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Nutrition and the Elderly
January 1987 - May 1990

Quick Bibliography Series: QB 90-78

307 Citations from AGRICOLA

Shirley King Evans
Food and Nutrition Information Center

Food & Nutrition

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Nutrition and the Elderly

1 The ABCs of nutritional assessment in older adults.
Fanelli, M.T.
Language: English
Descriptors: Nutritional assessment; Elderly; Nutritional state; Anthropometric dimensions; Clinical investigations; Nutrient intake; Blood composition; Standards; Guidelines
Abstract: A brief report provides an overview of nutritional assessment techniques and standards appropriate for elderly subjects over the continuum of care, and discusses criteria for detecting malnutrition risk in such subjects. Specific attention is given to separate discussions of anthropometric, biochemical, clinical, and dietary techniques and standards. It is concluded that suitable assessment techniques and standards are limited for accurate assessments of nutritional status of the elderly. A list of nutritional risk factors for elderly subjects is appended.

2 About good nutrition.
Channing L. Bete Co
Language: English
Descriptors: Nutrition--Study and teaching; Popular works; Diet; Exercise; Health
Abstract: This booklet describes how eating nutritiously promotes good health. It recommends eating a variety of foods from the basic food groups; exercising regularly to maintain a desirable weight; and moderating sugar, salt, fat, and alcohol intake. It also discusses the special nutrition needs of children, teenagers, women, and elderly individuals. Illustrations are included.

3 Acetylsalicylic acid dose fails to affect energy intake of osteoarthritic elderly.
Taylor, J.; Krondl, M.; Rao, V.
Language: English
Descriptors: Caloric intake; Acetylsalicylic acid; Nutrient-drug interactions; Osteoarthritis; Elderly; Men
Abstract: The objective of the study was to determine the effect on energy intake and appetite of acetylsalicylic acid (ASA), commonly used by the elderly to treat arthritis. In a double blind crossover study, 23 free-living osteoarthritic patients 60 years of age or older were treated for two-week intervals with a mean daily ASA intake of 2.44 and 1.29 grams, respectively. Twenty healthy persons similar in age, taking no medication, and matched in sociocultural characteristics were included as a control group. Appetite was measured directly, using a visual analogue scale, and indirectly by calculating energy intake from three-day food records. Varying the dose of ASA was without effect on appetite and food energy intake; however, as appetite was rated lower by the medicated osteoarthritic than by the healthy group, although the energy intakes were not significantly different, the former should be considered as potentially at nutritional risk.

4 Actual and perceived nutritional knowledge of elderly individuals.
Mann, N.L.; Hildreth, G.J.; Draughn, P.; Hegsted, M.
Language: English
Descriptors: Nutrition knowledge; Surveys; Demography; Socioeconomic status; Ethnicity; Elderly; Men; Women
Abstract: The perceived and actual nutritional knowledge of 150 noninstitutionalized elderly individuals was measured using mean scores on a 20 item test. Over 90% of those surveyed knew about the daily dietary need for vitamin C; about the lifelong need for calcium; and about sources of fiber coming from whole grain breads and cereals. The elderly who thought they had fair knowledge of nutrition, in fact, did have higher mean scores on the nutritional knowledge test. Data analysis indicated that mean scores on actual nutritional knowledge were higher for those who were white and for those who were in a higher socioeconomic level. Mean scores of elderly men and women were found to be similar.
5 NAL Call No: 389.8 AM34
ADA testimony on the 1987 reauthorization of the Older Americans Act of 1965.

Language: English

Descriptors: USA; Elderly nutrition; Federal aid; Federal programs; Congressional reports; Legislation

Abstract: The testimony given by the President of the American Dietetic Association (ADA) before the US Senate Subcommittee on Aging is reproduced, concerning ADA impressions and recommendations for the 1987 reauthorization of the 1965 Older Americans Act. Specific attention is given to: (1) Title III meals programs (home-delivered meals, congregate meals) and the need for improved training in food safety and sanitation; and (2) nutrition education needs. Additional programmatic considerations concerning reauthorization of the Older Americans Act also are described.(wz)

6 NAL Call No: 389.8 AM34
Age-related olfactory and taste changes and interrelationships between taste and nutrition.
Chauhan, J.; Hawrysh, Z.J.; Gee, M.; Donald, E.A.; Basu, T.K.
Chicago, Ill. : The Association; 1987 Nov.

Language: English

Descriptors: Taste; Smell; Aging; Taste threshold; Age groups; Nutrient intake

Abstract: Extract: This article critically reviews the literature on age-related olfactory and taste changes and the interrelationships between nutrition and taste. Age-related taste alterations are controversial, but there is consensus on an olfactory decline with age. Much of the age-related chemoreceptive research has used inappropriate methodology, thus leaving many findings inconclusive. Changes in the taste system with age may be related to nutrient intake, which in turn can be influenced by taste. Literature on such interrelationships is limited. Vitamins A, thiamin, B-6, B-12, folacin, zinc, and copper are thought to influence taste function. Moreover, those nutrients are of concern in the aged. The use of appropriate methodology is critical not only for the theory but also for the nutritional aspects, particularly for qualitative and quantitative assessments of nutrient intakes. This review considers the experimental deficiencies (small sample size, inappropriate age range, inadequate psychophysical and stimulus presentation procedures, and poor dietary intake assessment) of studies reported in the literature and suggests major needs for research.(author)

7 NAL Call No: 321.8 C162
Aging in Canada: a nutritional perspective.
Krondl, M.; Coleman, P.
Ottawa : Canadian Home Economics Association; 1987.

Language: English

Descriptors: Canada--fre; Elderly; Aging; Nutrition physiology; Nutritional disorders

Abstract: Extract: With advancing age, physiological changes and socio-economic considerations become key issues influencing the vulnerability of elderly persons to nutrition-related disorders. Physical impairment may hinder food-related activities and medications may precipitate or aggravate nutritional deficiencies. Isolation can affect motivation to buy, prepare, and eat adequate meals. With persons over 75 years of age expected to be the fastest growing segment of the Canadian population in the near future, it is important that the role of nutrition "successful aging" is emphasized. Appropriate intervention programs using approaches which recognized the heterogeneity of elderly populations and build on reliable guidelines will serve to decrease nutritional risks. These services should offer to Canadian seniors a supportive network to assist them in delaying health deterioration and maintaining life satisfaction. (author)

8 NAL Call No: 389.8 AM34
Aging population presents marketing opportunities for dietitians.
Foltz, M.B.; Ryan, A.S.
Chicago, Ill. : The Association; 1987 May.

Language: English

Descriptors: USA; Elderly nutrition; Marketing; Dietitians; Socioeconomic status; Nutritional state; National surveys

Abstract: An evaluation of statistical data
developed during the 2nd National Health and Nutrition Examination Survey (NHANES II) was applied to develop marketing strategies for dietitians, focusing on the expanding elderly market. This evaluation showed that socioeconomic status influenced the level of fatness, with poorer men tending to be leaner and poorer women fatter than their richer counterparts. Other findings on factors influencing eating and nutrition (living alone; eating habits; medical history conditions) also are discussed. Anthropometric and nutrient intake data by age, per capita income, and living arrangement are summarized, covering both sexes between ages 55-74. The evaluation specifically identified several factors that could be integrated into nutrition programs for the older US population. 

NAL Call No: 389.8 N953
The aging process: lessons from observations in man.
Leaf, A.
Language: English

Descriptors: Elderly nutrition; Trends; Mortality; Demography
Abstract: A brief report summarizes evidence concerning changes in the major causes of mortality due to the increase in life span. Attention is given to: changes in the leading causes of mortality and in the per capita consumption of tobacco and various foods of potential health risk in the US during the 20th century; the dietary composition of elderly people; and the association between diet and longevity in different countries. The evidence suggests that diseases of affluence disproportionately afflict older people and that overnutrition or improper dietary balance directly affect the prevalence of atherosclerotic heart disease in our current societies.

NAL Call No: 448.8 B77
Alcohol consumption and dependence in elderly patients in an urban community.
Bridgewater, R.; Leigh, S.; James, O.F.W.; Potter, J.F.
Language: English

Descriptors: United Kingdom; Alcoholic beverages; Consumption patterns; Elderly; Urban areas; Sex differences
Abstract: A cross-sectional survey assessed the prevalence of alcohol consumption and dependence in elderly subjects (53 women, 48 men; mean age, 71) residing in an urban community. Mean alcohol consumption was 16.5 times/week, with men consuming more frequently than women (22.6 vs 10.9 times/week), and subjects 75 years old and younger consuming more frequently than subjects over age 75 (20.5 vs. 8.7 times/week). Sixteen of the subjects (31%; 4 men, 12 women) were abstainers, while 17 subjects (11 men, 6 women) were classified as being alcohol dependent. A survey employed a structured ("CAGE") questionnaire.

NAL Call No: 449.9 AM3J
Alcohol intake in a healthy elderly population.
Goodwin, J.S.; Sanchez, C.J., Thomas, P.; Hunt, C.; Garry, P.J.; Goodwin, J.M.
Language: English

Descriptors: Alcoholic beverages; Consumption patterns; Socioeconomic status; Psychological factors; Elderly; Sex differences; Cognitive development
Abstract: Extract: The relationship between amount of alcohol consumption and social, psychological, and cognitive status was examined in 270 healthy, independently living men and women over age 65. Forty-eight per cent of the sample recorded some alcohol intake during a three-day diet record, with 8 per cent drinking 30 or more grams of alcohol daily. Alcohol intake was positively associated with male gender, income, and amount of education and negatively associated with age. Alcohol intake was not associated with any changes in social or psychological status, but was positively associated with several measurements of cognitive status. These correlations were weak, however, and tended to disappear after controlling for income, education, gender, and age. Past alcohol intake was not associated with any indicators of present social, psychological, or cognitive functioning.

NAL Call No: 389.8 Z1
Anemia and iron status in the free-living and institutionalized elderly in Kentucky.
Chen, L.H.; Cook-Newell, M.E.

Language: English

Descriptors: Kentucky; Nutritional state; Iron; Nutrient intake; Blood plasma; Iron deficiency anemia; Elderly
Abstract: The prevalence of iron deficiency in the elderly population of Central Kentucky was studied using hemoglobin and other biochemical indices of iron status. The association of iron intake with blood plasma levels of iron was examined for free-living and for institutionalized elderly.

13 NAL Call No: GN51.A58
Anthropometric standardization reference manual.
Lohman, Timothy G.,1940-; Roche, Alex F.,1921-; Martorell, Reinaldo,1947-

Language: English

Descriptors: Anthropometry
Abstract: This reference manual is designed to serve as a comprehensive set of measurement procedures describing over 40 anthropometric dimensions. The purpose of the manual is to provide a standardized set of descriptions that can be used across disciplines (for example: epidemiology, exercise and sport science, human biology, human nutrition, medicine, physical anthropology, and physical education). The manual also includes a section on special issues such as right vs. left side, measurement error, equipment availability, and applications. The papers on applications show the many applications of anthropometry to research involving children, the elderly, handicapped or obese individuals, clinical nutrition, epidemiology, physical anthropology, sports medicine, and conoray heart disease

14 NAL Call No: RM214.D47
Anthropometrics: an update on techniques.
Lieberman, L.S.; Kurtz, C.S.

Language: English

Descriptors: Nutritional assessment; Methodology; Anthropometric dimensions; Infants; Children; Elderly; Body composition
Abstract: A report describes standard anthropometric techniques and instruments for assessment of nutritional state with respect to accuracy and precision and the potential limitations and misinterpretations of resultant data, including longitudinal measurements. Attention is focused on measurements of small-for-gestational-age infants, growth rates of boys and girls, nutritional assessment of the elderly, and innovative methods for measuring body composition.

15 NAL Call No: 389.8 J824
Ascorbate and dehydroascorbate: distribution in mononuclear cells of healthy elderly people.
VanderJagt, D.J.; Garry, P.J.; Bhagavan, H.N.

Language: English

Descriptors: Ascorbic acid; Dehydroascorbic acid; Lymphocytes; Monocytes; Nutrient intake; Diet; Vitamin supplements; Elderly; Men; Women
Abstract: Concentrations of ascorbic acid and total ascorbate (ascorbic acid + dehydroascorbic acid) were determined in mononuclear cells from eight elderly men and nine elderly women (aged greater than 65 y) on controlled intakes of vitamin C. No increase in mononuclear cell ascorbic acid concentration was observed for intakes between 30 and 280 mg/d. A significant increase in total ascorbate concentrations was observed for the same range of intakes (p less than 0.01), primarily because of an increase in dehydroascorbic acid. Women were found to have significantly higher ascorbic acid concentrations in mononuclear cells than men (p less than 0.02) for similar intakes of vitamin C. No difference was observed for total ascorbate concentrations. The ratio of dehydroascorbate to ascorbate increased with increasing intake of vitamin C for both men and women.

16 NAL Call No: RC620.A1N8
Ascorbic acid and carnitine in man.
Davies, H.E.F.; Gruffudd, S.; Hughes, R.E.; Jones, E.
Nutrition and the Elderly

Language: English

Descriptors: Men; Women; Elderly; Ascorbic acid; Carnitine; Amino acid metabolism

Abstract: Extract: In apparently healthy elderly men supplementation of diet with 200 mg ascorbic acid daily increased urinary excretion of carnitine; ending of supplementation reduced urinary carnitine. In elderly female hospital patients urinary carnitine/creatinine ratio was positively correlated (P=0.01) with leucocyte ascorbic acid. Neither in young healthy women nor in elderly female hospital patients was a correlation found between leucocyte ascorbic acid and plasma carnitine concentration.(author)

17

NAL Call No: RC620.A1J6
Ascorbic acid, HDL cholesterol, and apolipoprotein A-I in an elderly Chinese population in Boston.
Dallal, G.E.; Choi, F.; Jacques, P.; Schaefer, E.J.; Jacob, R.A.

Language: English

Descriptors: Massachusetts; High density lipoprotein; Apolipoprotein; Ascorbic acid; Ethnicity; Nutritional surveillance; Elderly; Men; Women

Abstract. Over 300 elderly Chinese Americans were studied to determine the role that vitamin C may play in HDL cholesterol metabolism. Variables such as smoking, alcohol intake and health status were taken into consideration. Results were discussed and shown on tables.

18

NAL Call No: 389.8 J824
Ascorbic acid intake and plasma levels in healthy elderly people.
VanderJagt, D.J.; Garry, P.J.; Bhagavan, H.N.

Language: English

Descriptors: Elderly; Nutrient intake; Blood composition; Sex differences; Nutritional state; Vitamin supplements; Ascorbic acid

Abstract: Extract: Plasma ascorbic acid concentra-

**Language:** English

**Descriptors:** Energy requirements; Physical activity; Research methodology; Questionnaires; Elderly

**Abstract:** The assessment of physical activity and energy needs is discussed with particular reference to elderly subjects. The only practical method of determining physical activity in epidemiological research remains a retrospective questionnaire. Attitude measurements may nevertheless help in assessing those individuals prone to exaggerate participation, while personal activity monitors and measurement of individual fitness levels may contribute to the refinement of questionnaires. Particular problems in applying questionnaires to elderly subjects can include poor vision, hearing, and recent memory, coupled with slow understanding and garrulousness. The design of forms should be as simple and unambiguous as possible, and timely. Attempts to distinguish occupational from leisure or household chores and to explore seasonal variations merely seem likely to cause confusion.

**NAL Call No:** 389.8 AM34

**Attitudes, knowledge, and problem-solving approach of Michigan dietitians about aging.**

Noel, M.M.B.; Ames, B.D.

Chicago, Ill.: The Association; 1989 Dec.


**Language:** English

**Descriptors:** Michigan; Elderly nutrition; Nutrition information; Consumer attitudes; Calcium; Urban population; Rural population; Elderly; Women; Men

**Abstract:** To examine supplement purchase practices and attitudes toward supplements of rural and urban elderly, two questionnaires were designed. One questionnaire included demographic questions, an attitude scale, and questions concerning supplement purchases and sources of information about nutrition. The second questionnaire contained an advertisement about calcium supplements followed by questions regarding means to "improve calcium" and health concerns. The rural elderly had a significantly lower mean education level and a significantly higher number of misconceptions. The average expenditures on supplements were $52.00 per month for the total group and sources of information were media, physicians, family and friends. In response to the advertisement, nearly one-third of the respondents reported that they would be unlikely to take calcium supplements to improve calcium even though 86.7% stated they would take calcium supplements to prevent health problems and 51.7% believed there could be dangers in taking calcium supplements. The most commonly reported means to improve calcium were to increase milk and to eat cheese.
Nutrition and the Elderly

(86.7% each). Contradictions in the responses may indicate that these elderly are susceptible to advertising implying supplements are needed to prevent health problems.

23  NAL Call No: TX341.C6
B-12 recommendation lowered in 10th edition.

Language: English

Descriptors: USA; Vitamin B12; Nutrient requirements; Recommended dietary allowances; Recommended dietary intakes; Food and nutrition controversies; Vitamin supplements

Abstract: A brief technical report provides an excerpt of the recommended dietary intake (ROI) for vitamin B12 proposed for the 10th edition of the Recommended Dietary Allowances report rejected by the US National Academy of Sciences. Information is provided on vitamin B12 requirements for maintaining normal nutrient balance, and on vitamin B12 RDI's for sustaining normal infants, children, adults (including the elderly), and pregnant and lactating women. The coupled lack of apparent toxicity and health benefits from daily high intakes of vitamin B12 supplements also is noted.(wz)

24  NAL Call No: QP141.A1J68
Beta-carotene serum response in young and elderly females.
Maiani, G.; Mobarhan, S.; Ceccanti, M.; Ranaldi, L.; Gettner, S.; Bowen, P.; Friedman, H.; De Lorenzo, A.; Ferro-Luzzi, A.

Language: English

Descriptors: Beta-carotene; Blood serum; Food intake; Aging; Experimental diets; Intestinal transit time; Intestinal absorption; Blood lipids; Triglycerides; Young adults; Elderly; Women

Abstract: This study investigates the effects of aging and food intake on the serum beta-carotene response curve in humans. Serum carotenoids, retinoids, triglycerides, and cholesterol were measured after the oral administration of a fixed dose of beta-carotene given with a test meal to elderly and young adult women. Small intestine transit time was determined for the two groups by breath hydrogen test. The data indicate that beta-carotene absorption may be enhanced in old age.

25  NAL Call No: 389.8 J824
Between- and within-subject variation in nutrient intake from infancy to old age: estimating the number of days required to rank dietary intakes with desired precision.
Nelson, M.; Black, A.E.; Morris, J.A.; Cole, T.J.

Language: English

Descriptors: Food consumption; Dietary history; Nutrition surveys; Nutrient intake; Data analysis; Research methodology

Abstract: In prospective studies of diet it is often necessary to know for how many days subjects should record food consumption in order to be able to rank subjects correctly according to their nutrient intakes. Data from six studies--of toddlers, families, schoolchildren, dietitians, pregnant women, and elderly subjects--were analyzed to estimate the number of recording days necessary for energy, 28 nutrients, and the ratio of polyunsaturated to saturated fatty acids (P:S). The most striking finding is that 7 d of diet record do not rank subjects with the degree of accuracy commonly assumed. For some nutrients, such as iron, zinc, nicotinic acid, and pyridoxine, it may be desirable to record diet over a number of short, separate periods to achieve the number of days required. For others, such as copper, retinol, carotene, vitamin B-12, polyunsaturated fatty acids, P:S, and alcohol, alternative methods of assessment--based on dietary histories or questionnaires--may be more appropriate.

26  NAL Call No: RC620.A1N8
Biochemical assessment of vitamin status in "healthy" elderly Japanese: relationships between intakes and biochemical measures of thiamine, riboflavin and ascorbic acid.
Itoh, R.; Yamada, K.; Oka, J.; Echizen, H.; Murakami, K.

Language: English

Descriptors: Japan; Thiamine; Riboflavin; Ascorbic acid

Abstract: This study investigates the effects of aging and food intake on the serum beta-carotene response curve in humans. Serum carotenoids, retinoids, triglycerides, and cholesterol were measured after the oral administration of a fixed dose of beta-carotene given with a test meal to elderly and young adult women. Small intestine transit time was determined for the two groups by breath hydrogen test. The data indicate that beta-carotene absorption may be enhanced in old age.
acid; Nutrient intake; Nutritional state; Erythrocytes; Enzyme activity; Glutathione reductase; Transketolase; Elderly

Abstract: Intakes and nutritional status of thiamine, riboflavin and ascorbic acid were assessed from 3-day food records and blood samples collected from 183 free-living healthy, middle-income volunteers over 60 years of age from Nagano City area in Japan. About 50% of the subjects consumed thiamine-fortified rice, which was the only vitamin supplement used in this population. Biochemical measures used for the assessment of the status of these three vitamins were erythrocyte transketolase activity coefficient (ETK-AC), erythrocyte glutathione reductase activity coefficient (EGR-AC) and serum ascorbic acid concentration. Significant correlation coefficients between these biochemical measures and estimated intakes for each of the vitamins examined were obtained. Although only 5.5% of the subjects had estimated thiamine intakes less than the 1984 RDA for Japanese, 37.6% of the subjects not taking the supplement and 13.3% of the subjects taking the supplement had ETK-ACs above 1.15 and assessed to be in poor status of this vitamin. With regard to riboflavin, 9.6% of the subjects had its intakes less than the RDA, and 3.7% had EGR-ACs above 1.20. Only 1.1% of the subjects had ascorbic acid intakes less than the RDA, and 4.9% had its serum concentrations less than 0.4 mg/100 ml. Thiamine nutriment seems to be a serious problem in this population.

NAL Call No: Z33
Biochemical indicators related to antioxidant status and bone metabolic activity in Finnish elderly men.

Language: English

Descriptors: Finland; Nutritional state; Vitamin A; Vitamin D; Vitamin E; Selenium; Calcium; Blood serum; Blood lipids; Tobacco smoking; Alcoholic beverages; National surveys; Elderly; Men

Abstract: A 25-year follow-up survey of the Finnish men originally examined in the Seven Countries Study was conducted. The follow-up survey examined biochemical indicators related to increased cancer risk and bone fragility. Serum concentrations of vitamin A, vitamin D, vitamin E, osteocalcin, calcium, selenium, cholesterol and HDL-cholesterol were measured in 270 elderly Finnish men.

NAL Call No: RC520.A1N8
Blood pressure and body mass index in elderly long-term vegetarians and nonvegetarians.

Language: English

Descriptors: USA; Elderly; Diet; Vegetarians; Blood pressure; Seventh day adventists; Weight; Height; Indexes

Abstract: Extract: Several cross-sectional studies have found vegetarians to have lower blood pressure (BP) than nonvegetarians. However, differences in non-dietary health practices exist between the two groups which could confound the apparent relationship between diet and BP. Also, few studies have examined the diet-BP relationship in the elderly. This study addressed these shortcomings by examining elderly (age greater than or equal to 60) vegetarian and nonvegetarian Seventh Day Adventists. Subjects voluntarily completed a questionnaire which included information on demographics, health history, dietary practices, and other health-related habits. Height and weight were measured and multiple blood pressure readings were taken for each individual. Subjects were divided into long term vegetarian (n=61, x age=69.8) and nonvegetarian (n=29, x age=70.0) categories based on self-reported dietary habits. Long term vegetarians were defined as adhering to a meatless dietary regime for at least 3 years prior to the study; non vegetarians were defined as current omnivores. Twenty-one percent of the vegetarians and 24% of the nonvegetarians were on current antihypertensive drug therapy, and were excluded from further analysis. Age and sex-adjusted systolic BP was significantly lower (p less than .01) in the vegetarians (n=48, x=122.2 mm Hg) compared to the nonvegetarians (n=22, x=136.1 mm Hg). Age and sex-adjusted diastolic BP (vegetarians, x=71.2 mm Hg vs. nonvegetarians, 73.7 mm Hg) was not significantly different between the two groups. Body mass index (weight/height2) was significantly greater (p less than .001) in the nonvegetarians (x=28.0) compared to the vegetarians (x=24.3). There were no differences between the two groups in reported
family history of hypertension, frequency of exercise, use of tobacco, and consumption of beverage ethanol. Further statistical analysis revealed that the lower systolic BP among the elderly vegetarians was best explained by their body mass in

29 NAL Call N.: 1X361.A3J63
Blood pressure of elderly persons in relation to dietary practices, sodium preference in foods, and urinary sodium.
Stanek, K.L.; Fox, H.M.
Language: English

Descriptors: Hypertension; Diet; Nutrient intake; Sodium; Food preferences; Body weight; Elderly
Abstract: Hypertensive and normotensive elderly patients in government-sponsored nutrition centers were compared with regard to dietary practices, urinary sodium excretions, and taste preference levels for sodium chloride in tomato juice and beef broth. Body mass index and body weight of 265 persons were positively and significantly related to blood pressure. Caloric intake of treated hypertensive but not of normotensive persons was related to blood pressure. Urinary sodium excretions did not differ between 42 treated hypertensive and 40 normotensive persons. Hypertensive persons tended to prefer a higher level of sodium in tomato juice than did normotensive persons.

30 NAL Call No: 389.8 N953
Body composition and aging.
Steen, B.
Language: English

Descriptors: Body composition; Aging; Methodology
Abstract: Information and data developed from published studies are discussed concerning the assessment of body composition in elderly subjects. Specific attention is given to: the concepts of lean body mass and fat-free body mass; methods for gaining an understanding of the different body compartments; and assessments of body composition in higher age groups using a 4-compartment model technique considering total body potassium and total body water. Data concerning body weight, body fat, body cell mass, and body water in the 7th and 8th decade of life are graphically presented and discussed.

31 NAL Call No: 389.8 J824
Language: English

Descriptors: Body composition; Laboratory methods; Body density; Neutron activation analysis; Elderly
Abstract: Body composition measurements are integral to nutritional assessment of elderly subjects. The validity of methods available for partitioning body weight into its tissue or chemical subfractions in the geriatric population is of primary importance. Until recently verifying the accuracy of body composition techniques in vivo was limited by prevailing technology. New advances such as neutron activation analysis, neutron inelastic scattering, and dual photon absorptiometry now promise to overcome these earlier limitations. With these new tools investigators can now examine critical underlying assumptions related to body composition assessment in elderly subjects. This review highlights the need and opportunities for future research in this area.

32 NAL Call No: 389.8 J824
Bone mineral content in postmenopausal women: comparison of omnivores and vegetarians.
Hunt, I.F.; Murphy, N.J.; Henderson, C.; Clark, V.A.; Jacobs, R.M.; Johnston, P.K.; Coulson, A.H.
Language: English

Descriptors: Bone density; Mineral content; Nutrient intake; Calcium; Protein intake; Vegetarians; Elderly; Women
Abstract: This cross-sectional study of bone mineral content (BMC)/bone width (BW) (BMC/BW, cortical radius) was conducted in el-
derly, free-living Methodist omnivores (n = 146) and Seventh-day Adventist vegetarians (n = 144) in southern California. The purpose was to investigate relationships between BMC/BW and dietary factors (primarily vegetarianism and intakes of protein and calcium) and use of prescribed drugs. BMC was measured by single-photon absorptiometry. Dietary intakes during current and early periods of life were assessed by 24-h dietary recall and frequency methods. Information about drug use was obtained by interview. BMC/BW was not different in omnivores vs vegetarians. There were no significant relationships or trends between current or early dietary intakes and BMC/BW in either group. In multiple-regression analysis, age, weight, and use of estrogen and thiazide diuretics were predictive of 31% of the variability in BMC/BW in the total group.

33 NAL Call No: 448.8 L22
The bran wagon.
Suri, Y.P.
Language: English
Descriptors: Diet; Bran; Fiber; Risks; Calcium; Zinc; Elderly nutrition; Patient care; Nutrient-nutrient interactions; Food and nutrition controversies
Abstract: A letter to the editor critiques a recent editorial on bran, arguing that some of the most serious problems resulting from a high-fiber diet were completely overlooked. These include the impaired absorption of certain minerals (especially Ca, which may accelerate osteoporosis in the elderly) and trace elements (e.g. Zn, needed for tissue repair and bone fracture healing), due to insoluble phytate formation. It is emphasized that these effects need to be considered by the nutritionist and dietitian for exercising moderation with fiber in high-risk groups.(wz)

34 NAL Call No: 389.2538 F82
Breaking down barriers.
Peters, J.E.
Language: English
Descriptors: Restaurants; Elderly; Physically handicapped persons; Consumers; Eating out; Guidelines
Abstract: A report argues that restaurants should give increased attention to accommodating elderly and physically handicapped customers. Guidelines for accomplishing this are discussed and the benefits that restaurants can derive are emphasized. Specific examples are given throughout the report. Considerations for special facility and management accommodations and for proper training of the restaurant staff are included.

35 NAL Call No: 389.8 J824
Calcium and vitamin D supplements: effects on calcium metabolism in elderly people.
Chapuy, M.C.; Chapuy, P.; Meunier, P.J.
Language: English
Descriptors: Calcium; Elderly nutrition; Vitamin D; Mineral supplements; Vitamin supplements; Parathyroid hormone
Abstract: Extract: Calcium and vitamin D status were studied in 193 healthy elderly French people. Calcium intake was less than 500 mg/d in 62% of the patients and the vitamin D intake was less than 5 micrograms/d in all patients. They also exhibited reduced levels of serum calcium (SCa) and 25-hydroxyvitamin D (25-OHD) and high levels of parathyroid hormone (PTH) and alkaline phosphatase (SAP). The response to calcium (1000 mg/d) and ergocalciferol (20 micrograms/d) supplementation given for 6 mo was evaluated in 65 patients with 69 subjects taken as controls. The treatment induced a significant increase in SCa and in 25-OHD levels, and a subsequent decrease in PTH levels without modification of the mean calcitriol levels. The biochemical changes were more marked in long-stay hospital patients than in outpatients. All these changes were significantly different from those observed in the control group. Increasing the calcium and vitamin D intake reduces the biochemical signs of secondary hyperparathyroidism in elderly people.(author)
Nutrition and the Elderly

1987 Apr.

Language: English
Descriptors: Calcium; Bone mineralization; Nutrient requirements; Skeleton development; Vitamin D; Estrogens; Menopause; Elderly; Reviews
Abstract: A technical review (33 references) summarizes and discusses current research evidence concerning the importance of calcium (Ca) intake on maintaining a peak bone mass and preventing bone loss. Attention is given to: the effect of Ca intake on peak bone mass and on bone loss in young adulthood; the relationship between Ca intake and bone loss in young adulthood; the relationship between Ca intake and bone loss at menopause; and the role of dietary Ca intakes in the maintenance of bone health in postmenopausal women and the elderly. It is argued that, while considerable research has been conducted, current evidence does not point to a clear relationship between high Ca intakes to prevent accelerated bone loss at menopause or their therapeutic value for the elderly. Relationships between dietary Ca intake, estrogen status in postmenopausal women, and vitamin D are discussed with respect to bone health status and bone loss prevention and treatment.(wz)

Can I afford the diet?
Hanes, F.A.; De Looy, A.E.

Language: English
Descriptors: United Kingdom; Food costs; Low income groups; Nutrient intake; Food policy; Adults; Children
Abstract: An authoritative technical review addresses the problem of nutritional inadequacy due to restricted income, and provides recommendations for aiding low-income people residing in the United Kingdom (UK) who are at greatest risk of illness from nutritional deficiencies. Specific attention is given to: the inadequacy of RDA's for ill people; average household expenditures for food by income group vs. the cost for maintaining a healthy diet; the influence of income on food consumption patterns; and, especially, special groups at malnutrition risk (covering: children; pregnant women; black and ethnic minorities; mentally/physically handicapped; and the elderly). Attention also is given to the cost of special or therapeutic diets for adults and children having different requirements due to disorders or diseases (e.g., diabetes, renal failure). It is concluded that financial provision for food for many people on the UK Supplementary Benefit program is inadequate and that there should be no restriction in the existing provision of free school meals.

Caring for the elderly in America.
Stephenson, S.

Language: English
Descriptors: Nutrition programs; Adult day care; Community programs; Elderly
Abstract: Elderly day care centers are found in all areas of the country. The number of centers and their clientele are steadily increasing. Several centers and their programs are discussed.

Changes in food and nutrient intake in middle-aged men from 1960 to 1985 (the Zutphen Study).
Kromhout, D.; Lezene Coulander, C. de; Obermann-de Boer, G.L.; Kampen-Donker, M. van; Goddijn, E.; Bloemberg, B.P.M.

Language: English
Descriptors: Netherlands; Food consumption; Nutrient intake; Caloric intake; Dietary surveys; Longitudinal studies; Eating habits; Men
Abstract: Within the Zutphen Study dietary surveys using the cross-check dietary history method were carried out in 1960, 1965, 1970, and 1985. Of the 872 men aged 40-59 y examined in 1960, 315 participated in all four surveys. In 1985 a small random sample of 51 men aged 40-59 y was also investigated. Between 1960 and 1985 the consumption of bread, potatoes, and edible fats decreased and the consumption of fruits, pastries, nuts, and alcoholic beverages increased in both the aging cohort and in the two independent samples of middle-aged men examined 25 y apart. These changes were accompanied by a substantial
decrease in the intake of monounsaturated fat, polysaccharides, and potassium and a substantial increase in animal protein and alcohol. Small changes were observed in the intake of saturated fatty acids, polyunsaturated fatty acids, dietary cholesterol, and dietary fiber. Since 1960 some changes in a nutritionally desirable direction were observed but the diet of the Zutphen men in 1985 departs substantially from the guidelines for a healthy diet formulated by The Netherlands Nutrition Council in 1986.

40  NAL Call No: TX361.A3J63
Changes in food preferences of the elderly over a ten year period.
Holt, V.; Nordstrom, J.; Kohrs, M.B.
Language: English

Descriptors: Food preferences; Food habits; Dietary surveys; Food groups; Longitudinal studies; Elderly

Abstract: The changes of food preferences of persons who were initially 60 years and older were determined by comparing responses to surveys taken in 1975 and 1985. In 1985 the foods chosen as liked were softer foods with general decreases in preferences for protein and fatty foods. There was an increase in the amount of carbohydrate foods preferred. In 1975 the food items liked the most were beef, potatoes, chicken, green beans, pie, pork, dried beans, lettuce salad, fish and cake. In 1985 the foods liked the most often were potatoes, chicken, beef, pie, green beans, fish, fruit, meat, lettuce salad and ice cream. Nine of the top eleven foods disliked in 1975 were vegetables, while eight of the top ten foods disliked in 1975 were vegetables. Items from the basic four food groups were chosen as 'good for you' the most frequently in both the 1975 and 1985 surveys.

41  NAL Call No: 389.8 J824
Changes in total body water with age.
Schoeller, D.A.
Language: English

Descriptors: Body water; Body composition; Laboratory methods; Physiology; Men; Women; Elderly

Abstract: Extensive cross-sectional studies demonstrate a diminution of total body water in elderly and very old subjects. These findings are supported by less extensive longitudinal studies. Cross-sectional studies indicate that the decrease in total body water is mainly due to decreased intracellular water, but this is not supported by the findings of longitudinal studies. Despite the observed changes in total body water, both animal and human studies indicate little or no change in the relationship between total body water and fat-free mass with aging.

42  NAL Call No: HD9001.F65
Charting the course of change: what to expect as the food industry nears the 21st century.
Language: English

Descriptors: Consumption patterns; Trends; Food production; Food preferences; Consumer preferences; Prediction

Abstract: Recent trends in food consumption patterns are discussed relevant to projections of anticipated changes in food production and marketing most likely to occur by the end of the century. It is anticipated that over the next few years convenience stores and frozen microwaveables will be among the biggest competitors, that middle-class consumers are more likely to purchase prepared foods at a food store than white-collar workers, that teenagers are beginning to take nutrition seriously, and that elderly preferences will be more strongly felt with the anticipated growth in the US elderly population. A listing of anticipated changes is included.(wz)
Nutrition and the Elderly

Abstract: This article reports the results of a study designed to assess the relation between mortality and total serum cholesterol in a group of elderly women. Mortality increased at both ends of the cholesterol distribution curve. The results suggest that cancer mortality does not account for the excess of deaths in elderly women with low cholesterol.

44 NAL Call No: RC952.A1G4
Cholesterol changes with aging: their nature and significance.
Kasim, S.
Language: English
Descriptors: Atherosclerosis; Aging; Cholesterol; High density lipoprotein; Triglycerides
Abstract: Total cholesterol has been directly correlated with the risk of coronary artery disease, while levels of high density lipoproteins have been shown to be inversely related with the disease. These relationships have been found, to a lesser extent, to occur in the elderly population as well. In general, plasma triglycerides, total cholesterol, and high density lipoproteins have been shown to increase progressively with age. Because data among studies vary, prudent management of cholesterol levels through proper diet, and appropriate medications, if necessary, are the suggested guidelines at this time.

45 NAL Call No: TX341.N836
Chromium and nicotinic acid in glucose tolerance.
Language: English
Descriptors: Chromium; Niacin; Glucose tolerance; Elderly nutrition; Nutrient-nutrient interactions
Abstract: A brief report discusses the findings of a recently reported dietary study that assessed the effect of a possible interaction between chromium (Cr) and nicotinic acid (NA) on glucose tolerance in healthy elderly subjects. The combination of Cr and Na, but not either individually, produced a significant 7% decrease in the fasting glucose level, suggesting that sufficient amounts of both are needed to achieve optimum glucose metabolism.
biological variance components. The upper 95th percentile for the difference between two yearly measurements, expressed as a percent of the population mean, ranged from 4% for Na+ to approximately 20% for total cholesterol and to greater than 90% for ferritin. Year-to-year differences attributable to the biological component ranged from a low of 2% of the population mean for Na+ to 70% for gamma-glutamyltransferase.

NAL Call No: TX341.C6
A closer look at the mature market.
Papa, A.
Nutrition week v. 17 (10): p. 4-5; charts; 1987 Mar 05.

Language: English

Descriptors: Eating habits; Eating out; Elderly; Restaurants; Consumption patterns; Consumer behavior; Food preferences

Abstract: A brief report discusses factors that influence the food consumption patterns of the US "mature" population, defined as age 55 and above. It is pointed out that: mature consumers have money to spend; have fewer serious health problems than previously because of advances in medical technology and increased awareness of diet and exercise; spending for restaurant meals by mature consumers has increased; and that mature consumers prefer family-style restaurants. It is also noted that most (90%) mature consumers feel that they are informed about health and nutrition. Data are shown that indicate that mature consumers frequent fast food and moderately priced restaurants about as often, with less attention (10-15%) to attending fine restaurants.

NAL Call No: TX341.J6
A college-based nutrition counseling service for homebound elderly persons.
Fishman, P.; Van Marrelo, C.; Arthur, E.

Language: English

Descriptors: New York; Nutrition education; Patient education; Home delivered meals; Diet counseling; Program evaluation

Abstract: A technical report discusses the design and implementation of a unique college-based nutrition counseling service for educating homebound elderly subjects. Attention is given to the special opportunities and challenges associated with this service, operated as an adjunct to New York City's Meals on Wheels program. The procedures and assessment tools for this service are described and illustrated, and selected findings of a pilot evaluation project are discussed.

NAL Call No: TX341.C6
Community-based care should stress nutrition.
Bartlett, B.J.

Language: English

Descriptors: Ohio; Nutrition programs; Community nutrition; Elderly nutrition; Home care; Home delivered meals; Elderly

Abstract: This article is an excerpt from the testimony by the Ohio Dietetic Association during a hearing before the Governor's Home and Community Care Council. The testimony emphasized that any program providing home care or community services to the elderly should include nutritional assessment and monitoring of nutritional status to ensure that nutritional needs are being met.

NAL Call No: QP141.A1N88
Comparative effects of linoleic acid and gamma-linolenic acid intake on plasma lipids and platelet phospholipids in elderly people.
Vericel, E.; Lagarde, M.; Mendy, F.; Courpron, P.; Dechavanne, M.

Language: English

Descriptors: Diet; Nutrient intake; Linoleic acid; Linolenic acid; Blood plasma; Lipids; Platelets; Phospholipids; Elderly

Abstract: Extract: It has been speculated that linoleic acid might be a precursor for platelet potentially anti-thrombotic polyunsaturated fatty acids like dihomo-gamma-linolenic acid. In elderly people, who are considered as a pre-thrombotic state, desaturation of linoleic acid may be diminished. To by-pass this rate limiting step, gamma-linolenic acid was given to elderly people and compared to linoleic acid with regard to the composition of plasma and platelet lipids. Sixteen old subjects took a daily supplement of 1 g of
linoleic acid plus 1 g of gamma-linolenic acid (primrose oil) or 2 g of linoleic acid (sunflower oil) for periods of two months in a cross over study. Increases in both dihomo-gamma-linolenic acid and arachidonic acid were noted in plasma lipids and platelet phospholipids after primrose oil supplementation. In contrast, sunflower oil did not induce such increases. Since dihomo-gamma-linolenic and arachidonic acid have opposite effects upon platelet functions, these findings could explain why primrose oil intake did not lead to any modification of platelet functions in elderly people. (author)


Language: English

Descriptors: Elderly nutrition; Supplemental feeding programs; Consumers; Food quality; Nutrition education; Health services

Abstract: Extract: Managers and participants in the Title III C meals program were surveyed to determine differences in perception of meal and service quality. Manager vs. participant response significantly differed for food temperature, special diet needs, nutrition education, transportation, and accuracy of posted menus. Examination of discrepancies uncovered in this way in conjunction with foodservice monitoring will eliminate biased views and allow administrators to plan and evaluate the program more effectively. (author)

A comprehensive nutrition case management system has been developed by nutritionists (R.D.s) and public health nurses with the San Bernardino County Public Health Department in California. The system consists of three major components: flowsheets for the infant, the child, the perinatal client, family planning, and the adolescent/adult/aging client; a manual that defines and describes nutrition assessment guidelines and interventions; and an appendix that includes resource/reference information. Distinct advantages and unique features of this system include the following: (a) decrease in charting time; (b) precise documentation; (c) a workable diagnostic tool for implementing nutrition interventions; (d) a standard for consistent, quality nutrition care; (e) computer adaptability; and (f) easy accessibility for quality assurance audits. (author)


Language: English

Descriptors: Massachusetts; Elderly nutrition; Nutrition programs; Computer applications; Questionnaires; Food service management; Health care; Home care; Hospitals; Dietitians

Abstract: The federally funded elderly nutrition program (ENP) began in 1972 under Title 7 of the Older Americans Act of that year. The program has as its primary mission the provision of food and nutrition services to persons 60 years old and older, targeting those in greatest social and economic need. This article reports the results of a questionnaire designed to describe to what extent ENPs make use of computer applications.


Language: English

Descriptors: Consumer preferences; Consumer behavior; Food preferences; Consumption patterns; Trends; Consumer protection

Abstract: A 1987 report of the Food Marketing In-
stitute identifies new patterns of consumer practices that have significant implications for food policy and nutrition programs, and for food marketing. Data are presented that indicate that: more elderly people than younger people are very concerned about the nutritional content of the food they eat; consumers rely mostly on themselves that the food they purchase are safe; consumers frequently select foods to balance their family's diet and serve nutritional needs; and that consumers are becoming increasingly concerned about the salt, mineral, and vitamin content of foods, and less concerned about sugar content. However, consumers are more concerned about each of these and other factors (fat and cholesterol content and the presence of preservatives and chemical additives) than they are about freshness, junk food, fiber content, and protein value. Issues that could lead to increased policy activism include: biotechnology, detection technology, preservation and packaging techniques, and new discoveries concerning relationships between diet and health and disease.(wz)

56  
NAL Call No: 389.8 F7398
Consumer reaction to flavor innovations.
Horton, H.W.
Based on a paper presented during the symposium, "Flavor trends and technologies," sponsored by the Chicago Section of the Institute of Food Technologists, March 9, 1987, Chicago, IL.  
Language: English

Descriptors: Flavorings; Consumer preferences; Food acceptability; Consumer behavior; Food industry; Food technology  
Abstract: A brief commentary discusses factors influencing consumer satisfaction with food flavors and how rapid responses can be made by the food industry to consumer comments and complaints. Attention is focused on: the results of a consumer flavor survey affirming that blandness is out and flavor variety is in; the growth of consumer sophistication and experience, and how it affects food taste preferences; consumer health and fitness concerns; how manufacturers can keep abreast of changing consumer demands; guidelines for marketing the elderly and younger populations; and the influence of consumer nutrition education. The importance of the consumer's role in defining future trends for developing and marketing of new flavors also is discussed.(wz)

57  
NAL Call No: 449.9 AM3J
Continuance of elderly on home-delivered meals programs.
Frongillo, E.A. Jr; Williamson, D.F.; Roc, D.A.; Scholes, J.E.
Language: English

Descriptors: New York; Elderly nutrition; Home delivered meals; Supplemental feeding programs; Participation; Patient compliance; Surveys  
Abstract: Extract: Data from 2,002 elderly receiving home-delivered meals in 23 counties of New York State in 1984-85 were analyzed using a baseline survey and a six-month follow-up survey. Survival analysis estimated that 37.4 per cent of the clients left the program by the follow-up. The initial dropout rate was estimated to be 14.2 per cent per month; by six months the rate fell to 3.3 per cent. Whites left the program at a rate 2.6 times (95% CI = 1.9, 3.8) that of minorities. Recent discharge from hospital was associated with the highest relative probability of program discontinuance (2.7, 95% CI = 2.2, 3.4), followed by having cancer (2.1, 95% CI = 1.6, 2.8), and having a non-hip fracture (2.0, 95% CI = 1.3, 2.9). Many of those with cancer died, while those recently discharged and those with non-hip fractures were more likely to leave the program because they were again able to cook for themselves.(author)

58  
NAL Call No: RM222.5.N87
The cost of home total parenteral nutrition.
Baptista, R.J.; Blackburn, G.L.; Champagne, C.D.; Miller, D.G.; Bistrian, B.R.
Baltimore, Md. : Williams & Wilkins ; ; 1987 Feb.
Language: English

Descriptors: Parenteral feeding; Elderly; Costs  
Abstract: A survey assessed the differences in charges among 6 multiple home care vendors for hypothetical home total parenteral feeding and intravenous hydration patients. Comparisons of charges for self-mixed vs. pre-mixed solutions for
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Each of these therapies also was assessed. The cost estimates for self- and pre-mixed solutions for 2 different formulas are presented in detailed tables. Considerable variation was observed in the annual cost estimates among the vendors.

**Determination of zinc and copper absorption at three dietary Zn-Cu ratios by using stable isotope methods in young adult and elderly subjects.**

August, D.; Janghorbani, M.; Young, V.R.

Mysore: Association of Food Scientists and Technologists; 1989 Dec.


Language: English

Descriptors: Zinc; Copper, Intestinal absorption; Nutrient intake; Ratios; Stable isotopes; Young adults; Elderly; Men; Women

Abstract: Nine young men and six elderly men and women ingested low-zinc, low-copper, and adequate diets for 2-wk periods. The Zn-Cu ratios averaged 2:1, 15:1, and 5:1. On day 8 of each period, subjects ingested doses of $^{70}$Zn and $^{65}$Cu so that net absorption could be determined. Zn absorption on the adequate diet was 39 +/− 3% (average ± SEM) in young subjects and 21 +/− 1% (p less than 0.05) in the elderly subjects. During the low-Zn period, Zn absorption was higher as compared with that on the adequate diet in both young (64 +/− 5%, p less than 0.05) and elderly subjects (43 +/− 7%, p less than 0.05). Cu absorption on the adequate diet was 60 +/− 4% and 53 +/− 2% in young and elderly subjects, respectively. During the low-Cu period, Cu absorption was higher as compared with that on the adequate diet in the elderly subjects (67 +/− 4%, p less than 0.05). Cu absorption was higher in six of seven young subjects on the restricted Cu diet (p greater than 0.05). The effect upon absorption of the change in the Zn-Cu ratio was less than the effect of dietary restriction.

**Developing a continuum of community nutrition services: Massachusetts elderly nutrition programs.**

Balsam, A.; Osteraas, G.


Language: English

Descriptors: Massachusetts; Elderly nutrition; Supplemental feeding programs; Federal programs; Program effectiveness; Nutrient requirements; Reports; Nutritional support; Community feeding centers

Abstract: A detailed report discusses the costs, characteristics, and effectiveness of elderly nutrition programs in Massachusetts. Specific attention is given to: the functioning and effectiveness of these programs for providing nutritional support for ambulatory elderly subjects having the greatest economic and social needs; serving the frail elderly; the benefits and effectiveness of luncheon clubs; requirements in addition to provision of "meals on wheels"; and the importance of nutrition and health education for elderly subjects. Special attention also is given to the cost of such programs, including meal costs and a breakdown of state nutrition program expenditures according to the diversification of income from federal and state programs and from donations.

**Development and testing of a statistical and graphics-enhanced nutrient analysis program.**

Manore, M.M.; Vaughan, L.A.; Lehman, W.

Chicago, Ill.: The Association; 1989 Feb.


Language: English

Descriptors: Nutrient contents; Computer software; Computer graphics; Nutrient data banks; Diet study techniques

Abstract: The authors have developed and tested a nutrient analysis program that will compute and present graphically summary statistics of population and population subgroup nutrient intakes. The program analyzes for 44 nutrients from 5,800 separate foods. Capabilities of the program include: storage of large numbers of diet records and evaluations of their nutrient contents; calculation of nutrient means and standard deviations; data sorting based on subject characteristics, such as age, sex, and supplement use; and generation of bar graphs and line plots for individual and/or group data. To test this computerized nutrient analysis program, two sets of 3-day diet records from 200 elderly individuals were analyzed. The program was then used to generate means, differences between means, and distribution frequencies of designated nutrients for various population subgroups (e.g., men greater than or equal to 65 years vs. men...
greater than or equal to 80 years) as well as comparisons with individual files (e.g., Mr. Smith vs. all men greater or equal to 65 years). The statistical and graphics capabilities also function within the context of recipe analysis and menu planning, which enhances the application of this program in institutional and community nutrition settings.

62 NAL Call No: 389.8 J824
Development of a diet history questionnaire for studies of older persons.
Hankin, J.H.

Language: English

Descriptors: Elderly nutrition; Dietary history; Questionnaires; Research methodology; Data collection

Abstract: This paper describes the criteria of a simplified diet history method and the procedures for developing a dietary questionnaire for studies of older persons. Suggestions are included on selecting food items representative of the population's dietary patterns, designing objective methods to estimate quantitative and frequency intakes of food items, and collecting information on other dietary practices. Potential problems in dietary surveys among older persons are discussed, along with their prevention or alleviation.

63 NAL Call No: 389.8 N953
Diet and maintenance of mental health in the elderly.
Hodkinson, H.M.

Language: English

Descriptors: Mental health; Diet; Elderly; Neurotransmitters; Metabolism; Depression

Abstract: A brief report discusses the role of diet in maintaining mental health in old age. Topics include: dietary nutrients that serve as neurotransmitter precursors; nutrients that affect neurotransmitter metabolism and general brain metabolism; and the effect of changes in the intake of nutrients on the development of confusional states of mind. Information gaps requiring further research study also are discussed.

64 NAL Call No: S22.C6
Diet and senile dementia.

Language: English

Descriptors: Senility; Alzheimer's disease; Nutrient deficiencies; Choline; Nutrient excesses; Aluminum; Elderly

Abstract: A brief task force report discusses 2 dietary factors that may be related to the etiology and prevention of the type of senile dementia known as Alzheimer's disease, viz.: inadequate intakes of choline; and excessive intakes of aluminum (Al). Data on excessive Al intakes from autacids and analgesics relative to typically safe dietary intakes of Al are included. It is emphasized that evidence relating diet to the incidence or treatment of Alzheimer's disease is very limited.

65 NAL Call No: 389.8 N953
Diet, exercise, and chronic disease patterns in older adults.
Smith, E.L.; Smith, P.E.; Gilligan, C.

Language: English

Descriptors: Cardiovascular diseases; Diabetes; Osteoporosis; Aging; Diet; Exercise; Disease prevention

Abstract: A technical review considers the role of physical activity and diet in elderly subjects in maintaining the cardiovascular system, in lipid metabolism, in adult-onset diabetes, and in the skeletal system. Particular attention is given to changes in cardiovascular function during aging; plasma lipoproteins; glucose tolerance; osteoporosis; dietary considerations; and the effects of inactivity and physical activity. It is concluded that diet and exercise are being related increasingly to the prevention/delay of diabetes, atherosclerosis, and osteoporosis onset during aging.

66 NAL Call No: QP751.D53
Dietary fat requirements in health and development.
Beare-Rogers, Joyce
Champaign, Ill. : American Oil Chemists Society;
Nutrition and the Elderly

v, 206 p. : ill. ; 24 cm. includes bibliographies.

Language: English

Descriptors: Lipids in human nutrition; Fat; Fat metabolism; Dietary fat; Nutrition; Fatty acids

Abstract: This publication is a collection of works on fat requirements in development and health. The role of fats during human development and throughout a lifespan are discussed. Topics include: suitable fat foundations for infant feeding; lipid digestion in the developing infant; fat effects on fatty acids α in cholesterol metabolism in animal experiments; the biochemistry and role of (n-3) fatty acids in the brain and retina; dietary factors in immune responsiveness; aging and nutritional requirements of essential fatty acids; and challenges for lipid nutritionists.

67 NAL Call No: RC682.37
Dietary fats and the aging adult.
Willcox, K.K.; Lei, K.Y.

Language: English

Descriptors: Source fat; Cardiovascular diseases, Elderly nutrition; Food and nutrition controversies; Risks; Lipid metabolism; Aging; Reviews

Abstract: A technical review focuses on dietary fat consumption by Americans, with particular emphasis on elderly intakes. The review addresses the association between dietary fat and cardiovascular disease (CVD), as well as age-related changes in dietary fat metabolism. It is emphasized that the type of fat ingested appears to be equally as important as the quantity of fat consumed with respect to hyperlipidemia, atherosclerosis, and heart disease risk. It is concluded that conflicting opinions on the role of fats in CVD make the diet-heart hypothesis a controversial issue.

68 NAL Call No: 389.8 AM34
Dietary habits, weight history, and vitamin supplement use in elderly osteoarthritis patients.
White-O'Connor, B.; Sobal, J.; Muncie, C.L. Jr

Language: English

Descriptors: Arthritis; Cartilage; Food consumption; Food groups; Physical activity; Weight gain; Weight losses

Abstract: Osteoarthritis is a chronic disabling disease in the elderly, but few studies have examined nutritional parameters of osteoarthritis patients. For 82 ambulatory elderly osteoarthritis patients, a registered dietitian assessed the following: consumption of 72 food items, using a food-frequency questionnaire; weight history, by measuring current weight and asking the weight at age 20, maximum adult weight, and minimum adult weight; dietary habits; and vitamin supplement consumption. Joint pain and activities of daily living (ADL) were assessed by a physician. On the basis of the four Food Group guidelines, dietary intakes were suboptimal in the dairy and grain groups, which are important sources of calcium, vitamin D, thiamin, iron, and riboflavin. Eighty percent of the sample were obese (BMI greater than or equal to 27). The average weight change since early adulthood was a gain of 59 lb. Current joint pain and ADL restrictions were not related to obesity or weight gain. Vitamin/mineral supplements were consumed by 37% of the sample.

69 NAL Call No: TX341.C6
Dietary info. lacking for elderly Americans.
McGandy, R.B.

Language: English

Descriptors. USA; Elderly nutrition; Food and nutrition controversies; Nutritional state; Nutrient requirements; Supplemental feeding programs; Income

Abstract: Two papers presented at a 1986 USDA conference argue the need for further studies to assess and quantify dietary information concerning the US elderly. The first paper addressed various factors influencing the quality of elderly diets; the second paper compared income trends between the young and the elderly and discussed the effect of change in the economy and future income prospects. (mjs)

70 NAL Call No: 389.8 J824
Dietary intakes and biochemical indicators of nutritional status in an elderly, institutionalized population.
Sahyoun, N.R.; Otradovec, C.L.; Hartz, S.C.; Jacob, R.A.; Peters, H.; Russell, R.M.; McGandy,
Quick Bibliography Series


Language: English
Descriptors: Nutritional state; Elderly; Nutrient intake; Anthropometric dimensions; Nutritional assessment
Abstract: Extract: A dietary and biochemical assessment of the nutritional status of 260 elderly men and women, 60-101 y (average 80.5 y), was conducted in 15 long-term-care facilities in the Boston area. Subjects were free of clinically apparent terminal or wasting illness. Nutrient intakes were comparable to those in a simultaneously studied free-living population as were most biochemical markers of nutrient status. Although no specific nutrient deficiencies were identified, blood levels of vitamin A and retinol-binding protein in males and of zinc in both sexes were lower in this institutionalized group than in the free-living subjects. Hematologic indices, albumin, prealbumin, and transferrin levels were also lower than in non-institutionalized elderly populations. These differences may reflect the greater prevalence of chronic diseases and medication use in a long-term-care population. However, there is no evidence that institutionalization in itself leads to impairment of nutritional status.(author)

71 NAL Call No: 389.8 F7332 Dietary patterns and nutritional status of low income, free-living elderly.
Vaughan, L.A.; Manore, M.M.

Language: English
Descriptors: Nutritional state; Nutrient intake; Vitamin And mineral supplements; Poultry meat; Fish; Nutritional assessment; Low income groups; Elderly
Abstract: The U.S. population is rapidly aging, and the proportion of elderly anc very elderly Americans continues to increase. Inadequate dietary intakes and low nutritional status have been identified within elderly populations. Research suggests the elderly are at risk for inadequate consumption of dietary vitamin B-6, folacin and zinc; vitamin B-12 and iron are rarely a problem. Biochemical data indicate vitamin B-6 status is frequently low in the elderly, while folacin and vitamin B-12 status is generally adequate. Iron status indices in the elderly are more difficult to interpret, but suggest a marginal adequacy. The nutritional status of the elderly can be influenced by their dietary patterns, supplementation practices, medication use and state of health.

72 NAL Call No: 448.8 N442 Dietary potassium and stroke-associated mortality.
Khaw, K.T.; Barrett-Connor, E.

Language: English
Descriptors: Diet; Stroke; Potassium; Mortality; Hypertension; Longitudinal studies
Abstract: A study using data from a 12-year longitudinal, regional study of 859 middle-aged to elderly subjects (ages 50-79) tested the hypothesis that a high dietary potassium (K) intake reduces stroke incidence. Statistical analysis of K intake data indicated that risk of stroke-related mortality was reduced by 40 per cent by an increase in K intake of 10 mmol/day. This effect appeared to be unaffected by accepted cardiovascular disease risk factors (e.g., age, sex, blood pressure level, obesity, cigarette smoking, blood glucose level) and other dietary intakes (total energy, fat, protein, fiber, alcohol, Ca, Mg). The results supported the hypothesis that increased K intakes protect against stroke-related mortality.(wz)

73 NAL Call No: 389.8 J82 Dietary restriction and aging historical phases, mechanisms and current directions.
Walford,R L.; Harris, S.B.; Weindruch, R.

Language: English
Descriptors: Calorie-restricted diets; Aging; Health promotion; Longevity; Mocals; Animal experiments
Abstract: A technical overview discusses the historical justification of energy intake restriction (EIR),
Nutrition and the Elderly

in the absence of essential nutrient deficiencies, for retarding aging and disease susceptibility and extending life span, the potential mechanisms involved, and current research directions aimed at improving the understanding of this effect. Potential mechanisms involved in this effect may include effects on the immune defense system, cell proliferation potential, metabolic rate, DNA repair, protein biosynthesis/turnover, and a control of free radical scavengers. The utility of the EIR model for examining single vs. multiple factorial theories of aging also is discussed.

74 NAL Call No: R31.B55
Dietary salt affects biochemical markers of resorption and formation of bone in elderly women.
McParland, B.E.; Goulding, A.; Campbell, A.J.
Language: English
Descriptors: Sodium chloride; Intake; Diet; C-amp; Hydroxyproline; Vitamin D; Bone resorption; Elderly; Women
Abstract: High dietary intakes of sodium chloride increase calcium and are considered a risk factor for osteoporosis. We investigated the short term effects of salt intakes of 70 and 170 mmol/day on variables of resorption of bone (urinary hydroxyproline excretion) and formation of bone (serum osteocalcin concentration) in elderly women.

75 NAL Call No: 389.8 AM34
Dietary status of Seventh-Day Adventist vegetarian and non-vegetarian elderly women.
Chicago, Ill.: The Association; 1989 Dec.
Language: English
Descriptors: Nutrient intake; Vegetarianism; Nutritio surveys; Food preferences; Elderly; Women
Abstract: The purpose of this study was to investigate nutrient intakes of Seventh-Day Adventist elderly women who were similar in many demographic and life-style factors except for choice of diet. Twenty-three vegetarian and 14 non-vegetarian elderly women (mean +/- standard error ages 72.2 +/- 1.3 and 71.1 +/- 1.4 years, respectively) were recruited on the basis of several selection criteria, including race, religion, education, geographic area, Quetelet index, self-reported absence of major chronic disease and use of medications, and physical activity. Average years +/- SE of adherence to dietary regimens were 47.0 +/- 2.9 and 71.2 +/- 1.4 in the vegetarian and non-vegetarian groups, respectively. Results from analysis of 7-day food records showed that vegetarians consumed significantly less cholesterol, saturated fatty acids, and caffeine but more carbohydrate, dietary fiber, magnesium, vitamins E and A, thiamin, pantothenic acid, copper, and manganese than non-vegetarians (p less than .05). On the basis of group means, 67% of the Recommended Dietary Allowance was met for all nutrients except zinc and vitamin D in both groups, and vitamins E-6, folacin, and vitamin E in the non-vegetarians. Compared with non-vegetarians, vegetarians had significantly lower serum glucose (5.18 +/- 0.11 vs. 4.65 +/- 0.09 mmol/L), low-density-lipoprotein cholesterol (4.08 +/- 0.25 vs. 3.34 +/- 0.19 mmol/L), and total cholesterol levels (6.46 +/- 0.27 vs. 5.62 +/- 0.21 mmol/L) (p less than .05). In summary, when healthy elderly vegetarian women were compared with closely matched non-vegetarian peers, the vegetarian diet was associated with improved nutrient intake and associated reductions in blood glucose and lipid levels.

76 NAL Call No: QP14LA1N88
Dietary survey of a large random sample of elderly people: energy and nutrient intakes.
Horwath, C.C.
Language: English
Descriptors: South australia; Nutrient intake; Caloric intake; Dietary surveys; Food consumption; Protein intake; Dietary carbohydrates; Fat consumption; Vitamins; Minerals; Food fiber; Elderly; Men; Women
Abstract: The average daily intakes of energy and nutrients were estimated in a randomly selected group of 2195 people aged 65 years and over residing in Adelaide, South Australia, by mean of a semi-quantitative food frequency questionnaire. Mean intakes for most nutrients were equal to or above the recommended intakes. The proportion of people with intakes below two-thirds of the
RDA, however, was highest for folate, calcium, magnesium, copper, and zinc, and varied from approximately 10 to 35 per cent of the total group. Comparisons with the results of other large surveys of noninstitutionalized elderly people in Boston and Gothenburg, Sweden, showed some variation in total intakes, but many similarities in patterns of nutrient density and those nutrients least adequately supplied.

77 NAL Call No: 389.8 F7332
The dining environment and food intake of the elderly in long-term care.
Doyle, B.
Language: English
Descriptors: Food intake; Long term care; Malnutrition; Dining facilities; Food serving methods; Interior design; Physical environment; Sensory disorders; Elderly
Abstract: Appropriate environmental adaptations in long-term care dining settings can improve the ongoing nutrient intake of the older resident. Improvement in intake not only improves overall nutritional status but also makes mealtime an anticipated and positive "dining experience," rather than just a time to consume food.

78 NAL Call No: 389.8 J824
Discriminant biochemical markers for evaluating the nutritional status of elderly patients in long-term care.
Kergoat, M.J.; Lerclerc, B.S.; PetitClerc, C.; Imbach, A.
Language: English
Descriptors: Elderly nutrition; Nutritional state; Nutritional assessment; Patient care; Carotenes; Creatinine; Malnutrition; Anthropometric dimensions; Diagnosis
Abstract: Extract: To determine the most discriminant serum markers of protein-energy status in elderly patients, we performed a discriminant analysis of 85 subjects grouped according to triceps skinfold and midarm circumference values as compared with reference percentiles. Results indicated that neither the classic serum indices of nutritional assessment nor retinol-binding protein can predict undernutrition. However, creatinine, urea, carotene, complement C3, and prealbumin included in a function enabled high discrimination between groups: 68% of subjects in 0-5th percentile for triceps skinfold and 75% of subjects in 0-5th percentile for midarm circumference are correctly predicted. Lower serum concentration was found in the lower anthropometric percentiles except for serum carotene, which showed an inverse relation not explained by diet. We found that nutritional alterations exist in hospitalized elderly patients. We emphasize the importance of considering several biochemical markers for detection of malnutrition and the pertinence of further exploration of serum carotene profiles in undernourished elderly patients.(author)

79 NAL Call No: HQ1060.J68
Does nutrition affect surgical outcome?
Cooper, J.K.
Language: English
Descriptors: Supplements; Malnutrition; Surgery; Nutritional state
Abstract: A review article addresses the question of whether a higher nutritional status is associated with an improved surgical outcome in elderly patients, concluding that it is difficult to diagnose protein malnutrition in the elderly due to lack of well-defined norms and anthropometric characteristics change with age in a non-predictable variable way. It also is pointed out that while low serum albumin have been correlated with poor surgical outcome and nutritional supplements can reverse some nutritional deficiencies, the value of supplementation to elderly surgery candidates who are not severely malnourished is unproven and the benefits of nutritional intervention must be weighed against costs of delayed surgery and hospital stay.(wz)

80 NAL Call No: aHD9001.N275
Domestic food programs: an update.
Matsumoto, M.
National food review NFR - United States Department of Agriculture, Economic Research Ser-
Nutrition and the Elderly


Language: English

Descriptors: USA; Supplemental feeding programs; Federal programs; Food stamp program; School lunches; Elderly nutrition; Program participants; Costs; Trends

Abstract: A technical report compares food program participation and costs for January-March 1987 with the same period for 1986. Summary data and findings are presented and discussed concerning the US Food Stamp Program, child nutrition programs (National School Lunch Program; School Breakfast Program; Child Care Food Program; Special Milk Program), supplemental food programs (WIC; the Commodity Supplemental Food Program; Elderly Feeding Pilot Project), and food distribution programs (Food Distribution Program on Indian Reservations; Nutrition Program for the Elderly; Temporary Emergency Food Assistance Program). Data for 1985 also are included.

81 NAL Call No: 389.8 J824
Dose-response relationships regarding vitamin B-6 in elderly people: a nationwide nutritional survey (Dutch Nutritional Surveillance System).
Lowik, M.R.H.; Berg, H. van den; Westenbrink, S.; Wedel, M.; Schrijver, J.; Ockhuizen, T.

Language: English

Descriptors: Netherlands; Pyridoxine; Nutrient intake; National surveys; Nutritional state; Vitamin supplements; Food intake; Elderly; Men; Women

Abstract: The dietary intake and biochemical status of vitamin B-6 in 476 apparently healthy Dutch elderly people (aged 65-79 y), who were not using drugs known to affect vitamin B-6 metabolism, were evaluated. Intake of vitamin B-6 per gram protein was related to biochemical data, namely plasma pyridoxal 5'-phosphate (PLP) and cofactor stimulation of aspartate aminotransferase in erythrocytes (AST-AC). Based on a cutoff point of 2.02 for AST-AC, approximately 9% of the elderly people not using vitamin B-6 supplements had a marginal vitamin B-6 status. About 7% were using vitamin B-6 supplements. Dietary intake of vitamin B-6 per gram protein was negatively related to AST-AC. Vitamin B-6 intakes per gram protein higher than 0.020 mg were necessary to ensure an AST-AC value less than 2.02. At high PLP values AST-AC hardly varied. The results seem to indicate a higher requirement of vitamin B-6 in elderly people than in younger adults.

82 NAL Call No: RM302.D76
Drug and nutrient interactions in elderly cardiac patients.
Roe, D.A.

Language: English

Descriptors: Cardiovascular diseases; Drug therapy; Nutrient-drug interactions; Diuretics; Hypertension; Wheat bran; Potassium deficiency; Digoxin; Purgatives; Elderly

Abstract: In the elderly, drug treatment is used for the prevention and control of cardiovascular disease. Prevention of cardiovascular disease includes management of hypercholesterolemia to reduce the risk of myocardial infarction, treatment of acute myocardial infarction to reduce the risk of recurrence, and treatment of hypertension to reduce the risk of hypertensive heart disease and stroke. Management of chronic cardiovascular disease with permanent disability is the major therapeutic goal. The most commonly treated disorders of the heart and peripheral vascular system include congestive heart failure, arrhythmias, angina, and thromboses. Reduction of plasma lipid levels may be undertaken by drug therapy as a means of preventing myocardial infarction.

83 NAL Call No: RM302.D76
Drug and nutrient interactions in the elderly diabetic.
Roe, D.A.

Language: English

Descriptors: Diabetes; Nutrient-drug interactions; Drug combinations; Nutrient deficiencies; Hypoglycemia; Hyperglycemia; Appetite; Weight gain; Elderly

Abstract: Elderly diabetics take more drugs than other groups of elderly patients. Their multiple drug use is largely explained by the drugs that they take for complications of their primary disease;
these include cardiovascular drugs for macrovascular disease and antibiotics for secondary infections. They also take more drugs for control of other conditions that are etiologically associated with the development and progression of their diabetes, including antihypertensive agents, antilipemic agents and steroids, and nonsteroidal antiinflammatory drugs (NSAIDs), which are taken for relief of joint pain that is intensified by arthritic joints bearing excess weight. Drugs taken by elderly diabetics that contribute to the high prevalence of drug-nutrient interactions include those taken as antidiabetic agents, including both insulin and sulfonylureas as well as calcium channel blockers; they also include thiazides, loop diuretics, sulfa drugs, cephalosporin antibiotics, tetracyclines, antifungal agents, cholestyramine and colestipol, niacin, prednisone and other corticosteroids, and NSAIDs. These drugs and drug combinations contribute to the risk of hyperglycemia, which can cause nonketotic hyperglycemia in the elderly; to the risk of hypoglycemia, which in the elderly carries the risk of inducing pseudo-stroke; to the risk of drug-induced nutritional deficiencies from antilipemics and cephalosporins, which can induce vitamin K deficiency; to the risk of acute incompatibility reactions, including flush reactions from chlorpropamide, niacin, and calcium channel blockers; and to the risk of edema, anemia, and hyperkalemia from NSAIDs. The risk of these adverse outcomes can be minimized by carefully pruning drug lists, by discontinuing medications when they are no longer needed, by monitoring drug times relative to meal times, and by monitoring the electrolyte levels, blood count, and nutrient levels in elderly diabetics. Promoting abstinence also serves to reduce risk.

Abstract: An audio cassette tape and an accompanying study guide provides basic information and guidelines to aid dietitians in understanding and minimizing drug-nutrient interactions in clinical settings in particular patient groups and in individual elderly patients and other patients taking medication, and to provide dietitians with advice on appropriate intervention. The cassette tape covers: definitions of drug-nutrient interactions; the classification of such interactions by adverse effects and by risk level; specific examples of drug-nutrient interactions; guidelines for controlling common drug-nutrient interactions in elderly patients, diabetics, and elderly patients with neurological or mental health problems (as well as for situations involving development disorders and anorexia in children and problems elderly patients face from over-the counter drugs and the mass media); information on foods, formulas, and diets that reduce the effectiveness of prescribed drugs (including dietary changes, dietary factors, and the use of nasogastric tubes); and advice concerning the monitoring of drug-nutrient interactions for their control. The accompanying study guide provides tabular summaries of specific food-drug incompatibilities, the chemical and brand names of various drugs, factors that influence drug absorption, and information on the type of nutrient interaction and its risk for drugs used for infants through the elderly.

85 NAL Call No: TX341.N836
Drug-induced malnutrition in the geriatric patient.
Blumberg, J.B.
Includes 5 references.

Language: English

Descriptors: Elderly nutrition; Nutrient-drug interactions; Patient care; Guidelines

Abstract: A brief technical review highlights the effects of prescribed drugs on nutritional status and the effect of nutrient intake on the effectiveness of such medications in elderly patients. Specific attention is given to: alterations of food intake by drugs that influence appetite, taste, and smell, including their effect on nutrient absorption, and on nutrient metabolism and excretion. Practical guidelines for reducing the risk of drug-induced malnutrition risk in the elderly are included.(wz)
Nutrition and the Elderly

Eating for your 80s.

Liebman, B.; Davis, R.

Language: English

Descriptors: Elderly nutrition; Exercise; Health promotion; Aging; Guidelines

Abstract: A report for aging people discusses how dietary modifications (including the use of the Pritikin diet) and exercise can be used to promote and extend a sound health status into their 80's. A number of examples and guidelines are given. Specific attention is given to: methods for unclogging arteries; the positive effects of exercise; increasing fiber intakes; reduction of diabetes; the use of sensible vitamin-mineral supplements; the dual need for both calcium and vitamin D; and unrealistic RDA's. Practical suggestions for elderly people are included.

Eating the low fat way a nutrition program for older adults, with home and quantity-size recipes.

Philadelphia Health Management Corporation, Thomas Jefferson University, Dept. of Geropsychiatry
139 p.; 28 cm. "The nutrition program described...is part of a larger project, "Exercise and Nutrition Program for the Elderly", which was developed by the Philadelphia Health Management Corporation and Thomas Jefferson University, Department of Geropsychiatry."--Pref. Bibliography: p. 137-139.

Language: English

Descriptors: Low-fat diet--Recipes; Aged--Nutrition; Popular works; Elderly; Nutrition programs

Abstract: This manual describes a nutrition program for the elderly. This program is part of a larger project: "Exercise and Nutrition Program for the Elderly" developed by Thomas Jefferson University's Dept. of Geropsychiatry and the Philadelphia Health Management Corporation. It is intended to alleviate or improve some of the health problems associated with aging and to improve the functional ability and independence of residents in nursing homes. This nutrition program recommends changes in eating habits and includes: nutritional guidelines for changing eating habits; and how to reduce sodium in the diet. Recipes, references, appendices, illustrations, and a glossary are included.

Eating well when you just can't eat the way you used to.

Wilson, Jane Weston; Karas, G. Brian

Language: English

Descriptors: Cookery; Aged--Nutrition; Recipes; Dietary guidelines; Elderly nutrition

Abstract: This text is a guide to eating and living well for those who are fifty and over. The aim of this book is to show how to feast every day (but lightly), how to entertain often, how to splurge on occasion; and how to do it all in a healthy way. Food shopping, a philosophy of eating, suggested menus, food preparation and a large section of recipes are included.

Education, training, and development of the older worker.

DeMicco, F.J.
Englewood, Colo.: American School Food Service Association; 1988.

Language: English

Descriptors: School food service; Personnel; Training; Demography; Aging; Labor force; Employer employee relationships; Attitudes; Elderly

Abstract: Demographic trends will have a significant impact on the food service labor force. With fewer teenagers available, the commercial sector (that is, fast food restaurants) is experiencing acute labor shortages. This trend will impact the institutional sector (that is, school food services) as commercial and institutional employers compete for a similar labor pool. The older worker will be a valuable resource in light of a shrinking labor pool and increased competition. Stereotypes regarding the training, education, and development of older workers are pervasive. To achieve financial success in their food service operations, employee training, education, and development programs are necessary. Therefore, managers will have to overcome
stereotype barriers and develop effective training and educational programs for older employees. This paper examines the age-related stereotypes regarding education, training, and development of the older worker.

90 NAL Call No: 389.8 AM34
Effect of household size on nutritional patterns among the Dutch elderly.

Language: English

Descriptors: Netherlands; Nutritional state; Food consumption; Nutrition surveys; Eating patterns; Risks; Family size; Households
Abstract: Elderly persons are vulnerable to nutritional risks. Factors such as living alone make the elderly prone to poor nutritional status as a result of inadequate diets. The results of a Dutch national nutrition survey of food consumption and nutritional status among 539 independently living, apparently healthy elderly persons, aged 65 to 79 years, show that in general the intake of macronutrients deviates from the Dutch recommendations. In particular, saturated fat intake and P:S ratio were unfavorable, especially for the solitary elderly persons (saturated fat intake 19.0 +/- 3.2% and 17.7 +/- 3.3% total energy for men and women, respectively). Except for vitamin B-6 (about 92% of the recommendation on a group level for men and 78% for women), the intake of micronutrients studied is considered to be adequate. Elderly women living alone had a higher calcium:phosphorus ratio (0.76 +/- 0.12), lower meat consumption (90 +/- 31 gm), and a lower mean HDL-cholesterol concentration (1.22 +/- 0.28 mmol/L) in serum than non-solitary elderly women (Ca:P ratio 0.73 +/- 0.12, meat consumption 100 +/- 36 gm, HDL-cholesterol concentration 1.45 +/- 0.38 mmol/L). Potatoes, vegetables, and meat were more often prepared for more than one day at a time by elderly persons living alone than by the non-solitary elderly.

91 NAL Call No: RC620.A1N8
Effect of vitamin E supplement intake on HDL and total cholesterol in the elderly.


Language: English

Descriptors: Vitamin E; Elderly nutrition; Vitamin supplements; High density lipoprotein; Cholesterol
Abstract: Extract: The relationships of vitamin E supplement use with plasma HDL cholesterol (HDL-C) and total cholesterol (T-C) were examined in 252 males and 465 females, age 60 to 98 years. The relative difference between those subjects consuming greater than or equal to 10 times the recommended dietary allowances (RDA) for vitamin E from supplements and those consuming less than the RDA from supplements was 3% for HDL-C and 2% for T-C. Neither of these differences was statistically significant (p greater than 0.05). The results suggest that vitamin E intake does not influence HDL-C or T-C. The present study, because of the large sample size, overcomes the problem of low statistical power to detect small, but clinically important, differences in cholesterol levels between those with high and low vitamin E intakes. (author)

92 NAL Call No: TX361.A3J63
Effect of zinc supplementation on the development of cardiovascular disease in the elderly.
Hale, W.E.; May, F.E.; Thomas, R.G.; Moore, M.T.; Stewart, R.B.

Language: English

Descriptors: Zinc; Mineral supplements; Surveys; Risks; Cardiovascular diseases; Elderly
Abstract: Supplemental zinc intake by an ambulatory elderly population was examined. Health questionnaire, electrocardiogram, laboratory, and medication use data from a geriatric health screening program were compared for 69 participants who were taking zinc supplements and 1,832 participants who were not taking zinc supplements during 1985. A major purpose of this study was to evaluate whether ingestion of zinc supplements by elderly persons is a risk factor for development of cardiovascular disease. No association between zinc supplementation and increased risk of developing cardiovascular disease was found for the indices examined. More information is needed to
resolve the question of whether or not zinc supplementation is a risk factor for the development of cardiovascular disease. It is important that elderly persons be provided information to evaluate the possible risk versus benefit of taking zinc supplements.

93 NAL Call No: RM214.T66
Effective nutrition education for older adults.
Fanelli, M.T.

Language: English

Descriptors: Nutrition education; Elderly; Test construction; Teaching methods
Abstract: The special needs of the older adult learner are discussed. A test to examine the educational needs of the adult is described and instructional methods to reach the older learner are recommended.

94 NAL Call No: TX341.J6
The effectiveness of a television quiz show in providing nutrition information to the elderly.
Goldberg, J.P.; Gershoff, S.N.; McGandy, R.B.; Hartz, S.C.
Baltimore, Md.: Williams & Wilkins; 1989 Apr.

Language: English

Descriptors: Nutrition education; Nutrition information; Television; Games; Program evaluation; Elderly
Abstract: This paper describes a television quiz show designed to convey information to the elderly, and provides data on the show's effectiveness.

95 NAL Call No: TX341.C6
Elderly face special nutrition, food problems.

Language: English

Descriptors: USA; Elderly nutrition; Malnutrition; Socioeconomic status; Nutrient requirements; Health services
Abstract: Excerpts are provided from a position paper and technical support paper issued by the American Dietetic Association on nutrition, aging, and the continuum of health care. Noting and emphasizing the special food and nutrition problems faced by the US elderly. Special attention is given to nutritional problems of the elderly caused by disease complications, loss of teeth, socioeconomic factors, changes in nutrient requirements for health promotion, and the inadequacy of health care.(wz)

96 NAL Call No: 389.8 B773
Thomas, A.J.; Bunker, V.W.; Hinks, L.J.; Sodha, N.; Mullee, M.A.; Clayton, B.E.

Language: English

Descriptors: United Kingdom; Elderly; Protein intake; Energy intake; Zinc; Copper; Nutritional state; Recommended dietary intakes
Abstract: Extract: Duplicate diet analysis for energy, protein, zinc and copper with estimates of biochemical status for Zn and Cu were undertaken in twenty-one elderly long-stay inpatients (mean age 82 (range 63-89) years) consuming their customary hospital diet and in a stable medical condition. Fourteen patients had a long standing and significant healing problem, either ulcer or pressure sore. Mean daily intakes of energy (5.2 MJ), protein (45 g), Zn (85 micromoles) and Cu (14 micromoles) were low in comparison with both official recommendations and levels of intake at which metabolic equilibrium was observed in healthy elderly people studied by the same methods (Bunker et al. 1984a). Mean leucocyte Zn (9 pmmol/10(6) cells) and Cu (7.5 pmmol/10(6) cells) were low in comparison with results from healthy elderly people (Bunker et al. 1984a), implying suboptimal status for these elements. Those patients with healing problems tended to have the lower values within the range. Recommendations are made with respect to improving nutritional status in this disadvantaged group of people.(author)

97 NAL Call No: RC620A1N47
Essential fatty acid metabolism in the elderly: effects of dietary manipulation.
Dillon, J.C.
Quick Bibliography Series


Language: English

Descriptors: Essential fatty acids; Polyunsaturated fatty acids; Elderly nutrition; Nutrient requirements; Supplements; Nutritional intervention; Enzyme deficiency; Lipid metabolism

Abstract: A technical review summarizes and discusses evidence linking alterations in polyunsaturated fatty acid (PUFA) metabolism, platelet dysfunction, and thrombotic events as they occur in the elderly, and presents clinical and biochemical results on dietary interventions conducted in elderly subjects. Attention is given to: the nature of delta-6-desaturase deficiency in the elderly; age-related disorders in eicosanoid synthesis; and the effect of dietary supplementations with PUFA's in the elderly. The results of a beneficial clinical trial with gamma-linolenate supplementation in a group of 60 elderly patients are included.

98 NAL Call No: RC620.A1N8
Estimation of available dietary iron in meals of "healthy" elderly Japanese.
Itoh, R.; Oka, J.; Echizen, H.

Language: English

Descriptors: Japan; Elderly; Diet; Nutrient availability; Iron

Abstract: Extract: To establish the amount of absorbable iron necessary to maintain optimum iron nutriture in free living 'healthy' elderly Japanese, we tried to estimate the availability of dietary iron in 67 subjects 60 years of age and older, whose iron stores were assessed to be normal. From the value of basal iron loss of 14 micrograms/kg body weight/day, the averages of the iron requirement of the subjects were calculated to be about 0.8 mg/day for males and 0.7 mg/day for females. From geometric means and 95% confidence intervals of serum ferritin concentration, iron stores of most of the male and female subjects were estimated to be in the range of 400-2500 mg and 300-1000 mg, respectively. Using dietary records of each meal in three successive days and a food composition table, we estimated availability of iron, according to the model proposed by MONSEN et al. (Am. J. Clin. Nutr., 31, 134, 1987). Averages of dietary iron intake differed in sexes and residential areas, and ranged from 10 to 12 mg. When the iron stores of the subjects were assumed to be 500 mg, estimated absorbability of dietary iron was about 8% and its amount was 0.8-1.0 mg/day. When the iron stores were assumed to be about 1000 mg, estimated absorbability of dietary iron was 4-4.5% and its amount was 0.5-0.6 mg/day. (author)

99 NAL Call No: 389.8 J823
Ethnic and genetic differences in bone mass: a review with a hereditary vs environmental perspective.
Pollitzer, W.S.; Anderson, J.J.B.
Mysore : Association of Food Scientists and Technologists; 1989 Dec.

Language: English

Descriptors: Bone density; Bone weight; Body composition; Calcium; Ethnicity; Heredity; Dietary factors; Nutrient intake; Physical activity; Ethnic groups; Men; Women

Abstract: Based on a review of the literature, ethnic and genetic factors are significant determinants of bone mass, along with such environmental factors as diet and exercise. Differences in bone density between blacks and whites remain even after adjustment for body mass. Black-white differences in bone mass appear to be related to ethnicity because blacks have not only greater skeletal calcium content, but also greater total body potassium and muscle mass. Genetic studies of twins and parent-offspring pairs reflect strong constitutional associations of both bone mineral content and bone density at commonly measured skeletal sites. At least for females, bone mass accumulation by age 20 y is highly associated with maternal bone mass; up to menopause it is enhanced by child-bearing and lactation; beyond menopause environmental factors seem to dominate. Dietary calcium and physical activity are significant in the control of bone mass. These findings are important for osteoporosis and fractures, especially in elderly people.

100 NAL Call No: 389.9 C1632
Evaluation of the dietary adequacy of elderly osteoarthritic individuals treated with acetylsalicylic acid.
Taylor Kennedy, J.; Krondl, M.
Journal of the Canadian Dietetic Association v. 48.
Nutrition and the Elderly


Language: English (Summary in French)

Descriptors: Acetylsalicylic acid; Osteoporosis; Nutrient-drug interactions; Elderly nutrition; Vitamin A; Ascorbic acid

Abstract: A study of 23 elderly osteoarthritic patients taking acetylsalicylic acid (ASA) assessed the effects of ASA on nutrient intakes relative to 20 healthy controls not taking ASA. The patients had higher intakes of niacin and other nutrients (except Ca) than controls, but vitamin A, Ca, and ascorbic acid intakes were below their RDA's. The clinical implications of these findings are discussed.

101 NAL Call No: TX341.H82
An evaluation of the nutrient intake of a group of elderly people attending a luncheon club.
Potts, M.C.

Language: English

Descriptors: England; Lunch; Groups; Elderly; Nutrient intake; Energy intake; Consumption patterns

Abstract: A study of the nutrient intakes of 18 elderly people (ages 67-85) who frequent a London luncheon club revealed generally adequate intakes (except for Zn), but with wide variations between individuals, including sub-optimal intakes. The luncheon did not markedly alter mean intakes of energy and other nutrients (except for protein). However, it is possible that the luncheon had a greater contribution to daily intake for individuals having low intakes of certain nutrients.

102 NAL Call No: 389.8 F7398
Factors affecting folate bioavailability.
Bailey, L.B.
Chicago, Ill.: Institute of Food Technologists; 1988 Oct.

Language: English

Descriptors: Folic acid; Bioavailability; Intestinal absorption; Ph; Food fiber; Wheat bran; Milk protein; Thermal processes; Nutrient-drug interactions; Aging

103 NAL Call No: 389.8 AM34
Factors affecting food intake of women with Alzheimer's type dementia in long-term care.
Susi, N.S.; Nielsen, C.C.
Chicago, Ill.: The Association; 1989 Dec.

Language: English

Descriptors: Nutrient intake; Alzheimer's disease; Eating habits; Supplements; Food preferences; Elderly

Abstract: This study assessed the nutrient intake and problems associated with the feeding of individuals who have advanced senile dementia of the Alzheimer's type (SDAT). The sample consisted of 19 non-ambulatory women, ranging in age from 67 to 105 years, with documented SDAT, who reside in a long-term-care facility. Dietary intake was recorded, and feeding practices were observed for a 3-day period. The mean daily energy intake was 1,558 kcal, with a mean protein intake of 65 gm during the study. Nutritional supplements, consisting of fortified beverages and/or puddings, provided 29% of the calories and 41.5% of the protein intake while contributing considerable amounts of vitamins and minerals. Maintenance of optimal caloric and protein intake is difficult for advanced SDAT patients who are at high risk for infection and skin breakdown related to poor swallowing ability, incontinence, and immobility. Four major factors emerged that promoted optimal intake: using skillful feeding techniques, selecting appropriate food consistency, providing adequate time in which to feed, and capitalizing on the midday meal when cognitive abilities were at their peak.

104 NAL Call No: 389.8 AM34
Factors that influence the elderly to use traditional or nontraditional nutrition information sources.
Probart, C.K.; Davis, L.G.; Hibbard, J.H.; Kime, R.E.
Chicago, Ill.: The Association; 1989 Dec.

Language: English

Descriptors: Oregon; Nutrition education; Nutritional surveys; Health services; Utilization; Information sources; Food misinformation; Sex
Quick Bibliography Series

Abstract: This study analyzed sociodemographic variables, access to medical care, health status-related variables, and nutrition status-related variables to determine their ability to predict an orientation toward traditional or nontraditional nutrition information sources among aged subjects in Eugene, OR. Data were collected from 165 randomly selected subjects by trained interviewers using face-to-face interviews. Nutritionist orientation was measured by a Traditional/Nontraditional Index (TNT Index) developed for the study. Nutrition knowledge and misinformation, supplement use, and sources of nutrition information were also investigated. Predictors of nontraditional nutritionist orientation were acceptance of nutrition misinformation and male sex (adjusted $R^2 = 0.99$). For women, predictors of a similar orientation were acceptance of nutrition misinformation, low knowledge of general nutrition information, and low functional health status (adjusted $R^2 = 0.19$). Mean nutrition knowledge scores were high, with a mean of 4.7 (standard deviation [SD] = 0.8) on a scale ranging from 4 (high) to 8 (low). However, many of the subjects did not list dairy foods (28%) and grains (27%) as necessary in the diet. In addition, belief in certain nutrition myths was widespread. More than 58% were taking one or more supplements (mean = 1.4 supplements per day, SD = 1.98). Physicians were mentioned as most likely sources of nutrition information, with dietitians and health food store personnel mentioned second, indicating the importance of marketing efforts for registered dietitians.

106 NAL Call No: 389.8 J824
Fasting plasma amino acids in elderly men.

Language: English

Descriptors: Amino acids; Blood plasma; Fasting; Nutritional state; Elderly; Men

Abstract: The fasting amino acid profile in 22 healthy young men aged 25-35 y (group A) was compared with the fasting profile in 21 healthy independent men aged 65-85 y (group B), in 23 orally-fed nursing home men with dementia aged 65-92 y (group C), and in 17 tube-fed nursing home men with dementia aged 65-88 y (group D). Groups B, C, and D had significantly (p < 0.05) lower levels of methionine and branched-chain amino acids than group A. Methionine was significantly lower in groups C and D than in group B. The ratio of essential to nonessential amino acids was significantly lower in groups B, C, and D than in group A. The data suggest that the intake of essential amino acids may often be suboptimal in both independent and institutionalized elderly men.
Nutrition and the Elderly

107 NAL Call No: 389.8 J824
Fatty acid composition of serum lipids and its relation to diet in an elderly institutionalized population.

Language: English

Descriptors: Fatty acids; Blood serum; Nutrient intake; Source fat; Acyl-coa desaturase; Elderly; Nursing homes; Nutritional state
Abstract: This study was conducted to determine the nutritional status with respect to fatty acids of 53 institutionalized elderly subjects (group A). Seven-day food records and biochemical determinations were used. The same protocol was applied to 25 healthy young adults (group B). The 1981 French Recommended Dietary Allowances were used to assess adequacy of intake. Total fat intake was found to be too high in both groups. Higher intakes of animal fats and saturated fatty acids and lower intakes of polyunsaturated fatty acids and linoleic acid were documented in group A than in group B. Elderly subjects exhibited decreased 18:2-omega-6 and 20:4-omega-6 in serum phospholipids and triglycerides. Other indicators of essential fatty acid status in group A differed from group B in the direction of deficiency (double-bond index [DBI], 0.93 +/- 0.01 vs 1.13 +/- 0.04, p less than 0.001; total omega-6, 25.07 +/- 0.46% vs 32.49 +/- 0.89%, p less than 0.001). These findings indicate that institutionalized elderly people are deficient in circulating essential fatty acids, which appears to be caused by both diet and metabolism.

108 NAL Call No: TX361.A3J63
Feeding the dysphagic elderly resident: a case study.
Matthews, L.E.

Language: English

Descriptors: Individual feeding; Long term care; Clinical nutrition; Menus; Case studies; Elderly
Abstract: A brief case study of a nursing home resident with chewing and swallowing problems is presented. The nutritional assessment, the nutritional plan and the daily menu plan for the patient is included.

109 NAL Call No: TX341.F69
Focusing elderly nutritional programs.
Leonard, R.
Food management v. 22 (3): p. 34. ill; 1987 Mar.

Language: English

Descriptors: Elderly nutrition; Supplemental feeding programs; Federal programs; Food and nutrition controversies
Abstract: A brief commentary critiques perceived shortcomings of elderly nutrition programs, arguing that federal and state "aging" program managers give little real attention to elderly nutrition and that a managerial system is needed that can accomplish the goals of the Older American Act and its authorized service programs at a more reasonable cost than currently is being paid. The view is expressed that in the current system, individuals become recipients rather than participants whose needs are determined by their interviewers as they are processed through an intake system. It is suggested that the current system may encourage Congress to ask whether the current program is achieving the goal of aiding older people to maintain independent lifestyles in their communities and how program management may be improved.(wz)

110 NAL Call No: RC455.4.N8N8
Food and fluid intake as criteria of disturbed adaptivity in old age.
Janicke, B.; Coer, H.

Language: English

Descriptors: Adaptation; Nutrient requirements; Aging; Food intake; Fluid intake
Abstract: A technical report discusses and provides experimental animal data concerning the association between food and fluid intake and disturbed adaptivity in old age. The data, addressing various physiological mechanisms of adaptive behavior, show that latent functional losses of adaptability in the 3rd phase of life can be detected. The study approach is based on subjecting aging animals to physical and drug challenges.
111 NAL Call No: TX361.A3J6
Food and nutrient intake of institutionalized and noninstitutionalized elderly in the Philippines.
Florencio, C.A.; Macatangay, L.A.
Language: English
Descriptors: Philippines; Elderly nutrition; Nutrient intake; Energy intake; Food habits; Hospitals; Nutritional adequacy; Dietary surveys; Recommended dietary allowances; Institutional food service
Abstract: Extract: The study was conducted to compare the food and nutrient intake of institutionalized and noninstitutionalized elderly from the same geographical area. Data were obtained using food weighing-recall method and interview. Sixty elderly in the same section of Quezon City, Philippines participated in the study; thirty from a government institution for the elderly and thirty from among those living with their families. Both groups failed to meet the Philippine Recommended Daily Allowances for energy and the eight nutrients considered. However, the average diet of the noninstitutionalized elderly was more nutritionally adequate than that of the institutionalized.

112 NAL Call No: TX361.A3J6
Food contamination: widespread, increasing.
Nutrition week v. 17 (14): p. 4-5; 1987 Apr02.
Language: English
Descriptors: USA; Foodborne diseases; Salmonella; Campylobacter; Trends; Costs; National surveys
Abstract: A special report provides data illustrating the increase in foodborne illnesses in the US, up to half of which resulted from contaminated meat and poultry, particularly from Salmonella and Campylobacter. These 2 bacteria are separately discussed with respect to their contamination levels and health impacts. Infants, elderly, malnourished, and people with an immune deficiency are most susceptible. Human and economic costs associated with such illnesses are discussed.

113 NAL Call No: TX361.A3J6
Food preferences and perceptions of institutionalized elderly: a case report.
Pierce, R.P. Jr; Hodges, P.A.M.; Merz, B.; Olivey, A.
Language: English
Descriptors: Elderly; Institutions; Food preferences; Environmental factors; Case studies
Abstract: Extract: Providing nutritious, appetizing meals to institutionalized elderly is a continuing challenge. Menu planning must reflect sensitivity to regional, cultural, and ethnic food preferences, in addition to nutritional needs of the population to be served. In order to raise the level of awareness of dietetic technician students--future menu planners--regarding the eating habits and food preferences of the elderly, this project was undertaken in Tidewater, Virginia. Two facilities were used to interview selected institutionalized elderly patients. Results are reported, with considerations for future menu planning, as well as implications of the impact of early eating habits upon preferences in later years.

114 NAL Call No: TX361.A3J6
Food preferences of older adults.
Holt, V.; Nordstrom, J.; Kohrs, M.B.
Language: English
Descriptors: Missouri; Food preferences; Elderly; Food habits; Regional surveys
Abstract: Extract: Food preferences of 488 elderly persons over 59 years old were determined. Beef, potatoes, chicken, green beans, pie, pork, dried beans, lettuce salad, cake and fish were given most often as liked. Nine of the top ten food items given as disliked were vegetables. Items from the basic four food groups were given as "good for you" the most frequently.

115 NAL Call No: 389.8 AM34
Food stamps and the energy status of the U.S. elderly poor.
Lopez, L.M.; Habicht, J.P.
Nutrition and the Elderly

Abstract: Extract: The energy status of poor elderly individuals in relation to the nonpoor elderly was examined using data from NHANES I and II. Within the poor population, the status of Food Stamp Program participants was compared with that of nonparticipants. The indicators of energy status used were weight (adjusted for height), triceps skinfold, subscapular skinfold, and energy intake. Energy status was examined by analyses of variance; the effects associated with sex, race, age, geographic region, and other potentially confounding variables were included in the model. In both surveys, there were interactions with race. That is, the poor whites had lower transferrin saturation and iron intake means than the nonpoor whites, while the Food Stamp Program participants were no different from the nonparticipants in transferrin saturation. Within the nonwhites, the poor had a lower hemoglobin mean than the nonpoor, and the program participants had a lower hemoglobin mean than the nonparticipants. Therefore, the Food Stamp Program was not consistently associated with better iron nutrition of the elderly poor in NHANES I and II. (author)

Food stamps and the iron status of the U.S. elderly poor.

Lopez, L.M.; Habicht, J.P.
Chicago, Ill.: The Association; 1987 May.

Abstract: Extract: With the use of data from NHANES I and II, the iron status of poor elderly persons was examined by comparing it with that of nonpoor elderly persons. Within the poor group, the iron status of Food Stamp Program participants was compared with that of nonparticipants. The poor were those below the poverty line; the nonpoor were those with incomes at least twice the poverty line. The indicators of iron status were: hemoglobin, hematocrit, free erythrocyte protoporphyrin, transferrin saturation, total iron-binding capacity, serum iron, and iron intake. Iron status was examined by analyses of variance. The effects associated with sex, race, age, geographic region, and other potentially confounding factors were included in the model. In both surveys, there were interactions with race. That is, the poor whites had lower transferrin saturation and iron intake means than the nonpoor whites, while the Food Stamp Program participants were no different from the nonparticipants in transferrin saturation. Within the nonwhites, the poor had a lower hemoglobin mean than the nonpoor, and the program participants had a lower hemoglobin mean than the nonparticipants. Therefore, the Food Stamp Program was not consistently associated with better iron nutrition of the elderly poor in NHANES I and II. (author)

Fractures in the men of a Veterans Administration Nursing Home: Relation of 1,25-dihydroxyvitamin D.


Abstract: The authors studied the incidence of bone fracture in middle-aged and elderly men living in nursing homes. Health status, types of medication, age, blood chemistries and vitamin D levels were measured. The emphasis of the study was to correlate vitamin D deficiency with increased bone fractures.

The future direction of nutrition research: unraveling the diet-disease connection.

Feldman, E.B.
Abstraction: This opinion statement proposes that the future of nutrition research is in the direction of diet and disease relationships. Specific areas mentioned are fetal nutrition, heart disease, aging and longevity, diet and behavior, and nutrition and public policy.

Abstract: An individual phenotype consists of interactions of genotype, environment and institutional influences. Food preferences, nutritional thresholds adverse reactions to foods, and the aging process may be determined by genetic factors. The effect of genetic factors on the intake of essential or nonessential nutrients is discussed. Knowledge of genetic individuality may help in disease prevention when the environment in which the particular gene is likely to act is taken into account.
Nutrition and the Elderly

Language: English

Descriptors: Canada; Elderly nutrition; Nutrient requirements; Recommended dietary intakes; Nutrient intake; Caloric intake; Food preferences; Elderly

Abstract: Since 1965, a small number of studies on geriatric nutrition have been conducted in various parts of Canada. This paper summarizes the major observations of these studies and recommends areas for future research.

123 NAL Call No: HD9000.9.U5A1
The 'grazing' of America: a guide to healthy snacking.
Weinstead, C.P.
Rockville, Md.: Food and Drug Administration, Department of Health & Human Services; 1989 Mar.

Language: English

Descriptors: USA; Snacks; Eating patterns; Feeding habits; Nutrient intake; Low calorie foods; Children; Adolescents; Elderly

Abstract: Since many people do not eat three regular meals a day, snacking has become a part of the nation's eating pattern. Healthy snacks for different stages of life are discussed. Nutrient and caloric intake charts are included.

124 NAL Call No: TX361.A3J6
Health factors associated with food intolerances among meals-on-wheels clientele.
Zimmerman, S.; Krondl, M.

Language: English

Descriptors: Canada; Elderly; Home delivered meals; Vegetables; Food intolerance; Incidence; Health; Drugs; Supplements

Abstract: Extract: A study was carried out with Meals-on-Wheels clientele to determine differences between tolerators and intolerators of vegetables in regard to health status, eating problems, medication and supplement use. Sixty-six subjects were divided into two groups on the basis of perceived tolerance to twenty different vegetables. Significantly more intolerators had digestive disorders and took more medications. Supplement use was more uniform in the two groups. There were no significant differences in subjective health ratings or in chewing and swallowing problems. Identification of meal recipients on the basis of food intolerances would alert the meal providers to persons who need special care. (author)

125 NAL Call No: 389.9 C1632
Health-related characteristics and dietary intake of a selected sample of elderly Canadians.
Martinez, O.B.

Language: English

Descriptors: Ontario--fre; Food intake; Interviews; Questionnaires; Computer analysis; Nutrient intake; Caloric intake; Vitamin and mineral supplements; Physical activity; Health; Drug therapy; Sex differences; Elderly

Abstract: The following study describes selected health characteristics and the dietary intakes of 78 free-living volunteers, 59-88 years of age from Southern Ontario. Data on health, food supplement and medication use and other information were obtained during home interviews using a questionnaire. Dietary data were obtained through three 24-hour recalls. The information was coded and analyzed by computer. Seventy-one percent of the women (n=56) and 32% of the men (n=22) reported at least one chronic health problem, especially arthritis/rheumatism, hypertension, gastrointestinal problems and heart disease. Most subjects (79%) reported habitual use of at least one drug but 27% of the women used four or more drugs simultaneously. Reported compliance with medical treatment was high in both sexes. Twenty percent of the women and 4.5% of the men had lower than recommended energy intakes. In women, 21% and 16%, respectively had lower than recommended calcium and vitamin D. Men's diets were generally adequate. Five to 23% of the men and 29-45% of the women reported the use of individual nutrient supplements. In conclusion these subjects showed generally adequate nutrient intakes in spite of low energy intakes; calcium and vitamin D were the nutrients more likely to be present in lower than recommended levels in the diet.

126 NAL Call No: aTX341.F615
Helping young and old.
Rudman, L.
Quick Bibliography Series


Language: English

Descriptors: Michigan; Nutrition programs; Supplemental feeding programs; Community action; Mothers; Federal programs

Abstract: An illustrated report describes the activities and effectiveness of a Detroit agency food center, Focus HOPE, for providing USDA-donated foods to 38,000 low-income mothers, infants, and children and 26,000 elderly people. The program includes nutrition education as part of its operation, including a cookbook for mothers with recipes using USDA commodity foods. The operational structure of the food center is also briefly described.

127 NAL Call No: RM216.M342
Home nutrition support in elderly patients.
Chernoff, R.

Language: English

Descriptors: Parenteral feeding; Elderly; Home care; Therapeutic diets

Abstract: Extract: The greatest users of acute health care resources are persons aged 65 and older. Because of the impact of hospital reimbursement systems, elderly patients are going home from the hospital earlier with nutrition support therapies. Elderly persons require special considerations because of the physiologic and functional changes that occur as part of the normal aging process. They require careful monitoring because they are more vulnerable to complications and less likely to respond rapidly to change. They are difficult to monitor by usual parameters because of age-related changes that occur in many of these measures. In addition, there are many other factors that are unique in elderly patients, such as polypharmacy and potential rapid shifts in fluid compartments. Nutritional rehabilitation in frail, older patients can be accomplished by encouraging oral feeding or providing supplemental meals, or by instituting enteral or parenteral nutrition support. There are many factors to consider when assessing elderly patients for these therapies. Social, financial, physical, psychological, and ethical aspects of nutrition support should be explored during decision-making. With the increasing number of persons living beyond age 65, home nutrition support and the factors affecting its successful use in elderly persons will become more important.

128 NAL Call No: 389.8 AM34
Home-delivered meals: food quality, nutrient content, and characteristics of recipients.
Asp, E.H.; Darling, M.E.

Language: English

Descriptors: Home delivered meals; Food quality; Nutrient intake; Elderly nutrition; Nutritional adequacy; Program evaluation

Abstract: Extract: Meals provided by a home-delivered meal program with the same supplier were evaluated for 5 consecutive days in each of 6 years. In the evaluations, meals were compared with federal guidelines for meal pattern, serving size, and temperature of hot food, and the quality was evaluated. Meal pattern and serving size guidelines were not always met by the meals. Problems included no delivery of milk with the meals and variations in serving sizes for meat or alternate, fruit, vegetable, and dessert. Temperatures of hot foods were often much lower than the 140 degrees or 150 degrees F specified in food safety guidelines. Food quality varied. Protein, iron, phosphorus, vitamin A, and niacin were consistently greater than 33% of the RDA; energy, thiamin, riboflavin, and vitamin C were less than 33% of the RDA some years, and calcium was consistently less than 33% of the RDA. Estimated total daily nutrient intakes of 27 recipients followed the same pattern as the nutrient content of the meals. For many recipients, estimated nutrient intakes from food other than the home-delivered meal was less than 33% of the RDA. Food preferences were fairly well satisfied. Recall of nutrition-related vocabulary was poor. In this study, home-delivered meals were found to make important contributions to the nutrition needs of the recipients.

129 NAL Call No: 389.8 F7398
How the aging explosion will create new food trends.
Gerber, J.
Chicago, Ill.: Institute of Food Technologists; 1989 Apr.
Nutrition and the Elderly


Language: English

Descriptors: Food industry; Trends; Nutrition labeling; Ethnic foods; Life style; Elderly

Abstract: Food industry innovations which satisfy the needs of the older consumer may also motivate the buying trends of the younger market. Examples given in this article include improved labeling and packaging of food and foods designed for health promotion.

130 NAL Call No: 389.8 AM34 Hypophagia among hospitalized elderly.
Rammohan, M.; Juan, D.; Jung, D.

Language: English

Descriptors: Nutrient intake; Age differences; Sex differences; Body weight; Eating habits; Appetite; Elderly

Abstract: A prospective study was done in 21 hospitalized medical patients to determine the effects of age and gender on food intake. From precise weighing of food served and uneaten, macronutrients and micronutrients ingested during the hospital stay were determined. Even though the hospital diet served was adequate in energy and protein, 38% of the patients ingested less than 65% of their nutritional requirements, with a higher percentage of those with inadequate intake among the elderly than among the young (28% vs. 10%). Patients over 65 years of age ingested less energy and protein than those under 65 year of age (1,167 vs. 1,967 kcal, p less than .01; 47 vs. 78 gm, p less than .05). The gender of the patients had no influence on food intake. More than 60% of the medical patients, especially the elderly, had an inadequate intake of micronutrients: folate, 100% of the elderly vs. 93% of the young; zinc, 90% vs. 64%; magnesium, 90% vs. 36%; and vitamin B-6, 90% vs. 64%. Multiple stepwise regression analysis showed that age and body weight on admission were of predictive value in terms of subsequent nutrient intakes during the hospitalization. Patients who were over 65 years old and weighed less than 80% of their ideal body weight consumed significantly less energy and fewer macronutrients and micronutrients.

131 NAL Call No: QP141.A1N88 Immunodeficiency and lymphocyte ecto-5'-nucleotidase activity in the elderly: a comparison of the effect of a trace mineral supplement (1 USRDA) with high zinc (6.7 X USRDA).
Hollingsworth, J.W.; Otte, R.G.; Boss, G.R.; Fryberger, M.F.; Strause, L.G.; Saltman, P.

Language: English

Descriptors: Zinc; Immunity; Elderly nutrition; Nucleotidase; Enzyme activity; Mineral supplements

Abstract: Extract: The effect of administering a total mineral supplement (TMS) or 100 mg of elemental zinc alone on immune function was studied in 17 normal subjects, aged 66-85. Subjects were given either TMS containing 1 USRDA of zinc, copper, iron, and manganese or 100 mg of elemental zinc alone as zinc sulfate (ZnSO4). Administration of either supplement led to a slight increase in peripheral blood lymphocytes and improved maturation of B-lymphocytes to antibody-producing cells in culture of peripheral blood mononuclear cells. Ecto-5'-nucleotidase, a zinc obligate enzyme of lymphocyte cell membranes, increased when TMS was administered daily but failed to increase when ZnSO4 was administered. Serum zinc levels increased in all subjects receiving the ZnSO4. Only those subjects with low initial serum zinc levels had higher serum zinc levels after 3 months on the TMS. These studies indicate that dietary supplementation with a TMS (1 USRDA) can improve certain in vitro parameters of immune competence in the aged, avoiding the deleterious effects possible with excessive intake.(author)

132 NAL Call No: TX361A3J6 The impact of food stamps and other variables on nutrient intake in the elderly.
Posner, B.M.; Ohls, J.C.; Morgan, J.C.

Language: English

Descriptors: USA; Elderly nutrition, Food stamp program, Nutrient intake, Nutritional intervention;
Supplemental feeding programs; Federal programs; Program effectiveness; National surveys

Abstract: Extract: The effect of the national Food Stamp program and other variables on nutrient intake and dietary adequacy in low-income elderly persons was determined by comparing the dietary behavior of 1400 program participants and 500 eligible non-participants. Data were gathered using a validated telephone-administered 24-hour dietary recall and household interview. Food Stamps did not produce statistically significant improvements in nutrient intake in these households. Functional health status, gender, race, nutrition knowledge, social contact and perceived problems with food preparation were variables found to predict differences in nutrient intake among the low-income elderly. An indirect income transfer program like Food Stamps appears at best to have limited effectiveness as a method of improving the nutrient intake of low-income households headed by older persons.

133 NAL Call No: 389.8 AM34

Language: English

Descriptors: Washington; Health services; Health care costs; Diagnosis; Elderly nutrition; Health care; Home care; Hospitals; Nutritional assessment; Nursing homes; Elderly

Abstract: The effect of the diagnosis-related groups (DRG)/prospective payment system (PPS) on the health status complexity and nutrition needs of patients was studied in home health and five extended-care facilities in Spokane, WA. Three periods were studied: pre-DRG (1982), early DRG implementation (1984), and full DRG implementation (1986). The complexity of patient health status and nutrition needs was measured in three areas: number of total diagnoses, nutrition-related diagnoses, and diet modifications per patient. In home health care, those variables increased significantly from a mean of 4.35 diagnoses per patient in 1982 to 6.12 in 1986, from 1.31 nutrition-related diagnoses per patient in 1982 to 1.99 in 1986, and from 6% of patients with four or more diet modifications in 1982 to 16% in 1986. The complexity of patient health status in extended-care facilities remained stable, with a mean of 6.06 diagnoses per patient in 1982 vs. 5.87 in 1986, 1.84 nutrition-related diagnoses per patient vs. 1.73, and 14% of patients having two or more diet modifications in 1982 vs. 11% in 1986. A consistent odds ratio of 2.06 was observed between number of diagnoses and diet modifications per patient, indicating a direct relationship.

134 NAL Call No: RM214.D47

Language: English

Descriptors: Smell; Taste; Food intake; Flavor enhancers

Abstract: The effects of taste and smell impairment on decreased food intake of the elderly are discussed. Also discussed are the physiology and treatment by flavor enhancement of chemosensory loss. Conclusions are that addition of palatable flavors to nutrient-dense foods for elderly persons with reduced taste and smell perception may increase consumption.

135 NAL Call No: 389.8 AM34

Language: English

Descriptors: Health care costs; Malnutrition; Elderly nutrition; Diagnosis; Hospitals; Nutritional assessment; Elderly

Abstract: The implications of malnutrition on the Medicare Prospective Payment System of diagnosis-related groups (DRGs) were examined in 185 Medicare patients, aged 65 to 69 years, admitted to an acute-care tertiary hospital. Upon admission, patients were classified as malnourished if they were below the acceptable level in at least two of four parameters: serum albumin concentration, total lymphocyte count, percent ideal body weight, and percent weight loss. On the basis of that criterion, 8.6% (n=16) of the 185 patients were classified as malnourished. Although patients...
were classified as malnourished, malnutrition was among several comorbidity and complication (CC) factors, and, therefore, coding for malnutrition in any of these cases would not have increased hospital reimbursement. If malnutrition had been the only CC factor, hospital reimbursement would have been enhanced.

136 NAL Call No: 389.8 AM34
Inclusion of geriatric nutrition in ADA-approved undergraduate programs.
Shoaf, L.R.; Jensen, H.M.
Chicago, Ill.: The Association; 1989 Sep.

Language: English

Descriptors: Dietetic education; Curriculum, Elderly nutrition; Educational programs

Abstract: All ADA Plan IV programs were surveyed to determine whether geriatric nutrition was included in their curriculums. Of the 268 Plan IV programs, 66% responded. Less than one-fifth of the programs offered or planned to offer a specific geriatric nutrition course. An overview of geriatric nutrition occurred most frequently in a human nutrition course. A practicum/clinical experience or a course other than nutrition most frequently provided in-depth study, if such was available. Nursing homes and congregate meal sites were the primary locations for experiences with the geriatric population. Major activities with that age group included (a) taking diet histories, (b) making nutrition assessments, and (c) providing diet instruction. In some programs, didactic and experimental training with the geriatric population may not be adequate to prepare dietetic undergraduate students to meet the health care needs of that growing segment of society.

137 NAL Call No: QP141.A1N88
Indices of vitamin, iron and hematological status of a selected sample of elderly Canadians.
Martinez, O.B.

Language: English

Descriptors: Ontario; Ascorbic acid; Folic acid; Riboflavin; Vitamin B12; Ferritin; Blood plasma; Elderly; Nutritional state

Abstract: This study investigated vitamin, iron and hematological indices of 52 women and 22 men volunteers, 59-88 years of age from Southern Ontario. Background information was obtained in home interviews. Fasting blood samples were obtained for measurements of plasma ascorbate, ferritin and vitamin B12 levels, and for red cell folate and red cell glutathione reductase activity (GRA) coefficients. The information was coded and analyzed by computer. Using hemoglobin values as criteria, there was no evidence of anemia in this sample. Ascorbate, folate and iron levels were adequate. The results suggest that subclinical nutritional deficiencies of riboflavin and vitamin B12 may occur in some elderly and that supplementation with the respective vitamins may be beneficial.

138 NAL Call No: 389.8 B773
The influence of guar-gum bread on the regulation of diabetes mellitus type II in elderly patients.
Sels, J.P.; Flendrig, J.A.; Postmes, T.J.

Language: English

Descriptors: Netherlands; Man; Elderly; Diet; Diabetes; Bread; Fiber; Guar gum; Hemoglobin A1; Blood serum; Glucose; High density lipoprotein; Cholesterol; C-peptide; Triglycerides

Abstract: Extract: The effect of a high-fibre bread mixed with guar-gum (75 g/kg flour) on serum glucose, connecting peptide (C-peptide), haemoglobin A1 (HbA1), high-density-lipoprotein-cholesterol (HDL-cholesterol) and triglycerides was examined in fourteen elderly patients with diabetes mellitus type II. The mean daily consumption of guar gum was 8.1 g. Gastrointestinal disorders were not observed. Consumption of guar-gum bread resulted in a significant decrease in C-peptide values on the 1st day and blood glucose values after 3 weeks (both measured 90 min after breakfast). C-peptide values remained low, while an unaccountable 'rebound' phenomenon was seen in the blood glucose values 90 min after breakfast at the end of the study.(author)

139 NAL Call No: QP141.A1A64
Interindividual and intraindividual variation in repeated measures of 24-hour dietary recall in the elderly.
McAvay, G.; Rodin, J.
Quick Bibliography Series

Includes 21 references.

Language: English

Descriptors: Dietary history; Nutrient intake; Elderly; Longitudinal studies; Human nutrition research; Variations

Abstract: This study examines the validity and variability of the 24-hour dietary recall method for determination of the nutrient intake of older adults.

140 NAL Call No: QP141.A1N88
Intraindividual variation in zinc intake among elderly women: the effect of diet and supplements.
Ervin, R.B.; Smiciklas-Wright, H.A.; Fosmire, G.J.

Language: English

Descriptors: Zinc; Nutrient intake; Dietary history; Supplements; Data analysis; Variations; Elderly; Women

Abstract: Thirty-six women (65-84 y) kept 3-day dietary records and recorded supplement use at three periods in time, each 28 days apart. Sources of intraindividual variation in zinc intake were examined. Mean dietary zinc intake was 7.3 +/- 2.9 mg/d; mean total zinc intake (diet plus supplements) was 11.7 +/- 9.3 mg/d. For both types of zinc intake, there was significant intraindividual variation among the time periods (p less than 0.0001), but not among the three days each subject kept her records. The intraindividual variation for independent records was not significantly different from that for consecutive records. Primary sources of intraindividual variation in zinc intake appeared to be dietary modifications related to acute illnesses, changes in calorie, protein and/or zinc intakes, and variable use of supplements. Intraindividual variance for irregular supplement users was significantly larger (p less than 0.0005) than the intraindividual variances for both non-supplement users and regular supplement users.

141 NAL Call No: RC620.A1N8
Iron status in free-living, low income very elderly.
Manore, M.M.; Vaughan, L.A.; Carroll, S S.

Language: English

Descriptors: Nutritional state; Iron; Nutrient intake; Ferritin; Blood serum; Anthropometric dimensions; Supplements; Low income groups; Elderly; Sex differences; Men; Women

Abstract: In order to determine the effect of age, sex, dietary and supplemental iron intakes and chronic disease factors on iron status and serum ferritin concentrations, 69 free-living very elderly (greater than or equal to 75 yr.) were recruited. Subjects completed demographic and health history questionnaires, 3-day diet records and provided a fasting blood sample for determination of iron status parameters. Subjects were predominately white (mean age 80 yrs) and low income (52% less than $10,000; 23% $10,000-$15,000, annually). Women had significantly lower hemoglobin, serum iron and percent transferrin saturation as compared with the men. Only one subject had a total iron intake less than 2/3 the RDA, but 22% supplemented with iron. Iron
deficiency anemia was prevalent in only 3% of the population; iron status in general, however, was lower than that reported in other free-living elderly. Neither serum ferritin, total iron intake, age, nor income were good predictors of iron status in this population. Serum ferritin was greater than 200 ng/mL in 38 of the subjects, but half of these high values could be explained by pre-existing disease factors.

143  NAL Call No: TX353.B76 1987
Jane Brody's nutrition book a lifetime guide to good eating for better health and weight control.
Brody, Jane E.
xx, 552 p. : ill. ; 23 cm. Includes bibliographies and index.
Language: English
Descriptors: Nutrition; Diet; Nutrition; Nutrition; Preventive nutrition; Health hazards; Diet planning; Nutrient sources; Recipes
Abstract: A sensible approach to good nutrition throughout life is based on making constructive changes in life style, practicing moderation, and understanding basic nutrition principles and needs. Consumers concerned about additives, alcohol, caffeine, cholesterol, salt, or sugar will find facts and discussions clarifying cloudy issues. Diet components--protein, identified and their nutritional aspects examined. Health hazards associated with everything from alcohol to water are discussed. Special dietary needs are identified for pregnant and lactating women, children, adolescents, athletes, vegetarians, and the elderly. The problems of obesity, the failures of diet fads, and tips for successful weight control are discussed. The text is interspersed with charts, tables, recipes, and menus.

144  NAL Call No: 389.8 F7398
Lifestyle-driven foods and ingredients required for their development.
Miller, G.A.; Frier, H.I.
Chicago, Ill. : Institute of Food Technologists; 1989 Apr.
Language: English
Descriptors: Food industry; Product development; Nutritional value; Disease prevention; Aging; Life style; Consumer attitudes
Abstract: Changes in American demographics and lifestyles will provide opportunities for the food industry to produce new products and ingredients. The aging population, changing family structure and increased demand for ethnic foods will influence the makeup of our food supply. Concern for health and fitness will spur development of nutrient-dense foods and nutrient-free foods.

145  NAL Call No: 389.8 J824
Local action of oral 1,25-dihydroxycholecalciferol on calcium absorption in osteoporosis.
Francis, R.M.; Peacock, M.
Language: English
Descriptors: Vitamin D; Osteoporosis; Absorption; Calcium; Nutrient-nutrient interactions; Bone mineralization; Women
Abstract: Extract: To investigate whether low calcium absorption in osteoporosis improves by increasing 1,25-dihydroxyvitamin D both systemically in plasma and locally in gut, the effects of oral 25-hydroxycholecalciferol and oral 1,25-dihydroxycholecalciferol on plasma 1,25-dihydroxy-vitamin D (1,25-(OH)2D) and calcium absorption were studied in 20 postmenopausal patients with vertebral osteoporosis. In 10 patients taking oral 0.25 micrograms 1,25-dihydroxycholecalciferol twice daily for 7 d, calcium absorption increased more than in 10 patients taking oral 40 micrograms 25-hydroxycholecalciferol once daily for 7 d (p less than 0.02) despite both groups having a similar increase in plasma 1,25-(OH)2D. These results support the view that the major effects of oral 1,25-dihydroxycholecalciferol on absorption is due to a local action on the gut and that it is possible to increase calcium absorption in osteoporosis with oral 1,25-dihydroxycholecalciferol without increasing its undesirable action on bone resorption.(author)

146  NAL Call No: TX341.C6
The MD Food Committee: hunger knows no season.

Language: English

Descriptors: Maryland; Hunger; Food distribution programs; Nutrition programs; State government; Low income groups; Children; Elderly

Abstract: This article is an excerpt from a report by the Maryland Food Committee. The report was based on a survey of 133 food pantries in Maryland. Food pantries distribute food to needy households. The demographics of the people receiving food aid are discussed.

147

NAL Call No: TX341.F69

Meeting a need efficiently.

King, P.

Cleveland, Ohio: Edgell Communications, Inc; 1989 Mar.


Language: English

Descriptors: California; Food service; Cook-chill system; On-site food preparation; Nutrition programs; Elderly

Abstract: Feedback Foundation, a non-profit group, gives assistance to the elderly in Orange County, California. The need for its services, especially foodservice, has grown, necessitating a more efficient means of preparing and serving meals. They found the cook-chill method of preparation to be cost-effective and nutritious. Details of their foodservice operation are discussed.

148

NAL Call No: TX341.F69

Meeting elderly patients' needs with cook-chill.

King, P.

Cleveland, Ohio: Edgell Communications, Inc; 1989 Jun.


Language: English

Descriptors: Missouri; Hospital food service; Cook-chill system, On-site food preparation; Long term care; Elderly

Abstract: A food and meal production system for a continuing care center is described. The center, which is located in John Knox Village, a retirement community outside Kansas City, Missouri, uses a cook-chill production system that involves the blast-chilling of bulk menu items, cold-plating of those foods well in advance of service and reheating of trayed foods immediately before meals are served.

149

NAL Call No: TX361.A3J6

Meeting nutritional needs of Alzheimer patients who pace constantly.

Rheaume, Y.; Riley, M.E.; Volicer, L.


Language: English

Descriptors: Elderly; Patient care; Alzheimer's disease; Energy intake; Energy expenditure; Nutritional requirements

Abstract: Extract: Energy intake and expenditure were observed in six patients suffering from dementia of the Alzheimer type. Three of these patients walked constantly and three walked only occasionally. Our clinical observation indicates that constant walking (pacing) increases energy demand by 1600 kilocalories/day. The implication of this observation and the nutritional strategies for prevention of metabolic imbalance in these patients are described (author).

150

NAL Call No: 389.8 J824

Metabolic balance studies for zinc and copper in housebound elderly people and the relationship between zinc balance and leukocyte zinc concentrations.

Bunker, V.W.; Hinks, L.J.; Stansfield, M.F.; Lawson, M.S.; Clayton, B.E.


Language: English

Descriptors: Nutritional state; Zinc; Copper; Leukocytes; Balance studies; Elderly

Abstract: Extract: Five-day metabolic balance studies for zinc and copper were carried out in 20 housebound elderly people with stable chronic diseases. Subjects were age 70.0-85.1 y, lived in their own homes, and ate self-selected diets. Mean daily intakes for Zn and Cu were 90 micromoles and 13.4 micromoles with mean negative balances of -16 and -1.1 micromoles, respectively. Both balance values significantly differed from equilibrium (p less than 0.05). For Zn and Cu, respectively, mean concentrations were 11.3 and 22.1 micromoles/L plasma, 103 and 19.4 micromoles/L whole blood, and 98 and 8.7 pmol/10(6) leukocytes. The results
Nutrition and the Elderly

for Zn and Cu balance and leukocyte concentrations were different from those obtained by us for healthy elderly people (Am J Clin Nutr 1984;40:1096-120). A highly significant (r = 0.75, p less than 0.001) correlation was observed between zinc balance and leukocyte zinc concentrations.(author)

151 NAL Call No: 389.8 J824
Methodological and nutritional issues in assessing the oral health of aged subjects.
Carlos, J.P.; Wolfe, M.D.

Language: English

Descriptors: Dental health; Nutrition; Research methodology; Gingivitis; Paradontal disease; Dental caries; Epidemiology; Elderly

Abstract: Despite several serious methodological difficulties in epidemiological research on the oral health of elderly subjects, sufficient data are available to conclude that the prevalence of dental diseases is high in persons aged greater than 65 y in the US. An estimated 41% are completely edentulous, and dental caries, including root-surface caries, and destructive periodontal disease are widespread. Whether nutrition is related to the oral health problems of older persons is unclear; this question has received little research attention, and the results have generally been equivocal. There is some evidence that loss of teeth may be associated with suboptimal intake of nutrients and with changes in food preference.

152 NAL Call No: RA784.A1C3
A methodology for nutrition, health and lifestyle survey of elderly population living in communities.
Sinha, D.P.

Language: English

Descriptors: Caribbean; Nutritional assessment; Elderly; Health; Dietary surveys; Life style; Methodology

Abstract: Practical steps are identified and discussed concerning the development and implementation of appropriate methodology for conducting baseline surveys to assess the nutritional, health, and lifestyle status of elderly populations residing in the Caribbean. Attention is given to the survey characteristics, requisite preliminary investigations, the development of the survey instruments and their pre-testing, sampling strategies, essential characteristics concerning the design and conduct of the survey, data analysis, and the presentation of the report and the dissemination and utilization of the survey results. A 50-item questionnaire for a baseline survey is appended.(wz)

153 NAL Call No: 389.8 J824
Moderate alcohol intake and nutritional status in nonalcoholic elderly subjects.
Jacques, P.F.; Sulsky, S.; Hartz, S.C.; Russell, R.M.

Language: English

Descriptors: Nutritional state; Alcoholic beverages; Nutrient intake; Nutritional surveys; Caloric intake; Vitamins; Minerals; Elderly; Men; Women

Abstract: Three hundred and seventy-three female and 213 male nonalcoholic subjects, aged 60-100 y, who had participated in a nutritional status survey of elderly people in the Boston area were grouped according to usual alcohol intake: 0-4, 5-14, or 15 + g/d. The age- and sex-adjusted mean intake of calories, fat, protein, carbohydrate, and 10 micronutrients and the mean levels of 14 nutrient and 22 nonnutrient biochemical indices were compared for the three categories of alcohol intake. The mean micronutrient intakes were also adjusted for total caloric intake and the mean nutrient biochemical concentrations were also adjusted for the corresponding nutrient intakes. The results suggest that caloric intake and blood concentrations of retinol, iron, ferritin, HDL cholesterol, AST, and ALT increased with increasing alcohol intake whereas folate and phosphorus intakes and blood measures of riboflavin, copper, zinc, urea nitrogen, and creatinine decreased with increasing alcohol intake.

154 NAL Call No: TX361.A3N34
A National survey of nutritional risk among the elderly.
Food Research and Action Center
1 v. (various pagings) ; 28 cm. March 1987. In-
This survey of the nutritional status of the elderly is based on 3602 responses by senior citizens to a questionnaire distributed during December, 1984 and January, 1985. In this self-administered survey, affirmative answers to the "risk questions" indicated a greater chance that the respondent lacked a component of a healthy diet.

Results: 35 percent responded that they eat less than three meals per day, 18.1 percent indicated "I do not have enough money to buy the food I need," 20.2 percent had lost weight without trying over the last month, and 21.7 percent gave responses which indicated nutritional risk to five or more of the survey questions. Recommendations are included.

Need for body composition information in elderly subjects.

Kuczmarski, R.J.

Nitrogen balance studies in apparently healthy elderly people and those who are housebound.

Bunker, V.W.; Lawson, M.S.; Stansfield, M.F.; Clayton, B.E.
Nutrition and the Elderly

Housebound individuals received meals-on-wheels 5 d/week. Healthy men and women had mean metabolizable energy intakes of 8.7 and 6.6 MJ/d respectively compared with 6.3 and 4.8 MJ/d in the housebound. The average energy content of the meals-on-wheels as delivered was 2.4 MJ per meal, of which 2.1 MJ were consumed. The healthy men and women had average daily protein intakes of 69.4 and 59.7 g respectively compared with 46.3 and 39.1 g in the housebound. Meals-on-wheels as supplied provided 19.4 g protein per meal, of which 16.2 g were consumed. Healthy subjects were in equilibrium for N balance (0 mmol/d) with a daily intake of 733 mmol, which was equivalent to 11.04 mmol N (0.97 g mixed protein)/kg body-weight per d. Housebound individuals were in negative N balance (-95 mmol/d) with an intake of 475 mmol/d, corresponding to 7.59 mmol N (0.67 g mixed protein)/kg body-weight per d. We were unable to determine in the present study whether the negative N balance observed in the housebound people was due to the relatively low N intake or the underlying disease condition. (author)

158 NAL Call No: RM214.N8
No effect on serum lipids by moderate and high doses of vitamin C in elderly subjects with low plasma ascorbic acid levels.

Language: English

Descriptors: Diet; Ascorbic acid; Vitamin supplements; Blood lipids; Cholesterol; High density lipoprotein; Elderly
Abstract: The influence of dietary supplementation with moderate (200 mg/day) and high (2,000 mg/day) doses of vitamin C on serum lipid levels was studied in 27 female long-stay hospital patients characterized by low plasma ascorbic acid levels during the preceding year. The two doses of vitamin C were compared with placebo in a double-blind, cross-over design during randomly determined 6-week periods followed by 2-week washout intervals. No effect was observed on serum cholesterol, HDL cholesterol, triglyceride levels. Plasma ascorbic acid levels, were highly significantly increased (p less than 0.001) by both doses of vitamin C. It is concluded that dietary supplementation with moderate or high doses of vitamin C does not affect serum lipids of persons who have low plasma ascorbic acid levels suggestive of possible marginal deficiency of vitamin C.

159 NAL Call No: 389.8 AM34
The nutrient intake of a group of older South African hospitalized persons.
Gouws, E.; Rossouw, J.E.; Labadarios, D.; Van Eck, M.

Language: English

Descriptors: South Africa, Nutrient intake, Hospital diets; Nutritional status; Elderly
Abstract: As little is known about the nutritional status of older patients hospitalized for long-term rehabilitation, the present study was undertaken to assess the dietary intake of a group of such patients. Inadequate nutrition can influence both the chance of recovery and the duration of hospitalization.

160 NAL Call No: 389.8 AM34
Nutrient intake recommendations needed for the older American.
Andres, R.; Hallfrisch, J.

Language: English

Descriptors: Elderly nutrition; Recommended dietary allowances; Nutrient requirements; Minerals; Vitamins; Nutrition knowledge
Abstract: Physiological, social, economic, and psychological factors all affect nutritional intake in older Americans. Diseases, physical impairments, and mental deterioration can make maintenance of nutritional status complicated. Until recently, little notice was paid to the dietary needs and habits of older Americans except in relation to restrictions imposed by chronic diseases they acquired on their way to old age. Recommended dietary allowances published in 1980 made few distinctions between requirements for young and old adults. The major change recommended as age increased was a reduction in caloric intake at ages 51 and 75. This reduction is in response to the lower metabolic rates and physical activity of many older people.
161 NAL Call No: TX361.A3J63
Nutrient intake status, knowledge, source of information and self-perceived health status among older adults in South Carolina.
Ryan, V.C.; Gates, A.D.

Language: English

Descriptors: South Carolina; Nutrition knowledge; Nutritional state; Nutrient intake; Information sources; Elderly

Abstract: Data on 339 subjects who were over 51 years of age was analyzed and Pearson product variant correlation coefficients were estimated between the variables of nutrient intake, nutrition knowledge, source of information and self-perceived health status. Nutrient status was based on the consumption of eight nutrients (protein, calcium, iron, vitamin A, vitamin C, niacin, riboflavin and thiamin). A significant positive relationship was found between nutrition status and nutrition knowledge, but no significant relationships were found between self-perceived health status and nutrition status or between self-perceived health status and nutrition knowledge. A significant difference was found between sources of nutrition knowledge (physicians, dietitians, nurses, etc.) and nutrition status using the chi-square statistic. There was no significant difference on a chi-square test of sources of nutrition information and self-perceived health status or on self-perceived health status and nutrition status. A stepwise multivariate approach was used to estimate the amount of variance contributed by the independent variables of nutrition knowledge and sources of nutrition information on the dependent variable of nutrition status.

162 NAL Call No: 389.8 AM34
Nutrient intakes and energy expenditures of residents with senile dementia of the Alzheimer's type.
Litchford, M.D.; Wakefield, L.M.

Language: English

Descriptors: Canada; Nutrient intake; Nutritional state; Nutritional surveys; Elderly; Women; Men

Abstract: A 3-day study compared the nutrient intakes and energy expenditure of 12 women and 3 men (ages 75-95) with senile dementia of the Alzheimer's type (SDAT) with 10 women and 3 men with similar medical profiles but lacking SDAT. The results showed that the SDAT subjects consistently exhibited lower nutrient intakes than the non-SDAT group. Significant intake differences were noted for total calories, fat, carbohydrates, vitamin A, thiamin, niacin, riboflavin, and calcium. The intake results are statistically summarized and discussed.

163 NAL Call No: TX361.A3J63
Nutrient intakes of a group of independently-living elderly individuals in Toronto.

Language: English

Descriptors: Canada; Nutrient intake; Nutritional state; Nutritional surveys; Elderly; Women; Men

Abstract: A cross-sectional survey of an age-stratified random sample of 619 independently-living adults (307 males, 312 females) aged 60 years and over, living in Toronto was conducted. Detailed dietary data was collected from three sets of 3-day food records. The mean energy and nutrient intakes appeared to be adequate. However the energy intake of many participants was low, while their fat intake was high. The nutrients of concern for inadequate intakes were calcium, vitamin D and vitamin A. Intakes of zinc, vitamin C and protein were low for a smaller group. Nutrition education is recommended to provide guidance for choosing healthy diets.

164 NAL Call No: 389.8 AM34
Nutrition, aging, and the continuum of health care: technical support paper.

Language: English

Descriptors: Elderly nutrition; Nutritional intervention; Disease prevention; Aging; Health care; Public services; Policy

Abstract: A technical review justifies the importance of a continuum of health care to help the aging maintain independent living for as long as possible, including the integration of professional nutrition and energy expenditure.
Nutrition services, education and counseling, and research. Specific attention is given to the etiology of nutrition problems of the elderly, the causes of these problems, and effective intervention and preventive strategies. The limitations of existing methods and standards for assessing the nutritional status of the aging also is addressed.

165 NAL Call No: RC620.A136
Nutrition and aging: Dietary Intake of "apparently healthy" elderly (Dutch Nutrition Surveillance System).

Language: English
Descriptors: Netherlands, Nutrient intake, Dietary surveys; Dietary history; Nutritional adequacy, Food consumption; Elderly; Men; Women
Abstract: This article details dietary surveys of healthy elderly men and women. Nutrient intake, nutritional supplements, food choices and eating habits are discussed and shown on tables. Some results were compared with statistics for younger men.

166 NAL Call No: RA784.F6
Nutrition and bone.

Language: English
Descriptors: Bone mineralization; Vitamin D, Phosphorus; Osteoporosis; Disease prevention
Abstract: A brief technical report discusses the influence of nutritional factors on bone health. Particular attention is given to calcium, vitamin D, and phosphorus and their interrelationships in promoting/maintaining bone health. Nutrient requirements for infants, growing adolescents, and the elderly are addressed, as well as nutritional approaches for managing osteoporosis in the elderly.

167 NAL Call No: 389.8 AM34
Nutrition and dementia.

Language: English
Descriptors: Nutrient intake; Alzheimer's disease; Nutritional assessment; Therapeutic diets; Supplements; Aluminum; Alcoholism; Vitamin Deficiency, Elderly
Abstract: The nutritional consequences of dementia and the role of diet in the etiology, treatment, and prevention of dementia are the subjects of this review. The major cause of dementia is Alzheimer's disease. Although it has been suggested that aluminum intake may cause this disease, the bulk of scientific evidence suggests that this is unlikely. Dietary supplements of choline and lecithin have been used to treat Alzheimer's disease but are ineffective. Alzheimer's disease patients are at risk of developing protein-energy malnutrition because of poor food intake and increased energy requirements. The second most common cause of dementia is multi-infarct dementia, caused by multiple strokes. Diet may play a role in the prevention of this form of dementia through effects on blood pressure and other risk factors. Control of risk factors may also prevent further progression of the dementia. Patients with multi-infarct dementia often have dysphagia. The third most common cause of dementia appears to be excessive alcohol intake, due both to the direct neurotoxic effects of alcohol and to the effects of alcohol on nutritional status. Alcoholic dementia may be at least partially reversible with abstinence and good nutrition. Other causes are vitamin B-12 and folate deficiencies; these are reversible dementias. In all types of dementia, adequate nutrition may improve physical well-being, help maximize the patient's functioning, and improve the quality of life.

18 NAL Call No: S22.C6
Nutrition and health.

Language: English
Descriptors: Dietary guidelines; Nutrient requirements; Obesity; Aging; Health promotion
Abstract: An expert task force report defines nutriti-
tion as the interaction between food components and living organisms, and discusses child development, the aging process, and problems of over-nutrition and undernutrition. Attention also is given to Recommended Dietary Allowances for recommended nutrient intakes and Dietary Guidelines for Americans for recommended food habits. Specific attention is given to the effects of special dietary problems (obesity) and chronic diseases of aging on nutritional status, with longevity and life quality given as products of healthful dietary habits.

169 NAL Call No: RA784.N8

Language: English

Descriptors: Food allergies; Food fiber; Diabetes. Elderly; Nutrition, Cardiovascular diseases, Food preferences

Abstract: The Jean Andrews Visiting Professorship Lecture Series at The University of Texas at Austin, is designed to present current information in the field of nutrition. This year the symposium was attended by over 300 participants and addressed many areas of nutrition including: food allergies; the effect of fiber on diseases such as cancer, diabetes and heart disease; and nutrition in aging ranging from the prevention and therapy of osteoporosis by nutrition, defining how the elderly make their food choices and changing the RDAs for the elderly.

170 NAL Call No: RC682.N87

Language: English

Descriptors: Cardiovascular diseases; Elderly nutrition; Energy requirements; Nutrient requirements; Aging

Abstract: A detailed technical review deals specifically with a general and comprehensive view of the relationship between diet and heart disease in aging. Following a discussion of the influence of aging on cardiac function, key nutritional and biochemical changes that occur in aging, and energy and nutrient requirements for the elderly, attention is directed to heart diseases commonly found in the elderly. A structured examination of the short-term and long-term effects of the intakes of energy and other nutrients (protein, carbohydrate, fat, minerals, alcohol) on heart disease is included.

172 NAL Call No: 389.8 D14
Nutrition and modern lifestyles. McBean, L.P.
Nutrition and the Elderly

Literature review. Includes 3 references.
Language: English

Descriptors: Food habits; Eating patterns; Consumer attitudes; Household income; Family size; Employed women; Nutritional adequacy; Convenience foods; Consumer behavior; Nutrition surveys; Low caloric foods

Abstract: Modern lifestyles are influenced by recent demographic, economic, and social changes. Among these are an aging but more affluent population, a growing number and proportion of smaller (one or two person) households, and more women in the work force. Also, the trend in the 1980s toward self improvement has stimulated interest in health, fitness, and nutrition. These factors, in turn, have influenced the way people purchase, prepare, and consume food. The greater percentage of women in the work force and today's fast-paced lifestyle have led to a growing demand for convenience, especially as related to food. Modern lifestyles also are characterized by more fragmented meals—"eating on the run," eating away from home, buying take-out foods, or ordering foods for home delivery. The nutritional implications of these new eating patterns are being questioned. However, it is the actual foods consumed throughout the entire day, not necessarily where or when people eat, that determine nutritional adequacy. The increased health consciousness of Americans is responsible for their heightened concern about the nutritional content of food, in particular fat, cholesterol, sodium/salt, sugar, vitamins, and minerals. Improving nutritional intake/status is being viewed by some consumers not just as a means to avoid specific chronic diseases but to improve the quality of life. Consumers' purchasing behavior in grocery stores and when eating out reflects their health perceptions and lifestyle. In response to restaurant patrons' growing awareness of nutrition and health, many restaurants and foodservice establishments are offering healthy menu options and preparation methods. Similarly, food manufacturers, cognizant of this health trend, have developed new food products. In recent years, growth of sales of "healthy" and "diet" foods has been greater than that for their regular counterparts. Although consumers are interested in a healthy lifestyle, they behave in seemingly inc

DeBruyne, L.K.
Language: English

Descriptors: Elderly nutrition; Brain; Senility; Nutrient deficiencies; Vitamin B12; Thiamine; Iron, Zinc; Mental ability; Nutritional state

Abstract: This article begins with a brief description of the brain and how it works. Normal aging of the brain is discussed as well as abnormal preventable aging due to moderate long-term nutrient deficiencies. Nutrient deficiencies associated with loss of memory and impaired cognitive function are discussed.

Kannel, W.B.
Language: English

Descriptors: Cardiovascular diseases; Elderly; Disease prevention

Abstract: A technical overview discusses recent evidence concerning the effect of diet on the prevention of cardiovascular (CV) disease in elderly subjects. Attention is given to: dietary practices and nutrient requirements of the elderly; CV risk factors in the elderly; blood lipid trends with age; the effect of obesity on CV disease risk; the role of blood pressure and its control for reducing CV disease risk; and dietary effects on blood lipid composition. Controlled clinical trials linking dietary nutrients to serum lipid composition and CV disease incidence also are discussed.

Kivela, S.L.; Nissinen, A.
Nutrition education and changes in nutrition behavior among the 65-74-year-old population of eastern Finland.
Language: English

173 Nutrition and the aging brain.
175 NAL Call No: TX341.J6 Nutrition education and changes in nutrition behavior among the 65-74-year-old population of eastern Finland.
Quick Bibliography Series

Descriptors: Finland; Nutrition education; Elderly nutrition; Health promotion; Behavior modification; Consumption patterns; Regional surveys

Abstract: A 1982 survey assessed the sources, quality, and usefulness of nutrition information available in eastern Finland, and evaluated reported changes in nutrition behavior in the 65-74 elderly age group of the population. The results indicated that: the principal nutrition information sources were television and radio; women obtained more nutrition information from reading materials than did men; while the elderly were able to understand the information provided, only about half were able to follow the guidelines provided; and that changes in improved nutrition habits occurred less in men (up to 35% of the men) than in women (up to 57%). It also was determined that the elderly decreased their dietary fat intake and experienced positive health changes, and that non-smokers had more positive nutritional health changes.

176 NAL Call No: TX361.A3J63
A nutrition education workshop for managers of nutrition centers for the elderly utilizing videotaped simulations for assessment.
Stanek, K.L.; Fox, H.M.

Language: English

Descriptors: Nutrition education; Workshops (programs); Program effectiveness; Videotapes; Elderly

Abstract: As funds become increasingly scarce, an effective nutrition education method which reaches large numbers of elderly individuals is appropriate. A nutrition workshop was provided for 30 managers of government-sponsored nutrition centers for the elderly in a 5-county area. The workshop curriculum, determined after interests of both center managers and participants at the nutrition centers were assessed, was presented in a packet of materials to each workshop attendee and supplemented with explanations and demonstrations. A pre- and post-test evaluation instrument, which included videotaped simulations of typical nutritional situations encountered with elderly persons at the centers, was used to measure attitudes and knowledge before and after the workshop. As a result of the workshop, knowledge increased significantly as measured by the test instrument and 75% of the managers reported use of materials and ideas during the 5 months following the workshop.

177 NAL Call No: TX341.N838
Nutrition for senior citizens.
Rozovski, S.J.

Language: English

Descriptors: Elderly nutrition; Nutrient requirements; Nutrient intake; Guidelines

Abstract: A report provides nutritional guidelines for physicians and other health professionals treating elderly patients. The need for specific nutrients is described, covering intakes of energy, protein, fat, carbohydrate, fiber vitamins and minerals (Ca, P, Fe). Data on dietary recommendations for elderly men and women are included.

178 NAL Call No: 389.8 N953
Nutrition, immunity, aging, and cancer.
Good, R.A.; Lorenz, E.
Literature review. Includes 69 references.

Language: English

Descriptors: Carcinoma; Immunology; Diet; Aging; Nutritional state; Protein energy malnutrition; Zinc

Abstract: A technical report summarizes and discusses the results of recent studies concerning the effect of nutritional status on immunity, aging, and cancer risk. Attention is given to: associations between protein-energy malnutrition and decreased immune function; the role of zinc in immunocompetence; the effect of nutrition on immune function and diseases of aging; and rodent studies of dietary prevention of breast cancer. Recent approaches to understanding the effect of restricted energy intake on immune function also are discussed.

179 NAL Call No: QP141.A1N88
Nutrition, immunity, and outcome; past, present, and future. 11th Gopalan Gold Medal Oration.
Chandra, R.K.

Language: English

Descriptors: Nutrition; Cell mediated immunity;
Nutrition and the Elderly

Neonates; Elderly

Abstract: Extract: Nutrition is a critical determinant of immunocompetence and risk of illness. Young children with protein-energy malnutrition exhibit increased mortality and morbidity, due largely to infectious disease. Recent work has demonstrated that undernourished individuals have impaired immune responses. The most consistent abnormalities are seen in cell-mediated immunity, complement system, phagocytes, mucosal secretory antibody response, and antibody affinity. These changes, together with other handicapping factors observed in underprivileged societies, lead to more infections, which in turn produce physiological changes that worsen nutritional status. It is now established that deficiencies of single nutrients also impair immune responses. The best studied are zinc, iron, vitamin B6, vitamin A, copper, and selenium. If malnutrition occurs during fetal life, as epitomized by small-for-gestational age infants, the effects on cell-mediated immunity are very significant and long lasting. There is much recent evidence to suggest that at the other end of the age spectrum, namely in old age, nutrition plays an important role in maintenance of optimum immunity. Response to influenza virus and other vaccines is improved when the nutritional deficiencies in the elderly are corrected. These interactions of nutrition and immunity have several practical applications. (author)

180 NAL Call No: TX361.A3J6
Nutrition knowledge test for older adults.
Mwonya, R.; Ralston, P.A.; Beavers, I.
Language: English
Descriptors: Nutrition knowledge, Elderly, Questionnaires, Regional surveys, Nutrition education, Socioeconomic status
Abstract: Extract: Purposes were to assess the effectiveness of an instrument designed to measure nutrition knowledge of older adults, and to use this instrument to compare nutrition knowledge of older adults according to age, sex, education, occupation and sources of nutrition information. A 24-item nutrition knowledge test was adapted for use with older adults, and was administered to 104 subjects (60 years of age and older) from two senior citizen centers in a medium-sized Midwestern community. Data were analyzed using an item analysis to determine the best and poorest items, and one-way analyses of variance (ANOVA) to test for significant differences in nutrition knowledge by selected socio-demographic variables. The results revealed that the raw scores of the nutrition knowledge test ranged from 4 to 20 with a mean of 13.17 and standard deviation of 3.74. Eighteen items met the item analysis criteria, while the remaining six items were judged as poor. The results of the ANOVA showed significant differences in nutrition knowledge by educational level and occupation, with those with college education backgrounds and professional occupations having higher scores than other groups. Findings suggest that objective tests can be developed and used with older adult audiences, and that nutrition education efforts need to be focused on older adults from lower socioeconomic backgrounds. (author)

181 NAL Call No: TX341.N836
Nutrition myths about the elderly.
Language: English
Descriptors: Elderly nutrition; Food beliefs; Caloric intake; Nutrient deficiencies; Food preferences
Abstract: Five myths about elderly nutrition are listed. The article discusses the amounts of food consumed, the need for soft foods, the need for vitamin supplement, food choices by the elderly and the relationship between nutrition and income of the elderly.

182 NAL Call No: 389.8 133
Nutrition of the elderly in a Mediterranean city in Spain: effects of life-style patterns.
Fernandez-Ballart, J.; Gordillo, B.; Arija, V.; Marti-Henneberg, C.
Language: English
Descriptors: Spain; Food intake; Dietary surveys, Energy intake; Nutrient intake; Life style; Elderly
Abstract: The authors studied food intake of elderly men and women living in Reus, Spain. All of the subjects lived in non-institutional homes but with different aged companions. The type of life-style and age group of living companions were found to be the major contributing factors in the daily intake of nutrients and calories from proteins, lipids, and carbohydrates. The authors found that the greatest
risk of energy deficiency exists among the elderly who live with the same age group especially in the case of men.

183 NAL Cr11 No: 389.8 AM34
A nutrition screening and assessment system for use with elderly in extended care.
Tramosch, T.S.; Blue, L.S.
Language: English
Descriptors: Nutritional surveillance; Elderly; Nutritional assessment; Patient care
Abstract: Extract: One area of particular interest to health care professionals that is undergoing considerable investigation is the nutritional status of the elderly. This article describes the development, implementation, and evaluation of a procedure used to nutritionally screen and assess geriatric patients in extended care at the Veterans Administration Medical Center in Houston. As we developed the system, we considered the special needs and characteristics of geriatric individuals and incorporated them into two forms. Designs were selected to make our method comprehensive, concise, and ideally, time-efficient. The evaluation of the system included a time utilization study. This study was conducted to evaluate the efficiency of the new system compared with the efficiency of methods used hospital-wide in the past. Results suggest that the new system for reassessing the patient's nutritional status and reevaluating the nutrition care was three times more efficient. (author)

184 NAL Call No: 389.8 AM34
Nutrition screening for long-term care residents.
Noel, M.B.; Wojnaroski, S.M.
Chicago, Ill. : The Association; 1987 Nov.
Language: English
Descriptors: Nutritional surveillance; Patient care; Elderly nutrition; Hospitals
Abstract: A brief report describes the rationale for and development of nutritional screening in a 320-bed geriatric-psychiatric state hospital serving residents having an average length of stay of 806 days. Criteria are specified for an appropriate nutrition screening tool, which was developed by a critical review of the literature concerning screening tools with consultation with a consulting firm of registered dietitians. This tool, a patient-oriented data form, was found to be totally consistent with standard methods of nutritional evaluation in identifying patients requiring nutrition services. (wz)

185 NAL Call No: TX354.N8
Nutrition throughout the life cycle.
xxiv, 597 p. : ill. ; 24 cm. Charts on lining paper. Includes bibliographies and index.
Language: English
Descriptors: Nutrition; Teaching materials; Textbooks; Nutrition; Life cycles; Growth stages; Post secondary education; Professional education
Abstract: This comprehensive text is designed primarily for students in upper division courses in life cycle nutrition and for health professionals working in both individual and community programs. Focus is on human growth and development needs at each stage of life: pregnancy and lactation, infancy, childhood, adolescence, adults and the aging process, and special needs of the elderly in the aging population. Discussions are provided on the changing body at each stage in the human life cycle; ways of determining nutritional status and needs along the way; the special needs of persons carrying increased risk at different ages and stressful life situations, and new approaches to nutrition education for health promotion. This text includes illustrations, appendices, charts, learning aids, and a glossary.

186 NAL Call No: TX361-A3J6
Nutritional and dental status of title III meal recipients.
Kunkel, M.E.; Chesnut, C.K.; Hoover, J.L.B.; Roughead, Z.K.
Language: English
Descriptors: South Carolina; Elderly nutrition; Supplemental feeding programs; Nutritional state; Dental health; Thiamine; Niacin; Calcium; Ethnicity; Urine analysis; Anthropometric dimensions; Regional surveys
Abstract: Seventy-one subjects aged 60 years and
Nutrition and the Elderly

older were recruited through Title III congregate dining sites and one church in northwestern South Carolina. Each participant was given a dental examination; had height, weight and triceps skinfold thickness measurements made; completed a 3-day dietary record; and collected a 24-hour urine sample. Urine samples were analyzed for creatinine, thiamin, niacin, phosphorus and nitrogen. The mean age of the participants was 73.5 +/- 5.8 years with a range of 62-89 years. Of the 37 dentulous subjects, all but 1 had periodontal disease. The only nutrient for which mean intakes were less than the RDA was calcium for black subjects. Thiamin excretion was adequate for all subjects while niacin excretion for 20 subjects was in the deficient range. There were no statistically significant relationships between dietary intake and oral health in these elderly subjects. (author)


Language: English

Descriptors: Louisiana; Puerto rico; Hawaii; Atherosclerosis, Dietary factors; Risks, Mortality, Epidemiology; Lipid metabolism

Abstract: A technical report summarizes and discusses the results of several major studies focused on the effects of dietary risk factors on pathological aspects of the etiology of atherosclerosis in aging adults. Specific attention is given to the methodology, dietary patterns, and results of 4 studies (with particular emphasis on the latter 3 studies), viz: the international atherosclerosis autopsy project, conducted in 14 countries; the New Orleans autopsy studies, the Puerto Rico heart health program; and the Honolulu heart study. Statistical correlation results are presented and discussed.


Language: English

Descriptors: Bone strength, Calcium, Vitamin D, Mineral metabolism, Estrogens, Osteoporosis, Research methodology; Elderly

Abstract: Five problem areas relating to the assessment of nutritional influences on bone health in elderly subjects are described. These are 1) complexity of the domain of bone health, 2) difficulty in detecting bone fragility in vivo, 3) difficulty in detecting useful changes in bone mass, 4) remodeling transients, and 5) lack of standards for assessing adequacy of vitamin D nutrure in elderly subjects. The first four are inherent to the tissue being studied and the last is definitional. Strategies are available for dealing with some of these problems; others seem inherently intractable. However, understanding the basis for all of them can at least help avoid both entering upon futile research and misinterpretation of experimental results.


Language: English

Descriptors: Trauma, Patient care; Nutritional support; Nutrient requirements; Enteral feeding; Parenteral feeding; Case studies; Elderly

Abstract. The nutritional assessment and management of the elderly trauma patient is discussed. Nutritional requirements for protein, vitamins, minerals and fluids are included. A case report of a 65-year-old woman motor vehicle accident victim is presented.


Language: English

Descriptors: Elderly nutrition; Nutrition policy; Nutrient requirements; Physiology; Nutrient-drug interactions; Elderly

Abstract: The elderly have unique nutritional needs
and problems influenced by environmental, genetic, physiologic and pharmacologic factors. Their food choices also affect their nutritional status and these choices may be influenced by income status and physical handicaps.

Language: English
Descriptors: USA; Elderly nutrition; Federal programs; Food and nutrition controversies; Malnutrition; Socioeconomic status
Abstract: A review of assessments of US elderly at nutritional risk, compounding low income factors, and low food stamp program participation, concludes that elderly nutrition programs have received no significant funding increases for 5 years, despite long waiting lists reflecting the presence of a continuing unmet need. It is argued that the provision of food and resources to purchase food can ameliorate the undernutrition and illness that is associated with poor life quality and increased health care costs in old age.

Language: English
Descriptors: USA; Elderly nutrition; Risks; Protein energy malnutrition; Anorexia; Vitamin supplements; Mineral deficiencies; Zinc; Reviews
Abstract: A brief review focuses on 3 areas of particular nutritional concern to the elderly, viz.: body mass issues related to longevity enhancement (including protein energy malnutrition (PEM) and the anorexia of aging); the use/abuse of vitamin supplements; and the role of trace elements in elderly nutrition. It is concluded that there is an increasing need for awareness of elderly nutritional problems, that elderly have higher risks for PEM and low zinc status, and that megadosage vitamin supplements pose toxic risks.

Language: English
Descriptors: Elderly nutrition; Physiological functions; Diseases; Income; Nutritional state; Nutritional surveys; Food consumption; Recommended dietary allowances; Dietary guidelines; Dietary proteins; Dietary carbohydrates; Fats; Vitamins; Minerals
Abstract: The factors which influence the nutritional status of the elderly include physiological decline, health, medication, economics and nutrition knowledge. This article presents the results of nutrient intake studies and the recommended dietary allowances for the elderly.

Language: English
Descriptors: Elderly nutrition; Nutrient requirements; Nutrient intake; Nutritional state; Osteoporosis; Trace elements; Vitamins; Nutrient-drug interactions
Abstract: A technical review summarizes and discusses the current knowledge and understanding of nutrient needs and intakes of elderly people, and the degree of their nutritional status risk. This review highlights the weaknesses of current recommended nutrient intakes for the elderly, noting the lack of solid data for such recommendations. Particular attention is given to separate discussions of: energy and protein intakes and requirements; Ca and other nutrients in osteoporosis; requirements for individual trace elements (Fe, Zn, Cu) and vitamins (A, C, D, E, K, B1, B2, B6, B12, folate, niacin, biotin, pantothenic acid); and data on the nutritional status of the elderly, as gleaned from national clinical surveys, nutrient-drug interaction studies, and nutritional intervention strategies.

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Language: English

Descriptors: Elderly; Nutritional state; Nutrient intake; Protein energy malnutrition; Weight losses; Anthropometric dimensions; Alzheimer's disease

Abstract: A 5-week study of the nutritional status (anthropometry and clinical measurements) and dietary intake (weighed food diary) of 44 elderly patients (23 women, 21 men; mean age, 76) with Alzheimer's disease or multi-infarct dementia revealed the presence of energy and/or protein malnutrition in half the patients even though the mean dietary intake was adequate for energy, protein, vitamins, and minerals. A 4-fold higher incidence of infections was noted for malnourished than for non-malnourished patients and 89 percent of the patients lost weight during hospitalization, but no association was found among weight loss, hospitalization duration, and length of illness.

NAL Call No: 389.8 Z33

Nutritional status, grip strength, and immune function in institutionalized elderly.
Suboticanec, K.; Stavljenic, A.; Bilic-Pesic, L.; Gorajscan, M.; Gorajscan, D.; Brubacher, G., Buzina, R.

Language: English

Descriptors: Nutritional state; Nutrient intake; Blood plasma; Vitamins; Zinc; Immune response; Vitamin supplements; Strength; Men

Abstract: Elderly people are prone to vitamin deficiencies and malnutrition. This is probably due to a decline of basal metabolic rate and lean body mass as well as reduction in physical activity and total food consumption. The authors studied a group of elderly institutionalized men and women. Their food intake was recorded and certain essential minerals and vitamins found in their blood were measured. The effects of vitamin supplementation on grip strength and immunocompetence were analyzed.

NAL Call No: TX361.A3J6

Nutritional status of healthy middle class elderly women.
Bergstrom, N.; Wilson, S.E.; Smith, J.L.

Language: English

Descriptors: Women; Elderly; Nutritional state, Socioeconomic status

Abstract: The purposes of this study were to determine the adequacy of dietary intake and blood/serum concentrations of nutrients of middle class elderly women. Thirty-six middle class women volunteered to participate in the study. An interview, a 24-hour dietary recall, anthropometric measurements and a blood sample were obtained from all subjects. Using the 1980 RDA as a basis for evaluation, less than two-thirds of the RDA of the following nutrients were ingested for a percentage of the subjects: calcium (41%), vitamin A (16%), thiamin (8%), and riboflavin and vitamin C (14%). Blood and serum levels of nutrients below normal clinical ranges included vitamin B6 (31% of subjects), carotene (23%), vitamin B12 (14%) and folate (11%). No correlations were found between intake and blood and serum concentrations.

NAL Call No: 389.8 Z33

Nutritional status of non institutionalized elderly people in North Italy.
Porini, M.; Testolin, G.; Simonetti, P.; Moneta, A.; Kovati, P.; Aguzzi, F.

Language: English

Descriptors: Italy; Elderly; Nutritional state, Nutrient deficiencies; Anthropometric dimensions; Clinical investigations

Abstract: An anthropometric, dietary, and biochemical study of the nutritional status of 313 free-living and 37 publically-assisted elderly subjects revealed the assisted elderly to have lower body weight, percent body fat, muscle and fat areas, and a lower body mass index. The assisted elderly also had mean dietary intakes that were below recommended levels for 8 of 9 nutrients studied. While 10-15% of the free-living subjects had an inadequate thiamin and riboflavin status, these nutritional status deficiencies in the assisted elderly...
were greater. It also was noted that the free-living subjects had higher protein and fat intakes and lower thiamin and retinol intakes. (wz)


Language: English

Descriptors: Italy; Diet; Elderly nutrition; Mineral deficiencies; Vitamin Deficiency; Calcium; Iron; Niacin; Thiamine; Nutritional state; Nutritional adequacy; Urban areas

Abstract: A study of the nutritional status of 136 free-living, healthy elderly subjects (66 women, 70 men; ages 65-69) residing in an urban area revealed low calcium, iron, niacin, and thiamin intakes in 10-50% of the subjects and excess body fat in 85% of the women and in half of the men. Their diets also were slightly below recommended levels for carbohydrate and fat, but were high in protein. Food habits and differences in mineral deficiency incidence between sexes also are discussed. (wz)


Language: English

Descriptors: Jamaica; Elderly nutrition; Nutritional state; Anthropometric dimensions; Blood pressure, Health; Life style

Abstract: A survey assessed the nutritional status, socioeconomic environment, and lifestyle of 154 of 197 elderly residing in a small urban area of Kingston, Jamaica. Extensive data tabulations are provided on: age and sex distribution; sources of income; illnesses and illness patterns; anthropometric measurements; percentage of standard weight for age by sex; iron nutritional status; and nutritional status (judged by weight/height ratio) vs. income sources and vs. high diastolic and systolic blood pressure, arthritis, and heart disease prevalence. The study design and methodology are detailed, and the survey results are discussed. Specific and general recommendations derived from the survey are included. (wz)


Language: English

Descriptors: Diet; Nutritional adequacy; Nursing homes; Elderly nutrition; Patient care; Guidelines

Abstract: An overview article examines and discusses various aspects of the provision of nutritional support in long-term care facilities. Attention is given to: the role of nursing homes in controlling patient malnutrition and its consequences; and factors involved in ensuring that patients in long-term care facilities receive adequate nutritional support (including mechanisms for nutritional status monitoring, identifying patients at nutritional risk, identifying adequate nutritional goals, and for delivering nutritional support). The inadequacy of professional staff caused by cost considerations is addressed as a key problem area that needs resolution. (wz)


Language: English

Descriptors: Nutritional surveillance; Nutrition programs; Nutritional assessment; Federal programs; Public agencies; Home delivered meals; Elderly

Abstract: Nutritional surveillance of the elderly provides ongoing evidence that nutrition programs, both federal and state, can help to reduce health costs for those elderly whose care is otherwise so costly to the taxpayer. This article examines the development of one such program in New York State.
Nutrition and the Elderly

203 Nutrition-related problems in the institutionalized elderly.
Welch, T.
Columbus, Ohio: Ross Laboratories; 1989.
Language: English
Descriptors: Elderly nutrition; Physiological functions; Weight; Albumins; Protein energy malnutrition; Iron deficiency anemia; Digestive disorders; Nursing homes
Abstract: The physical and biochemical changes which occur with aging create special nutritional problems for the geriatric patient. Health care professionals need to recognize the importance of nutrition in maintaining and improving the health of the elderly patient.

204 The role of omega-3 fatty acids in growth and development. I. The role of omega-3 fatty acids in growth and development.
Simopoulos, A.P.
Baltimore, Md.: Williams & Wilkins; 1988 Apr.
Language: English
Descriptors: Polyunsaturated fatty acids; Nutrient requirements; Fish oils; Health promotion; Disease prevention; Lipid metabolism; Prostaglandins
Abstract: The first of a 2-part technical report summarizes and discusses the current scientific understanding of the role of fish and vegetable oil omega-3 fatty acids in growth and development. Specifically, the report addresses the sources and metabolism of these fatty acids, the elongation and desaturation of alpha-linolenic acid, and the role of these acids in pregnancy and fetal development, the nutrition of breast-fed infants, child health, and aging. The essentiality of these omega-3 fatty acids is discussed. The results of animal and human studies are included.

205 Optimism abounds at New York's LAC.
Truax, M.
Denver, Colo.: American School Food Service Association; 1987 Jun.

206 Osteopenia in the men of a Veterans Administration nursing home.
Nagraj, H.S.; Gergans, G.A.; Mattson, D.E.; Rudman, I.W.; Rudman, D.
Language: English
Descriptors: Bone density; Bone fractures; Incidence; Osteoporosis; Body weight; Nursing homes; Elderly; Men
Abstract: We measured by photon absorptiometry the bone density at six sites in 65 nursing home men aged 57-58 y and in 25 independent community men aged 57-80 y. Average bone density in the community men ranged from 97% to 105% ofagematched normal men. In the nursing home men bone densities at all six sites (in g/cm2) were significantly (p < 0.05) and directly correlated with body weight but were not significantly correlated with height, age, principal or
secondary diagnoses, continuing medications, or functional level

207 NAL Call No: RC931.O73O76
Osteoporosis a patient education sampler.
United States, Food and Drug Administration
National Conference on Women's Health Series
1987 : United States. Food and Drug Administration

Language: English

Descriptors: Osteoporosis-Prevention, Women's health services; Teaching materials; Osteoporosis; Patient education; Women; Study guides; Disease prevention; Diagnosis; Guidelines

Abstract: An educational document for healthcare providers, patients, and women in general provides resource information for becoming more informed and active in osteoporosis prevention and treatment. The document includes articles from the FDA Consumer publication addressing key health messages for women in their teens and twenties; middle-aged women, and older women. The articles include: osteoporosis, a women's guide; osteoporosis: cause, treatment, prevention; osteoporosis, calcium and estrogens; and the menopause time of life. An article encouraging exercising by the National Institute on Aging, suggestions for further reading, and space for patients to enter questions to ask their doctor also are included. The pages of the document are perforated for convenient duplication and sharing of the materials.

208 NAL Call No: TX341.B75
Osteoporosis and calcium supplementation.
Bailey, A.J.

Language: English

Descriptors: Osteoporosis; Calcium; Supplements; Bone density; Collagen; Elderly

Abstract: The use of calcium supplements for the prevention of osteoporosis or for regeneration of bone is controversial. This article argues that calcium deficiency is rare and that bone strength does not depend solely on mineralization. It is proposed that the quality of the collaginous framework is important to bone strength because replacement of the collaginous matrix framework by hormone therapy results in an increase in bone thickness and a reduction in the incidence of fractures.

209 NAL Call No: RC931.O73R6 1986
Osteoporosis current concepts : report of the Seventh Ross Conference on Medical Research.
Roche, Alex F., 1921-; Gussler, Judith D.
Ross Laboratories
Ross Conference on Medical Research 7th : 1986 : Charleston, S.C.
Columbus, Ohio : Ross Laboratories; 1987.

Language: English

Descriptors: Osteoporosis--Congresses; Reference works; Osteoporosis; Therapy, Calcium; Vitamin D; Metabolism; Disease prevention; Patient care

Abstract: The proceedings of a 1986 medical research conference for physicians and scientists working on various aspects of osteoporosis presents 31 papers addressing medical and clinical studies and issues concerning this disease. Topics include: the epidemiology of osteoporosis etiology; skeletal status in children, adolescents, and the elderly; hormonal and calcium metabolism; risks factors; hormonal and calcitonin theapy; bone metabolism and bone mass; cellular abnormalities; bone loss prevention; bone mass measurements; general osteoporosis treatment; and ethical issues and fraud. Discussions are appended to each of the papers.

210 NAL Call No: TX361.A3J6
The PaCS survey--a renewed commitment to good care.
Matthews, I E.

Language: English

Descriptors: USA; Nursing homes; Patient care; Elderly nutrition; Surveys; Facilities; Medicaid; Medicare
Nutrition and the Elderly

Abstract: A brief report discusses the characteristics and requirements of the new Patient Care and Services (PaCS) survey that all nursing homes for elderly patients participating in the US federal Medicare/Medicaid program must experience by the end of 1987 as part of their annual state licensure inspection. The 3 major components of the PaCS survey format focus on: (1) new facilities, emphasizing traditional concerns (facility structure, staffing, written policies/procedures, etc.); (2) a comprehensive facilities inspection, including the dining area and quality of eating assistance provided; and (3) fire and safety compliance. Detailed discussion is given to elderly nutritional assessment and satisfying nutritional needs. It is noted that the PaCS survey system places an increased emphasis on aggressive intervention rather than passive care of elderly subjects.

211 NAL Call No: TX361.A3J6

Peer support and nutrition education for older adults with diabetes.

Language: English

Descriptors: Diabetes; Elderly; Nutrition education; Weight reduction; Food habits; Psychological factors; Peer relationships; Support systems; Patient compliance; Beliefs; Dietary surveys

Abstract: Extract: The impact of nutrition education, peer support and several pre-intervention psycho-social variables upon weight change and glycemic control were assessed in older, non-insulin-dependent diabetic patients. Significant weight reductions were observed in persons who participated in the combined nutrition education and peer support program. No significant changes were observed in glycemic control. Several psycho-social variables were significantly correlated with reductions in weight and improvement in glycemic control. Implications for future research and intervention programs for older persons with nutrition related diseases are presented. (author)

212 NAL Call No: RM214.T66

Perceived relationships between taste and smell acuity and food intake in the elderly.

Language: English

Descriptors: Nutritional support, Elderly; Hospices; Diet counseling

Abstract: This article provides general information about hospice care for the geriatric patient as well as information about the current role of nutrition and dietetic services in hospices. The implications for nutrition services in future hospice environment also discussed.

215 NAL Call No: 389.8 J824

Phylloquinone in plasma from elderly and young
Adults: factors influencing its concentration.
Sadowski, J.A.; Hood, S.J.; Dallal, G.E.; Garry, P.J.
Language: English
Descriptors: Vitamin K; Blood plasma; Triglycerides; Cholesterol; High density lipoprotein; Regression analysis; Young adults; Elderly
Abstract: Fasting plasma phylloquinone concentrations were determined by reverse-phase high-performance liquid chromatography in a population of young (n = 131) and elderly (n = 195) human subjects. The distribution of values was non-Gaussian but was converted to Gaussian form after a logarithmic transformation of the data. The normal range derived from the lognormal distribution was 0.29-2.64 nmol/L (geometric average = 0.87 nmol/L, median = 0.86 nmol/L). Young females had significantly decreased plasma phylloquinone concentrations when compared with the elderly females whereas concentrations in young males were slightly higher than those in elderly males. A regression model was constructed and revealed that plasma phylloquinone concentrations were positively correlated with plasma triglycerides and alpha-tocopherol. Although the elderly subjects (average = 1.05 nmol/L) had higher levels of phylloquinone than the young subjects (0.94 nmol/L), when the concentration of phylloquinone in plasma is expressed as nanomoles phylloquinone per millimole of triglyceride, the elderly subjects (0.62 X 10^-6) showed decreased levels for phylloquinone compared with the young subjects (0.82 X 10^-6) (p < 0.001).

216 NAL Call No: J89.8 Z33
Plasma and leucocyte zinc concentrations and their response to zinc supplementation in an elderly population.
Field, H.P.; Whitley, A.J.; Srinivasan, T.R.; Walker, B.E.; Kelleher, J.
Baltimore, Md.: Han., Huber; 1987.
Language: English
Descriptors: Zinc; Elderly nutrition; Blood plasma; Leukocytes; Mineral supplements

Plasma and leucocyte zinc concentrations and their response to zinc supplementation in an elderly population.
Field, H.P.; Whitley, A.J.; Srinivasan, T.R.; Walker, B.E.; Kelleher, J.
Baltimore, Md.: Han., Huber; 1987.
Language: English
Descriptors: Zinc; Elderly nutrition; Blood plasma; Leukocytes; Mineral supplements

Abstract: A study of plasma and leucocyte zinc (Zn) levels relative to different levels of Zn supplementation (50-150 mg/day) in 15 institutionalized elderly women revealed that plasma Zn levels rose while granulocyte Zn levels declined. Mononuclear cell Zn levels were unaffected by Zn supplementation. The clinical implications of these results are discussed.

217 NAL Call No: P-020.A184
Plasma calcium and trace metals in human subjects with mature cataract.
Bhat, K.S.
Language: English
Descriptors: India; Men; Women; Cataract; Blood plasma; Calcium; Magnesium; Chromium; Copper; Zinc; Nutritional state
Abstract: Extract: Plasma samples from 39 human subjects with mature cataract and 15 subjects without the eye disease were analysed for calcium, magnesium, chromium, copper and zinc by atomic absorption spectrometry. Copper and zinc levels in plasma were significantly lower in subjects with cataract as compared to control subjects. The concentrations of calcium, magnesium and chromium in plasma from subject in the former group were similar to those from the latter group. Age appeared to have no effect on plasma copper, but zinc levels were significantly lowered in elderly persons with cataract as compared to younger subjects with the eye disease. The results suggest an association between cataract and nutritional status of copper and zinc in human subjects. (author)

218 NAL Call No: J89.8 J824
Plasma pyridoxal 5'-phosphate concentration and dietary vitamin B-6 intake in free-living, low-income elderly people.
Manore, M.M.; Vaughan, L.A.; Carroll, S.S.; Leklen, J.E.
Language: English
Descriptors: Pyridoxine; Niacin intake; Blood plasma; Vitamin supplements; Low income groups;
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Abstract: Free living elderly persons (aged greater than or equal to 60 y, n = 198) were recruited to determine the effects of age, sex, health status, dietary vitamin B-6 intakes, and B-6 supplement use on plasma pyridoxal 5'-phosphate (PLP). Vitamin B-6 intakes were determined from 3-d diet records; supplementation was based on self-reported brand and frequency data. Fasting blood samples were analyzed for PLP. Subjects were primarily low-income Caucasians. There was no linear relationship between dietary vitamin B-6 intake, age, sex or health status, and PLP while accounting for supplemental vitamin B-6 use. PLP, however, was negatively correlated with age (p less than 0.001) in individuals with PLP values between 32 and 90 nmol/L. Vitamin B-6 status was low (PLP less than nmol/L) in 32% of this elderly population (n = 198) and could be attributed to low dietary vitamin B-6 intakes and/or the presence of health problems reported to alter vitamin B-6 status. This research suggests that low vitamin B-6 status is prevalent in low-income, elderly persons, especially those with multiple health problems.

219 NAL Call No: 389.8 AM34
Pleasantness perception of salt in young vs. elderly adults.
Chauhan, J.

Language: English

Descriptors. Taste sensitivity, Sodium chloride, Age: Sex differences; Young adults; Elderly

Abstract: This study examined age effects on suprathreshold taste intensity and pleasantness perception of salt (NaCl) in both aqueous and food systems using large population samples in three discrete age groups, the young (20-29 yrs), the old (70-79 yrs) and the very old (80-99 yrs).

220 NAL Call No: 389.8 N953
Practical nutrition for the elderly.
Davies, L.

Language: English

Descriptors. Elderly nutrition, Malnutrition, Diagnosis; Patient care, Nutrition education

Abstract: A brief report discusses practical approaches to the diagnosis of malnutrition in the elderly and provides suggestions for enhancing the understanding of nutrition by the elderly and by health professionals dealing with the elderly. Specific attention is given to myths and realities concerning elderly diets; and the general classification of malnutrition in the elderly and easily recognizable warning signs of malnutrition. Practical examples of nutrition teaching for the elderly and for physicians and nutritionists caring for the elderly are included.

221 NAL Call No: TX361.A3J63
Predicting dependent feeding behaviors in the institutionalized elderly.
Nolen, N.R.; Garrard, J.
Binghamton, N.Y.: Haworth Press. 1988

Language: English

Descriptors. Eating habits; Food consumption; Liquids; Self-feeding; Prediction; Nursing homes; Patient care; Elderly

Abstract: Dependence in feeding behaviors in the institutionalized elderly results in increased staff costs and loss of self-esteem. This study analyzed the conditions which appeared to be related to the loss of independent feeding skills in 106 individuals in a skilled care setting. At highest risk for loss of self-feeding skills are passive, preoccupied individuals and those with cognitive disorders. Staff has a tendency to feed people when intake begins to fall. Consistency in seating and routine, as well as creative alternatives between total independence and dependence are needed in order to maximize self-feeding behaviors.

222 NAL Call No: 389.8 AM34
Prediction of body weight for the nonambulatory elderly from anthropometry.
Chumlea, W.C.; Guo, S.; Roche, A.F.; Steinbaugh, M.L.
Chicago, Ill.: The Association; 1988 May.

Language: English

Descriptors. Body weight. Elderly; Prediction, Anthropometric dimensions, Nutritional state
Abstract: Body weight is one of the most important measurements in assessing nutritional status. Weight is also an important variable in equations that are needed to predict caloric expenditure and in indexes of body composition. Equations to predict the body weight of nonambulatory elderly persons with known errors should make use of body measurements that are indexes of the actual constituents of body composition and that can be collected regardless of an elderly person's level of mobility. The study samples consisted of a validation sample of 228 ambulatory white elderly persons, a cross-validation sample, and a clinical-validation sample of nonambulatory white elderly persons. Equations to predict body weight in the validation sample were derived from recumbent measures of arm and calf circumferences, triceps and subscapular skinfolds, and knee height. The accuracy, sensitivity, and validity of the equations were independently tested in the cross-validation sample; mean signed differences in actual and predicted weight ranged from differences in actual and predicted weight ranged from 0.1 to 1.8 kg. In the clinical-validation sample, the mean differences were larger. Prediction equations are presented using two, three, and four body measurements to allow the selection of an equation based upon those measurements that are possible to collect from a nonambulatory person on an individual basis.

223 NAL Call No: 389.8 J824
Predictive ability of various nutritional variables for mortality in elderly people.
Agarwal, N.; Acevedo, F.; Leighton, L.S.; Cayten, C.G.; Pitchumoni, C.S.

Language: English
Descriptors: Nutritional assessment; Prediction; Malnutrition; Diagnosis; Blood serum protein; Albumins; Body weight; Mortality
Abstract: Nutritional indices (percentage ideal body weight [IBW], serum albumin, serum transferrin, total lymphocyte count [TLC] and delayed cutaneous hypersensitivity [DH] response) were assessed in 80 consecutive patients (aged 85-100 y) within 24 h of admission to determine their predictive value for mortality. Nine patients died. Pearson correlation analysis demonstrated that death was significantly (p less than 0.05 to less than 0.01) associated with sepsis, serum albumin less than 30 g/L, TLC less than or equal to 1500 cells/mm3, and percentage IBW less than or equal to 90%. However, when serum albumin was controlled for, logit regression analyses demonstrated that the impact of other nutrition indices on death was insignificant. The effect of serum albumin remained significant (p less than 0.05 to less than 0.01) even when age and physician's diagnosis were held constant. With the logit model, serum albumin greater than or equal to 30 g/L had a sensitivity of 0.33, specificity of 0.99, and overall predictive power of 0.91. Serum albumin is thus the simplest and best single predictor of mortality and can provide early identification of elderly people at increased risk of death.

224 NAL Call No: TX361.A3J63
Predictors of nutrition supplement use in the elderly part I: the role of beliefs, attitude, subjective norm and intention.
Cotugna, N.

Language: English
Descriptors: Consumer attitudes; Consumer behavior; Food beliefs; Prediction; Elderly; Women; Men
Abstract: This study was able to demonstrate the predictive role of beliefs in determining the intention to use nutrient supplements in an elderly population. It provided insight into the beliefs which formulated positive attitudes toward nutrition supplement use, and the relevant weights of those beliefs.

225 NAL Call No: TX361.A3J63
Predictors of nutrition supplement use in the elderly part I: A review of the literature.
Cotugna, N.

Language: English
Descriptors: Vitamin supplements; Mineral supplements; Consumer behavior; Consumer surveys; Literature reviews; Elderly; Women; Men
Abstract: The use of nutrition supplements is a common health behavior in Americans especially
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among the elderly. The author studied reasons as to why the elderly are so vulnerable to the use of nutrition supplements. Level of education, age differentiation, and socioeconomic status do not have an impact on supplement use by the elderly, although they do in the general population. Race or ethnic background differences have not been adequately studied. The one factor which does appear to be significant is gender, with women being more frequent users of nutrition supplements than men.

Prospective study of pneumonia hospitalizations and mortality of U.S. older people: the role of chronic conditions, health behaviors, and nutritional status.

Language: English

Descriptors: Pneumonia; Morbidity; Mortality; Nutritional state; Risks; National surveys; Men; Women; Elderly

Abstract: Mortality and hospitalization rates for pneumonia have increased among older Americans during recent years (1979-86), despite a national commitment to the reduction of premature deaths from pneumonia. A prospective study of deaths and hospitalizations attributable to pneumonia was conducted among 5,474 subjects ages 55 and older who participated in the NHANES I Epidemiologic Followup Study. Prevalent chronic conditions, health behaviors, and nutritional status indicators, measured at baseline, were examined in relation to pneumonia hospitalization and death during 12 years of followup. Mortality and hospitalization rates for pneumonia were higher among men than women, and higher among those ages 65 and older than among those 55-64 of both sexes. Risk of pneumonia death was higher among subjects with a history of congestive heart failure, stroke, cancer, or diabetes. Risk of pneumonia hospitalization was higher among subjects with a history of chronic obstructive pulmonary disease and among men who were current smokers. Daily alcohol consumption did not increase risk of pneumonia in this study population. Four measures of nutritional status were examined taking age, prevalent chronic conditions, and cigarette smoking into account. Body mass index, arm muscle area, and serum albumin and hemoglobin levels. Risk of pneumonia death was 2.6 times higher in men in the lowest quartile, compared with men in the highest quartile, of body mass index. Similarly, the risk was 4.5 times higher among men in the lowest quartile of arm muscle area. Risk of death from pneumonia was 3.6 times higher among women in the lowest quartile of serum albumin levels compared with women in the highest quartile. Relative risks for these nutritional status indicators remained elevated after adjusting for age and the medical history risk factors.
Protein calorie malnutrition in elderly chronic care institutions in Hong Kong.
Woo, J.; Ho, S.C.; Cheung, C.K.; Mak, Y.T.; Swaminathan, R.
Language: English
Descriptors: Hong kong; Protein energy malnutrition; Nutritional state; Protein intake; Caloric intake; Anthropometric dimensions; Long term care; Elderly
Abstract: Protein nutritional status was assessed in 208 elderly residents of four long term care institutions in Hong Kong, by measuring protein and energy intake, anthropometric indices, and concentrations of plasma proteins. Compared to free-living elderly subjects of a similar age group, institutionalized subjects had lower daily protein and protein caloric intake despite of similar intake total energy, lower anthropometric measurements and lower plasma protein concentrations. Subjects who were unable to feed themselves and those who died within a three month period had poorer nutritional status. This survey shows evidence of protein calorie malnutrition among elderly residents of long term care institutions in Hong Kong, and that it may contribute to short term mortality.

Protein nutriture of a group of free-living elderly.
Munro, H.N.; McGandy, R.B.; Hartz, S.C.; Russell, R.M.; Jacob, R.A.; Otradovec, C.L.
Language: English
Descriptors: Elderly nutrition; Protein intake; Nutritional state; Blood composition; Anthropometric dimensions; Pyridoxine
Abstract: The adequacy of the protein intakes of elderly people without overt debilitating diseases was investigated on 691 free-living men and women divided into those aged 60-75 y and those greater than 75 y. In both age groups men and women had average protein intakes of 1.02-1.06 g/kg body weight, values well above the safe level of 0.75 g/kg recommended in a WHO/FAO/UNU report. Although plasma concentrations of albumin, prealbumin, and transferrin declined with age, these were not related to low intakes of protein by individual elderly people. Similarly, upper-arm muscle mass was not less in those elderly people at the lower end of the range of protein intakes. Thus in this population of overtly healthy elderly men and women, there was no evidence of protein deficiency in contrast to other surveys where elderly people with chronic diseases were included.

The provision of weekend home delivered meals by state and a pilot study indicating the need for weekend home delivered meals.
Journal of nutrition for the elderly v. 8 (1). p. 31-43. charts; 1988. Includes 16 references.
Language: English
Descriptors: USA; Home delivered meals; Work days; Program evaluation; Nutrient intake;
Nutrition and the Elderly

Abstract: A survey of state units on aging revealed that 43 states and the District of Columbia provide some weekend home delivered meals. In most states meals were provided in only a few areas. There is no national system for reporting weekend delivery. Very few states have data on the extent of weekend meal service. A pilot study to determine the need for home delivered meal indicated that persons receiving home delivered meals 5 days a week were more likely to have an insufficient dietary intake of protein, thiamin, riboflavin, calcium, iron, and phosphorus on weekends than weekdays.

Pyridoxine supplementation: effect on lymphocyte responses in elderly persons.
Talbott, M.C.; Miller, L.T.; Kerkvliet, N.I.

Language: English

Descriptors: Pyridoxine; Pyridoxal phosphate; Vitamin supplements; Lymphocytes; Elderly nutrition

Abstract: The effect of pyridoxine supplementation on lymphocyte responsiveness was investigated in 15 persons aged 65-81 y. Eleven subjects received 50 mg/d pyridoxine HCl (PN). Four subjects received a placebo. Lymphocyte proliferation to T and B cell mitogens, lymphocyte subpopulations with monoclonal antibodies, and plasma pyridoxal 5'-phosphate (PLP) were measured before and after 1 and 2 mo of supplementation. After 1 and 2 mo plasma PLP levels increased by 195 +/- 88 nM and 201 +/- 84 nM, respectively, in subjects receiving PN. With PN supplementation, lymphocyte proliferation increased significantly in response to phytohemagglutinin (p less than 0.01), pokeweed mitogen (p less than 0.01), and Staphylococcus aureus (Cowan I) (p less than 0.05). For PN-treated subjects with low presupplement plasma PLP levels, lymphocyte blastogenesis also increased significantly (p less than 0.01) in response to concanavalin A. Percentages of T3+ and T4+ but not T8+ cells increased significantly (p less than 0.05) in PN-treated subjects. These results suggest that improving vitamin B-6 status is important in stimulating immunocompetence in the elderly. (author)
Information is provided on vitamin A dietary sources, intakes, essentiality, deficiency states, and the vitamin A nutritional status and requirements for infants, children, adults, pregnant and lactating women, and the elderly. Ancillary information is given on vitamin A nutrient-nutrient interactions and vitamin A toxicity at high ingestion doses. The clinical rationale for lowering the vitamin A RDA for infants and adults also is discussed.

Abstract: A brief statistical report compares the participation in and costs of US domestic food programs between the 4th quarter of fiscal year 1986 (July-September) and the same period during 1985. Attention is focused on 3 categories of these programs, viz.: child nutrition programs (e.g., school lunch program); supplemental food programs (e.g., WIC program); and food distribution programs (e.g., nutrition programs for the elderly). Tabular data are included on the average participation in USDA food programs and on the benefit cost of the various USDA food programs.

Abstract: Various authors have criticized the Recommended Dietary Allowances (RDA) because they do not include values for elderly subjects. It is argued here that such values would not be useful. The large majority of elderly subjects have one or more diagnosed diseases, drug consumption is high, etc, and it is unlikely that specific dietary standards for such a group could be developed or would be useful. More importantly, I argue that the RDA do not and cannot do most of the things which dietary standards ought to do, and their use generates considerable misinformation. It is time to reconsider the whole issue of dietary standards. It is clear that elderly subjects who do not require therapeutic diets need to consume a diet which differs from that of the rest of the population.

Abstract: Extract: Vitamin C is unevenly distributed throughout all body cells and fluids. A total-body pool of 900 mg (5.11 mmol) in an adult male meets the following criteria of a satisfactory vitamin C status: 1) it is threefold higher than one that prevents scurvy, 2) no known health advantages accrue at higher pool sizes, 3) absorption efficiency is high and urinary loss low at appropriate intakes, and 4) a 1-mo reserve allows for periods of low intake or stress. To maintain a suitable body pool in healthy 76-kg men and 62-kg women requires daily intakes (RDI) of 40 mg (227 micro moles) and 30 mg (170 micro moles), respectively. Reasons for not increasing RDI values to enhance iron absorption and to prevent nitrosamine formation age given. The specific association of normal intakes of dietary vitamin C with cancer is very weak and not quantifiable. Ad visable intakes for children, pregnant and lactating women, and the elderly are considered. The present recommendations are in better accord with current information than are the 1980 RDA values.

238 NAL Call No: 389.8 J824 Recommended dietary intakes (RDI) of vitamin A in humans. Olson, J.A. Bethesda, Md.: American Society for Clinical Nutrition; 1987 Apr.
Nutrition and the Elderly


Language: English

Descriptors: Vitamin A; Nutrient requirements; Recommended dietary intakes; Human nutrition research

Abstract: Extract: Mean and median dietary intakes of vitamin A in the US are approximately 1000 and 624 retinol equivalents, respectively. In this paper a satisfactory vitamin A status is defined as a total-body pool that provides adequate vitamin A to meet all known physiological needs and a reserve for 4 mo on low intakes or during stress. Mean dietary intakes required to maintain an adequate body pool (ie, 20 micrograms vitamin A/g liver [0.07 micromoles/g]) in reference 76-kg men and 62-kg women are 506 and 413 micrograms, respectively. Recommended dietary intakes (RDI) for nearly all men and women are 700 micrograms and 600 micrograms, respectively. Vitamin A needs in infants, children, the elderly, and pregnant and lactating women are quantified. The toxicity of vitamin A in early pregnancy, for which a safe intake level is not known, is stressed. On many grounds these suggested lower RDI values are preferable to the 1980 RDA values.(author)

239 NAL Call No: TX361.A3J63
The relationship between a nutrition education program and nutrition knowledge and eating behaviors of the elderly.
Bedell, B.A.; Shackleton, P.A

Language: English

Descriptors: Nutrition knowledge; Nutrition information, Consumer education; Program evaluation

Abstract: An experimental study was conducted to examine the relationship between a nutrition education program and nutrition knowledge and eating behaviors of older adults. Twenty-four subjects were randomly assigned to an experimental or a control group. Prior to any intervention, all subjects completed a demographic data sheet, a 25-item True/False questionnaire and a 24-Hour Dietary Recall interview. The experimental group attended four one-hour nutrition education classes over a two-week period. Following the educational intervention, both groups of subjects completed the True/False questionnaire and the 24-Hour Dietary Recall interview. Controlling for pretest, posttest differences on the two dependent variables were tested using repeated measures analysis of variance. No significant differences were found between the two groups.

240 NAL Call No: 389.8 AM34
Relationship of socioeconomic status and living arrangements to nutritional intake of the older person.
Ryan, V.C.; Bower, M.E.

Language: English

Descriptors: South Carolina; Nutrient intake; Nutritional surveys; Socioeconomic status; Living conditions; Nutritional assessment; Psychological factors; Elderly

Abstract: The number and proportion of older Americans have grown rapidly in recent years, and this trend is expected to continue. Adequate nutritional intake is essential for optimal physical and mental activity. The purpose of this study was to examine the relationship of socioeconomic status and living arrangements to nutritional intake of persons 55 years of age or older living in South Carolina. Data on 268 subjects who participated in the South Carolina Nutrition Survey, which was based on a true probability sample that represents the state's adult population, were analyzed. Eighty-nine percent of the subjects were found to have poor nutritional intake on the basis of a combination of four index nutrients: iron, vitamin B-6, calcium, and vitamin A. The data did not show a relationship between living arrangements and nutrient intake but affirmed the literature findings that support a positive relationship between low socioeconomic status and inadequate nutritional intake.

241 NAL Call No: 389.8 J824
Relationship of vitamin A and vitamin E intake to fasting plasma retinol, retinol-binding protein, retinyl esters, carotene, alpha-tocopherol, and cholesterol among elderly people and young adults: increased plasma retinyl esters among vitamin A-supplement users.
Baltimore, Md. : American Society for Clinical
Quick Bibliography Series


Language: English

Descriptors: Vitamin supplements; Nutritional assessment; Blood plasma; Carrier proteins; Carotenoids; Age; Adults; Elderly; Men; Women

Abstract: We studied the relationships of supplemental and total vitamin A and supplemental vitamin E intake with fasting plasma biochemical indicators of vitamin A and vitamin E nutritional status among 562 healthy elderly people (aged 60-98 y) and 194 healthy young adult (aged 19-59 y) volunteers. All subjects were nonsmokers. For the young adults, plasma retinol was significantly greater in males than in females (p less than 0.01); retinol was not related to supplemental vitamin A intake for either group. Fasting plasma retinyl esters demonstrated a significant increase with vitamin A supplement use. For supplemental vitamin A intakes of 5001-10 000 IU/d, a 2.5-fold increase over nonusers in fasting plasma retinyl esters was observed for elderly people (p less than 0.05) and a 1.5-fold increase for young adults (p greater than 0.20). For elderly people, greater fasting plasma retinyl esters were associated with long-term vitamin A supplement use (greater than 5 y) and biochemical evidence of liver damage. Elderly people who take vitamin A supplements may be at increased risk for vitamin A overload.

242 NAL Call No: 389.8 AM34

Relationships between sour and salt taste perception and selected subject attributes.
Chauhan, J.
Chicago, Ill.: The Association; 1989 May.

Language: English

Descriptors: Taste sensitivity; Salt; Acidity; Age; Alcoholic beverages; Tobacco smoking

Abstract: The relationships between perceived sour and salt taste intensity and selected subject attributes--taste/smell deficits, salt use, avoidance of salt/sour tasting foods, smoking, alcohol use, dentures, education, and prescription drug use--were investigated in 180 subjects (30 men + 30 women/age group: 20 to 29 years [young], 70 to 79 years [old], 80 to 99 years [very old]. Multiple regression analyses showed that the taste intensity estimates were significantly related to age, sex, stimulus concentration, self-reported taste/smell deficits, avoidance of salt/sour tasting foods, salt use, alcohol, smoking, education, and use of certain drugs (drugs for the treatment of arthritis, drugs acting on the gastrointestinal tract and heart system, and diuretics/drugs for the treatment of hypertension). The very old showed deficits in perception of the low suprathreshold tastant levels, with near normal perception of the high levels, whereas the old exhibited deficits at all levels. Wearing dentures was the only single variable not selected in any of the final regression models, due to the high prevalence and homogeneity in use of dentures in the elderly groups. Further work using a stratified sample and a larger number of subjects is warranted to elucidate the influence of subject attributes on taste perception.

243 NAL Call No: RC262.C5N8

The relative validity of a retrospective estimate of food consumption based on a current dietary history and a food frequency list.
Bakkum, A.; Bloemberg, B.; Staveren, W.A. van; Verschuren, M.; West, C.E.

Language: English

Descriptors: Man; Food consumption; Validity; Accuracy; Dietary history; Etiology; Nutrient intake; Frequency; Nutritional assessment

Abstract: Extract: The relative validity of information and food consumption in the distant past was assessed by combining a dietary history (referring to the recent past) with a food frequency list (monitoring major changes over the past 12-14 years). This approach was evaluated in a study of two groups of apparently healthy elderly people (mean age 80 years) who had participated in a food consumption study 12-14 years before the start of the present study. One group consisted of 18 harbor employees who retired subsequent to the initial assessment of food intake. On the average, each member of this group had reduced his food consumption by about 1,000 kcal. The other group consisted of 46 elderly men and women who had retired before their food consumption was measured initially. This group had not markedly changed their food intake. The results showed that both groups overestimated changes in their food intake and that the systematic overestimation and
random error were similar for both groups. If the men in both groups were combined to form one group, a valid ranking of subjects in small and large consumers of energy and most of the selected nutrients was possible. However, current food intake influenced the accuracy of the measurement of past food intake.(author)

244  NAL Call No: 389.8 J824

Language: English

Descriptors: Gambia; Riboflavin; Nutritional state; Nutrient intake; Blood plasma; Adolescents; Elderly

Abstract: Riboflavin status was measured by activation coefficient of erythrocyte glutathione reductase (EGRAC) in elderly and adolescent rural Gambians whose intakes were low. Fifty-one adolescents and 52 elderly subjects were each divided into six supplementation groups to receive 0.25, 0.5, 0.75, 1.0, 1.5, or 2.5 mg riboflavin/d on 5 consecutive days weekly for 5 wk. Before supplementation, EGRAC values were grossly at normal and differed (p less than 0.005) between the two female groups [elderly subjects 1.94 +/− 0.33 (average +/− SD); adolescents, 1.72 +/− 0.27] but not between the two male groups. With supplementation greater than 0.25 mg/d the values became nearly equal in the two age groups. Only at total intakes between 1.8 and 2.5 mg riboflavin/d did the subjects attain acceptable status, with a mean EGRAC of 1.3-1.4. Clearly there is a need for further study of the discrepancy between observed index values during supplementation and the accepted ranges of normality at intakes close to the recommended amounts.

245  NAL Call No: 389.8 J82

Language: English

Descriptors: Folate and Neurotransmitters, Human nutrition research

Abstract: Under the sponsorship of the National Institute on Aging and the National Institute of Diabetes and Digestive and Kidney Diseases, the Life Sciences Research Office of the Federation of American Societies for Experimental Biology held a workshop entitled, "The Role of Folate and Vitamin B-12 in Neurotransmitter Metabolism and Degenerative Neurological Changes Associated with Aging." The purpose of the May 1988 workshop was to bring together scientists from various disciplines to identify opportunities for research on an important topic relating to neuroscience, nutrition and aging.

246  NAL Call No: RC682.N87

Language: English

Descriptors. Cardiovascular diseases; Lipid peroxidation; Risks, Peroxides, Lipid metabolism

Abstract: A technical report reviews the ways lipid peroxidation (LP) may be involved in atherosclerosis, describes a model of how peroxidation could be atherogenic, and discusses the possible relationships between aging, LP, and heart disease. Attention is given to: the incidence of LP in heart disease patients; cell injury attributed to LP; interactions among endothelial cells, LP, and atherosclerosis; LP and other factors implicated in atherosclerosis at the cellular level; the source of LP products and cellular protection against LP; and the association of LP with aging and heart disease. The hypothesis is presented that LP plays a part in the initiation of heart disease.

247  NAL Call No: RA784.F6
Quick Bibliography Series

(The International perspectives in food, diet and health, 9951-869x ; 1). Includes 26 references.

Language: English

Descriptors: Taste sensitivity, Smell, Organoleptic traits; Aging; Obesity; Carcinoma; Therapy

Abstract: An overview discusses the status of the chemical senses, which play an important role in nutrition and food intake, throughout the lifespan, including taste and smell abnormalities due to normal aging, disease status, and ethical drug usage. The role of taste and olfaction in obesity and cancer also are addressed. A wide variety of disorders affecting taste and smell are tabulated. Treatments of taste and smell disorders are described.

248 NAL Call No: 389.1 W892

The role of zinc in human nutrition.
Ronaghy, H.A.

Language: English

Descriptors: Zinc; Mineral deficiencies; Nutrient requirements; Patient care; Surgery; Mineral supplements

Abstract: A variety of studies are discussed concerning various aspects of zinc (Zn) nutriture in humans. Attention is given to: the biological essentiality of Zn; its metabolic turnover; the causes and clinical manifestations of Zn deficiency; the effects of Zn deficiency on the developing fetus; Zn deficiency and requirements in infants, adolescents, and the elderly; the clinical importance of Zn in surgical patients; and Zn supplementation.

249 NAL Call No: 389.8 J824

The roles of inflammation and iron deficiency as causes of anemia.
Yip, R.; Dallman, P.R.

Language: English

Descriptors: Iron deficiency anemia; Inflammation; Erythrocyte sedimentation rate; Socioeconomic status; Children; Men; Women

Abstract: Inflammatory disease as well as iron deficiency may play an important role in the cause of anemia in the United States. We evaluated the relationships between Fe deficiency, inflammatory disease, and anemia using data from the First National Health and Nutritional Examination Survey (NHANES I). Fe nutrition index was based on the ratio of serum Fe to Fe-binding capacity (Fe:TIBC) and inflammatory index was based on erythrocyte sedimentation rate (ESR). Groups with the highest prevalence of anemia were younger children, young women, and elderly men. Fe deficiency (low Fe:TIBC) was most common among the anemic children and young women but rare in anemic elderly men. Conversely, inflammation (high ESR) was most common among anemic elderly individuals. The prevalence of anemia was more than twice as high in the lowest than in the highest income group. Relative contributions of Fe deficiency and inflammation to anemia did not differ substantially among income groups.

250 NAL Call No: RM214.N87

Selection of supplements.
Debruyne, L.K.; Rolfs, S.R.

Language: English

Descriptors: USA; Vitamin supplements; Mineral supplements, Food and nutrition controversies; Age groups; Risks; Nutrient requirements; Guidelines

Abstract: A technical report discusses public misconceptions and facts concerning the need for vitamin-mineral supplements, focusing on the hype of the supplement industry and food faddists, and arguing that such needs, if any, be diagnosed and treated by a physician, not be self-prescription. Specific attention is given to the supplement needs of infants, teenagers, women of childbearing age, pregnant women, the elderly, strict dieters, vegetarians, people with chronic diseases, and people who smoke, drink, or take regular medications. Guidelines are included for selecting the right supplement, and data on safe nutrient ranges and information on certain nutrients and foods not needed in supplements are presented. Basic information and tabular data on vitamin and mineral needs, supplements for infants, children, adults, and elderly, and food group selection plans are appended.
Selenium balance studies in apparently healthy and housebound elderly people eating self-selected diets.
Bunker, V.W.; Lawson, M.S.; Stansfield, M.F.; Clayton, B.E

Abstract: Metabolic balance studies (5 d) for Se were conducted in twenty-four apparently healthy elderly people (age 69.6-85.4 years), and twenty housebound subjects (age 69.9-85.1 years) with chronic disease. During study the subjects lived in their own homes, at self-selected diets and continued their normal daily activities. Geometric mean daily dietary intakes of the two groups were significantly different (P less than 0.01), being 819 (range 310-1631) nmol for the healthy and 475 (range 233-1136) nmol for the housebound elderly. Daily intake of Se significantly correlated with balance in both groups. Solution of the regression equations gave theoretical daily requirements of 447 nmol for the healthy and 419 nmol for the housebound subjects. The healthy elderly were in positive balance of 148 nmol/d for Se and the housebound were in equilibrium with an overall mean retention of 43 nmol/d. Mean levels of Se in blood fractions for the healthy and housebound subjects were significantly different, being 1.65 and 1.40 micromole/l whole blood, 1.45 and 1.21 micromole/l plasma and 5.72 and 5.30 nmol/g haemoglobin in erythrocytes respectively. There was no difference in the whole-blood glutathione peroxidase (EC 1.11.1.9) activities between the groups. There were clear differences in Se status between the two groups of elderly people. The cause of the positive balance in the healthy subjects remains unexplained.

Senile' osteoporosis reconsidered.
Resnick, N.M.; Greenspan, S.L.
Chicago, Ill. : The Association; 1989 Feb

Abstract: Osteoporosis is a devastating, morbid, and costly condition whose ravages are felt most profoundly by women over age 70 years. Yet most research on its prevention and treatment has focused on perimenopausal women, although there are significant differences between perimenopausal and older women in factors related to bone mineral metabolism, rate of bone loss, the structural integrity of remaining bone, risk factors for fractures, and the types of fractures sustained. Currently recommended therapies, which slow bone loss in perimenopausal women, may be of less benefit for older women whose loss of bone has already slowed or ceased and whose remaining bone may be of inadequate quantity and quality to prevent fracture. Thus, the application of currently available modalities is unlikely to mitigate significantly the consequences of osteoporosis in this population. Further research is urgently needed, and some directions for future investigation are suggested.

Serum magnesium levels in nursing home patients.
Dave, D.M.; Katz, P.R.; Gutman, S.
Nutrition research v. 7 (9): p. 981-984. charts; 1987 Sep. Includes 13 references.

Abstract: The elderly nursing home patient is at risk for hypomagnesemia due to poor nutritional intake, multiple chronic disease states, and polypharmacy. In order to assess the need to screen for magnesium deficiency in a long-term care setting, serum magnesium levels were determined in 75 nursing home patients. Mild hypomagnesemia was observed in 3 of the patients, all with poor eating habits. Diuretic use, although common, was not associated with magnesium deficiency. Routine screening for hypomagnesemia in nursing home patients with adequate nutritional intake does not appear warranted.
Quick Bibliography Series


Language: English

Descriptors. Men, Aging; Bone mineralization; Protein intake; Blood composition; Calcium
Abstract: Extract: Low serum protein levels and low dietary protein intakes possibly influence bone metabolism. To evaluate the relationships among serum protein concentrations, protein intakes, and bone mineral content (BMC), we have examined two populations of normal men. BMC was measured at two radial sites and a vertebral site. Aging was associated with a fall in BMC at all sites. Serum albumin levels also fell with age and were related to BMC. Albumin concentrations were associated with BMC when other variables (calcium and protein intake, vitamin D levels, parathyroid hormone, and urinary calcium) also were considered. Thus, alterations in protein metabolism may affect BMC and may play a role in the genesis of senile osteopenia.(author)

255 NAL Call No: 389.8 J824
Serum retinol levels of persons aged 4-74 years from three Hispanic groups.

Language: English

Descriptors: Nutritional state; Blood serum; Nutrition surveys; Ethnicity; Hispanics; Children; Adolescents; Adults; Elderly
Abstract: Previous research suggests that Hispanics in this country may have poor vitamin A status. Using serum retinol data from the Hispanic Health and Nutrition Examination Survey, we examined the vitamin A status of Mexican Americans (MA), Cubans, and Puerto Ricans (PR) aged 4-74 y. MA had lower mean serum retinol levels and higher prevalences of serum retinol in the range 0.70-1.01 micromole/L than did Cubans in several age-sex groups. The prevalence (or percentage) of serum retinol in a range indicating possible risk of functional impairment was not elevated in any of the Hispanic groups except the females aged 18-44 yrs. However, a high percentage of children and adolescents in the three Hispanic groups had serum retinol values in ranges that might indicate less-than-optimal vitamin A status. Determination of vitamin A status requires a more definitive assessment than by serum vitamin A alone.

256 NAL Call No: TX341.C6
Nutrition week v. 18 (45): p. 4-5; 1988 Nov.17.

Language: English

Descriptors: Elderly nutrition; Nutrition programs; Federal programs; Community feeding centers, Home delivered meals; Program evaluation
Abstract: This article is an excerpt from a report entitled "Service Innovations in Elderly Nutrition Program: Strategies for Meeting Unmet Needs." This report, funded by the American Association of Retired Persons, evaluates the federal Elderly Nutrition Program and makes recommendations for improving services.

257 NAL Call No: HV696.F6B32
Service innovations in the elderly nutrition program strategies for meeting unmet needs.

Language: English

Descriptors: Food relief--United States; Aged--Nutrition; Elderly; Senior citizens; Nutrition programs; Public agencies
Abstract. This report discusses the extent to which the federally funded Elderly Nutrition Program provides services to socially impaired elders, homeless elders, ethnic and linguistic minorities, and extremely impaired individuals with needs for more than one meal daily and/or weekend meals. Data on the extent to which these innovative services have been implemented was collected by means of a mailed questionnaire to a random sample of 568 nutrition project directors nationwide. Other information about the programs was collected, including: program size, mechanics of foodservice, project structure, and nutrition project.
Nutrition and the Elderly

director characteristics.

258 NAL Call No: QP141A1N88
Sex and age changes in serum zinc levels.
Rea, I.M.
Jan. Includes 16 references.

Language: English

L. scriptors: Zinc. Blood serum; Age groups; Elderly; Young adults; Males; Females; Sex differences

Abstract: Serum zinc was measured in 126 fit healthy subjects living at home, 31 elderly males (mean age 78.3 years), 30 young males (mean age 21.6 years), 33 elderly females (mean age 81.6 years) and 32 young females (mean age 22.1 years). There were highly significant differences for serum zinc between the four groups with respect to age and sex (p less than 0.0002). Mean serum zinc was significantly lower in the elderly male group compared to the young male group with a similar but non significant trend in female groups. Males, old and young, had higher serum zinc levels than females of the same age and differences were significant between young males and females. Serum zinc levels are therefore lower in the elderly male group compared to the young male group with a similar but non significant trend in female groups. Males, old and young, had higher serum zinc levels than females of the same age and differences were significant between young males and females. Serum zinc levels are therefore lower in the elderly male group compared to the young male group with a similar but non significant trend in female groups. Males, old and young, had higher serum zinc levels than females of the same age and differences were significant between young males and females. Serum zinc levels are therefore lower in the elderly male group compared to the young male group with a similar but non significant trend in female groups. Males, old and young, had higher serum zinc levels than females of the same age and differences were significant between young males and females. Serum zinc levels are therefore lower in the elderly male group compared to the young male group with a similar but non significant trend in female groups. Males, old and young, had higher serum zinc levels than females of the same age and differences were significant between young males and females. Serum zinc levels are therefore lower in the elderly male group compared to the young male group with a similar but non significant trend in female groups. Males, old and young, had higher serum zinc levels than females of the same age and differences were significant between young males and females. Serum zinc levels are therefore lower in the elderly male group compared to the young male group with a similar but non significant trend in female groups. Males, old and young, had higher serum zinc levels than females of the same age and differences were significant between young males and females. Serum zinc levels are therefore lower in the elderly male group compared to the young male group with a similar but non significant trend in female groups.

259 NAL Call No: 448.8 B77
Simple test of intestinal calcium absorption measured by stable strontium.

Language: English

Descriptors: Calcium; Absorption; Digestive system diseases; Strontium; Tests

Abstract: Extract: A clinical test of intestinal calcium absorption has been developed using non-radioactive stable strontium as a calcium tracer. In nine elderly subjects there was a close correlation between the fractional absorption of strontium and radioactive calcium (45 Ca) during a five hour period after the simultaneous oral administration of the two tracers. Comparable precision was achieved with each tracer in six subjects in whom the test was repeated after two weeks. The effect of food on strontium absorption was examined in a further 33 normal subjects (age 21-60 years), and the administration of the strontium with a standard breakfast was shown to reduce the variance at individual time points. A simplified test in which serum strontium concentration was measured four hours after the oral dose given with a standard breakfast was adopted as the routine procedure. The normal range (mean (2 SD)), established over 97 tests in 53 patients, was 7.0-18.0% of the dose in the extracellular fluid. A further 30 patients with possible disorders of calcium absorption (10 with primary hyperparathyroidism and 20 with coeliac disease) were studied by this standard test. In both groups of patients the mean four hour strontium values were significantly different from normal. This standard strontium absorption test allows assessment of calcium absorption with sufficient sensitivity and precision to have a wide application in clinical practice. (author)

260 NAL Call No: 389.8 J824
Social, psychological and physical factors affecting the nutritional status of elderly subjects: separating cause and effect.
Goodwin, J.S.

Language: English

Descriptors: Nutritional state; Mental health; Intelligence; Alcoholic beverages; Nursing homes; Psychological factors; Elderly

Abstract: The fact that most of the important changes in nutritional status with age are not secondary to aging per se in no way detracts from their importance. This paper reviews three factors that can affect nutritional status in elderly adults: ethanol intake, cognitive status, and institutionalization. The discussion focuses on the difficulties in obtaining reliable information on the interaction of nutritional status with these factors.

261 NAL Call No: TX361.A3J63
Some aspects of sensory properties of food that relate to food habits and associated problems of elderly consumers.
Madeira, K.
Abstract: A questionnaire was developed and administered to 30 elderly consumers to explore perceptions about sensory properties of food that relate to food habits and food-related problems. Fifty percent of the survey sample believed that their food habits had changed considerably in the past 10 years, and 47% believed that health problems influenced their food selection. Few reported changes in food preparation because of mastication problems. Approximately half believed that foods smelled and tasted as good to them now as foods did when the consumers were young. Sensory properties of food were significantly (p less than or equal to .05) more important than several other factors in making purchase decisions for food preparation in three specific social contexts.

Sensory properties of food were significantly (p less than or equal to .05) more important than several other factors in making purchase decisions for food preparation in three specific social contexts.

Special considerations in meal planning for the elderly.


Abstract: Practical guidelines are given for planning meals for the elderly to ensure the nutritional adequacy of the elderly and reduce the potential for elderly malnutrition. Specific attention is focused on: the consistency of foods; the importance of their palatability and digestability; meal frequency and the attractiveness of meal presentation; the physical status of elderly subjects with respect to specific nutrient requirements; and guidelines on the eating environment, food variety, and meal planning. Menu compositions for elderly women and men are included. (wz)

Status of anthropometry and body composition data in elderly subjects.

Chumlea, W.C.; Baumgartner, R.N.
American journal of clinical nutrition v. 50 (5). p. 1158-1166. ill; 1989 Nov. Includes 91 references.

Study to decide if calcium curbs bone loss.

Denver, Colo. American School Food Service Association; 1987 Mar.

Abstract: The USDA Human Nutrition Research Center on Aging at Tufts University is studying the possible benefits of women taking calcium supplements after menopause. The study will note if there are benefits to supplementation; the long-term effects of supplementation; and any unsuspected risks associated with supplementation. The methodology of the study is discussed.

Subnormal concentrations of serum selenium and plasma carnitine in chronically tube-fed patients.


Language: English

Descriptors: Body composition; Anthropometric dimensions; Laboratory methods; Impedance; Ultrasound; Ethnicity; Elderly; Men; Women

Abstract: Understanding the normal changes in the body and its composition with increasing old age and their health implications are important to the health care and nutritional support of elderly subjects. Distribution statistics for selected body measurements of persons aged 65-80 y are available from the national surveys. Recumbent anthropometric techniques and B-mode ultrasound may be applicable to measuring those greater than 80 y who have difficulty standing or are chair- or bedfast. The problems of estimating body composition in elderly subjects could be improved by using a four-compartment model. Noninvasive methods, such as anthropometry, and bioelectric impedance, could be used to predict body composition in elderly subjects if appropriate equations were available and validated against direct methods. The most pressing need is for the development of suitable reference data for anthropometry and body composition in large representative samples of black, white, Hispanic and Oriental elderly persons in the US.
Nutrition and the Elderly

Nutrition; 1987 Feb.

Language: English

Descriptors: Selenium; Carnitine; Enteral feeding; Elderly; Nutritional requirements; Nursing homes

Abstract: Extract: Forty-seven tube-fed nursing home patients were investigated with regard to serum or plasma selenium (Se), carnitine, and red blood cell (RBC) glutathione peroxidase (GSH-Px). Thirty-six patients were tube fed with Isocal, and 11 were tube fed with Compleat B, an L-carnitine-containing formula. Eighteen elderly nursing home patients and 10 young adults served as controls. Serum Se and plasma carnitine were lowest (p less than 0.05) in the Isocal patients. In all 36 Isocal subjects, Se was below normal, and in 26% of Isocal patients RBC GSH-Px was also below normal. Free and total carnitine were below normal in most Isocal subjects. All 11 Compleat B patients had subnormal serum Se, but most had normal carnitine concentrations. These data suggest that enteral formulae in nursing homes should contain greater than 100 micrograms Se and on the order of a mmol carnitine/1600 kcal.(author)

266 NAL Call No: LB1025.14
Suggestions for extension home economists programming at congregate nutrition sites.
Newhouse, J.K.
Champaign, Ill. : Home Economics Education, University of Illinois at Urbana-Champaign; 1989 Nov.

Language: English

Descriptors: Community feeding centers, Learning activities; Cooperative extension service; Nutrition programs; Public relations; Elderly

Abstract: The congregate nutrition site which provide group meals for older adults is an appropriate forum for educational outreach to the elderly by the Cooperative Extension Service. This article gives guidelines for planning programs which fit the needs and interests of the people who use these sites.

267 NAL Call No: 389.8 J82
Summary of the NATO advanced research workshop on dietary omega-3 and omega-6 fatty acids: biological effects and nutritional essentiality.
Simopoulos, A.P.

Language: English

Descriptors: Essential fatty acids; Docosenoic acid; Eicosapentaenoic acid; Nutrient deficiencies; Lipid metabolism; Infant feeding; Diseases; Parenteral feeding; Elderly nutrition; Human nutrition research; Nato

Abstract: A number of human studies presented at the workshop indicate that the premature infant at birth is biochemically deficient in docosahexaenoic acid (DHA) in both the brain and liver phospholipids, and that DHA is essential for normal visual acuity. The amount of DHA necessary to maintain normal amounts of the liver and brain phospholipids postnatally is 11 mg/kg daily. Elderly patients on long-term gastric tube feedings and others on long-term intravenous fluids and on total parenteral nutrition are particularly prone to deficiencies of alpha-linolenic acid, eicosapentaenoic acid (EPA) and DHA. The amounts estimated to prevent deficiencies in the elderly are 800-1100 mg/d of alpha-linolenic acid and 300-400 mg/d of EPA and DHA combined. Preliminary data indicate that children with malnutrition and mucoviscidosis, women with toxemia, and elderly people have decreased amounts of DHA in plasma phospholipids. The omega-3 fatty acids lower triglycerides and, at high levels, lower cholesterol. The anti-aggregatory, antithrombotic and anti-inflammatory properties of omega-3 fatty acids have been confirmed, and a dose-response curve is emerging. Despite the increase in bleeding time, no clinical evidence of bleeding has been noted by the investigators in any of the studies. Clinical trials are necessary in order to precisely define the dose and mechanisms involved in defining the essentiality of omega-3 fatty acids in growth and development and their beneficial effects in coronary heart disease, hypertension, inflammation, arthritis, psoriasis, other autoimmune disorders, and cancer.

268 NAL Call No: 389.8 SCH6
Survey shows elderly receive good grades for nutrition.
Denver, Colo. : American School Food Service Association; 1987 Apr.
Abstract: Scientists at USDA's Human Nutrition Research Center on Aging at Tufts University recently reported that many U.S. elderly persons are well-nourished in spite of diminished appetites. Reports were based on a survey of nearly 700 healthyBoston residents over the age of 60 years, the first study to examine the nutritional status of this particular age group. Major findings of the study were that 1) daily calorie intakes averaged 200 to 400 calories lower for this age group than for middle-age people, 2) vitamin and mineral levels in blood samples were within normal ranges in spite of low dietary intakes of some nutrients, and 3) over 50% of the survey population took vitamin and/or mineral supplements, most commonly vitamins C and E, iron, zinc, and calcium. Another survey of 350 elderly people confined to nursing homes found that their nutritional status was comparable to that of the healthy elderly population. Additional analyses of survey findings are currently being conducted.
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Language: English

Descriptors: Trace elements; Immunity; Infection; Mineral deficiencies; Mineral supplements; Iron; Zinc; Copper; Selenium; Iodine; Blood composition

Abstract: Extract: Nutrition is a critical determinant of immunocompetence and risk of infection. Protein-energy malnutrition results in impaired cell-mediated immunity, decreased levels of serum complement components, phagocyte dysfunction, and reduced secretory antibody response on mucosal surfaces. Deficiencies of many micronutrients also impair immunity. Obesity and excessive intake of nutrients are associated with decreased immune responses. The interactions of nutrition and immunity have several practical implications, particularly for young children and elderly persons. (author)


Language: English

Descriptors: USA; Geriatrics; Training; Dietitians; Nutrition education; Elderly nutrition; National surveys

Abstract: Extract: All ADA-accredited dietetic internship programs and coordinated undergraduate programs (CUPs) were surveyed to determine the inclusion of geriatric nutrition and education about the aged population. All responding programs included some exposure to geriatrics; however, CUPs provided more experiences than internship programs. Skilled- and intermediate-care facilities were the most relevant sites of training. (author)


Language: English

Descriptors: Nutritional assessment; Anthropometry; Dimensions; Elderly; Standards

Abstract: Extract: The purpose of this study was to develop percentile norms for upper arm anthropometry for use in the nutrition assessment of the elderly. This survey involved the measurement of four parameters: triceps skinfold thickness, mid-upper arm circumference, mid-upper arm muscle circumference, and mid-upper arm muscle area. Measurements were collected from 746 white, noninstitutionalized ambulatory elderly persons living in the Cincinnati area. Age- and sex-specific percentile distributions for the four parameters indicated age-related trends. All four parameters were lowered with advancing age in elderly women and men aged 60 to 89 years. The degree of change with age varied among parameters but was consistently greater in elderly women than in men. Elderly women had larger triceps skinfold thickness but smaller mid-upper arm circumference, mid-upper arm muscle circumference, and mid-upper arm muscle area measurements than did elderly men. These anthropometric findings provide useful standards for ambulatory white elderly people. It is evident that upper arm anthropometry changes with age. As a result, and elderly person's nutritional status should not be evaluated with a single standard for the elderly. Surveys of the elderly should use appropriate age standards to ensure and accurate estimation of obesity or undernutrition in the elderly. (author)


Language: English

Descriptors: Food fiber; Wheat bran; Calcium; Digestive tract; Intestine transit time; Long term care; Elderly

Abstract: The effect of added dietary fibre on bowel function and calcium balance has been studied in a group of elderly long-stay patients. The results show that a regime of a basic fibre-enriched diet with supplementary bran improves bowel habit in patients with chronic constipation and diarrhoea without effect on serum calcium, phosphate and alkaline phosphatase levels. Unacceptable gastrointestinal side effects had been encountered.
but did not occur when the supplementary bran was added at ward level.

276 NAL Call No: TX361.A3J63
Use of supplemental feedings for nursing home residents.
Matthews, L.E.
Language: English
Descriptors: Supplements; Liquid diet; Protein content; Caloric intake; Nutritional intervention; Food costs; Long term care; Elderly
Abstract: Many elderly residents of nursing homes need food supplements because they do not get enough nutrients from regular meals. This article describes several types of supplements and gives protein and caloric contents of each. The relative costs of the supplements are also considered.

277 NAL Call No: TX361.A3J63
Using high fiber foods to meet resident needs.
Matthews, L.E.
Language: English
Descriptors: Food fiber; Bran, Whole grains; Fruit juices; Fruits; Vegetables; Blended foods; Constipation; Long term care; Elderly
Abstract: The use of dietary fiber to maintain bowel function for elderly patients in long-term care is discussed. Possible detrimental effects of high fiber foods are included.

279 NAL Call No: QP141.A1N88
Vitamin and food supplement practices and nutrition beliefs of the elderly in seven western states.
Language: English
Descriptors: Arizona; California; Colorado; Hawaii; New Mexico; Nevada; Washington; Vitamin and mineral supplements; Questionnaires; Nutrition information; Information sources; Information dissemination; Elderly
Abstract: A mail survey of 2,451 non-institutionalized subjects, including 595 sixty years or older living in seven Western states (Arizona, California, Colorado, Hawaii, New Mexico, Nevada and Washington) reported frequencies and factors associated with vitamin and mineral supplementation. Sixty percent of subjects over 60 years reported using one or more supplements with multiple vitamin, vitamin D and vitamin E being most frequently used (greater than 50%). Reasons for use ranged from lack of vitamin in food to energy and/or tiredness. Sources of nutrition information cited most frequently were newspapers and books. The level of usage in the elderly is a major concern for health providers as well as the lack of information from professional resources.

280 NAL Call No: TX341.H82
The vitamin and mineral intake of a free-living young elderly Australian population in relation to total diet and supplementation practices.
Baghurst, K.; Record, S.J.
Language: English
Descriptors: Australia; Nutrient intake; Vitamins; Minerals; Elderly; Nutritional state
Abstract: A survey assessed the vitamin and mineral intakes of a randomly-selected group of
Nutrition and the Elderly

Free-living Australian elderly subjects in 2 age groups (65-69 and 70-75). The results indicated that the mean intakes of most nutrients were equivalent to or greater than recommended levels, with a lower percentage of elderly at risks for vitamin (folate, vitamin B6) and mineral (Ca, Zn, Mg, Cu) deficiencies than reported for less able elderly subjects. Differences and similarities in intakes between sexes also are discussed.


Language: English

Descriptors: Finland; Netherlands; Pyridoxine; Nutritional state; Vitamin supplements

Abstract: A study assessed the vitamin B6 status of 45 Finnish elderly (31 women, 14 men; ages, 66-96), compared this with that reported earlier for Dutch elderly and younger adults, and examined the efficacy of a 1-year, 2 mg/day pyridoxine supplement in a double-blind, placebo-controlled design. It was found that ca. 25% of the Finnish and Dutch elderly were deficient in vitamin B6, and that pyridoxine supplementation corrected this.

Vitamin C status and nutrient interactions in a healthy elderly population.


Language: English

Descriptors: Ascorbic acid; Blood plasma; Nutrient-nutrient interactions; Vitamin supplements; Elderly; Men; Women

Abstract: Vitamin C status and interactions with other nutrients were studied in 677 healthy, non-institutionalized elderly people aged 60-98 y. Although 6% of the males and 3% of the females showed marginal vitamin C status (plasma ascorbic acid 11 to less than 23 micromole/L), only one person had a plasma ascorbic acid (AA) level less than 11 micromole/L. At all levels of total vitamin C intake, mean plasma AA levels were higher in females than males. Vitamin C supplement use was associated with generally higher blood levels of vitamins B-6, B-12, and E and folate in both sexes and with higher levels of retinol in females. However, after both age and the total dietary intake of the specific nutrient being examined were controlled for, plasma AA levels were significantly correlated only with plasma levels of vitamin F and folate in females.

Vitamin D status in the elderly: seasonal substrate deficiency causes 1,25-dihydroxycholecalciferol deficiency.


Language: English

Descriptors: Ascorbic acid; Blood plasma; Nutrient-nutrient interactions; Vitamin supplements; Elderly; Men; Women

Abstract: Vitamin C status and interactions with other nutrients were studied in 677 healthy, non-institutionalized elderly people aged 60-98 y. Although 6% of the males and 3% of the females showed marginal vitamin C status (plasma ascorbic acid 11 to less than 23 micromole/L), only one person had a plasma ascorbic acid (AA) level less than 11 micromole/L. At all levels of total vitamin C intake, mean plasma AA levels were higher in females than males. Vitamin C supplement use was associated with generally higher blood levels of vitamins B-6, B-12, and E and folate in both sexes and with higher levels of retinol in females. However, after both age and the total dietary intake of the specific nutrient being examined were controlled for, plasma AA levels were significantly correlated only with plasma levels of vitamin F and folate in females.
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Language: English

Descriptors: Belgium; Vitamin D; Elderly nutrition; Nutritional state; Seasonal variation; Bone disorders; Metabolism; Calcium; Parathyroid hormone

Abstract: The seasonal variation of 25-hydroxycholecalciferol and 1,25-dihydroxycholecalciferol was analyzed in 240 elderly subjects (mean age: 78 yr) in Belgium. Serum 25-hydroxycholecalciferol was lowest from February until May (mean levels less than 25 nmol/L). Summer peak levels were, however, not higher than nadir levels in younger control subjects. A seasonal variation in total and free 1,25-dihydroxycholecalciferol concentrations was also observed in the geriatric population with a nadir in February and March (50 +/- 24 pmol/L). The peak values in summer (110 +/- 33 pmol/L) were not different from those of the younger controls. Serum calcium and phosphate were decreased whereas alkaline phosphatase and parathyroid hormone were increased throughout the year in the geriatric patients. Oral 25-hydroxycholecalciferol treatment rapidly normalized serum 1,25-dihydroxycholecalciferol concentrations in vitamin D-deficient subjects. Deficiency of both the vitamin D substrate and hormone is frequent in the elderly population in Belgium.

285 NAL Call No: 448.8 L22
Vitamin D supplementation in the elderly.

Language: English

Descriptors: Vitamin D; Vitamin supplements; Bone resorption; Bone fractures; Disease prevention; Elderly

Abstract: A technical review examines published studies to assess whether vitamin D supplements should be given to elderly subjects. Further studies are needed to (1) verify that such supplementation reduces hip fracture incidence or reduces or prevents age-related bone loss in the femoral neck, and (2) the appropriate time for supplementation initiation and its duration. At minimum, it is argued that since vitamin D supplementation is easy and safe, evidence strongly favors such supplementation for high-risk patients.

286 NAL Call No: 389.8 J824
Vitamin requirements of the elderly.
Suter, P.M.; Russell, R.M.

Language: English

Descriptors: Elderly nutrition; Vitamins; Nutrient requirements; Nutritional state

Abstract: In general, low dietary intakes can account for much of poor vitamin nutrition reported among various elderly populations. Despite problems in assessing vitamin nutrition in the elderly, the 1980 RDAs for thiamin, riboflavin, and ascorbic acid seem appropriate for those populations. However, RDAs for vitamin A and folate may be too high and the RDAs for vitamin D, vitamin B-6, and vitamin B-12 may be too low, due to specific age-related changes in the metabolism of these vitamins. For vitamin E, vitamin K, niacin, biotin, and pantothenic acid, the data is conflicting and/or insufficient to make a judgement about the appropriateness of the RDAs or to estimate safe and adequate daily intakes for the elderly.

287 NAL Call No: RC620.A1N8
Vitamin A intake and vitamin A status in an elderly, institutionalized population.
Asciutti-Moura, L.S.; Guilland, J.C.; Fuchs, F.; Klepping, J.; Richard, D.

Language: English

Descriptors: Nutritional state; Blood plasma; Nutrient intake; Caloric intake; Nursing homes

Abstract: Vitamin A status of 30 institutionalized elderly subjects (7 men, mean age = 79 y and 23 women, mean age = 87 y) was evaluated using plasma retinol level, plasma retinol-binding protein level and the retinol dose response. The kilocalorie, protein, total fat and vitamin A intakes were also estimated using a five-day food record. Regarding energy, protein and total fat, the diets may be generally considered satisfactory in respect to the French Recommended Dietary Allowances (RDA). The mean dietary intake of vitamin A was greater than RDA. Only 5% of males and 2% of females consumed less than their individual vita-
Nutrition and the Elderly

Abstract: A regional survey assessed the socioeconomic, demographic, and health behavior characteristics of 72 elderly women regarding their use and misuse of vitamin and mineral supplements. The study identified some potentially important characteristics of overusers. It is suggested that screening of overusers first be conducted with elderly women with health problems and who live alone.

What characterizes elderly women who overuse vitamin and mineral supplements?

Ranno, B.S.; Wardlaw, G.M.; Geiger, C.J.

Language: English
Descriptors: Overfeeding; Women; Elderly nutrition; Nutritional state

Abstract: A special report provides information and guidelines for aiding elderly people in safe and nutritious food preparations. Attention is focused on: the susceptibility of older people to food poisoning; nutritional problems of older people due to poor food selections; food handling problems associated with the elderly; the effect of money problems and attitudes on waste on proper food selection and food safety; and signs to look for concerning improper food preparation by the elderly. Ten specific tips on nutritional value and food safety are summarized.

Zinc and immunocompetence in the elderly: baseline data on zinc nutriture and immunity in unsupplemented subjects.

Bogden, J.D.; Oleske, J.M.; Munves, E.M.; Lavenhar, M.A.; Bruening, K.S.; Kemp, F.W.; Holding, K.J.; Denny, T.N.; Louria, D.B.

Language: English
Descriptors: Diet; Zinc; Immunity; Nutritional state; Mitogens

Abstract: Extract: Zinc nutriture and immune function were studied in 100 subjects, age 60-89 yr. Mean (+/- SD) zinc concentrations found were 84.8 +/- 15.5 micrograms/dL (13.0 +/- 2.4 microM) for plasma. 1.04 +/- 0.24 micrograms...
Zinc nutriture and cell mediated immunity in institutionalized elderly.
Soliesz, K.S.; Williford, J.H.; Renker, L.P.; Meserve, L.A.
Language: English
Abstract: This study examined the effects of increasing zinc nutriture on the cell mediated immune response of an institutionalized elderly population. A volunteer institutionalized population was identified and nutritional assessment consisting of a weighed food intake record and anthropometric measurements was conducted. Zinc status and delayed cutaneous hypersensitivity (DCH) skin tests were administered to determine immune responsiveness. Subjects were supplemented with 15 mg zinc gluconate for 28 days, after which the zinc status and immune status of each subject were reassessed. Results indicated that dietary zinc intakes were inadequate in 67% of the test population. After supplementation, serum zinc levels increased significantly (p less than .006), while results of the alkaline phosphatase test indicated no significant change. DCH reactions improved significantly (p less than .034) after zinc supplementation.

Zinc nutriture and dark adaptation in patients subjected total gastrectomy: effect of zinc supplement.
Sandström, B.; Davidsson, L.; Lundell, L.; Olbe, L.
Language: English
Abstract: A study involving measurements of serum zinc (Zn), urinary Zn excretion, and a simple dark adaptation test estimated Zn status in 10 totally gastrectomized elderly patients (1 woman, 9 men; ages 61-80) vs. an age-matched control group, before and after 4 weeks of Zn supplementation. Serum Zn (but not urinary Zn) was lower in the patients than in the controls before supplementation; Zn supplementation did not affect dark adaptation, but increased both serum and urinary Zn levels in the patients.
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