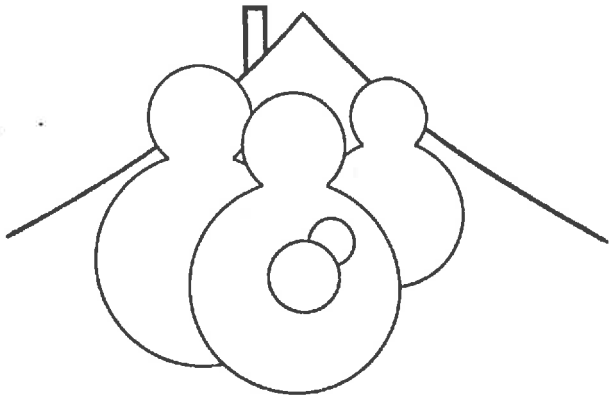
Maggie

POSTAGE PAID
W.H.B.
Permit No. 12

Maggie Banks
14 Eton Drive
Hamilton

Waikato Home Birth Association
P.O. Box 12-099
HAMILTON

HOME BIRTH



Waikato Newsletter

Monthly meetings of the Association are held on the
second Monday of each month at 7.30pm at
Womens Health Action Centre,
cnr Collingwood & Milton Sts, Hamilton.
ph Glenys 551-842 for details

Oct 90

Waikato Home Birth Association
P.O. Box 12-099
HAMILTON

Newsletter Contact
Joanne Hodgson
ph 557-742

Hello everyone

This month Christine Dawson & myself are starting another support meeting. The main purpose being to offer continued support once your baby is born. However, anyone is welcome to attend - those of you who haven't yet had your baby & need extra support, or who can't attend the public meetings at night.

At this stage the meetings will take the form of a morning-tea with no fixed topic - just a get-together & conversation to be held on the fourth Thursday of each month.

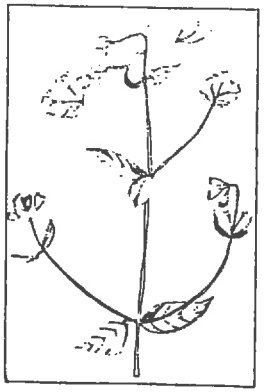
The first one will be held on Thursday 25.10.90 at 10am at Christine's - 29 Oakfield cres Pukete.

Just turn up or contact either Christine on 493905 or myself on 557742 if you have transport problems.

Joanne.

HERBAL TEAS

STEVIA
rebaudiana bertoni



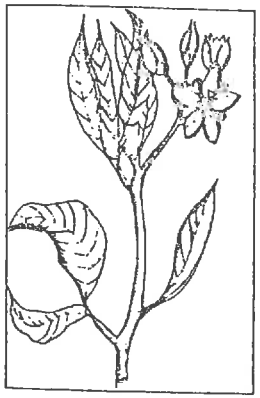
Characteristics: Stevia is a small bush which grows near Brazil's southern border, on the frontier with Paraguay. It contains Stevisoid, a natural sweetener. It is 300 times as sweet as sugar, yet is not absorbed by the body and contains hardly any calories.

Brazilian uses and folklore: Stevia has long been used by the Guarani Indian tribe to sweeten other herbal teas and foods. The plant was first studied scientifically in 1899 by Paraguayan botanist Moisés S. Bertoni, who recognized the plants incredible sweetening power. He suggested that Stevisoid might substitue saccarhine as a sweetening agent being completely non-toxic. In Rio de Janeiro studies on Stevia are continuing and it is considered to be the sweetener of the future. Stevia is grown in the interior of São Paulo. In the city o the plant is so popular that the tea made from it is sold a all bars and restaurants. Milkshakes, juices and coffee are sw with Stevia. The inhabitants in this little town speak wonders of Stevia and the positive results it has given in diabetes, hypertension and infections.

Stevia is considered to be a great help in weight loss p because it is very low in calories and its sweetness is so trated. Chewing a few leaves of Stevia will satisfy anyone' tooth, and the shredded leaves are an excellent substit sugar in cooking.

Uses: Natural herbal sweetener; useful in treating the sympt diabetes, high blood pressure, infections.

JATOBÁ
hymenaea courbaril
Fam. Leguminoceae



Features: Jatobá is a large, beautiful hardwood tree native to Brazil. It grows in the states of Minas Gerais, Bahia and Pernambuco. Jatobá produces a large flat pod type fruit which is edible. The bark and branches of the tree have a resin that resemble crystals when dry and is highly valued by industry. The Indians used to make their lower lip plates from this resin. An herbal tea is made from the bark of the tree and the resin and bark are used to make an herbal "wine".

Brazilian uses and Folklore: Jatobá tea is a natural tonic for the organism. According to Dr. J. Monteiro Silva, whoever drinks Jatobá tea feels"... strong and vigorous, with a good appetite, always ready to work" Lumberjacks who work in the forests of Brazil generally take a jar of Jatobá tea or extract with them to drink during the day: it gives them energy. Besides being an energizer and tonic, Jatobá has also given very good results in cases of acute and chronic cystitis and prostatitis. When mixed with a little honey it is influential in treating respiratory problems such as bronchitis, chronic coughs and asthma.

The resin of the tree is employed externally as an ointment to relieve aches and pains.

Uses: For symptoms of cystitis, prostatitis, bronchitis, asthma, and chronic coughs. Tonic and energizer. Used in homeopathy as a mother tincture.

* Livro verde, p. 547.

Midwives

Liz Carlaw
ph. 491000

Maggie Banks
ph. 64612

Home birth rise seen

An increasing number of home births in the Waikato is expected as changes in the law concerning midwives begins to take effect.

Under the Nurses Amendment Bill registered midwives are now allowed to deliver babies without the supervision of a doctor.

Midwives are able to draw up contracts with area health boards, just as general practitioners do at the moment, assuring them access to hospital facilities for deliveries.

Contracts between the Waikato Area Health Board and midwives in the region are still to be negotiated.

Hamilton Community Midwifery Action Group secretary Maggie Banks said it was likely seven independent midwives would be interested in signing contracts with Waikato Hospital.

A draft contract had already been submitted by the group to the area health board, she said.

However one of the main effects of the bill was that made it easier for women to opt for homebirths if they wanted to, Mrs Banks said.

At the moment there are about 32 home births in the Waikato every year.

Mrs Banks, a domicilary midwife, said she had had three women come to her in the month since the bill had come into effect asking that their general practitioner not be involved in the delivery of their babies.

"I always try to foster the relationship with the general practitioner but it is the womens' choice," Mrs Banks said.

"Now they can use the services of a general practitioner or a midwife or both."

Waikato Hospital's manager of the obstetrics and gynaecology unit, Pat Oettli, said there were undoubtedly more women who wanted deliveries at home.

Mrs Oettli said she also expected that as midwives took up contracts with the hospital more women would be going home sooner after their delivery and having midwife care at home.

This months Topic for discussion is Breastfeeding

DOCTORS MUST REPORT VACCINE REACTIONS:

According to the FDA DRUG BULLETIN (1988), health care providers who administer vaccines - are required by law -to keep records and report to Health and Human Services (HHS) any reaction to all the commonly prescribed vaccines. These include immunizations for diptheria,tetanus and pertussis, either singly or in combination; measles, mumps and rubella, either in single or in combinations and polio vaccines. All'events', that could be contraindicated to a child's receiving a second 'dose' of that vaccine must be reported to the HHS. The Doctor must report also any 'events' that follow an immunization 'as well as their acute complications or sequelae (including death).' In USA the Doctor now must record, the date of vaccination the manufacturer and lot number of the vaccine in the child's file at the office of administration...IMMUNIZATION DIGEST.

Birth Notices

Congratulations to:

Annette Taylor & David Riddel - a daughter - Jessica

Anna & Barry Price, a daughter - Freyja

Julie & Gary Marshall, a son - Joshua

Saeia & Fiona Mafile'o, a daughter - Elizabeth

Karen & Bruce Hopper, a son - after two daughters

Pippa & Graham Cox-Wright, a daughter - caught by Fiona. Liz a bit late

Judy & Nick Segedin, a son.

Cot deaths linked with low blood sugar

RESEARCHERS in Scotland have linked the sudden infant death syndrome—or cot death—with low levels of sugar in the blood. They found that 10 out of 38 babies who died of the syndrome had genetic deficiencies involving an enzyme called glucose-6-phosphatase, which helps to release glucose from the liver. The scientists say that there is "an urgent need" for research on a larger scale to find out how common the problem is. They believe that it could be one of many factors that contribute to cot deaths.

The body needs glucose-6-phosphatase to make and release glucose. One of the enzyme's roles is to help to break down glycogen, a carbohydrate stored in the liver, to release glucose. If it fails and glycogen builds up in the liver—a condition known as glycogen storage disease—the level of glucose in the blood can fall, potentially causing death. Doctors have suggested that cot deaths might result from low blood sugar, but no one has been able to prove or disprove the theory because it is impossible to measure blood sugar or glycogen accurately after death.

Ann Burchell at the University of Dundee and her colleagues analysed samples of liver tissue from 55 infants who had died suddenly and unexpectedly, including 38 who had died of the sudden infant death syndrome. She also looked at 45 control samples (*The Lancet*, 5 August, p 291).

Burchell found that 10 of the 38 babies had various types of glycogen storage disease and contained more glycogen than normal. Glucose-6-phosphatase was either inactive or barely active in eight of the samples. In the other two, she found defects in proteins that are closely involved in the enzyme's activity.

At the moment, doctors need to take a sample of tissue from the liver to diagnose glycogen storage disease—a painful and invasive technique. If there were a more acceptable test for the disease, such as a gene probe, researchers could assess the real numbers of infants who are affected. The babies that Burchell and her colleagues have tested so far may not represent the general population. She now aims to develop a better test for the disease and to locate the genes responsible. □

IMPORTANCE OF THE CLICKING HIP IN SCREENING FOR CONGENITAL DISLOCATION OF THE HIP

DAI ANTHONY JONES

Morriston Hospital, Swansea SA6 6NL

Summary A birth cohort of 3289 babies was investigated prospectively for one year to assess the importance of risk factors for congenital dislocation of the hip (CDH). 426 (13%) babies had an identifiable risk factor when examined by paediatric senior house officers. On further examination in the first week of life at a screening clinic, 51 proved to have CDH, an incidence of 15·5 per 1000 births. The results confirmed the importance of established factors such as family history, caesarean section, and the breech position, and demonstrated the clinical significance of the presence of clicking hips on initial examination. After up to 4·1 years of follow-up there have been no late presentations. By taking into account the clinical examination by senior house officers, secondary screening of babies at high risk of CDH can be very effective. This extended high risk group may contain all potentially abnormal hips. All such babies should be examined by ultrasonography in hospitals where it is available.

EFFECT OF BREAST-FEEDING ON IMMUNE RESPONSE TO BCG VACCINATION

HENRY F. PABST JOHN GODEL
MICHAEL GRACE HELEN CHO
DONALD W. SPADY

Department of Pediatrics, University of Alberta, Edmonton, Alberta, Canada T6G 2R7

Summary The effect on BCG immunisation of feeding either formula or breast milk was assessed in Canadian Cree infants who were vaccinated either at birth or after 1 month of age. The response to BCG was measured in terms of lymphocyte blastogenesis stimulated by purified protein derivative of *Mycobacterium tuberculosis*. Breast-feeding significantly enhanced cell-mediated immune response to BCG vaccine given at birth, but had no significant effect if vaccine was given after 1 month. These findings were not related to maternal history of tuberculosis or BCG vaccination, and the feeding method did not influence lymphocyte stimulation by candida or streptococcal antigens.

Introduction

BREAST milk reduces the frequency and severity of gastrointestinal and respiratory infections in infants,[1-4] and contains specific antibodies to intestinal pathogens and other factors which may enhance the infant's immune defence system.[5] Schlesinger and Covelli[6] found evidence for transmission to the infant of specific cell-mediated immunity to tuberculin by breast-feeding, but this finding was not confirmed by Keller et al.[7] The effect of feeding method on specific cell-mediated immunity generated by neonatal immunisation has not been recorded, although its enhancement by breast milk would help to protect against organisms such as *Mycobacterium tuberculosis* and measles virus. As part of a larger trial on BCG immunisation,[8] we compared lymphocyte responses in breast-fed and formula-fed infants to immunisation with BCG (given to infants during the first week of life or after 1 month of age) and to specific antigens in the environment.

Subjects and Methods

The infants and their mothers were North American Indians of Cree ancestry, most of whom lived on reserves near Edmonton, Alberta. The Crees have a transitional lifestyle with a high degree of cultural dissonance. Formula-feeding of infants had become almost universal between 1960 and 1980, but more recently breast-feeding has returned to favour as part of an increased awareness of traditional values, and this trend has been encouraged by public health workers. All infants were full-term and none was small for gestational age. Written consent for the study was obtained from the mothers within 2 days of birth. On recruitment, data were recorded about the mother's history of active tuberculosis, contact with tuberculosis, BCG immunisation, recent Mantoux response, and parity, and about the chosen method of infant feeding (recorded as breast-fed or formula-fed). The feeding method was recorded each time the infant and mother were seen. Formula-fed infants were those fed only formula milk from birth; breast-fed infants were those breast-fed for at least the first 2 weeks of life, even if they were subsequently fed with formula milk.

Cell-mediated immunity was assessed by measurement of antigen-induced blastogenesis in the infant's lymphocytes in response to purified protein derivative of *Mycobacterium tuberculosis* (PPD, Connaught), candida (Hollister-Steere), or streptokinase (SK, Hoechst).[9] Blastogenesis was measured in heparinised venous blood samples obtained at various times during the first year of life and tested within 24 hours. 6-day lymphocyte cultures were done in autologous plasma and in pooled AB serum. A stimulation index (SI) for both autologous plasma and AB serum cultures was calculated from the counts per minute of cultures in presence of antigen divided by the counts per minute of cultures in the absence of antigen.

We had planned to obtain samples at fixed ages but this was impossible for our study population. We found no relation between the PPD SI and either age or interval after BCG, and we therefore compared the mean SI from blood obtained before BCG vaccination with the mean SI after vaccination. For the infants who were given BCG at birth, a pre-vaccination blood sample was taken on the same day that the infant received BCG. For infants vaccinated with BCG after the age of 1 month, blood samples were taken for SI determination at varying times between birth and vaccination, with a mean interval of 3 months before vaccination and 7·5 months after vaccination.

The SI distribution was skewed, therefore logarithm-transformed data for the breast-fed and formula-fed groups were compared with Student's *t* test.

Results

188 infants (91 M, 97 F) were enrolled in the study: 4 infants were seen only once; the others were seen up to six times. 127 infants received BCG, 61 did not; 106 infants were breast-fed and 82 were formula-fed. The mean length of breast-feeding was 3·9 months for the 77 breast-fed infants in whom this information was available. There were no differences between type of feeding and maternal age, parity, history of TB, or BCG vaccination (table I); however, more infants (81 of 127) who received BCG were breast-fed ($p < 0·01$).

Stimulation indices were determined for the three antigens used (table II). The number of values for candida and SK vary because of difficulty in obtaining enough lymphocytes for all cultures; PPD culture was always given priority. No significant relation was found between breast-feeding and formula-feeding for candida, SK, or PPD before vaccination; however, after vaccination, mean PPD values were greater in 61 breast-fed infants than in 40 formula-fed infants ($p < 0·05$).

In 101 (48 M, 53 F) infants, paired data are available for PPD SI before and after BCG vaccination. In 65 infants BCG was given at birth, and at 10·8 months (SD 10·8) in 35

TABLE I—MOTHER AND INFANT CHARACTERISTICS

	Breast-fed (n = 106)	Formula-fed (n = 82)
Birthweight (g)	3473 (560; 104)	3363 (568; 81)
Sex (M, F)	52, 54	49, 41
Maternal age (yr)	23·4 (5·9; 105)	22·7 (5·7; 82)
Parity	3·0 (2·4; 101)	2·8 (2·1; 82)
Breast-feeding duration (mo)	3·9 (3·4; 77)	. . . . .
Maternal TB history		
No history of TB	46	42
Past TB	12	9
Past TB contact	47	31
Unknown	1	. .
Maternal BCG status		
Had BCG	56	34
No BCG	18	20
Unknown	32	28
Maternal Mantoux test		
Positive	76	56
Negative	5	4
Unknown	25	22

Results shown as mean (SD; number on which mean and SD based due to incomplete data collection).

TABLE II—STIMULATION INDICES OF INFANTS BY FEEDING METHOD

Antigen	Breast-fed	Formula-fed
Candida	2·0 (3·8; 101)	1·2 (3·5; 76)
SK	2·5 (2·2; 96)	2·5 (3·1; 77)
PPD: before BCG	2·6 (1·9; 103)	2·6 (2·2; 81)
after BCG	40·4* (39·4; 61)	22·0* (19·9; 40)
BCG given at birth:		
PPD (after BCG)	40·11 (41·9; 38)	19·71 (15·2; 28)
BCG given after 1 month:		
PPD (after BCG)	40·9 (33·6; 23)	30·5 (25·9; 12)

Results shown as in table I.
*$p < 0·05$; †$p < 0·01$.

others. There were no significant differences between feeding groups for age of venesection or length of time between BCG vaccination and venesection. Breast-fed infants given BCG at birth had a significantly higher SI than bottle-fed infants after BCG vaccination ($p < 0·01$; table II). In infants given BCG after 1 month of age, no significant difference was seen between feeding groups. The SI values for candida and SK were not different for the two feeding groups.

Discussion

Although breast-feeding has been shown to increase an infant's resistance to infections,[1-5] the mechanisms by which immunity is enhanced remain unclear. We found an enhanced lymphocyte response to PPD in breast-fed infants who were given BCG vaccination at birth and, presumably, these infants had better protection against *M. tuberculosis*. This is the first evidence that breast-feeding enhances acquisition of specific immunity.

There were no differences in age, parity, infant birthweight, or maternal lymphocyte response to PPD between breast-feeding and formula-feeding mothers. The SI values obtained for the infants were similar whether lymphocytes were cultured in their own plasma or in pooled heterologous serum; this finding indicates that the enhanced SI response is not due to an agent in the plasma. For mothers who breast-fed, the mean duration of lactation was 3·9 months (range 1–27). We could not show any relation between length of breast-feeding and SI response, but the influence of breast-feeding was most striking in infants who were vaccinated at birth. Stephens et al[10] found enhanced general cell-mediated immunity in breast-fed babies at 6

days and at 6 weeks, but not beyond this age. Colostrum may therefore be especially beneficial for the infant's cell-mediated immune response. In infants who received BCG after 1 month of age, only 6 were still breast-feeding, 3 of whom stopped within 1 month of immunisation: the low numbers may explain the similar PPD SI responses for formula-fed and breast-fed infants who were vaccinated later. Breast-fed infants who had a BCG vaccination in the first week of life had a higher lymphocyte response to PPD than formula-fed infants. Therefore the response to BCG immunisation at birth may be enhanced by breast-feeding. The numbers of children were too small to determine if duration of breast-feeding affected response to PPD. There was no correlation between maternal PPD immunity and the lymphocyte response to PPD of the breast-fed infants and, like Keller et al,[7] we found no evidence for passive transfer of PPD immunity by breast-feeding. There was no change in the immune response to candida and SK antigens, which may induce a later immune response as exposure to environmental organisms increases.[11]

Does colostrum contain a substance that enhances the infant's immune system response to various antigens? Our findings, like those of Stephens and colleagues,[10] indicate that breast-fed infants do have an enhanced immune response during the first few weeks of life.

AUSTRALIANS FIND COT DEATH CLUE...

An Australian Medical Research Team believes they have found an important clue to the mystery of cot deaths, but more research was needed to establish the exact cause.

Research team leader Dr. Kevin Forsyth, lecturer in paediatrics and immunology at Flinders University, said they have found excessive levels of immunoglobulin in the lungs of all 19 cot death victims they have examined in Australia. He then stated that a focus in research on the respiratory tract, especially on the body's immune system functions within the lungs of children.

The study showed that Cot Deaths were more common in cold climates and its incidence co-related with respiratory tract infections.

...NZPA-AAP.