

CHILD NUTRITION IN LATIN AMERICA

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One might begin the history of child welfare in Latin America, even from the nutritional standpoint, with the pre-Columbian era. Not only were certain gods and goddesses—for instance, the Mayan Zukuy-kak, Ixmol (goddess of childhood; one month, Mol, was devoted to her), and Ixchel (goddess of maternity) and the Aztec Ixtliltón or Tlaltetecuín (god of sick children) and Yoalticítl (called on by midwives for assistance)—especially relied on for the care and protection of mothers and children;¹ . . . there were also customs and traditions intended to safeguard mother and infant, and some of these had to do with nutrition.² The diet of pregnant Aztec women was regulated. Aztec women of all classes always nursed their children until the infants were two and a half to three years old, and if, because of severe illness, a wet-nurse had to be employed, care was taken to select one in good health and with good milk.³ The Mendoza Codex appears to show that the diet of the Aztec child (mainly *tortillas*, or corn cakes) was prescribed according to age.⁴

¹ Sahagún, Bernardino de: "Historia General de las Cosas de Nueva España," (about 1559-60), Ed. Pedro Robredo, Mexico, D. F., 1938, pp. 20, 37, 170, 178 (Book I, Ch. XVI, VIII; Book II, Ch. XXV); Flores, Francisco A.: "Historia de la Medicina en México," Secretaría de Fomento, Mexico, 1886, Tomo I, pp. 38, 205, 272, 342. Both the Mayas and Aztecs had a god of corn and agriculture. Pre-Columbian theogony is rather confusing, since succeeding civilizations adopted or adapted wholly or in part the gods of their forerunners, more or less as did the Greeks and Romans. Sometimes the attributes or the names were changed. Thus Tzapotlatenan, Mayan goddess of medicine, was replaced by the Aztec god Xipe; and Ixchel by Cihuacoatl.

² To judge from the description by Katheryn MacKay ("Mayan Midwifery," p. 64, in "The Peninsula of Yucatan, Medical, Biological, Meteorological and Sociological Studies," by George Cheever Shattuck, Carnegie Institute of Washington, 1933) present-day practices among Mayan midwives differ but little from the methods used by the Aztecs before the Conquest (see Flores, *supra*, who relies in these matters chiefly upon Sahagún, Torquemada, and Gomara).

³ Sahagún, and Flores, *supra*. Diego de Landa (Relación de las Cosas de Yucatán, about 1566, 7th ed., with notes by H. Pérez Martínez, Ed. Pedro Robredo, Mexico, D. F., 1938, Ch. XXX, p. 132) remarked that Mayan children nursed until three and four years of age, and that during the first couple of years they were "wonderfully pretty and fat." The lack of an adequate substitute for mothers' milk (the use of animal milk seems to have been unknown to the Indians; cattle and goats, as well as the horse, were introduced by the Spaniards, and the native bison would hardly appear to be good material for domestication) was probably responsible for the late weaning, though it is a sad fact that some present-day children in supposedly more civilized countries see little milk after their first six months. The protective ancient custom of long nursing still postpones the problem of mal-nutrition until after first infancy in some regions. This was pointed out in a recent report from Paraguay, where, in rural areas, women nurse their children for two years, supplementing the diet after the first six months with other foods (*Bol. Min. Salud Pùb.*, No. 1, Aug. 1940, p. 31). With regard to this area, it is interesting to recall that the Guaraní mothers are said to have watched their diet during pregnancy, and to have fasted, so that the infant would be more inclined to suckle after its birth. Even the husband is reported to have fasted. (Ploss u. Barbels: "Das Weib," Leipzig, I, p. 912-929.)

⁴ Both the Mayas and the Aztecs laid much stress on the physical training of children. Incidentally, one of the earliest Brazilian books, (1790), and the first in Portuguese on physical training, was Mello-Franco's "Tratado de Educação Physica dos Meninos"; and this subject has since received a great deal of attention in Latin America.

The Aztecs also had orphanages, though little is known about their operation.⁵ In Peru, the people were required to till, first, the lands of the Sun, then those of the aged, the sick, *widows, orphans*, and soldiers, before their own and those of the Inca, and in times of shortages the Inca's storehouses could be drawn upon for food supplies.⁶

The Spanish conquerors established at an early date institutions for orphans (Mexico, 1532⁷), as well as schools and hospital wards for children.⁸ While food, clothing and shelter were provided, it was probably not on a very scientific basis. Furthermore, the Laws and Regulations for the Government of the Indies contained several provisions for safeguarding the health of Indian mothers and children, especially during pregnancy and lactation (See below).

The latter part of the 19th century saw the development, in Europe and in America, of an ever-increasing interest in the child as a part of the human capital of the nation. It was realized that the mere provision of food, shelter and clothing for the abandoned infant until it was old enough to be self-supporting, was not sufficient; and that not only the orphan or deserted child, but also the underprivileged children of the poor,⁹ needed intelligent care and attention if they were to become true assets to their country and happy, integrated individuals.

The study of children's diseases became a special and important branch of medicine. Clinics for the diagnosis and treatment of children's diseases were established in country after country. Moncorvo, Sr., had a Children's Service in his Polyclinic in Rio de Janeiro (established in 1881), and endeavored to secure permission for the opening of a Children's Polyclinic, an ambition which his son was to realize in 1901 (Instituto de Protecção a Infancia, organized on a private subscription basis in 1899 and inaugurated in 1901).¹⁰ Argentina's pioneer hygienist, Emilio Coni, organized a school medical service in 1881 (donating his own

⁵ Flores, *supra*. It is said, however, that Aztec parents sometimes sold their children into slavery because of poverty. The slavery was apparently at times more like an indenture or apprenticeship. (Prescott, W. H.: "Conquest of Mexico," Mod. Lib. Ed., 1936, p. 26).

⁶ Garcilaso: "Historia General del Perú," Madrid, 1800, II, pp. 280-90. Childhood was not long the time for play, however, for according to Ondegardo, children five years old worked at spinning wool (Prescott, W. H.: "Conquest of Peru," Mod. Lib. Ed., 1936, p. 758). The Aztecs distributed food to the poor (Torquemada), and on one occasion, in 1452, when the royal depots failed, Moctezuma I authorized the people to try to obtain food from other countries.

⁷ Quiroga's institution included a hospital, a foundling home and a school, and wet-nurses were employed. His work antedated by more than a century that of Vincent de Paul in Peru. A successor of Quiroga, Alvarez, followed in his footsteps, and fed and taught children in his hospital (1587) and in the school he opened for them.

⁸ Saavedra, Alfredo M.: "Antecedentes de la obra de protección a la infancia en México," VII Congreso Panamericano del Niño (Mexico, Oct. 12-19, 1935), "Memoria," Tomo I, p. 322.

⁹ Not only those of the poor. Pruneda has vividly described another problem, in speaking to kindergarten teachers: "You know, surely, children who arrive at school without having had breakfast, because Mother hadn't gotten up; because the children were left to the care of the maid; because the child had gone to bed too late and scarcely had time to reach school at the proper hour; these children are the more unfortunate in that they have mothers, servants, and food, and are not able to make use of the last because no one is around to help them . . . this is not an economic question, it is nothing more than lack of education in the home." (Pruneda, Alfonso: "El jardín de niños y la salud," 2nd. ed., Mexico, 1939, p. 20.)

¹⁰ Moncorvo Filho, Arthur: "Histórico da Protecção à Infancia no Brasil 1500-1922," 2nd. ed., 1927 (Depto. da Creação do Brasil), 383 pp.

services and securing those of friends) while a member of the school board (*Comisión Escolar*) of two parish schools; a paid medical inspection system was established by the National Education Council in 1886.¹¹ There was a child health center in Matanzas, Cuba, in 1894, and Habana and Santa Clara (Cuba) had them by 1895. Buenos Aires also had a children's clinic attached to one of its hospitals at an early date, and the noted Argentinian sanitarian, Aráoz Alfaro, was appointed physician of the clinics of the *Patronato de la Infancia* (Child Welfare Society) in 1894.^{12, 13} The list could be indefinitely extended.

With the return from Europe in 1894 of Luis Morquio of Uruguay—pediatrician, professor, institutor of reforms in the care of orphans and children in public agencies, founder (in 1905), with Aráoz Alfaro of Argentina and Olinto de Oliveira¹⁴ and Fernandes Figueira of Brasil, of the *Archivos Latino-Americanos de Pediatría*, founder of the Montevideo Pediatrics Society (1915), and creator of the International American Institute of Child Welfare (*Instituto Internacional Americano de Protección a la Infancia*, 1927)¹⁵—the children of this hemisphere truly entered the gates of their kingdom. Before him there had been, of course, the work of such men as Centeno and Larguía of Argentina, Dueñas of Cuba, Llerena of El Salvador, and Domínguez of Mexico. They and their successors, the Argentine Ricardo Gutiérrez, of whom it was truly said that as a poet he sang of children and as a physician he healed them; Morquio and his contemporaries and disciples—Elizalde, Cibils Aguirre, Schweizer and Garrahan of Argentina, Morales Villazón, Velasco Blanco, and Herzog of Bolivia, Gurgel, Barbosa, Gesteira, Gomes de Mattos, Ygartúa, and Cintra of Brasil, Del Río, Calvo Mackenna, Scroggie, and Sanhueza of Chile, Barberi, Iriarte,

¹¹ Aráoz Alfaro, G.: "Crónicas y estampas del pasado," Buenos Aires, 1938, 360 pp., p. 287. In 1875 Coni had urged the organization of a Municipal wet-nurse bureau; in 1884 he won the Rawson prize with his work on the "Causas de la morbilidad y mortalidad infantiles," which also was awarded a medal by the Academy of Medicine of Paris; in it he suggested such preventive and remedial measures as day nurseries, maternity centers, maternity homes, family assistance, improvement of housing, and education. In 1879 he had made a study of infant mortality in Buenos Aires. The first chapter of his 1887 book on public health is devoted to child care. He was the founder of the *Patronato de la Infancia*, created a journal of child hygiene, the first day nursery, and the first healthy baby contest, and worked for the teaching of puericulture in the public schools. (*Ibid.*, and also Coni's own book, "Memorias de un médico higienista, contribución a la higiene pública y social argentina," Asociación Médica Argentina, 1918).

¹² Moll, A. A.: "Las Obras Sanitarias de Protección a la Infancia en las Américas," Pub. No. 107, Pan American Sanitary Bureau, Mar. 1936, 47 pp.

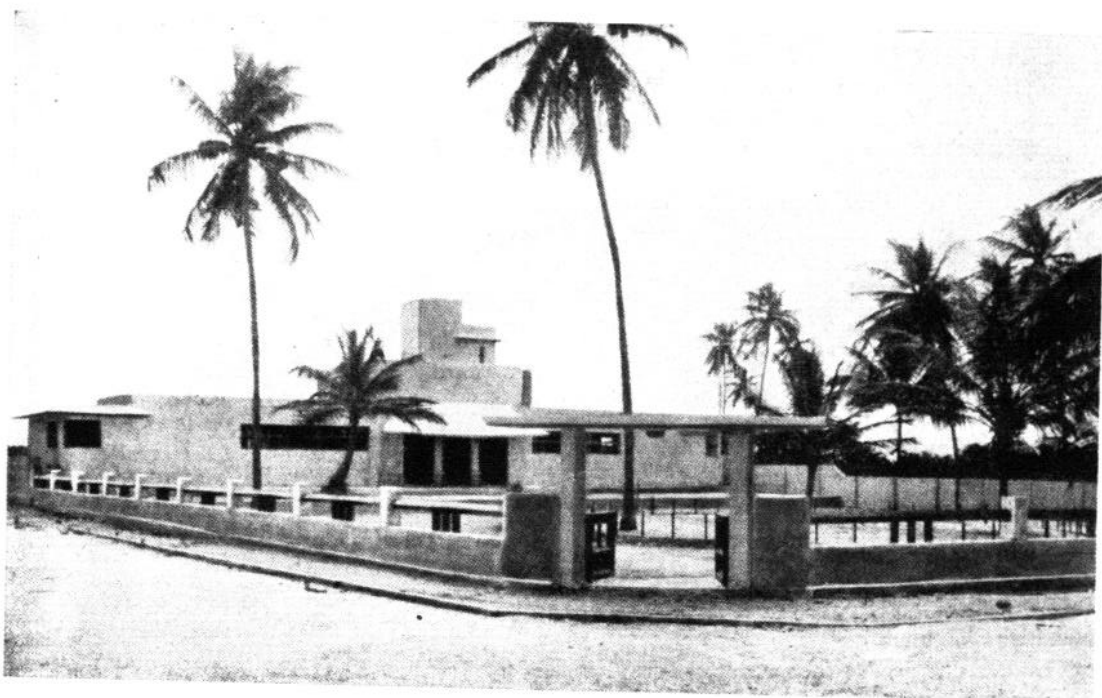
¹³ *Bol. Inst. Int. Amer. Prot. Inf.*, Montevideo, 1927-1942. Mention might be made of the publication in a Buenos Aires newspaper, the *Telégrafo Mercantil*, in 1802, of an article on care of the new-born and treatment of constipation. The first pediatric paper in Argentina was the (1871), sensibly-written thesis of Ortiz-Herrera, on breast feeding of infants.

¹⁴ In 1890 Olinto de Oliveira had established a dispensary for poor children in Rio Grande do Sul, and he also took a leading part in an early "Campaign for Child Nutrition."

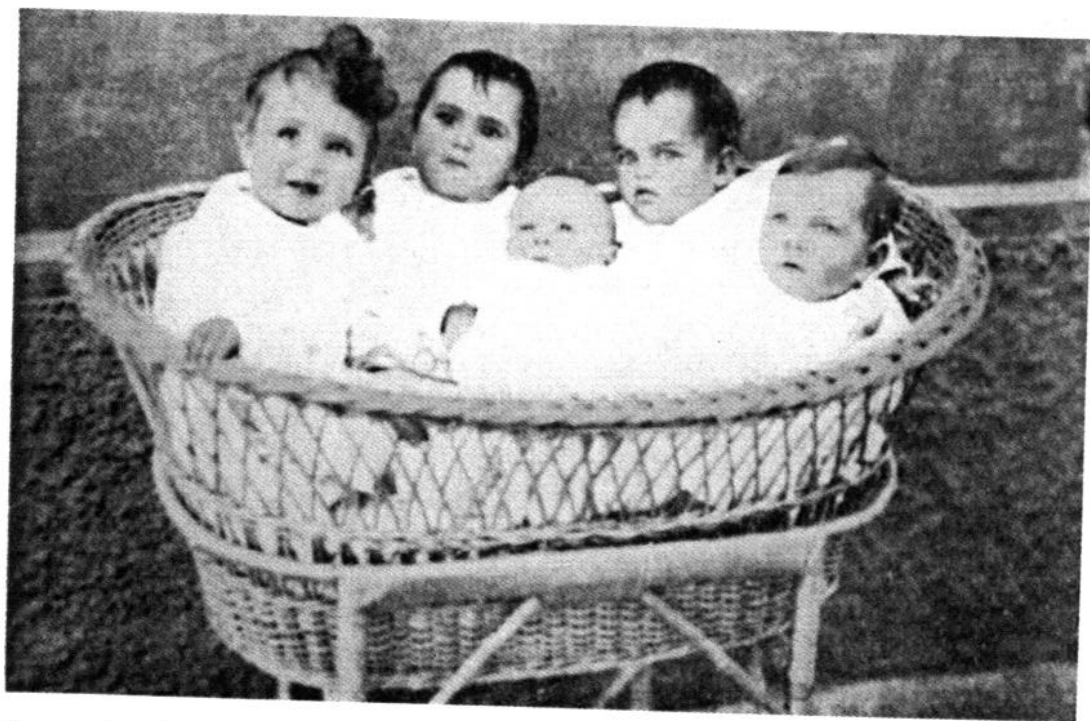
¹⁵ Aráoz Alfaro, G.: "Semblanzas y apologías de grandes médicos," Imp. y Casa Ed. Coni, Buenos Aires, 1926, 279 pp., p. 251. Of Morquio's great influence as a teacher, he said, "Era maestro aquí como lo era en Montevideo, y en cualquier país que visitara" (He was *maestro* here, i.e., Argentina, as in Montevideo, and in any country which he visited.) Morquio was the author of many papers on children's diseases, and a disease and a symptom bear his name. At the time of his death, in 1934, he had just finished inaugurating a cardiologic center, and a clinic for nursing infants attached to his Institute (one in which both mother and child could be hospitalized), and was working on material for the representation of his country at the coming Pan American Child Congress. The organization of an inter-American institute was urged by him in 1919 at the II American Child Congress.



Buenos Aires, Argentina: arriba: Preventorio Rocca para niños sanos de hijos tuberculosos; abajo: Dadoras con sus hijos, Lactario Municipal
 (Buenos Aires, Argentina: above: Rocca Preventorium for healthy children of tuberculous parents; below: milk donors with their children, Municipal Lactarium)



Preventório Bruno Vello para Crianças; Recife, Brasil
(Bruno Vello Preventorium for children; Recife, Brazil)



Grupo de filhos sadios de leprosos no Preventório Santa Teresinha, Edo. de
São Paulo, Brasil
(Group of healthy children of lepers, in the Santa Teresinha Preventorium,
São Paulo State, Brazil)

and Umaña of Colombia, Luján of Costa Rica, Aróstegui, Aballí and Inclán of Cuba, Herrera, Gómez and Alarcón of Mexico, Ros and Peña of Paraguay, Graña, Pérez Aranibar, León García, and Krumdieck of Peru, Berro of Uruguay, Oropeza of Venezuela, and other great Latin American pediatricians and physicians interested in child welfare¹⁶ (in addition to those previously mentioned)—made full use of the lessons of the past, of the fruits of their own experience, observation, and experiment, and of their colleagues'—exchanging views and information through periodic congresses, journal articles, and tours of investigation and of study. However, only one aspect of the results of their efforts—the influence on nutrition—can be discussed in the succeeding pages.

These men were, of course, conscious of the part played by adequate and safe nutrition in determining the health, and, in fact, the very survival of the child. Their campaigns against infant mortality incorporated attempts to secure safe water and milk supplies (for instance, Aráoz Alfaro's plea for the establishment of special, hygienic, inspected dairies to provide safe milk for children, and for educating mothers in the proper feeding of their infants, in 1898¹⁷). They were also interested in provisions for safeguarding the health of the child of the wet-nurse (see below) and in educational efforts to induce mothers to nurse their own children. That the health of the child is closely linked with the health of the mother has always been realized by these leaders.

The campaigns against tuberculosis also called for attention to nutrition, and the *Gotas de Leche* (milk distribution centers, usually for infants and pre-school children), *Copas de Leche* (glass of milk in school) and similar efforts were often first initiated by anti-tuberculosis societies or by the Red Cross in its tuberculosis prevention work.¹⁸

From its original position as part of the general child welfare program, or of the anti-tuberculosis or anti-infant mortality campaigns, child nutrition has come today to have a standing of its own, and even its own clinics and services. In discussing this evolution, it may be well to consider the various aspects under separate headings.

Mother and nursing infant.—Possibly the earliest efforts to safeguard the child insofar as nutrition was concerned, were those dealing with the nursing infant. For the sake of both infant and mother, laws requiring that women were to be given lighter tasks during the later months of pregnancy, and for several months to several years after the birth of the child, were promulgated even in the days of the Conquest (Ordinances of 1513 for Hispaniola and Puerto Rico, governing treatment of the Indians). The mother was given special diets during both the pre-Columbian and Colonial periods.¹⁹ An Argentine law passed in 1907 per-

¹⁶ Obviously, only a few leaders in the field can be mentioned here. An indication of the general interest is given by the list of pediatric societies (See Pub. 141, Pan American Sanitary Bureau) and journals (Pub. 152).

¹⁷ At the I Congreso Científico Latino-Americano, 1898 ("Actas," Vol. 4, p. 489). He advocated legal protection for the child of the wet nurse; safe supplies of cows' milk; advice on hygienic feeding. It was at his initiative that the first National Conference on Milk met in Argentina, May 31, 1925.

¹⁸ In reviewing child welfare activities, Tumburus stated in 1926 that the *Gota de leche* was an indispensable attachment of every school in the country. (Tumburus, Juan: "Contribución a la Historia de la Medicina Argentina.")

¹⁹ Nicolás León ("La obstetricia en México," Partes 1 y 2, Tip. Vda. de F. Díaz de León, Mexico, 1910, p. 102) gives the diet prescribed for the mother immediately after childbirth: *atole blanco* (corn-meal gruel), champurrado (chocolate made with *atole*) or *almenádrado* (almond milk), and then chicken, bread, toasted tortillas, and warm water. She was also to stay in bed for several days. This was toward the end of the Colonial period.

mitted working mothers to take maternity leave without losing their positions.²⁰ Mexico's 1917 Constitution provided for rest periods with pay, and for two recesses a day during which the mother could nurse her child. From 1919 on, similar protective legislation was enacted, in country after country, in behalf of working mothers.

A logical consequence of the recess for nursing was the requirement that factories employing more than a certain number of women must provide *cámaras de lactancia*, or nursing rooms, where the babies might be cared for while the mother was at work, and to which she could come to nurse the infant. The first such nursing room in Mexico was installed in 1920, after a French example, and legislation requiring such accommodations exists in several countries (Argentina, 1924; Brasil, 1932; Venezuela, 1928; Chile, Colombia, Costa Rica, Ecuador, Guatemala, Uruguay, and no doubt others).²¹

Day nurseries (*casas cunas, salas cunas, cunas maternas*) for the children of working mothers are found in practically all Latin American countries, some of the oldest being those in Argentina (1895) and Venezuela (1895).²² The children, of course, received their meals at these nurseries. Sometimes the day nursery is a part of, or annexed to, a child-and-maternal welfare center or dispensary, such as have been created by national departments, institutes, or councils of child welfare.²³

²⁰ Moragues Bernat, J.: *Prensa Méd. Arg.*, Feb. 1941, p. 459.

²¹ Moll, *supra*, and Saavedra, *supra*. The inspiration for much of this present-century legislation was, of course, French.

²² Probably some what of this nature was the *Casa Amiga de la Obrera* opened in Mexico in 1878 to give "assistance and education to the children of workers." (Saavedra, *supra*, p. 825.) In Mexico *casa cuna* refers to an orphanage.

²³ See the list in Moll's paper (Note 8). Since it was written, additional agencies have been established, including:

Bolivia: *Patronato Nacional de Menores y Huérfanos de Guerra* (National Board for Children and War Orphans), created by Decree of Mar. 8, 1934, as the *Patronato Nacional de Huérfanos de Guerra* and merged Apr. 13, 1939 with the till then autonomous *Patronato Nacional de Menores*, which had been established by a Decree of June 14, 1937. The new body is a dependency of the *Ministerio del Trabajo, Salubridad y Previsión Social* (Ministry of Labor, Health and Social Welfare). Its present activities consist chiefly of caring for some 2400 children, mostly war orphans, in 13 localities. (See "Memoria que presenta . . . el Ministro del Trab., Salud y Prev. Soc.," A. Ibáñez Benavente, 1941, p. 27.)

Brazil: *Instituto de Puericultura* (Puericulture Institute), created by Law No. 378 of January 13, 1937, to carry out studies and research work on child health problems, and to teach puericulture. It is connected with the University of Rio. The Institute has a maternity ward and shelter, various clinics, nursery, lactarium, diet kitchen, mothers' canteen, child hospital, etc. either within it or annexed, and its educational courses reach three groups: primary school girls in their last year (it has been suggested that certificate of completion of the puericulture course be required of girls seeking any public employment, just as the certificate of military reserve status is required of men), secondary school pupils and society women; and physicians and university graduates. (*Bol. Inst. Puer.*, Año I, No. 1, 1938, p. 9; I, 2, 1938, p. 133.)

Dominican Republic: *Junta Nacional de Protección a la Maternidad y la Infancia* (National Board of Maternal and Child Protection), created by Law No. 367 of Nov. 15, 1940, and inaugurated Jan. 5, 1941; it has installed two milk stations and increased the capacity of three maternity hospitals. (See "Public Health in the Dominican Republic," by Wenceslao Medrano H., *Bol. Of. San. Pan.*, Jan. 1942, p. 30.)

Ecuador: *Departamento de Hogares de Protección* (Department of Welfare Homes), a part of the *Ministerio de Previsión Social y Trabajo* (Ministry of Social Welfare and Labor). It supervises the work of various institutions such as the *casas cunas* or day nurseries, mountain camps (*colonias de altura*), industrial schools, and orphanages. The *Consejo Nacional de Menores* (National Children's Council) comes under this Department. (See "Informe. Ministro de Prev. Soc. y Trab., 1941," Carlos Andrade Marín, p. 60.)

Peru: The *Instituto del Niño* has established branch Institutes in Canta, Chiclayo, Cuzco, Huancayo, Iquitos, Piura, Puno, Taena, and Trujillo, and sponsors the organization of child care committees in other cities, which operate milk stations, dispensaries, etc. Its dependencies include vacation camps, prenatal clinics, day nurseries, and agencies for furnishing food. (See "Memoria. Ministro de Salud Pública, Trabajo, y Previsión Social, 9 dbr. 1939-28 julio 1941," Constantino J. Carvallo, Lima, 1941, pp. 94, 247.)

Venezuela: *Consejo Venezolano del Niño*, created in 1936; reorganized in 1939, attached to the Ministries of Health and Welfare (*Sanidad y Asistencia Social*) and Interior (*Relaciones Sociales*). It plans to or-

Additional protection for the nursing mother and infant is provided through the maternity coverage of a number of social security systems, assuring to working mothers paid maternity leave, nursing recess periods after return to work, medical, pharmaceutical, and hospital care before, during, and after the birth of the child and for the child up to two years of age, and financial subsidies; and similar aid is often extended to or may be contracted for, the wife and children of the insured worker.²⁴

Child of the wet-nurse.—It was early realized that the child of the wet-nurse (*nodriza, ama*) needed special protection, and also the child for whom the nurse's services were secured. In 1537 the Spanish Crown forbade the employment of Indian mothers in Tucuman, (Argentina) as wet-nurses unless the Indian infant was dead, and this was extended to Paraguay and Río de La Plata in 1609.²⁵ In more modern times, various types of supervision have been set up. The Moncorvo Child Welfare Institute in Río (1901) made health examinations of wet-nurses and also kept a check on the growth of their infants; São Paulo State had legislative restrictions on wet-nursing by 1904; Uruguay in 1919 passed a law forbidding a mother to sell her milk until her child was six months old; and in 1925 there was established in Montevideo a *lactario* or center where donors' milk was extracted and distributed. Similar institutions had existed in Argentina in 1920 or earlier, and in 1928 a Municipal Lactarium was established in Buenos Aires in connection with the Maternity Institute of the Welfare Society. The true lactarium differs from earlier milk collection centers in that only the surplus milk is taken. It is not regarded as a business, the institution merely acting as agent between the donor and purchaser, and about half the milk obtained is given free of charge to needy infants whose mothers are not able to nurse them.²⁶ The Institute of Nutrition of Buenos Aires also has a lactarium; and there are similar establishments in other countries.

Milk-stations.—Whether in connection with child welfare centers, or with tuberculosis control campaigns, *Gotas de Leche* ("Drop of Milk"—milk distribution station, often with a clinic) and *Copas de Leche* ("Glass of Milk" distributed in school) were early developments in Latin America.²⁷ The Moncorvo Institute

ganize regional councils, and the first was created in the State of Zulia in 1940, following the meeting in Maracaibo of the II Venezuelan Child Congress. The *Consejo* administers or supervises nurseries, a school for the deaf, an agricultural school for delinquent or abandoned boys, etc. (See "Informe del Consejo Venezolano del Niño, 1939-1941," Caracas.) Venezuela also has an *Instituto Nacional de Puericultura*, established about 1936; its activities extend out through the rest of the country, particularly through its puericulture training program.

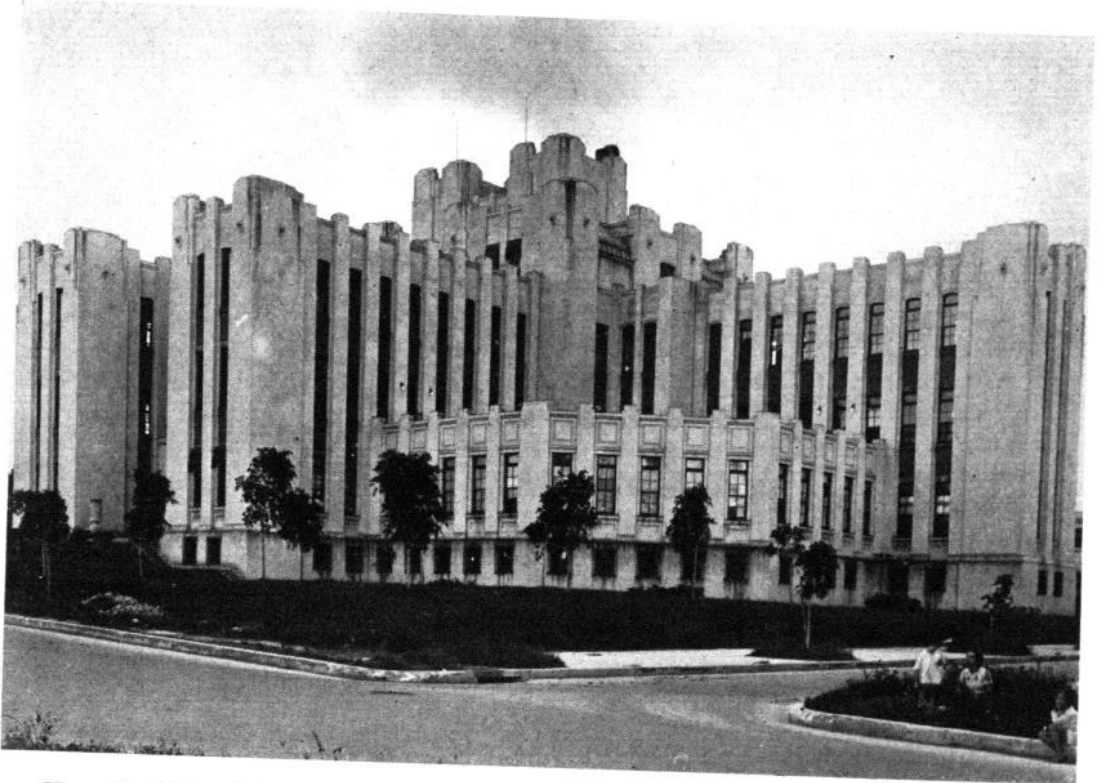
²⁴ See "Housing and Hospital Programs of Latin American Social Security Systems," by O'Leary, *Bol. Of. San. Pan.*, Apr. 1942.

²⁵ "Recopilación de Leyes de los Reynos de las Indias . . . mandadas imprimir y publicar por la Magestad Católica del Rey Don Carlos II," Madrid, Andrés Ortega, III ed., 1774, Vol. II, Lib. VI, T.17 XVII, p. 271, Ley xiii: "Que ninguna India puede salir de fu pueblo a criar hijo de epañol, teniendo el fuyo vivo." ("Haviéndose reconocido por experiencia graves inconvenientes de facar Indias de los Pueblos, para que fean amas de leche: Mandamos, que ninguna India, que tenga fu hijo vivo, pueda salir à criar hijo de Epañol, especialmente de fu Encomendero, pena de perdimiento de la encomienda, y quinientos pefos, en que condenamos al Juez, que lo mandare; y permitimos, que haviendofele muerto à la India fu criatura, pueda criar la del Epañol.")

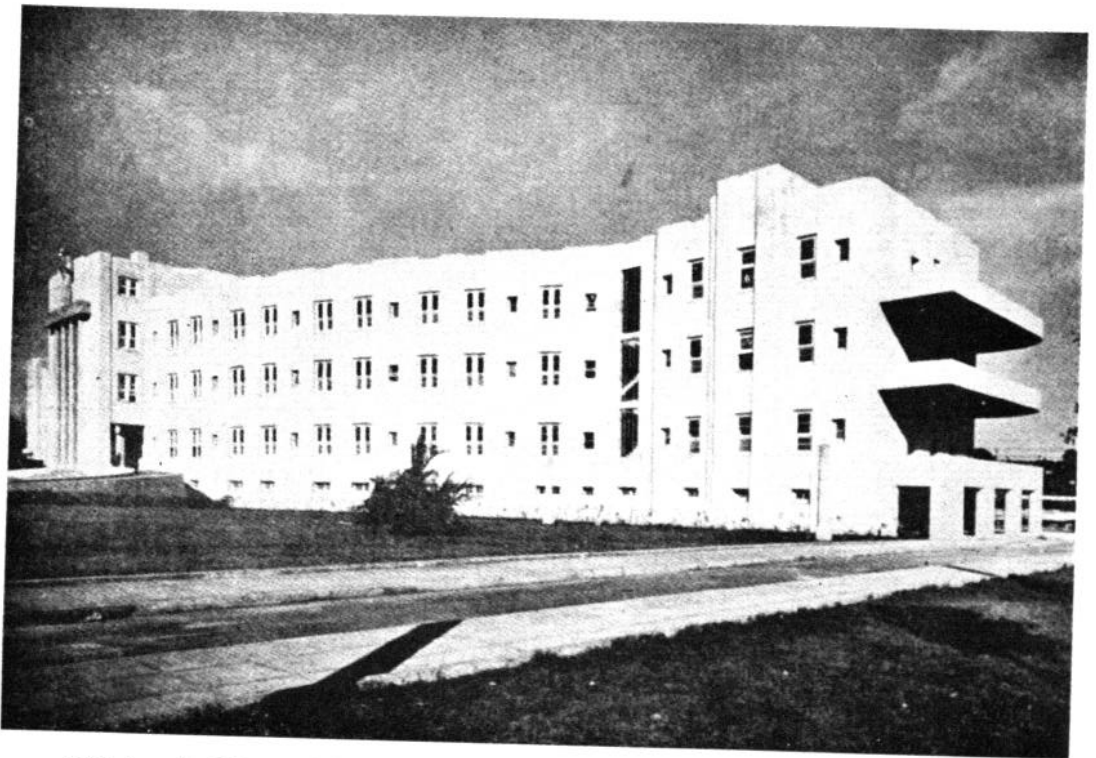
²⁶ See description, in English, in *Bol. Of. San. Pan.*, Aug. 1941, p. 829.

The National Department of Health of Argentina, through its Department of Maternal and Child Welfare, is tackling the problem of milk for infants on a large scale; its Milk Kitchen (*Cocina de Leche*) during 1940 distributed 558,772 liters of whole cow's milk; 395,200 lt. of mothers' milk; 5,992, 237 kg. of powdered milk; 37,851 lt. of reconstituted condensed milk; 15,781,105 lt. of modified milk, as well as flour, cereals, sugar, and other foods. ("Memoria del Departamento Nacional de Higiene, 1940," *Bol. Sanitario*, Jan.-Mar. 1941.)

²⁷ Incidentally, the first *Gota de Leche* in Madrid seems to have been the one founded by a Cuban physician, Dr. Rafael Ulecia. Another Cuban, Dr. Francisco Vidal Solares, founded the first clinic for nursing infants in Barcelona, in the last part of the 19th century. (Trelles, Carlos M.: "Contribución de los Médicos Cubanos a los Progresos de la Medicina," Habana, 1926, A. Dorrbecker, 276 pp., p. 36).



Hospital Municipal de la Infancia de la ciudad de la Habana; lado norte
(Municipal Children's Hospital, Habana; north side)



Clínica de Maternidad de la Habana; aspecto parcial del ala derecha
(Maternity Clinic, Habana; partial view of right wing)



Courtesy of the Children's Bureau, U. S. Dept. of Labor

Servicios de higiene maternoinfantil de la Ley del Seguro Social de Estados Unidos :
arriba, consulta pediátrica en una conferencia rural de higiene infantil ;
abajo, la enfermera sanitaria enseña la manera de bañar al niño
(Maternal and child health services under the Social Security Act of the United
States: above, pediatric consultation at rural child-health conference ;
below, demonstration of bathing infant by a public health nurse)

of Brazil (1901), the *Patronato de la Infancia* of Chile (*Gota de leche* and mothers' clinic established in May, 1908),²⁸ and the *Asistencia Pública* of Montevideo, Uruguay (1907),²⁹ had such milk stations operating on the principle of inducing mothers to nurse their children if possible, and where this was not possible, to supply them with good, safe milk. They nearly always operate in connection with a children's clinic or health center.

Argentina had *Gotas de Leche* before 1924; the one in Tegucigalpa, Honduras, was opened in October, 1925; Colombia had them by 1926 (auspices of the tuberculosis society);³⁰ Costa Rica by 1927; and Ecuador, El Salvador, Guatemala, Mexico, Paraguay, Peru, and Venezuela³¹ at undetermined dates. Two were opened in the Dominican Republic in 1941. Bolivia plans their creation.

Copas de Leche were instituted as early as 1907 in the schools of Buenos Aires and other Argentine cities (by 1925 the *Consejo Nacional de Educación* was operating 154 *copas* in the city of Buenos Aires, supported by private organizations and the municipality, with a subsidy of 300,000 pesos yearly, and some 20,000 children were also benefited by the *Miga de Pan* or "crumb of bread," the *Taza de Caldo* or cup of broth, the *Plato de Sopa*—soup, *Plato de Arroz con Leche*—milk and rice, and *Plato de Mazamorra*—boiled corn). A *copa de leche* was opened in the Moncorvo Filho Dispensary in Nieteroi, Brazil, in 1917, by Dr. Almir Madeira, for the benefit of a nearby school, and Rio de Janeiro is said to have 20 stations for the distribution of soup.³² Montevideo's *copas de leche*, founded in the 1920s, have been substituted by school lunches, and this has been a general tendency in all countries. However, in 1940, two *copas de leche* were inaugurated in Asunción, Paraguay, for the benefit of children not yet aided by the school lunch program.³³ Cod liver oil was sometimes furnished with the *copa de leche*.

Vacation camps, etc.—Summer vacation colonies and preventoria to which weak or undernourished children could be sent for fresh air, sunshine, rest, and good food, were often established in connection with tuberculosis control campaigns, but have come to be regarded as excellent localities for building up any child. The first vacation colony in Latin America³⁴ appears to have been the one

²⁸ This may refer to the *Ollas Infantiles* (literally, "children's kettle of stew"), founded in Santiago about 1908. The society *Ollas Infantiles* eventually had 20 *Ollas* in the working quarters of the city, feeding 2,500 children in public and private schools. A mixture of toasted wheat meal and sugar, cooked in boiling water, was the main dish. It is possible that the 1908 *gotas de leche* were connected with this program. (Nelson, Ernesto: "El alimento en la escuela—la cantina escolar y sus derivados," *Informaciones Sociales*, Lima, June 1939, p. 667.) An even earlier Chilean effort was the *Casa Central de Alimentación, Educación e Higiene*, founded in Valparaíso in 1894 by the *Sociedad Protectora de la Infancia* (organized in 1889). It furnished about 120,000 rations a year and cared for some 500 children, according to a 1911 report (Ferrer, P. L.: "Higiene y Asistencia Pública en Chile," 1911.) Chile had a Congreso Nacional de Gotas de Leche in 1919.

²⁹ Uruguay had 22 *Gota de Leche*-clinics in 1941, 18 of them in the interior of the country (Rossi de Alcántera, Celia: *Arch. Ped. Uruq.*, Aug. 1941, p. 545).

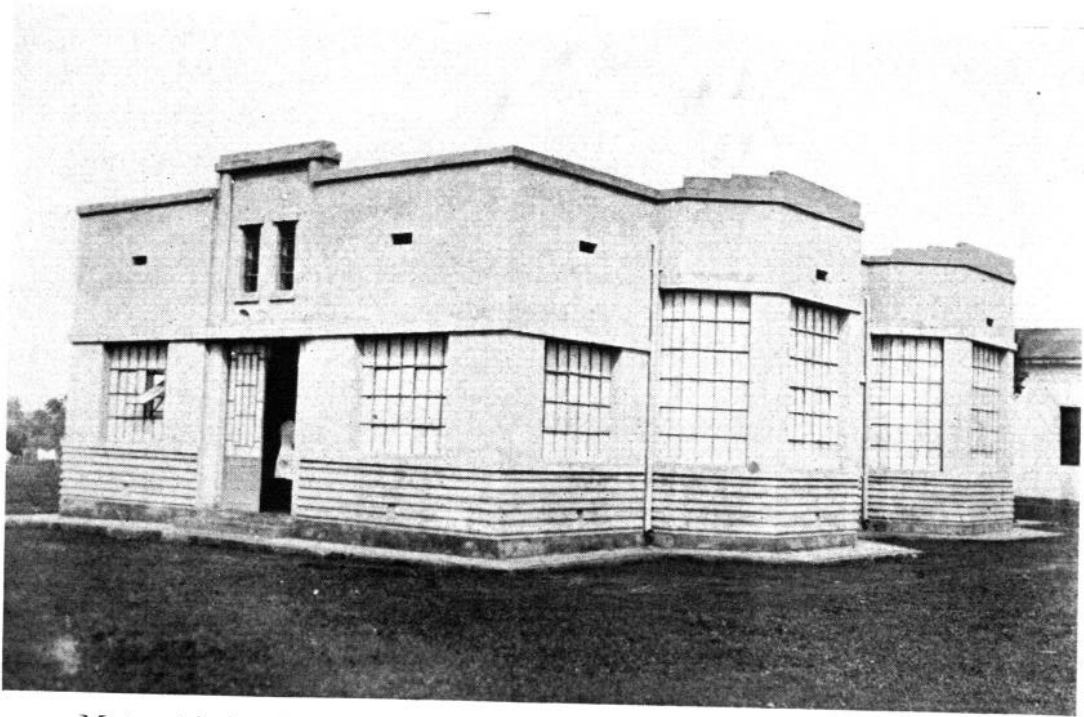
³⁰ In 1939 the Department of Child and Maternal Welfare of Colombia had 56 *Gotas de Leche*, with 7,442 in attendance (Ministerio de Trabajo, Higiene, y Previsión Social, Pub. No. 6, "Trabajos presentados por la Delegación de Colombia al VIII Congreso Panamericano del Niño," 1939, 174 pp., p. 11. The total number of child and maternal welfare services of all types, was some 685. See also in the same booklet the description of a rural service: "Una Gota de Leche Rural en Colombia," by Guillermo Echeverry. It cost 250 pesos per month to run the *Gota* for 50 children, 135 pesos being spent for milk. The station had a nurse.)

³¹ The Maternal and Child Welfare Division of the Ministry of Health and Welfare operates 40 milk stations in Caracas alone (*Bol. Of. San. Pan.*, Dec. 1941, p. 1312. They were attended by 161 mothers and 1,387 infants daily, in 1940, and distributed 517,205 liters of milk.)

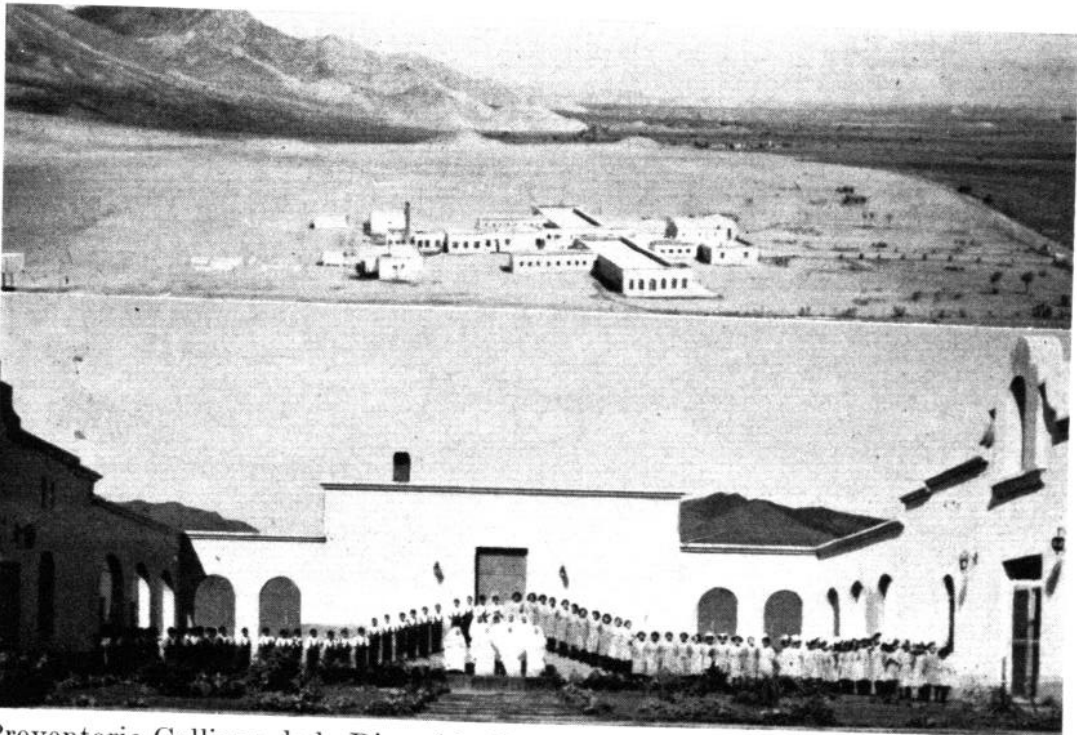
³² Nelson, E., *supra*. See Note 28.

³³ *Bol. Min. Salud Púb.*, Paraguay, No. 1, Aug. 1940, p. 52.

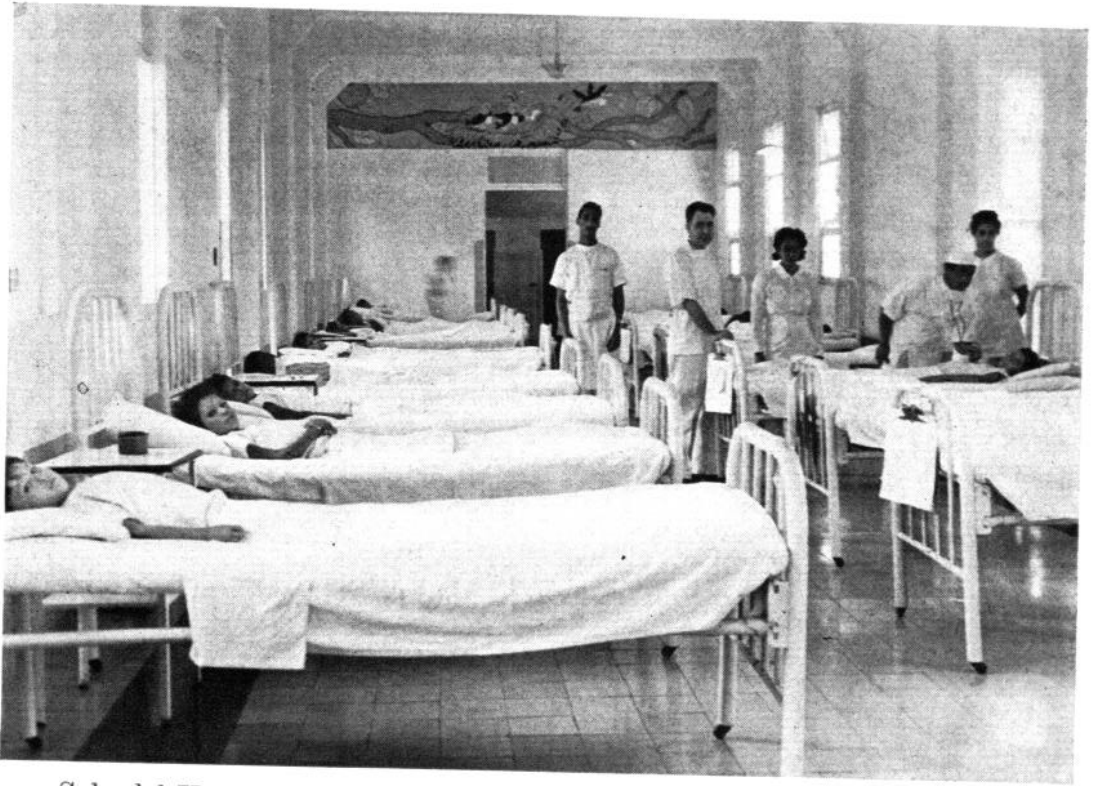
³⁴ Hernández Miyares, Carlos, and Aguilera, Gertrudis: "Colonias campesinas y marítimas para niños, convalescientes y desnutridos," VII Pan American Child Congress, "Memorias," Vol. I, p. 1063.



Maternidad y Sala de la Unidad Sanitaria de Villarrica, Paraguay
(Maternity ward of Health Center at Villarrica, Paraguay)



Preventorio Collique de la Dirección General de Salubridad del Perú, para niños sanos hijos de tuberculosos; arriba: vista panorámica; abajo: los pacientes del preventorio en el patio central
Collique Preventorium (Department of Health of Peru), for healthy children of tuberculous parents; above: panoramic view; below: patients of the preventorium, in the central patio



Sala del Hospital de Niños Ramfís; Ciudad Trujillo, Rep. Dominicana
(Room in Ramfís Children's Hospital; Ciudad Trujillo, Dominican Republic)



Maternidad Concepción Palacios de Caracas, Venezuela: fachada y jardines
del frente
(Concepción Palacios Maternity Hospital, Caracas, Venezuela: front view,
with gardens)

founded in Argentina in 1902, which was followed by those in Chile (1904), Cuba (1911), Brasil (1916), Colombia, Ecuador, Paraguay, Peru,³⁵ Uruguay (1929), Venezuela, and others. Mexico in 1933-34 opened a School of Physical Rehabilitation (*Escuela de Recuperación Física*) in which nutrition received special attention. There were health schools, open air schools, and similar institutions in Buenos Aires, La Paz, Rio de Janeiro, Santos, and Montevideo (1913). The first preventorium for children who had been exposed to tuberculosis was opened in Banfield, Argentina, in 1919 (at the initiative of Aróz Alfaro), and the first in Uruguay in 1912 (auspices of the tuberculosis society). Brazil, Chile, and other countries also have preventoria. The modern agricultural schools for delinquent and problem children, such as the Venezuelan *Instituto de Pre-Orientación* at Los Teques (operated by the *Consejo del Niño*) also pay careful attention to nutrition.

Cantinas and Refectorios maternas.—Canteens for mothers, at which food, clothing, medicines, and even financial subsidies are distributed to mothers to enable them to care for their children at home, have been established in a number of countries—Argentina (before 1924), Chile, and others. *Refectorios* or lunchrooms (often supplying medicines as well)³⁶ for mothers and their pre-school children, have been opened in Argentina, Peru, Uruguay, and elsewhere.

School lunchrooms and canteens.—Nearly all Latin American countries now have regular school lunch programs, administered by the Ministry of Health or that of Education, sometimes in cooperation with municipalities, school boards, parents, and special councils. Often (as, for instance, in Argentina, Colombia, and Mexico) the school garden supplies much of the produce for the school lunch (see below), and additional supplies may be brought from home by some children, while parents assist in the preparation of the actual lunch or in garden work, increasing the sense of cooperation and responsibility, and affording an opportunity for educational demonstrations. The school lunch movement began about 1926, gradually replacing the *Copa de Leche* (see above).

Present programs include those of: Argentina (in 1939 it was estimated that 628,709 Argentine school children received some sort of school meal provided by private or official institutions: 181,226 attended school lunch rooms or *comedores escolares*; 92,739 received a plate of *mazamorra*—boiled corn, *frangollo* or *locro*—stew; 264,904 received at least 200 grams of milk daily; 38,467 received a jar of warm *mate*; and 51,373 were given bread);³⁷ Bolivia (some children now receive an "inadequate" school breakfast, but development of a real program is planned);³⁸ Brasil (certain States, such as Bahia and São Paulo, have been especially active. A national law provides standards for school lunch programs);³⁹ Chile (free

³⁵ Founded Jan. 29, 1934. In 1934, 1,300 children benefited from it; and the number was growing. (Paz Soldán, C. E., "Memorias," VII Pan Amer. Child Cong., Vol. I, p. 1056.)

³⁶ *Refectorio* is used in Argentina to refer to the institution created by Escudero of the National Institute of Nutrition to furnish all types of aid—medicine, medical care, food, etc., except actual hospitalization.

³⁷ Comisión Nacional de Ayuda Escolar (Ministerio de Justicia e Instrucción Pública): "Contribución a la Conferencia Internacional de Alimentación," Buenos Aires, 1939 (*Bol. Of. San. Pan.*, June 1941, p. 648); "Memoria, 1938," 339 pp.; Report of Dr. Spangenberg to the IV Pan American Conference of National Directors of Health (*Bol. Of. San. Pan.*, Mar. 1941, p. 243.) Typical menus include: (a) vegetable soup, meat, potatoes and rice, butter, bread, dessert; (b) vegetable and noodle soup, liver and rice, bread and butter, cooked fruit; (c), rice and vegetable soup, *salpicón* (meat, potatoes, lettuce, beets, tomatoes, eggs, lemon, oil), bread and butter, raw fruit. (Consejo General de Educación, Prov. de Córdoba: "Como se protege al escolar en la Provincia de Córdoba, 1939" 137 pp., p. 14. Discusses school lunchrooms, vacation colonies, and kindergartens. Cod-liver oil is also given in the lunchrooms.) The Argentine school lunch program began about 1926 with six *cantinas* accommodating 300 children each. These were closed in 1930, but the program was revived in 1932 with *comedores escolares*. The Ministry of War operated some school lunches in the interior. (Bazán, F., and Ruiz Moreno, G.: "Las cantinas en los establecimientos de enseñanza secundaria," Buenos Aires, 1939.)

³⁸ Report of Ministry. See Note 23.

³⁹ *Bol. Inst. Puericulture*, 1938-41. In 1936 the State of São Paulo reported that there were lunchrooms in 320 State schools (Secretaria da Educação e da Saúde Pública: "Anuario do ensino do Edo. de S. Paulo, 1936-37," 652 pp., p. IX.)

breakfasts were furnished in certain Chilean towns in 1930. The budget for school lunches was increased from 1 million pesos in 1939 to 6 million in 1940; during the latter year, with the cooperation of the Department of Nutrition, municipalities, and school aid boards, the popular restaurants, of which Chile had 33, furnished 1,500,000 rations to school children. In 1940 it was reported that about 58,000 children received school breakfasts);⁴⁰ Colombia (local and private programs date back to 1914. In 1939, about 30,000 children received free breakfast or lunch, the programs being administered locally with financial aid from the national government; approximately 1 million dollars were spent by national and local governments in that year. Two thirds of the programs were in four of the 14 Departments.);⁴¹ Costa Rica (by 1927, Costa Rica had *cantinas escolares*, to furnish food, clothing, and other supplies); Cuba ("has furnished free lunches for about 20 years");⁴² Ecuador (a law was passed in 1938 providing for the establishment of school lunches; in Quito, school children were given free lunches in 1927);⁴³ Haiti (in 1937 it was reported that some school restaurants had been established, in different parts of the country, with funds from the Government Lottery, and others were supported by the President);⁴⁴ Mexico,⁴⁵ Paraguay (the Ministry of Health in cooperation with municipalities, the latter turning over 15% of municipal revenues for the purpose, has organized School Lunch Commissions—*Comisiones Pro-Comedor Escolar*, which, by the end of 1940 were functioning in more than 80 rural towns);⁴⁶ Peru (had a lunch program by 1935. In 1940 the *Refectorios Escolares* of the *Instituto Nacional del Niño* furnished 2,412,796 meals to school children in 13 localities);⁴⁷ Uruguay (had school lunches by 1926; in 1940 there were 652 school lunchrooms feeding 34,646 children);⁴⁸ and Venezuela.⁴⁹

Popular restaurants.—Bolivia, Brazil, Chile, Mexico, Peru, Uruguay, Venezuela, and other countries have established *comedores populares* or *restaurantes populares*, serving balanced meals at low cost—usually in densely

⁴⁰ Report of Dr. Garcés to the IV Pan American Conference of Directors of Health (*Bol. Of. San. Pan.*, Mar. 1941, p. 244), and other references in *Boletín*.

⁴¹ Raushenbush, Joan: "School lunches in Latin America," *Bulletin Board*, Surplus Marketing Adm., U. S. Dept. Agriculture, Aug., 1941. A review of the nutrition situation in Colombia is given in "Alimentación y nutrición en Colombia," by Jorge Bejarano, Bogota, 1941, 166 pp. Editorial Cromos.

⁴² Report of Dr. Lage to IV Pan Amer. Conf. Directors of Health (*Bol. Of. San. Pan.*, Mar. 1941, p. 244).

⁴³ *Bol. Of. San. Pan.*

⁴⁴ Report of Rulx León to the Committee on Nutrition of the Pan American Sanitary Bureau, *Bol. Of. San. Pan.*, June 1937, p. 539. ("L'état de la question de l'alimentation en Haïti dans ses Rapports Officiels et Sanitaires.")

⁴⁵ In 1940, breakfasts were being given Mexican children in 36 localities (2000 breakfasts) by the Secretariat of Public Assistance in cooperation with mothers' clubs, teachers, etc. About 70% of the children receiving breakfast were of school age, the rest, pre-schoolers, and the meals were served in schools, child centers, etc. (Sra. Asistencia Pùb.: "Informe, 1940-41," Gustavo Baz, Mexico, D.F., 180 pp., pp. 18, 131, 121.) A recommended menu was 250 cc. of milk, 20 grams of sugar, 15 gr. of oats, a fried egg, and a banana.

⁴⁶ *Bol. Min. Salud Pùb.*, No. 1, Aug. 1940, pp. 29, 46. The first lunchroom was opened April 8, 1940 in San Lorenzo de Campo Grande, and about 50 more are in operation. Parents and other persons have contributed where municipal and national revenues were not sufficient. Industrial firms have helped establish lunchrooms for children of their employees. It is proposed to have the preschool children come to school one day a week for a combined kindergarten-mother's education class, during which nutritional and other defects will be studied and cared for. A typical menu included a large plate of stew (*loco*) with 150 grams of meat, biscuit (*galleta*) or *mandioca*, and a dessert of fruits. The cost was \$3.25 c/1 for each student, or about one cent U. S.

⁴⁷ Report of Ministry. See Note 15.

⁴⁸ "Mensaje del Presidente . . . Gral. Arq. D. Alfredo Baldomir, a la Asamblea General . . . marzo 15, 1941," 32 pp., p. 25. (Report of Ministerio de Instrucción Pública y Previsión Social).

⁴⁹ In April, 1940, an experimental *comedor escolar* serving 12 Federal schools was opened by the *Consejo Venezolano del Niño*. Some 72 children were given meals, after investigation of their health and family circumstances. ("Informe del Consejo Ven. del Niño, 1939-1941," p. 39.)

populated, impoverished centers, or in places accessible to large numbers of workers. Uruguay was a pioneer in this field, and placed great emphasis on the educational functions of the *comedor*. In some of these institutions, particular attention is given to children: for instance, only persons with families are admitted to the family restaurant or *comedor familiar* opened in Mexico City in November, 1941.⁵⁰ In Peru, there are *refectorios maternas* (see above) attached to the *comedores populares*, for furnishing of food, medicines, and other supplies to mothers.⁵¹ In both Chile and Peru, the popular restaurants cooperate in the school lunch campaigns.

School gardens.—The school garden movement is rapidly gaining in popularity in Latin America, and its value from both educational and nutritional standpoints is realized. School gardens are said to have been required by one of the Argentine provinces as long ago as 1850;⁵² they were suggested in 1931 at the *Primer Congreso Nacional de Alimentación Popular* (First National Nutrition Congress) in Chile; and recommended by the IV Pan American Conference of National Directors of Health, Washington, 1940. Among the countries at present most active in this field are Argentina, Brasil (for instance the State of São Paulo reported 355 school gardens in 1936–37), Chile (which has school gardens as part of its agricultural education program), Colombia, Cuba, the Dominican Republic (which in 1940 had gardens at 635 of its rural schools), Guatemala, and Mexico.

Nutrition clinics.—The first nutrition clinic in Latin America appears to have been the one planned in 1926 and inaugurated in April, 1928, as part of the School Medical Service in Buenos Aires. It was followed by the establishment of a special nutrition clinic in the *Casa del Niño* or child health center of Montevideo, Uruguay, in 1929. The Uruguayan clinic has two sections, a diet clinic with out-patient facilities, and an interne section or infant home where children needing special care and diets may remain for as long as necessary.⁵³ The Institute of Nutrition of Argentina also has nutrition clinics. A nutrition and endocrine clinic was established in the São Paulo School Health Service in 1938; and a clinic for diseases of the digestive system and nutrition was opened in 1934 in the Poly-clinic of that city.⁵⁴ Peru's *Clinica de nutrición para pre-escolares*—Preschool child nutrition clinic—established in 1938, had 151 children registered in 1940.⁵⁵ Argentina, Chile, and other countries also have nutrition clinics attached to health centers or hospitals.

Nutrition institutes.—The National Institute of Nutrition of Buenos Aires (founded in 1928 as a municipal institute),⁵⁶ the *Instituto de Alimentación Científica del Pueblo*, of Uruguay, and similar institutions, while not devoted exclusively to child nutrition, are nevertheless greatly concerned with it.⁵⁷ It is interesting to note, as an example of inter-American cooperation, the fact that Bolivia and

⁵⁰ *El Universal*, Feb. 17, 1942. The *comedor* has a capacity of 1200, and operates Monday through Saturday. Families are enrolled, and before admission, are given a medical and dental examination; those with contagious diseases are not admitted and those with dental defects must have them corrected at the free clinic annexed to the *comedor*. The weekly quotas per family run from 1.80 to 3.00 pesos. A very few free tickets are given, under rigid supervision. The *comedor* is cafeteria style, but there are waiters to help the children. See also Srfa. Asis. Páb.: "Informe, 1940–41", p. 18.

⁵¹ Report of the Ministry. See Note 23.

⁵² Report of Argentina to the IV Pan Amer. Conf. Directors of Health, 1940.

⁵³ See description in *Bol. Inst. Int. Amer. Prot. Inf.*, Jan. 1932, p. 455.

⁵⁴ *Bol. Of. San. Pan.*

⁵⁵ Report of the Ministry. Note 23.

⁵⁶ An article, in English, on this institution will appear shortly in the *Bol. Of. San. Pan.*

⁵⁷ Conversely, other institutions, such as Brasil's *Instituto Nacional de Puericultura*, Peru's *Instituto del Niño*, and Venezuela's *Instituto de Puericultura*, not primarily nutritional, devote much attention to the subject.

Paraguay recently sent physicians to Argentina's Institute of Nutrition for special training in preparation for positions in the national nutrition institutes to be organized in their own countries. Brazil has two Institutes of Nutrition, connected with the Universities of Rio and São Paulo.

National agencies.—Nearly every Latin American country now has a national division (in the health department or ministry), council, or institute of nutrition: Argentina (*Instituto Nacional de la Nutrición*; *Comisión Nacional de Ayuda Escolar*; provincial commissions and institutes); Bolivia (*División de Nutrición de the Ministerio de Trabajo Salubridad y Previsión Social*); Brasil (*Serviço Central de Alimentação, Ministerio de Trabalho*, 1940); Chile (*Consejo Nacional de Alimentación, Min. de Salubridad, Previsión y Asistencia Social*, 1937); Columbia (*Consejo Nacional de Alimentación*, 1940); Costa Rica (*Consejo Nacional de Nutrición*, 1940); Guatemala (*Comisión de Alimentación*, 1940); Mexico (*Comisión Nacional de la Alimentación*, with state and local committees; *Oficina General de Higiene de la Alimentación*); Paraguay (*Sección de Nutrición, Ministerio de Salud Pública*); Peru (*Sección Técnica de Alimentación Popular*); Uruguay (*Comisión Nacional de Alimentación Correcta*, 1929; *Instituto de Alimentación Científica del Pueblo*), and of course, the Nutrition Committee of the Pan American Sanitary Bureau, as the international body, may be mentioned.⁵⁸

Related in nature are the Milk Commissions, including those of Cuba (*Comisión Técnica de la Leche*), Chile (*Consejo de la Industria Lechera*, 1939) and Venezuela (*Comisión Permanente de la Leche*, 1939). The semi-official Inter-American Committee for the Dairy Industries, 232 Madison Avenue, New York, may also be mentioned.

Congresses.—Nutrition, including that of the child, has been an important subject of discussion at Pan American Sanitary Conferences and Conferences of National Directors of Health, due in great part to the work of the late Dr. Justo F. González, of Uruguay.⁵⁹ At the latest Pan American Sanitary Conference (X, Bogotá, 1938), a considerable section of the report of the Pan American Committee on Nutrition was devoted to problems of child feeding. Other Congresses, both national and international, have been devoted entirely to the subject of nutrition. The III International Congress on Nutrition was held in Argentina in 1939. Reunions of other kinds, such as the Pan American Child Congresses have also considered the problem of nutrition. The First Inter-American Congress on Indian Life, meeting in Patzcuaro, Mexico, in 1940, adopted recommendations on nutrition (XVII, recommending free school lunches and the organization of popular restaurants; and XXVII, recommending special study of problems of native diets).⁶⁰ Congresses on milk have also been held (Argentina, Guatemala, Venezuela).

The subject of child nutrition is so closely linked with other fields—nutrition proper, child welfare in general, wages, education, public health—that a survey of it becomes, as Tennyson said of Experience, "an arch, where through gleams that untraveled world." But even this brief review will, it is hoped, afford some indication of what has been and is being done in Latin America concerning this vital problem.

(To be continued)

⁵⁸ See Pan Amer. San. Bureau Pub. No. 167: "The Work of the Pan American Sanitary Bureau in relation to Child Welfare," and Annual Reports of the Director.

⁵⁹ See editorial, *Bol. Of. San. Pan.*, Mar. 1942, p. 283, and p. 218.

⁶⁰ U. S. Office of Indian Affairs, Washington: "First Inter-American Conference on Indian Life, Final Act," (translation), 1940, p. 19.