

BIBLIOGRAFIA LATINOAMERICANA

ARGENTINA

El lactante y la relación calórico-proteica. A. S. Segura, P.A. Armeline e Y. Bettoni (Cátedra de Pediatría, Univ. Católica de Córdoba, Argentina). Archivos Argentinos de Pediatría, 74: 24-25, 1976.

Se comparan valores para la razón proteína:energía de leche humana, y de leche de vaca maternizada y natural. Usando las ecuaciones de Miller y Payne (Nutr. Abst. Revs., 32, 2424) se calculó que durante las primeras 12 semanas de vida y asumiendo una utilización neta proteínica de 80%, la proteína neta como por ciento de energía total de la dieta debería ser de 9.00 a 10.18%. Una proporción más pequeña de proteína sería inadecuada y una cantidad mayor sería anti-económica. La ingesta óptima de energía se discute en este artículo en relación a las cifras de proteína propuestas. 14 Ref.

BRASIL

Inter-American study of infant mortality: breast feeding

in Recife and current programmes. I. dos Santos. (Investigação interamericana de mortalidade na infância: alguns aspectos do aleitamento materno em Recife e ações em desenvolvimento. (Escola de Enfermagem, Univ. Federal de Pernambuco, Brazil). Bol. Of. San Pan., 81:399-404, 1976.

In Recife, of 1,029 children under 5 years, 64.7% belonging to the lowest socioeconomic group, only 24% were breast fed for 1 month or longer. Breast feeding is encouraged by the use of tape recordings, before and after parturition, to explain its importance to mothers, by educational programs in outpatient services and by emphasis on its nutritional value in courses for nurses.

Avaliação qualitativa e quantitativa das refeições recebidas em casa pelas crianças da creche. P. Bastianelli. Revista Associação Brasileira das Indústrias da Alimentação/Setor de Alimentos Calórico-Proteicos, No.

32.3, 1977.

Mothers of 151 children up to 6 years old who spent the day in the municipal crèche of Penha, São Paulo, filled in a questionnaire on food given to the children at home. The children were in 5 groups according to age. No breakfast was given to 22.52% of the children and it was inadequate for 42.72% of those who were given it; 44.37% had no milk with their breakfast. No dinner was given to 12.58% of the children and it was inadequate for 66.98% of those who were given it; 47.02% had no meat or eggs at dinner and 65.56% had no vegetables. No fruit was eaten by 76.82% of the children. No food was given at home to 5.96% who ate at the crèche only.

Nível alimentar, renda e educação. E.L.G. Alves. (Fundação Instituto de Pesquisas Econômicas, São Paulo, Brasil). Revista Associação Brasileira das Indústrias da Alimentação/Setor de Alimentos Calórico-Proteicos, No. 30, 17-44, 1977.

Durante 12 meses, el 15.7% de 2,380 familias en São Paulo tuvieron ingestas inadecuadas de energía y proteína. El promedio de ingreso familiar de aquellas familias con una dieta adecuada fue alrededor del doble que el de aquellas con una dieta inadecuada; el nivel educacional del jefe de la familia no mostró relación con el estado nutricional de la misma. Se concluye que alrededor de 870,000

personas en São Paulo tienen una dieta inadecuada. 9 Ref.

GUATEMALA

Effects of maternal nutrition on fetal growth and infant development. R. E. Klein, P. Arenales, H. Delgado, P.L. Engle, G. Guzmán, M. Irwin, R. Lasky, A. Lechtig, R. Martorell, V.M. Pivaral, P. Russell and C. Yarbrough. (Division of Human Development, Institute of Nutrition of Central America and Panama, (INCAP), Guatemala City, Guatemala C.A.). Bull. Pan Am. Health Org., 10:301-316, 1976.

The 4 villages in Guatemala had moderate malnutrition, infection, no sanitation and contaminated water. Staples were maize and beans, with animal protein 12% of total protein intake. Women in 2 villages were given supplements of atole, a maize gruel, and in the other 2 fresco, a cool drink. In 180 ml, atole supplied energy 163 kcal and protein 11 g; fresco 59 kcal and no protein; they provided equal minerals and vitamins. Children studied were 412 aged under 3 years when study began in January 1969 and 671 born between then and February 1973. Women had about the same energy intakes from home food; 68 got over and 118 got under 20,000 kcal beginning, during pregnancy, or lactation from fresco,

102 got over and 117 got under 20,000 kcal from atole. The higher-energy supplements gave on average 35,000 kcal/pregnancy or 125 kcal daily. From bar charts, incidence of infants under 2,500 g birthweight was about 18% with less and 8% with more energy in supplement. Association between birthweight and supplement was not accounted for by variables other than energy, such as mother's size or obstetric characteristics, morbidity or socioeconomic status. Protein:energy ratio of ordinary diet was high and energy supplement alone seemed sufficient. For 581 children up to 3 years old, the incidence of measurements showing retarded growth was about 40% for infants given under 5,000 kcal/3 months for at least 42 months, directly or through the mother; 25% with 5,000 to 10,000 kcal and 15% with more. Atole may have been slightly better than fresco, and the difference is being studied. Tables give details of the relation between supplements and results of psychological tests. From age 15 months onward, the better-nourished infants did better in mental and motor tests; that applied to grouping as high, medium or low-supplemented infants and to the measure of total supplement ingested. Relations remained significant when only the mother's supplement during pregnancy was considered, and disappeared when only the lactating mothers' and infants' were considered, so pregnancy was the critical time for supplements. Results are discussed; they have

wide implications for public health. Of 671 children born during the study 44 died in their 1st year; the relation between low birthweight and high mortality is known. 15 Ref.

Vitamin A deficiency and anemia in Central American children. L.A. Mejía, R.E. Hodges, G. Arroyave, F. Viteri and B. Torún. (Department of Internal Medicine, Section of Nutrition, TB 148, University of California School of Medicine, Davis, Calif. 95616, U.S.A.). *Am. J. Clin. Nutr.*, 30: 1175-1184, 1977.

A retrospective evaluation was made of information from 6 nutrition surveys of Central America and Panama. Children 1 to 4, 5 to 8, and 9 to 12 years old living between 0 and 2,500 feet above sea level were studied. In children between 5 and 12 years old there was a significant positive correlation between Hb and plasma retinol. In children 1 to 4 years old there was no such correlation. In children of all age groups there were positive correlations between plasma retinol and serum Fe. Percentage saturation of transferrin was lower when plasma retinol was low. In children with an adequate intake of Fe as classified by dietary information and socioeconomic class there was a significant positive correlation between plasma retinol and Fe in serum. There was no correlation

when dietary Fe was low. A possible relation between vitamin A deficiency and anemia is suggested. 34 Ref.

GUAYANA

Some fishery options for food supply increase in the Caribbean Atlantic. W. H. L. Allsopp. *Interciencia*, 3: 93-98, 1978.

With increasing populations and greater demand for animal protein in human diets, more efforts have been made to enhance the supplies from the seas and available waters. In general, Central Americans consume less fish per capita than South Americans, and the trend has been to fish for higher value marine products like shrimp, redfish and spiny lobsters. Population increases show a projected demand for more fish. The increased territorial limits of sea jurisdiction now impose the need for maximum use of the available harvest from the seas, while developing mariculture and enhanced managements measures. Some biological and technological opportunities are suggested and are illustrated by current International Development Research Center (IDRC of Canada) assisted projects in the Caribbean Atlantic, with comparisons of similar experiences in other tropical countries where coastal aquaculture activities are well developed. The opportunity for collaborative research activities for developing these resources is indicated.

JAMAICA

A comparison of fasting plasma insulin and growth hormone concentrations in marasmic, kwashiorkor, marasmic-kwashiorkor and underweight children. H. Robinson and D. Picou. (Tropical Metabolism Research Unit, Univ. West Indies, Mona, Kingston 7, Jamaica (W.I.). *Pediat. Res.*, 11:637-640, 1977.

Jamaican children were 24 with marasmus, 11 with kwashiorkor, 16 with marasmic-kwashiorkor and 4 underweight, mean ages of groups 11.8 to 14.4 months. In the first 3 groups, fasting plasma insulin was low and rose after recovery, the rise being significant in the group with kwashiorkor. Fasting plasma somatotropin was high in all 4 groups and fell after recovery, the fall being significant in the first 3 groups. Neither differed significantly between groups and nor did plasma glucose. Results did not support the accepted view that insulin is low in all types of protein-energy malnutrition. Plasma insulin concentration is of complex aetiology, and not enough is known of normal values in infants and young children to allow assessment of results found for malnourished children. It was suggested that abnormal somatotropin values may indicate adaptation for survival during starvation.

MEXICO

Malnutrition in early child-

hood, and some of its later effects at individual and community levels. J. Cravioto and E. R. DeLicardie. Food and Nutrition (FAO) 2:2-11, 32, 1976.

Single dose of tetracycline therapy for shigellosis in adults. L.K. Pickering, H.L. Dupont and J. Olarte. (Programa de Enfermedades Infecciosas y Microbiología Clínica de la Escuela de Medicina, Universidad de Texas Houston (Dr. Pickering y Dr. DuPont) en el Hospital Infantil de México, México (Dr. Olarte). JAMA, 239:853-854, 1978.

Forty-two adults who had *Shigella* isolated from stool (26 symptomatic, 16 asymptomatic) received a single oral dose of tetracycline hydrochloride (2.5g). Minimal inhibitory concentrations of the 42 isolates demonstrated that 41% were sensitive to tetracycline. Sixteen of 18 patients with diarrhea who had tetracycline-resistant *Shigella* and all eight patients with diarrhea who had tetracycline-sensitive *Shigella* were clinically well and had *Shigella*-negative stools 48 hours after therapy. Fifteen of 16 asymptomatic patients demonstrated clearing of *Shigella* from stool within 48 hours of therapy. Single-dose tetracycline therapy is effective in the treatment of *Shigella* regardless of clinical expression of illness or *in vitro* sensitive of the organism.

PANAMA

Tabla de Composición de los alimentos en Panamá. — H. Rosas, S.O. Quintero y J. Gómez. En: Investigaciones Agropecuarias, Universidad de Panamá 1974/1975. Panamá, Universidad de Panamá, Facultad de Agronomía, p. 420-471, 1976. (7 Ref.).

PERU

Contenido de mercurio en harina de anchoveta (*Engraulis ringens* J.) procesada en el Perú. Medardo Echeagaray R., Juan Chang-Say Yon y Clara María Guerin (Laboratorio de Higiene Industrial, Instituto de Salud Ocupacional, Lima, Perú). Bol. Soc. Quím. Farm., 43:93-104, 1977.

La necesidad de información técnica detallada de los recursos naturales de nuestro país es cada vez mayor. Esto es mucho más importante cuando se trata de datos sobre la posible contaminación en productos que constituyen pilares de nuestra economía, como lo es la harina de pescado. En el presente trabajo presentamos los resultados del estudio realizado en este producto por su contenido de mercurio. Estos datos forman parte de un estudio más amplio que se está efectuando sobre el contenido de algunos cationes en especies marinas peruanas, ya sea de consumo

directo o industrializadas. 18 Ref.

URUGUAY

Crecimiento fetal humano valorado por indicadores antropométricos. O. Guayasamín, W. L. Benedetti, O. Althabe, F. Nieto y S. Tenzer. (Centro Latinoamericano de Perinatología y Desarrollo Humano, Facultad de Medicina, Montevideo, Uruguay). Bol. Of. San. Pan., 81:481-488, 1976.

En 582 recién nacidos durante un año en un hospital de Montevideo se registró la edad gestacional, el peso al nacer, la longitud corporal, la circunferencia cefálica y la relación peso:talla. Se calcularon el 10o., el 25o., el 50o., el 75o. y el 95o. percentilos para todas estas medidas en base a la duración del embarazo. Con esos datos se construyeron curvas de crecimiento para cada percentilo. Las curvas fueron similares en su forma a las ya informadas en la literatura, pero difirieron en términos de sus valores absolutos. 15 Ref.

VENEZUELA

Astringency in an intermediate moisture banana product. J.R. Ramírez-Martínez, A. Levi, H. Padua and A. Bakal. (Centro de Investigaciones del Estado en Producción Experimental Agroindustrial, San Felipe, Venezuela). J. Food Sci., 42: 1201-1203, 1217, 1977.

Ripe banana halves dehydrated to a moisture content of about 30%, following blanching and (or) sulfiting, are remarkably astringent. In order to understand the cause of this phenomenon, total phenolics, leucoanthocyanins, and vanillin-reacting compounds were determined and found to be more extractable in astringent semidried bananas. Light microscopy observation showed that both blanching and sulfiting contribute to the leakage of tannin-like compounds from the latex cells. Overall results conform with a mechanism by which appearance of astringency in semidried banana is due to diffusion of the astringency-causing agents from the latex cells to the surrounding tissue.