Americans Act related homebound aged: what difference does racial background make? *J Gerontol Soc Work.* 9:133-143(1987).**

*This study examined racial differences in well-being among 440 older persons receiving in-home services, and found that compared with white homebound aged, black aged receiving in-home services have more limited economical resources, live in more impoverished neighborhoods, are more impaired in health and functional status, have more limited social resources and have more limited knowledge and access to services*

**Harris LJ, et al. Comparing participants' and managers' perception of services in a congregate meals program. *J Am Diet Assoc.* 87:190-195(1987).**

*In this study of 264 elderly clients from six congregate sites in Montgomery Co., Maryland, 30% of women and 17% of men reported being instructed by a physician to follow a specific therapeutic diet, 33% of men and 52% of women said certain foods were served at meal sites that they selectively avoided eating, 91% of site managers reported providing nutrition education once per month and yet, only 53% of clients believed nutrition education was offered regularly*

**Harris T, et al. NHANES supplement use by healthy elderly. *Am J Clin Nutr.* 50:1145-1149(1989).**

*This article reviews the role of NHANES for nutritional epidemiology, highlighting how NHANES III plans to expand the nutrition database for older persons*

**Hartz SC, et al. Nutrient supplement use by healthy elderly. *J Am Coll Nutr.* 7:119-128(1988).**

*This article describes the nutrient supplement use of the elderly as one part of a nutritional status survey of 691 community-dwelling elderly in Boston. When considering food intake only, 10% or more of the sample had dietary intakes of less than two-thirds the RDA for vitamins B6 and B12, folic acid, zinc, calcium, magnesium, and vitamin A for men only*

**Cancer and Malnutrition. In Morley JE, Glick Z, Rubenstein LZ, ed.: *Geriatric Nutrition.* (New York: Raven Press Ltd., 1990)**

*This chapter discusses malnutrition and cancer including the pathophysiology of cancer cachexia and pharmacological interventions to treat cachexia*

**Herbelin K. Infection control in the long-term care nursing facility. *J Am Diet Assoc.* 89: 1808-1809(1989).**

*This brief communication discusses infection control in long-term care facilities, including background information on the estimated 1.5 million infections that occur annually in nursing homes (10% in individuals more than 50 years of age and 25% in individuals more than 60 years of age), statutory and regulatory requirements and the components of an infection control program*

**Nutritional assessment by anthropometric and biochemical methods. In Shils ME, Olson JA, Shike M, ed.: *Modern Nutrition in Health and Disease, Eighth Edition.***

*This chapter discusses nutritional assessment components, anthropometry, nitrogen balance and serum biochemical markers*

**H.R. 2643 Nutrition and Health Information Act. (Washington, DC:1993)**

*This bill introduced in the House of Representatives by Representative Wyden, required the Surgeon General of the Public Health Service to prepare biennial reports on the relationship between nutrition and health and contained specific requirements for the report contents and defined the special populations for which the report was to address the existence of hunger and malnutrition*

**Hughes SL, et al. Impact of long-term care on mortality, functional status, and unmet need. *Health Services Research.* 23:269-294 (1988).**

*This study examined outcomes of a long-term home care program using a treatment and a control group. Results include: 1) the treatment group had a lower rate of admission to nursing homes (both ICF and SNF) compared to the control group, 2) the treatment group used five times the community-based care, 3) at nine months, functional status in the treatment group*

*was significantly better in only cognitive function also observed at 48 months, 4) no difference in mortality was found; however, the control group received home-delivered meals (HDMs) and the study did not test whether the HDMs made the non-difference between the two groups and 5) comparing total cost of care, the treatment group care cost 25% more*

**Hutchings LL, Tinsley AM. Nutrition education for older adults: how Title III-C Program participants perceive their needs. *J Nutr Ed.* 22:53-58 (1990)**

*This research project surveyed Title IIIC program clients in a large county in a southwest state about their nutrition education interests and the nutrition education they received through the Title IIIC program; findings suggest that nutrition education received was adequate*

**Institute of Medicine (US), Division of Health Promotion and Disease Prevention. *The Second Fifty Years: Promoting Health and Preventing Disability.* (Washington, DC: National Academy Press, 1990).**

*This report examines an assortment of diseases, causes of injury, risk factors, and the health care of an aging population, emphasizing health promotion and disability prevention interventions and health policy*

**Jackson YM, Godfrey F. Federal nutrition services for American Indian and Alaska native elders. *J Am Diet Assoc.* 90:568-571(1990).**

*This article describes Older Americans Act nutrition programs for elderly American Indians and Alaska Natives, including funding, types of services and the results of a comprehensive program evaluation in 1982*

**Jellinek I. *Hunger and Food Insecurity Among the Elderly in New York City: Testimony for Legislative Roundtable.* New York: Council of Senior Centers and Services of New York City, Inc., Nov. 16, 1993.**

*This Congressional testimony discusses food insecurity problems among New York City elderly (including 40 real life examples), the urban Institute food insecurity study methods and findings in the New York community sample, and the role of senior centers and other community-based services in preventing food insecurity among the elderly*

**Johnson LE, Dooley PA, Gleick BS. Oral nutritional supplement use in elderly nursing home patients. *J Am Geriatr Soc.* 41:947-952(1993).**

*This study evaluates the nutritional assessment received by elderly residents in one nursing home who are prescribed oral liquid supplements and examines whether there is evidence of any benefit from the supplementation. Key findings include: the diagnosis of and intervention in undernutrition in nursing home residents is frequently disorganized and hampered by the lack of convenient and unambiguous assessment tools, and oral supplement use is associated with weight gain and also improves other nutritional parameters in select individuals*

***Home Health Care.* (Newbury Park, California: Sage Publications, Inc., 1992)**

*The author describes this book as an introduction to the psychosocial skills and knowledge practitioners need to work effectively with the elderly in home health care settings; topics include the organizational nature of home health agencies, the importance policy plays in their operation and model fieldwork assignments*

**Keller HH. Malnutrition in institutionalized elderly: how and why? *J Am Geriatr Soc.* 41:1212-1218(1993).**

*This article determined nutritional status in 200 elderly long-term care hospital patients in Canada. Key findings include: sever undernutrition was present in 18%, mild/moderate undernutrition was present in 27.5%, and undernutrition was positively related to dysphagia, slow eating, low protein intake, poor appetite, presence of feeding tube and age*

**Kerstetter JE, Holthausen BA, Fitz PA. Malnutrition in the institutionalized older adult. *J Am Diet Assoc.* 92:1109-1116(1992).**

*This article discusses the causes of malnutrition in older persons in long-term and acute-care institutions, including disease, infections, pressure sores, depression and dementias*

**Kim KK, et al. Nutritional status of Chinese--, Korean-, Japanese-American elderly. *J Am Diet Assoc.* 93:1416-1422(1993).**

*This study examined the nutritional status of 169 Chinese-, 90 Korean-, and 50 Japanese-American elderly in Chicago (using 24 hour dietary recalls, heights, weights and triceps skinfold measures) and reports many of these elderly consumed inadequate amounts of calcium, a large number of Korean elderly also consumed inadequate protein and vitamins A and C, and significant percentages of all three groups consumed inadequate calories (20-48%) and were classified as thin or very thin (38-74%)*

**Koehn V, et al. Prevalence of malnutrition in alcoholic and nonalcoholic medical inpatients: a comparative anthropometric study. *J Parenter Enteral Nutr.* 17: 35-40 (1993).**

*Conducted to assess the frequency of malnutrition in alcoholic inpatients, this study found alcoholism associated with poor nutritional status in hospitalized patients and suggests that alcoholism-related malnutrition is mostly related to caloric undernutrition*

**Kover MG, Hendershot G, Mathis E. Older people in the United States who receive help with basic activities of daily living. *Am J Public Health* 79:778-779(1989).**

*This article summarizes information from the National Nursing Home Survey and the Supplement on Aging to the National Health Interview Survey providing a profile of the elderly who receive help with daily activities of living*

**Kubena KS, et al. Anthropometry and health in the elderly. *J Am Diet Assoc.* 91:1402-1407(1991).**

*This study obtained anthropometric measures and health data on 418 community-dwelling elderly in Houston. Key findings include: 34% of the total elderly subjects had BMIs less than 25 (considered below desirable range of 25-29 according to the Committee on Diet and Health, Food and Nutrition Board); when considering only those subjects 75+, 41% had BMIs below the desirable range; anthropometric measures varied with sex, age, health practices and the presence of certain disorders*

**Kucsmarski RJ. Need for body composition information in elderly subjects. *Am J Clin Nutr.* 50:1150-1157 (1989).**

*This overview article describes some of the practical reasons why elderly composition data are needed, including information about major changes in body mass components and body dimensions, and the uses of preventing malnutrition in institutionalized elderly, health risk screening and planning and evaluation intervention and therapy*

**LaCroix AZ, et al. Prospective study of pneumonia hospitalizations and mortality of US older people: the role of chronic conditions, health behavior, and nutritional status. *Public Health Reports.* 104:350-360 (1989).**

*This study of deaths and hospitalization attributable to pneumonia examined four measures of nutritional status and found the risk of pneumonia death 2.6 times higher in men in the lowest body mass index range compared to those in the highest range, and 4.5 times higher among men in the lowest range of arm muscle measures*

**Lee CJ, et al. Impact of special diets on the nutrient intake of southern rural elderly. *J Am Diet Assoc* 93:186-188(1993).**

*In this study almost 44% of over 3,000 rural community-dwelling elderly reported they were following either a recommended special dietary regimen or self-prescribed food practices, with low sodium the #1 diet recommended or self-prescribed, followed in order by low fat/ low cholesterol, diabetic, low calorie, high fiber and low fiber diets. Mean nutrient intakes of those following and those not following special diets differed significantly. Higher intakes of all nutrients except energy, thiamin, and riboflavin were observed among those following special diets*

**Life Sciences Research Office. *Core Indicators of Nutritional State for Difficult-to-Sample Populations*. (Bethesda, Maryland: Federation of American Societies for Experimental Biology, 1990).**

*This report summarizes the discussions of an ad hoc expert panel charged with identifying core indicators to assess the nutritional status of difficult-to-sample populations*

**Life Sciences Research Office. *Nutrition Monitoring in The United States: An Update Report on Nutrition Monitoring Prepared for the US Department of Health and Human Services and the US Department of Agriculture*. (Washington, DC: US Government Printing Office, 1989).**

*This update report summarizes the findings of the Expert Panel on Nutrition Monitoring on the status of nutrition monitoring in the US, through their review of all national nutrition surveys in existence at the time and includes recommendations for ways to strengthen national nutrition monitoring in the US*

**Lipschitz DA, Mitchell CO. The correctibility of the nutritional, immune, and hematopoietic manifestations of protein calorie malnutrition in the elderly. *J Am Coll Nutr* 1:17-25(1982).**

*This article clinically describes the features of malnutrition and the results of nutrition therapy in nine malnourished elderly patients*

**Lipski PS, et al. A study of nutritional deficits of long-stay geriatric patients. *Age and Aging*. 22:244-255(1993).**

*In this study in the United Kingdom the adequacy of dietary intake and the nutritional status of elderly hospital patients were compared to a group of fit young subjects and a group of fit community-living elderly. Elderly long-stay hospital patients were grossly undernourished based on anthropometric measures and their dietary intake did not meet recommended daily allowances. There was no biochemical or hematological evidence of undernutrition in the three groups*

**Livingston J, Reeves RD. Undocumented potential drug interaction found in medical records of elderly patients in a long-term care facility. *J Am Diet Assoc*. 93:1168-1170(1993).**

*This small study examined the medical records of 52 nursing home residents to determine the potential for drug-nutrient interactions and drug-drug interactions. Key findings include: written potential for drug-drug interactions and drug-nutrient interactions were identified*

***Class, aging and health. In Markides KS, ed.: Aging and Health: Perspectives on Gender, Race, Ethnicity, and Class. (Newbury Park, California: SAGE Publications, Inc., 1989)***

*This chapter discusses to what degree social class is associated with health among the elderly in the US including prevalence of major diseases, less serious chronic diseases and conditions, functional health and health self-ratings*

**Looker AC, et al. Calcium intakes of Mexican Americans, Cubans, Puerto Ricans, non-Hispanic whites, and non-Hispanic blacks in the United States. *J Am Diet Assoc.* 93:1274-1279(1993).**

*This article reports on population survey data from the Hispanic Health and Nutrition Examination Survey used to calculate calcium intake from one 24-hour dietary recall. Women in all age, racial and ethnic groups consumed less calcium than the RDA; for all women 55-74 years the range was 460-616 mg/day. For Hispanics, dairy foods were the main source of calcium, with corn tortillas an important source for Mexican Americans*

***Oral health in the elderly. In Chernoff R, ed.: Geriatric Nutrition: The Health Professional's Handbook. (Gaithersburg, Maryland: Aspen Publishers, Inc., 1991)***

*This chapter discusses the anatomy and function of the oral cavity, oral health status and needs of the elderly, changes in oral structures with aging and with disease, the impact of nutritional status on oral health and the impact of oral health on nutritional status*

**Martin KS, Scheet NJ, Stegman MR. Home health clients: characteristics, outcomes of care and nursing interventions. *Am J Pub Health.* 83:1730-1734(1993).**

*Using a sample of 2,403 home health clients served by four agencies in Nebraska, New Jersey and Wisconsin, this study examined the characteristics of home health clients and the nursing services provided to them. The median age of the sample was 68.6, approximately 40% lived alone, over 59% required a spouse or adult child to serve as primary caregiver. Medicare was the primary source of reimbursement for service with mean length of service at almost 35 days. Diabetes, congestive heart failure and cerebrovascular disease were the most frequently occurring medical diagnoses, the average number of drugs per client was 5.2 drugs per length of service and of the nine most frequently occurring problems requiring nursing intervention, nutrition problems ranked sixth*

**Miller DK, et al. Abnormal eating attitudes and body image in older undernourished individuals. *J Am Geriatr Soc.* 39:462-466(1991).**

*This study investigated an anorexic-like syndrome reported in older persons and found abnormal eating attitudes and body image in an important minority of elderly males, but different in patterns from that seen in classical anorexia nervosa*

**Miller DK, et al. Formal geriatric assessment instruments and the care of older general medical outpatients. *J Am Geriatr Soc.* 38:645-651(1990)**

*This study was an attempt to improve the identification of cognitive, affective, gait and nutritional problems in older medical patients by having non-physical clinic personnel administer formal geriatric assessment tools to 183 medical outpatients age 70 years and older. Fifty-six percent of the patients had at least one meaningful impairment identified, and few of the problems identified using the tools had been previously recognized*

***Nutritional assessment of the elderly. In Chernoff R, ed: Geriatric Nutrition: The Health Professional's Handbook. (Gaithersburg, Maryland: Aspen Publishers, Inc., 1991)***

*This chapter provides information on performing nutritional assessment of the elderly including clinical assessment, anthropometric assessment, biochemical measures, immunological assessment, hematologic measures, and dietary assessment*

**Mobile Meals Inc., Area Agency on Aging PSA 10B, Inc. Minority Outreach Project. (Columbus, Ohio: Ohio Department of Aging, April, 1992).**

*This eight-eight page report describes a special outreach program piloted in Portage County, Ohio to reach a very isolated and mistrustful group of minority elderly who needed a variety of community services but had previously refused help. By coordinating with community outreach workers not employed by the nutrition program, home-delivered meals were used for entry into the elders' homes by the community workers, trust was established and eventually other services started*

**Morley JE. Why do physicians fail to recognize and treat malnutrition in older persons? *J Am Geriatr Soc.* 39:1139-1140(1991).**

*This article discusses three major barriers to physicians recognizing and adequately treating malnutrition in older persons, including lack of training and lack of awareness about how best to treat malnutrition*

**Morley JE, Silver AJ. Anorexia in the elderly. *Neurobiology of Aging* 9:9-16(1988).**

*This review article discusses anorexia in the elderly and animal studies showing increased satiety and decreased feeding drive, anorexia and psychiatric disorders, and anorexia and disease*

**Mowe M, Bohmer T. The prevalence of undiagnosed protein-calorie undernutrition in a population of hospitalized elderly patients. *J Am Geriatr Soc.* 39:1089-1092(1991).**

*This study looked at all non-critically ill patients 70+ admitted to an Oslo, Norway Hospital over a three week period and found almost 55% with weights 90% or below normal (20% at 75% or below normal); of these, only 36% were recognized as malnourished upon admission, only 7% received any form of nutrition support and no patient was diagnosed as malnourished at the time of discharge. The authors conclude malnutrition in the elderly in this hospital is underdiagnosed and undertreated*

**Mowe M, Bohmer T, Kindt E. Reduced nutritional status in an elderly population (>70 Y) is probable before disease and possibly contributes to the development of disease. *Am J Clin Nutr.* 59:317-324(1994).**

*This is a study of the nutritional status of recently hospitalized elderly compared to a group of community-dwelling elderly. Key findings include the presence of undernutrition (based on three measures of malnutrition) in 17% of the recent hospitalized group compared to the slightly less than 4% for the community-dwelling control groups. Undernutrition causes and contributing factors include greater numbers unable to buy and prepare food, increased numbers with difficulty chewing, increased number on prescribed diets and less meals eaten overall*

**Protein nutriture and requirements of the elderly. In Munro HN, Danford DE, ed.: *Nutrition, Aging and the Elderly.* (New York: Plenum Press, 1989)**

*This chapter discusses protein nutriture and protein requirements of the elderly, including lean body mass changes with aging*

**National Institutes of Health. Consensus development conference statement on geriatric assessment methods for clinical decision making. *J Am Med Assoc.* 259:2456(1988).**

**National Eldercare Institutes of Long-Term Care. *Eldercare in the Home and Community: Long Term Care Information-Medicaid Home and Community Based Service Waivers for the Elderly.* (Washington, DC: National Association of State Units on Aging, 1992).**

*This eight page report and table includes descriptive information for each home and community-based service waiver program offering services to elderly persons in the US as of 1992*

**National Center for Health Statistics. *Health, United States, 1992 and Healthy People 2000 Review.* (Hyattsville, Maryland: Public Health Service, 1993).**

*This report is the 17<sup>th</sup> in a series on the national health status submitted by the Secretary of Health and Human Services to the President and Congress as mandated by the Public Health Service Act. The report presents national trends in public health statistics and reviews the progress of the Healthy People 2000 objectives*

**National Eldercare Institute on Nutrition. *Nutrition Institute Moves Forward with Strategic Planning Process.* (Grand Rapids, Michigan:1993) Pp.3.**

*This newsletter article describes the progress on three Futures Symposiums to be held by the National Eldercare Institute on Nutrition*

**National Institutes of Health Revitalization Act of 1993, Public Law 103-43. (Washington, DC: US Government Printing Office, 1993)**

***Diet and Health: Implications for Reducing Chronic Disease Risk.* (Washington, DC: National Academy Press, 1989)**

*This is a report on the work of a 19-member interdisciplinary committee appointed to conduct a study to 1) develop criteria for evaluating scientific evidence relating dietary components, foods, food groups, and dietary patterns to health maintenance and risk of chronic disease reduction, 2) use these criteria to assess the scientific evidence and 3) propose dietary guidelines for maintaining health and reducing chronic disease risk*

**Nelson KJ, et al. Prevalence of malnutrition in the elderly admitted to long-term care facilities. *J Am Diet Assoc.* 93:459-461(1993).**

*Using a malnutrition index, this study describes the nutritional status of 100 elderly patients upon admission to a skilled nursing facility. Nutrition assessment included anthropometric measures, calculations of Body Mass Index (BMI) and biochemical data (serum albumin, cholesterol, hemoglobin and hematocrit levels and total lymphocyte count). Thirty-nine percent of the total patients were found to be malnourished. Forty-eight percent admitted from acute-care facilities and 34% admitted from home were malnourished. The strongest predictor of decreased nutritional status was route of admission, with patients from acute-care facilities having lower nutritional reserves than those coming from home*

**New Mexico State Agency on Aging, Grisham, ML. (Santa Fe, New Mexico: July 12, 1993)**

*This state action memorandum describes a New Mexico State Agency on Aging breakfast initiative, including nutrient standards, breakfast meal pattern and menu*

**New York State Office for the Aging, Rosenzweig LY. *A Population at Risk: Current Findings and***

***Future Needs. Nutrition Program for the Elderly.*** (Albany, New York: New York State Office for the Aging, March 1993).

*This report reviews the nutritional status and needs of New York State's older adults, examines the ability of nutrition service providers to meet needs, and presents program strategies for meeting current and future needs. Key findings include: 39% of clients were on modified diets due to diabetes, arthritis, hypertension or heart disease, 35% took four or more medications, 63% took one to three medications, 21% experienced poor oral health with 83% of those not receiving dental care and 18% of clients were underweight. Information about the impact of nutrition services intervention is limited to comparing program clients to those on waiting lists in the area of food group consumption, days going without food, and frequency of hospital stays*

**Nobmann ED, et al. The diet of Alaska Native adults: 1987-1988. *Am J Clin Nutr.* 55:1024-1032(1992).**

*Seasonal dietary intakes were assessed in over 350 Alaska Natives aged 21-60 years of age from 11 communities, to understand the role diet may play in increasing rates of heart disease, cancer and diabetes in this population. Results suggest that energy and protein intakes decrease in the last 30 years but the proportion of energy from fat remain unchanged, and excess energy and fat, and low calcium, fruit and vegetable intakes may be contributing to recent increases in chronic disease*

**North Carolina Department of Human Resources, Vacendak SR. (Raleigh, North Carolina:1993)**

*National Nutrition Screening Initiative Survey Results and Follow-up Survey. This memorandum summarizes the findings from a random sampling of over 2,000 DETERMINE checklists completed throughout North Carolina, with 33% having a score of 6 or higher*

**Nutrition Screening Initiative. Progress on Research: It's Slow but Sure at NIA. (Washington, DC:1994) Pp.3.**

*This newsletter article describes the progress made in meetings between National Institute of Aging (NIA) officials and Nutrition Screening Initiative representatives to help implement the congressional mandate for research by the NIA into the effectiveness and cost-effectiveness of nutrition screening and intervention with the elderly*

***Nutrition Interventions Manual for Professionals Caring for Older Americans.*** (Washington, DC: Nutrition Screening Initiative, 1992)

*Using multidisciplinary approach and six key areas of nutrition intervention, this manual summarizes and models appropriate intervention steps for problem identified during nutrition screening of the elderly*

***Nutrition Monitoring in the United States: The Directory of Federal and State Nutrition Monitoring Activities.*** Wright J ed. (Hyattsville, Maryland: Public Health Service, 1992)

***Nutrition Screening 2: New Approaches to Care, An Interdisciplinary Strategy.*** {May 10, 1993: Washington, DC} Washington, DC: Nutrition Screening Initiative.

*This conference presented numerous sessions on how nutrition screening and intervention has been incorporated into a variety of services for the elderly. The published conference program includes abstracts from conference sessions, research briefs and poster sessions*

***Nutrition Strategic Study: A Report to the Director of the Ohio Department of Aging.*** (Columbus, Ohio: Ohio Department of Aging, 1989).

*This report summarizes a statewide survey of nutrition programs and the discussion of a statewide committee formed to examine and develop recommendations on the role of Ohio Department of Aging funded nutrition services in a developing long-term care system*

**Nutrition Working Group. Surgeon General's Workshop: Health Promotion and Aging Proceedings.** [March 20, 1988: Washington, DC] Washington, DC: Public Health Service, 1988.

*This is a compilation of the goals, assumptions and recommendations in the areas of service, research and policy made by the Nutrition Working Group at the Surgeon General's workshop on health promotion and aging*

**O'Shaughnessy C. CRS Report for Congress: Older Americans Act Nutrition Program.** (Washington, DC: Congressional Research Service, Library of Congress, 1990).

*This report describes the Older Americans Act Nutrition Program including administration and funding, benefits and meals served, eligibility and characteristics of participants, contributions and potential policy issues*

**Palmer RM. Failure to thrive in the elderly: diagnosis and management.** *Geriatrics.* 45:47-55(1990).

*This article describes the diagnosis and clinical management of failure to thrive in the elderly, recommending in addition to the physical exam a review of the patient's functional abilities cognitive status and mood, and early intervention to avoid hospitalization or institutionalization*

**Pinchcofsky-Devin GD, Kaminski MV. Correlation of pressure sores and nutritional status.** *J Am Geriatr Soc.* 34: 435-440(1986).

*This study of 232 residents from two nursing homes demonstrated no well-nourished patients had pressure sores, no mildly or moderately patients had pressure sores, but those patients who had degenerated to a "severe state of malnutrition" developed pressure sores, with the more severe the malnutrition, the more severe the sore*

**Ponza M, Ohls JC, Posner BM. Elderly Nutrition Program Evaluation Literature Review.** (Princeton, New Jersey: Mathematica Policy Research, Inc., 1994).

*This literature review was completed as partial fulfillment for the National Elderly Nutrition Program Evaluation and includes information on program participation (including subgroups such as low income and minority elderly), nutritional needs of the elderly, assessing the nutritional status of the elderly, program impacts, program administration, costs and quality, and funding sources, uses and transfers*

**Ponza M, Wray L. Evaluation of the Food Assistance Needs of the Low-Income Elderly and Their Participation in USDA Programs (Elderly Programs Study).** (Princeton, New Jersey: Mathematica Policy Research, Inc., 1990).

*This study examined the food assistance needs of needs of low-income elderly, their participation in available food and nutrition programs, and the overall effectiveness of these programs at meeting their food and nutrition needs. Key findings include: low-income elderly have a high prevalence of characteristics related to poor nutrition, such as living alone, 85+ years of age, less schooling, greater functional impairment and chronic illness and fewer assets; major federal food assistance programs appear to be well targeted to those elderly in greatest need; and the measured impacts of USDA food assistance are positive but generally small*

**Nutrition services for older Americans.** In Chernoff R, ed.: *Geriatric Nutrition: The Health Professional's Handbook.* (Gaithersburg, Maryland: Aspen Publishers, Inc., 1991)

*This chapter summarizes the characteristics that place the older population at particular risk of nutritional problems and describes the evolution of US policies, programs and services aimed at improving the nutritional status of older Americans*

**Prentice AM, et al. Is severe wasting in elderly mental patients caused by an excessive energy requirement? *Age and Aging*. 18:158-167(1989).**

*This study tested the energy expenditure in 14 chronically ill mental patients with rapid and severe weight loss and found mean energy expenditure low and no patients in negative energy balance. Other causes for weight loss are discussed, including episodes of infection, confusion, refusal of food, paranoia and depression leading to periods of inadequate food intake, use of antibiotics for infection, failure to recognize starvation and lack of staff for appropriate patient feeding support*

**Preventive Health Amendments of 1993, Public Law 103-183. (Washington, DC: US Government printing Office, 1993)**

**Rakowski W, Hickey T. Mortality and the attribution of health problems to aging among older adults. *Am J Public Health*. 82:1139-1140 (1992).**

*Using a sample of over 1300 elderly from the Longitudinal Study of Aging, this study shows a relationship between mortality and attributing health problems to old age. Discussion includes that others have found attributions of health problems to aging exceed 60% for some conditions and is associated with a delay in contacting a physician or a reluctance to discuss health problems with other people or health care providers*

**Rammohan M, Juan D, Jung D. Hypophagia among hospitalized elderly. *J Am Diet Assoc*. 89:1774-1779(1989).**

*This article describes a small prospective study on 21 hospitalized medical patients to determine the effects of age and gender on food intake. Patients over 65 years old who weighed less than 80% of their ideal body weight consumed significantly less energy and fewer macro- and micronutrients*

**Rauscher C. Malnutrition among the elderly. *Canadian Family Physician*. 39:1395-1403 (1993).**

*This article discusses elderly malnutrition, including risk factors, epidemiology and etiology, nutritional assessment, intervention, clinical treatment and options for managing malnutrition*

**Reily JJ, et al. Economic impact of malnutrition: a model system for hospitalized patients. *J Parenter Enteral Nutr*. 12:371(1988).**

*This study, done in two hospitals, found patients with the likelihood of malnutrition had over three times the number of major complications, stayed in the hospital two-thirds longer and were almost four times more likely to die. Various costs associated with patients with the likelihood of malnutrition are also cited*

**Report of Nutrition Screening 1: Toward A Common View. [April 8, 1991: Washington, DC] Washington, DC: The Nutrition Screening Initiative.**

*This report details the consensus reached (by broadly representative multidisciplinary group of professionals) on elderly nutrition risk factors, indicators and an approach to nutrition screening as the beginning of the Nutrition Screening Initiative, a five-year multifaceted effort to promote nutrition screening and better nutritional care in America's health care system, beginning with the elderly*

**Rhodus NL, Brown J. The association of xerostomia and adequate intake in older adults. *J Am Diet Assoc.* 90:1688-1692 (1990).**

*Sixty-seven randomly selected older adults from institutionalized and community-dwelling geriatric populations were studied to demonstrate an association between xerostomia (dry mouth) and inadequate dietary intake. Nutritional intake analysis was performed on both groups with xerostomia and a control group matched for age, sex and physical status. Key findings include significant inadequacies in the nutritional intakes of both groups with xerostomia were found, as well as reduced taste and food perception, and the mean Body Mass Index (BMI) for each group with xerostomia was significantly lower than the mean BMI for the control group*

**Robbins LJ. Evaluation of weight loss in the elderly. *Geriatrics.* 44:31-37(1989).**

*This article discusses weight loss in the elderly, including aging, physiology and weight loss, and the nine "d's" of geriatric weight loss: dentition, dysgeusia, dysphagia, diarrhea, disease, depression, dementia, dysfunction and drugs*

**Roe, DA. Development and current status of home-delivered meals programs in the United States: who is served? *Nutr Rev.* 48:181-185(1990).**

*This article discusses the development of meal programs for the frail elderly in the US and two questions: whether the programs serve those most in need and whether they reduce the need for more costly care. The author suggests that the recent finding that provision of home-delivered meals reduces hospitalization rates should be reexamined to determine whether the medically needy are actually kept out of the hospital by the provision of home-delivered meals*

**Roe DA. Development and current status of home-delivered meals programs in the United States: are the right elderly served? *Nutr Rev.* 52:30-33(1994).**

*This article discusses the two questions posed in a 1990 article by the author: whether in-home meal programs serve those most in need and whether the receipt of in-home meals reduces the need for higher levels of care. The author suggests that the elderly most frequently served those with medical disability. The author again recommends that the findings that provision of home-delivered meals reduce hospitalization be reexamined to determine whether the medically needy actually kept out of the hospital by the provision of in-home meals*

***Geriatric Nutrition, Second Edition.* (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1987)**

*This basic text on geriatric nutrition covers such topics as the elderly in our society, the physiology and pathology of aging, factors determining food intake, assessment of nutritional status, nutritional deficiencies, drugs and nutrition in the elderly, nutrition services for the elderly and geriatric nutrition for Third World*

***Geriatric Nutrition, Third Edition.* (Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1992)**

*This basic text on geriatric nutrition covers topics as the elderly in our society, the physiology and pathology of aging, factors determining food intake, assessment of nutritional status, drugs and nutrition in the elderly and geriatric nutrition in the Third World and immigrant populations*

**Roe DA. Nutritional surveillance of the elderly : methods to determine program impact and unmet need. *Nutrition Today.* 24-29(1989).**

*This article describes the development and findings of a statewide program design for nutrition*

*surveillance of the elderly in New York, including information on those elderly going without food, characteristics of in-home meals clients, and duration of service*

**Rosenbloom CA, Whittington FJ. The effects of bereavement on eating behaviors and nutrient intakes in elderly widowed persons. *J of Gerontology*. 48: S223-S229 (1993).**

*This study compared the nutritional behaviors of 50 recently (up to two years) widowed elderly and 50 married elderly subjects. Key findings include that widowed subjects had a significantly lower mean Diet Quality score than the married group, along with a significant difference in their mean Eating Behavior score. Grief resolution was found to be positively correlated with enjoyment of meals, Diet Quality score, appetite rating, Eating Behavior score, days don't feel like eating, number of pounds lost and one social factor, number of confidants*

**Rowan ML, et al. Nutrition status of the frail elderly in an acute-care eldercare service. *Nutrition Screening 2: New Approaches to Care, An Interdisciplinary Strategy*. [May 10, 1993: Washington, DC] Washington, DC: Nutrition Screening Initiative, 1993.**

*In this retrospective review of 30 hospital charts of elderly patients, 43% were reported to have evidence of malnutrition; most patients lived alone or with family, with only 20% institutionalized. Common barriers to adequate dietary intake were difficulty chewing or swallowing, impaired cognition, depression, impaired dentition and difficulty preparing meals or self-feeding*

**Epidemiology of malnutrition in nursing homes. In Morley JE, Glick Z, Rubenstein LZ, ed.: *Geriatric Nutrition: A Comprehensive Review*. (New York: Raven press, Ltd., 1990)**

*This chapter describes the prevalence of protein-calorie undernutrition (PCU) in the nursing home population including survey information for both nursing home and community-dwelling elderly, the relationship of PCU to mortality in nursing homes, and the cause of and intervention measures for PCU in nursing homes*

**Rudman D, Feller AG. Protein-calorie undernutrition in the nursing home. *J Am Geriatr Soc*. 37:173-183(1989).**

*This article describes the prevalence of protein-calorie undernutrition (PCU) in nursing homes, the relationship of PCU to mortality, the causes of PCU in nursing homes and implications for homebound elderly*

**Rush D. Evaluation the Nutrition Screening Initiative. *Am J Pub Health*. 83:944-945 (1993).**

*This detailed letter to the editor critiques the national Nutrition Screening Initiative with an emphasis on the validation of the "DETERMINE" checklist and whether or not the initiative meets the basic requirements for mass public screening*

**Russell RM, Suter PM. Vitamin requirements of elderly people: an update. *Am J Clin Nutr*. 58:4-14(1993).**

*This is a review of vitamin requirements of elderly indicating there is strong evidence that aging affects the requirements for certain vitamins. The authors conclude the 1989 recommended dietary allowances (RDAs) appear too low for the elderly persons for vitamin D, riboflavin, vitamin B6 and vitamin B12, and too high for vitamin A*

**Ryan AS, Craig LD, Finn SC. Nutrient intakes and dietary patterns of older Americans: a national study. *J Gerontology*. 47:M145-M150 (1992).**

*This national dietary survey of a representative sample of elderly 65-98 years of age reports*

*substantial percentages had inadequate intakes of energy and nutrients. Over 40% of men and women were below two-thirds of the RDA for vitamin E, calcium and zinc, with the same percentage of men also below two-thirds of the RDA for vitamin A; over 20% of men and women skipped lunch*

**Ryan VC. Nutrition identified as a risk factor for elderly Medicare patients' hospital readmission. *J Nutr Elder.* 9:81-87(1990).**

*In this small (N=35) retrospective chart review of elderly Medicare patients readmitted to the hospital, several diet and nutrition-related factors were identified in a number of cases, including being placed on modified diets, multiple diets, multiple drugs at discharge, and poor appetites prior to discharge*

**Ryan VC, Bower ME. Relationship of socioeconomic status and living arrangements to nutritional intake of a representative sample of South Carolina elderly. *J Am Diet Assoc.* 89:1805-1807(1989).**

*This study examines the relationship of socioeconomic status and living arrangements to nutritional intake of a representative sample of South Carolina elderly. Key findings include: a positive relationship between low socioeconomic status and inadequate nutritional intake, and no relationship between living arrangements and nutrient intake*

**Saffel-Shrier S, Athas BM. Effective provision of comprehensive nutrition case management for the elderly. *J Am Diet Assoc.* 93:439-444(1993).**

*This article outlines a new role for the Registered Dietitian in providing nutrition case management through nutritional status assessment using a functional approach; practical steps and assessment instruments are included*

**Siebens H, et al. Correlates and consequences of eating dependency in institutionalized elderly. *J Am Geriatr Soc.* 34:192-198(1986).**

*This is a cross-sectional study of 240 residents of one skilled nursing facility to classify residents' functional eating status and examine factors associated with loss of functional eating capacity. Key findings include: 1) eating dependency did not correlate with age or weight loss, and 2) eating dependency was associated with impaired mobility, cognition, modified consistency diets, upper extremity dysfunction, abnormal oral-motor examinations, absence of teeth and dentures, behavioral indicators of abnormal oral and pharyngeal stages of swallowing increased mortality*

**Anorexia of aging and protein-energy malnutrition. In Morley JE, Glick Z, Rubenstein LZ, ed.: *Geriatric Nutrition: A Comprehensive Review.* (New York: Raven Press, Ltd., 1990)**

*This chapter discusses malnutrition in the elderly and anorexia of aging including its multiple causes, nutritional assessment and treatment*

**Targeting benefits for the black elderly: The Older Americans Act. In Harel Z, McKinney EA, Williams M, ed.: *Black Aged: Understanding Diversity and Services Needs.* (Newbury Park, CA: SAGE Publications, Inc., 1990)**

*This article discusses challenges in recruiting homebound older persons to participate in nutritional studies and in establishing quality control procedures in a field setting*

**Smiciklas-Wright H, et al. Nutritional assessment of homebound rural elderly. *J Nutr.* 120:1535-1537(1990).**

*This article discusses challenges in recruiting homebound older persons to participate in*

*nutritional studies and in establishing quality control procedures in a field setting*

**Health promotion and disease prevention.** In Chernoff R, ed.: *Geriatric Nutrition: The Health Professional's Handbook*. (Gaithersburg, Maryland: Aspen Publishers, Inc., 1991)

*This chapter discusses aging and health promotion and disease prevention including strategies of health promotion in old age for diet, physical activity, smoking, alcohol abuse, medications and health fraud*

**Diverse black aged.** In Harel Z, McKinney EA, Williams M, ed.: *Black Aged Understanding Diversity and Service Needs*. (Newbury Park, CA: SAGE Publications, Inc., 1990)

*This chapter highlights historical experiences, the concepts of diversity and diverse life patterns, policy and social action areas and measures*

**State of Connecticut, Department of Social Services, Buck DR.** (Hartford Connecticut:1994)

*This letter from the Elderly Services Division transmits their "Elderly Nutrition Assessment Form" a one-page carbonless form for determining medical, nutritional and functional problems, and necessary community services*

**Stevens J, Gautam SP, Keil JE.** Body mass index and fat patterning as correlates of lipids and hypertension in an elderly, biracial population. *J Gerontology*. 48;M249-M254(1993).

*In this study of 786 black and white elderly, in each of the four race and gender groups, Body Mass Index (BMI) was inversely related to HDL cholesterol and positively correlated with hypertension. Those with BMIs lower than the 15<sup>th</sup> percentile of the group were labeled "thin" with approximately 10% of white men, 10% of white women, 15% of black men and 11% of black women classified as thin*

**Stotts NA, Whitney JD.** Nutritional intake and status of clients in the home with open surgical wounds. *J of Community Health Nursing*. 7:77-86(1990).

*This was a clinical study of 19 post-hospitalized patients with surgical wounds (the majority were 60+ years of age) to determine whether nutritional intake at home was adequate to support wound healing. Sixteen subjects had insufficient caloric intake to support wound healing and over half has less than the RDA of protein. Over two-thirds reported a decrease from their usual weight and anthropometric measures for all subjects were below medians reported in the first and second National Health and Nutrition Examination Surveys (NHANES I & II)*

**Strauss KF, Indian Health Service, Personal Communication.** (Rockville, Maryland:1994)

**Stuart D, Barrett E.** Successful strategies in an acute care setting. *Nutrition Screening 2: New Approaches to Care, An Interdisciplinary Strategy*. [May 10, 1993: Washington, DC] Washington, DC: Nutrition Screening Initiative.

*A one-day nutrition survey was completed in 1989 in a 288-bed acute care facility with 46% of inpatients identified as at-risk for malnutrition. A comprehensive nutrition screening and intervention program was developed and implemented on two floors in 1992. 1993 statistics showed 24% of inpatients malnourished and 50% needing education intervention*

**Sucher KP, Kittler PG.** Nutrition isn't color blind. *J Am Diet Assoc*. 91:297-298(1991).

*This commentary discusses nutrition and ethnicity, including variations in risk for nutrition-related disease among different ethnic groups, cultural influences on dietary practices and nutritional status, and the need for culturally specific research*

**Suidara H.** The Nutrition Risk Program for Older Adults, Southfield Michigan. *Nutrition Screening 2: New Approaches to Care, An Interdisciplinary Strategy*. [May 10,1993: Washington, DC] Washington, DC: The Nutrition Screening Initiative, 1993.

*This program provides nutrition screening and assessment of very frail, vulnerable, low income elderly and provides up to three meals per day in liquid supplements (for donation only). Clients' physicians are alerted to each client's nutritional risk and their potential need for follow-up medical care*

**Sullivan, DH.** Risk factors for hospital readmission in a select population of geriatric rehabilitation patients: the significance of nutritional status. *J Am Geriatr Soc.* 40:792-798(1992).

*This prospective study followed 98 rehabilitation patients for three months after hospital discharge and found protein-energy undernutrition a strong independent risk factor for non-elective hospital readmission: the more severe the undernutrition, the greater the risk. Patients found at highest risk for readmission had been given good prognosis, were more likely sent home, tended to be more cognitively intact and functionally independent than the patients not readmitted. The author concludes the findings suggests that these undernourished patients were not necessarily patients in the end stages of a chronic progressively disabling disease*

**Sullivan DH, et al.** Impact of nutrition status on morbidity and mortality in a select population of geriatric rehabilitation patients. *Am J Clin Nutr.* 51:749-758(1990).

*One hundred and ten patients newly admitted to a geriatric rehabilitation unit of a Veterans Administration hospital were included in a prospective study to determine whether protein-calorie undernutrition correlated with subsequent risk of developing in-hospital complications independent from non-nutrition factors. The risk of developing at least one complication was found to correlate with, in order of significance, functional status at admission and the presence or absence of pulmonary disease. Nutrition factors also independently correlated with the risk of developing an infectious complication and dying within the hospital*

**Sullivan DH, et al.** Oral health problems and involuntary weight loss in a population of frail elderly. *J Am Geriatr Soc.* 41:725-731(1993).

*This study of 109 patients admitted to a geriatric rehabilitation unit of a Veterans Administration hospital evaluated whether poor oral health is a potentially reversible contributor to the development of significantly involuntary weight loss. Out of 97 factors, the number of general oral problems was the best predictor of significant involuntary weight loss within one year of admission, followed by household income, age, smoking status, adequacy of nutrient intake prior to readmission and education*

**Sullivan DH, et al.** Patterns of care: an analysis of the quality of nutritional care routinely provided to elderly hospitalized veterans. *J Parenter Enteral Nutr.* 13:249-254 (1989).

*This prospective non-interventional study included 250 randomly selected 65+ years old patients admitted to a Veterans Administration hospital. Key findings include: 39% were found to be at high risk of protein-energy malnutrition, no patient had a diagnosis of malnutrition recorded on the medical record problem list, only 13% of the high risk group received some form of nutrition support therapy, and in this hospital patients were not usually screened appropriately for protein-energy malnutrition, the diagnosis was missed frequently or ignored, and nutrition support therapy was found to be underutilized*

**Sullivan DH, Walls RC, Lipschitz DA. Protein-energy undernutrition and the risk of mortality within 1 year of hospital discharge in a select population of geriatric rehabilitation patients. *Am J Clin Nutr.* 53:599-605 (1991).**

*This study found that the best predictor of mortality within one year of hospital discharge in a select population of geriatric rehabilitation patients was the percent of usual body weight lost in the year previous to admission, subscapular skinfold thickness and the discharge Katz Index of Activities of Daily Living score. The authors concluded that the results provided compelling evidence for the importance of nutritional status in predicting in-hospital and post-discharge mortality*

**Survey of Attitudes Toward Elderly Nutrition. (Washington, DC: Peter D. Hart research Associates, Inc., 1993).**

*This report contains the findings of a national telephone survey among over 750 health care providers and administrators who care for the elderly. Key findings include: geriatric physicians and nurses administrators agree that nutrition plays a major role in the prevention and treatment of and recovery from illness and disease; and doctors, nurses and the elderly and the need for these services in a basic health benefits package*

**Taybeck M, Kumanyika S, Chee E. Body weight as a risk factor in the elderly. *Arch Intern Med.* 150:1065-1072 (1990).**

*Using National Health and Nutrition Examination Survey data, this study examined whether body weight is a risk factor for mortality among older persons, and found low body weight (body mass index less than 22 kg/meter squared) to be associated with increased mortality*

**Thompson MP, Morris LK. Unexplained weight loss in the ambulatory elderly. *J Am Geriatr Soc.* 39:497-500 (1991).**

*This article describes a chart review of medical record from seven family practice centers finding significant and unexplained weight loss in elderly patients, with depression the most common diagnosis (18%), followed by cancer (16%), and 24% without definitive cause even after two years of clinical investigation*

**Tkatch L, et al. Benefits of oral protein supplementation in elderly patients with fracture of the proximal femur. *J Am Coll Nutr.* 11:519-525 (1992).**

*This study in Switzerland randomized 62 elderly patients into two groups, one receiving a supplement with protein, the other receiving a supplement without protein, and found improved clinical results for the patients given oral nutritional supplement with protein; their rate of complication and death was significantly lower, as was their median hospital stay (69 versus 102 days)*

**US Bureau of the Census, Taeuber CM. *Current population Reports, Special Studies P23-178, Sixty-five plus in America.* (Washington, DC: US Government Printing Office, 1992).**

*This report summarizes data from a number of reports prepared by the Census Bureau, but primarily from the 1990 Census of Population and Housing and national surveys such as the Current Population Survey, the Survey of Income and Program Participation, the Health Interview Survey and the Longitudinal Survey on Aging*

**US Senate Special Committee on Aging, American Association of retired persons, Federal Council on the Aging, US Administration on Aging. *Ageing America: Trends and projections 1991 Edition.* (Washington, DC:US Department of Health and Human Services,1991).**

*This report provides background information on the status of aging in American, including an overview of the health, income, employment, housing, and social characteristics of America's older population*

**Varma RN.** Risk for drug-induced malnutrition is unchecked in elderly patients in nursing homes. *J Am Diet Assoc.* 94:192-194 (1994).

*This is a study to examine the drug consumption pattern of elderly nursing home residents through the review of 390 medical records for one year. Key findings include: the mean number of drugs taken was 6.6 drugs per day, and 41% of the residents taking drugs with the side effects of anorexia, nausea, vomiting and food aversion lost even more than 10% of body weight in three to 12 months*

**Vaughan LA, Manore NM.** Dietary patterns and nutritional status of low income, free-living elderly. *Food and Nutrition News.* 60:27-30(1988).

*This study was designed to measure nutrient intake, food patterns and nutritional status of low-income community-dwelling elderly and found subjects frequently consuming less than two-thirds the RDA for vitamin B6, folacin, and zinc, with 35% having low vitamin B6 status and 33% subnormal serum iron values*

*Effects of the aging process on the nutritional status of elderly persons.* In Munro H, Schlierf G, ed.: *Nestle Nutrition Workshop Series: Volume 29. Nutrition and the Elderly.* (New York: Raven Press, Ltd., 1992)

*This essay discusses the patterns of malnutrition in the elderly, the capacity of the elderly to adapt to starvation and refeeding, and whether or not malnutrition is inevitable in the elderly*

**Vellas B, et al.** Malnutrition and falls. *Lancet* 336:1447 (1990).

*This letter to the editor includes findings that support the hypothesis that malnutrition increases the propensity to fall and recommends a nutritional approach to the prevention of hip fracture and falls that takes into account not only calcium intake, but overall energy intake*

*Gender, aging, health.* In Markides KS, ed.: *Aging and Health: Perspectives on Gender, race, Ethnicity, and Class.* (Newbury park, California: SAGE Publications, Inc., 1989)

*This chapter discusses aging and physical health and the difference between men and women, including mortality rates and trends, chronic health conditions, self-rated health, and social and physical disability*

**Walden O, et al.** The provision of weekend home delivered meals by state and a pilot study indicating the need for weekend home delivered meals. *J Nutr Elder.* 8: 31-43 (1988).

*This survey found that 43 states and the District of Columbia provided some weekend home-delivered meals (HDM), but usually only in a few areas of each state, and without any reporting mechanism for weekend HDM. A small pilot study of 16 HDM clients showed that without meals on weekends, they were more likely to have insufficient intake of protein and several key vitamins and minerals*

**Walker D, Beauchene RE.** The relationship of loneliness, social isolation, and physical health to dietary adequacy of independently living elderly. *J Am Diet Assoc.* 91:300-304 (1991).

*This small study evaluated the dietary adequacy of 61 independently living elderly individuals in relation to loneliness, social and physical health. Key findings include: energy and calcium were the most likely underconsumed, poor physical health was related to decreased intakes of vitamin*

*A and ascorbic, and loneliness was related to dietary inadequacies*

**Weddle DO, et al. Impatient and post-discharge course of the malnourished patient. *J Am Diet Assoc.* 91:307-311 (1991).**

*This retrospective review of the medical record of 114 malnourished and 106 non-malnourished male veterans. Key findings include: the malnourished group received significantly more special inpatient dietetic feedings beyond the basic diet and more special inpatient dietetic feedings beyond the basic diet and more special services with improvement in dietary intake greater in malnourished patients, and the post-discharge care was not greater for the malnourished group because no discharge plan of care for malnutrition was done. The authors make the important point that rarely is malnutrition corrected during the hospital stay*

**Wellman NS, Weddle DO. *Florida Nutrition Screening and Intervention Pilot Program: Final Report.* (Miami, Florida: Florida International University, 1993).**

*This report discusses a pilot nutrition screening program for congregate and home-delivered meals programs in Dade County, Florida which found 69% of congregate clients and 89% of home-delivered clients to be at moderate to high "potential" nutritional risk using the NSI DETERMINE Checklist and Level I RD assessment*

**William R, Boyce WT. Protein malnutrition in elderly Navajo patients. *J Am Geriatr Soc.* 37:397-405 (1989).**

*A total of 99 inpatients and 121 outpatients were included in this clinical study to examine the nutritional status of Navajo elderly. Based on 13 different measures for malnutrition, high rates of protein malnutrition (despite normal caloric stores) were found in both inpatients and outpatients, with males, inpatients and those 75 or older more affected. The pattern of undernutrition leads the authors to suggest chronic protein malnutrition versus the result of acute disease. For inpatients, length of stay in the hospital was shown to be related to their undernutrition*

**Wolfe CB. *Nutrition Programs for the Elderly: Linking Research, Policy and Practice.* (Washington, DC:1993) Pp12.**

*This newsletter article discusses the National Eldercare programs by linking research, policy and practice*

**Wolinsky FD, et al. Further assessment of reliability and validity of a nutritional risk index. *Health Services Research.* 20:977 (1986).**

*This article describes further work on the development and validation of a 16-item nutritional risk index*

**Wolinsky FD, et al. Health service utilization among the non-institutionalized elderly. *J Health Soc Behav.* 24:325 (1983).**

*This study of non-institutionalized elderly in one section of metropolitan St. Louis found nutritional risk, as measured by a 16-item nutritional risk index, to be the most important predictor of the total number of elderly visits to the physician, elderly visits to physicians in the emergency room and the occurrence of hospital episodes in the elderly*

**Wolinsky FD, et al. Progress in the development of a nutritional risk index. *J Nutr.* 120:1549-1553 (1990).**

*This article discusses the development of a 16-item nutritional risk index and its application in*

*three studies designed to assess its reliability and validity*

**Wolinsky FD, et al. The risk of nursing home placement and subsequent death among older adults. *J Gerontology*. 47:S173-S182 (1992)**

*This study analyzes information from over 5,000 respondents in the Longitudinal Study on Aging and finds an indication that the risk for nursing home placement is greater for older adults and that among the respondents living in nursing homes, the risk of dying there was greater for older adults*

**Young ME. Malnutrition and wound healing. *Heart Lung* 17: 60-67 (1988).**

*This article describes the cause and physiology of malnutrition and discusses wound healing and nutritional requirements*

**Zylstra RE. Nutrition Screening Initiative, Washington State Congregate Mealsite Survey: Who's at Risk in Washington State? (Bellingham, Washington: Northwest Area Agency on Aging, 1992).**

*This report outlines the findings of a statewide nutrition screening project using the DETERMINE Checklist on over 7,000 elders with a statewide average score in the moderate nutritional risk range and higher risk scores for all minority groups*

