

31 Study in infants of low socio-economical level fed with artificial milk. B.J.Schmidt, M.E.Z.Maluf, T.Aidars, C.P.B.Spinelli, I.P.Eiras, S.F.Pires, R.C.Paiva, S.G.Esteves, N.Takahashi, I.A.Oliveira-Dept.Pediatria-Faculdade Medicina Sorocaba-S.Paulo-Brasil.

106 infants which received artificial feeding and belonging to the lowest socio-economical levels of the city of Sorocaba were studied. The ages varied from 6 days to 12 weeks. 52 males and 54 females, weighing from 800 to 4200 g. They were followed-up to the 20th week of life. All patients were visited by the pediatric staff in their respective home every week, receiving advice on Puericulture. Parasitological tests and coprocultures of the feces were done at the beginning of the observation, every 4 weeks, and during diarrhoea outbreaks. Results: 55.6% of the infants had their nutritional state within normal limits; 17.0% improved their nutritional state during the observation period; 12.2%, which at the beginning of the study presented with 1st. undernutrition, remained unchanged, and 10.3% with undernutrition of the 2nd and 3rd degrees remained unchanged during the study. 2.8% of the cases with weight within normal level, evolved into 1st degree undernutrition and 1.84% with first degree undernutrition finished with 2nd degree undernutrition. 287 protoparasitological tests and 287 coprocultures were performed. Enteropathogenic bacteria were isolated in the feces of 23 patients without diarrhoea and in 7 patients with diarrhoea. In 10 patients with diarrhoea, no enteropathogenic bacteria were isolated. The results obtained stress the importance of continued "in loco" medical assistance.

32 VARIABLES RELATED TO WORK OF THE FATHER INFLUENCING THE RATE OF INFANT SEVERE MALNUTRITION.

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Variables related to the work of the father was studied retrospectively in a sample of 78 father/infants dyads from greater Santiago, Chile, divided into two groups: 40 dyads with malnourished infant admitted to a Closed Center for Nutritional Rehabilitation (experimental group) and 38 dyads with normal infant (control group). Both groups were selected from the same Health Centers (National Health Service) and from a low socioeconomic level. The groups were paired as to age of the infants (3-24 months), number of children in the family, type of work of the father, the family as a whole and sector of the city in which the family lived. Results of the analysis indicate that throughout the last five years changes of the type of work (specially for those working independently) as well as the rate of loss of work (joblessness) were significantly greater for the experimental group. At present no differences as to the type of work are observed between the two groups, despite a somewhat lower socioeconomic level of the experimental group. It is postulated that the instability of the work carried out by the father plays a significant role as a causative factor of infant severe malnutrition.

33 THYROID FUNCTION IN RATS FED WATER-DETOXIFIED RAPESEED (Brassica napus) MEAL. Ballester, D., Muzzo, S. & Brunser, O. Instituto de Nutrición y Tecnología de los Alimentos (INTA), Universidad de Chile. Casilla 15138, Stgo. 11, CHILE.

Thyroid function was measured in 60 day-old male rats fed one of the following diets at the 10% protein level: water-extracted rapeseed meal (DRSM) that contained 0.2% of the goitrogen VTO; untreated rapeseed meal (RSM) containing 5.5% VTO and a casein control diet. Plasma levels of TSH, T3 and T4 were measured after 10, 30 and 60 days when groups of animals were killed and their thyroid was dissected, weighed and processed for histologic studies. Weights of the gland of animals fed DRSM was always normal, with mild histologic signs of stimulation. Plasma T4 levels were also normal, RSM increased gland weight and induced histologic changes suggestive of strong stimulation. T4 levels was decreased at all time intervals. Animals fed DRSM and RSM showed an increase of T3 on day 30. Values were normal on day 60. There is no clear explanation for this observation. Plasma TSH was always normal in all animals. The expected increase of TSH in RSM-fed animals was not detected. The normalcy of plasma T4 and thyroid weight and histology in animals fed DRSM further supports previous evidence about the possibilities of using it in animal husbandry in concentrations higher than those used hereto. It may even have applications in human diets.

34 IMPAIRED ANTIGEN RECOGNITION IN PROTEIN CALORIE MALNUTRITION. L.Schlesinger, C.Muñoz, X.Rubio. INTA, Universidad de Chile, Santiago, Chile.

The in vitro proliferative response of lymphocytes to alloantigens, PPD and PHA was studied in 17 severely marasmic infants aged 4 to 13 months. Twenty one well-nourished infants served as controls. All infants had been vaccinated with BCG at birth and had a BCG scar. Proliferation was measured by tritiated thymidine incorporation and results expressed as the stimulation ratio (S.R.): c.p.m. in stimulated cultures/c.p.m. in unstimulated cultures. The response to alloantigens was studied in one way mixed lymphocyte cultures (MLC) using irradiated leukocytes from three non-related donors. The table shows geometric mean and range:

	Donor A	Donor B	Donor C
Malnourished	5.0(1.3-18.3)	4.9(1.2-23.6)	3.2(0.6-14.1)
Controls	8.9(3.8-22.7)	10.8(2.9-37.2)	9.2(3.2-23.5)
p	< 0.05	< 0.025	< 0.001

There were no significant differences in the S.R. of tuberculin positive marasmic and control infants nor of tuberculin negative marasmic and control infants. There were significant differences between the two groups in the response to PHA with a geometric mean SR of 27 and range 4-64 vs 101 and 61-203 in the controls (p < 0.01). These results suggest that recognition of foreign antigens is depressed in protein calorie malnutrition, as evidenced by the lymphocyte response to alloantigens and PHA. Lymphocytes of malnourished infants sensitized to PPD in the period of adequate nutrition responded to it normally.

35 R.COCCO, G.GALLO, H.GALIMDO and I.COCCO. Hosp.Niños Bs. Aires, Argentina. Trisomy 9 Associated with a Pericentric Inversion of N°9 in a liveborn.

The complete trisomy 9 is relatively rare due to high fetal mortality. We present here a malformed liveborn infant with a 47,XY,+9,inv(9)(p13;q13)mat karyotype. The infant presented: hydrocephalia, microphthalmia, small palpebral fissures, upward slanted eyes, ocular hypertelorism, broad base and prominent tip of the nose, low set posteriorly rotated malformed ears, micrognathia, incipient cleft lip, narrow and high arched palate, short neck, pteridium coli, narrow trunk, pectus excavatum, short limbs, hip dislocation, micropenis, cryptorchidism, 3rd phalange of 4th finger superposed over the 3rd and 2nd fingers in both hands, absent patella, joint limitation, and calcaneovalgus deformity. Death occurred two hours after birth. The post-mortem examination revealed: stenosis of aqueduct of Sylvius, ventricular septal defect, left diaphragmatic hernia, marked bilateral pulmonary hypoplasia. The parental karyotypes revealed that the mother was a carrier of pericentric inversion of chromosome 9: inv(9)(p13;q13). Of the 6 liveborn infants with trisomy 9 previously reported in the literature, 3 had also the same type of inverted chromosome 9, and one an enlarged 9qh+ segment, which were transmitted from parental carries. In addition, these polymorphisms were also found to be associated with others cases of non-disjunction, such us: 21, 13, 18 and 8. Although, these polymorphisms are considered non pathologic morphological variants, one wonders if during meiosis its presence is really so innocuo.

36 BREECH PRESENTATION REPERCUSSION ON NEONATE- De Los Santos, F.; Peña, J.L.; Ceruti, B.-Perinatology Center, Pereira Rossell Hospital, Montevideo, Uruguay.

This is the report of associate factors to fetal presentation type of 420 neonates. From 2960 births since I/IX/79 to 31/III/80, 105 cases were breech presentation (BP) and 315 cephalic presentation (CP). Distribution according to precedence, mother parity and age, and neonate sex was similar. Percentage significant differences were noted on following factors.

Controlled factors	BP	CP	Square Ch ²
No controlled pregnancy	45.5	28.9	9.48
Cesarean section birth	20.0	3.5	30.49
Preterm infants (< 37 weeks)	29.7	8.1	30.61
Small-for-date infants	26.7	8.8	21.16
Birth Weight < 2000 g	23.8	1.9	52.86
Neonate depression 1 minute's life	32.9	5.0	54.56
Neonate depression 5 minute's life	13.4	2.7	16.69
Neonatal mortality	15.8	1.6	31.32
I.R.D.S.	20.0	2.5	37.35
Major malformations	7.6	0.3	20.02

Breech presentation group of neonates is significantly associated with lack of maternal-fetal control. It was noted an increase of pre-term infants, small-for-date infants, greater depression, pathology and mortality that became a medicosocial problem of interest.