POSITION PAPER

on

THE ROLE OF VACCINES IN SIDS

Compiled by:

Hilary Butler,
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SUMMARY: This paper looks at medical articles which suggest that vaccines are damaging the immune system of some babies, and that the potentially immunosuppressive nature of vaccines could be contributing to the death, and ill-health of our babies — and therefore our children, and future generations.

The topic I was asked to speak on was the relationship between vaccines and SIDS. I want to make it scientifically clear here, and in the body of the position paper, that E. coli endotoxic effect can also kill an unvaccinated baby. The FINAL MECHANISM is the same, whereas in unvaccinated babies, environmental factors conspire to enable the endotoxin to overwhelm the liver, with vaccination, the liver is shut down by the vaccine resulting in a sudden increase of endotoxin in the blood stream. I cannot explain the abstract clearly in 15 minutes, because in order to understand the biochemical action of a vaccine on the baby, the reader must also understand the nature of the problem of E. coli as a complete picture. This paper is written for both lay and medical people, and details the medical literature describing SIDS in vaccinated babies in its proper broadest context.

There are no epidemiological studies published which can confirm or deny what has been scientifically demonstrated and published i.e. that SIDS babies have high levels of E. coli in the more absorptive portions of their gut, and bloodstream, and controls do not: or that vaccines cause liver injury leading to a failure to detoxify endotoxin from the gut or within the system. I believe that this is because the wrong questions have been asked. All the studies so far have been designed to prove current medical theories or assumptions, and perhaps the belief that the more complicated the findings the more legitimate the theory. In order to properly discuss the scientific basis of this position paper, new studies, with different questions need to be conducted.

I CHALLENGE immunologists whose speciality is related to endotoxin effect to thoroughly investigate the science behind this paper with the view to working towards supporting and working with the baby's existing immune system using where possible natural means and methods.

FOR THIS REASON this paper will be sent world-wide for serious thought and consideration.

I TAKE NO CREDIT for the contents of this paper, beyond being the brain which can see the link, and the shovel who put it in one heap. Is not research simply expanding upon, and adding to, logically blended plagiarism?

ALL THE CREDIT must go to Dr Henry Tissier, Dr Theobald Smith, Dr Erik Olsen, Dr Beller and Graeff, Dr Bendig and Haenel, Dr Robin Coombs and many many others — but primarily to Dr Robert Reisinger, who introduced me to them all, and helped drag my brain through the science required to understand it.

Dr Reisinger can be found at www.erols.com/drrobert.sids, e-mail drrobert@erols.com,
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ABSTRACT FOR SIDS 2000 CONFERENCE, AUCKLAND, NEW ZEALAND.

THE RELATIONSHIP BETWEEN VACCINES, BREAST-FEEDING, TEMPORARILY DYSFUNCTIONAL RETICULOENDOTHELIAL SYSTEM, E. COLI LIPOPOLYSACCHARIDE ENDOTOXEMIA, AND SIDS.

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Veterinary studies show E. coli to be the major cause of death, (including SIDS) in all mammals so far studied including calves, piglets, rhesus monkeys, foals etc. The primary cause has been established to be large numbers of E. coli in the more absorptive portions of the gastro-intestinal (G.I.) tract. The one published study in human infants yielded similar results (Bendig, J. and Haenel, H.: 1969). Bettelheim, K. et al, established (1988) E. coli association with SIDS, and Oppenheim, B. et al (1994) antibody evidence of systemic endotoxemia in SIDS.

Capps, R.B. et al (1955) stated that DPT caused temporary liver dysfunction in infants similar to that caused by viral hepatitis. Anser, S and Habig, W (1990) showed DPT vaccine endotoxin significantly disrupts P-450, and other microsomal and cytosolic enzyme activities (which detoxify endotoxin) in mice. Since gastrointestinal E. coli is detoxified by the liver, any suppression of the RE (Reticuloendothelial) system by vaccines places a baby at risk of death by endotoxin effect. Rook, G.A.W (1997) details other ways vaccines disrupt the immune system.

The effect of neonatal endotoxin encephalopathy was stated by Reisinger, R.C. (1973) and demonstrated by Gilles, F.H. et al (1974). Reisinger's "A final mechanism of cardiac and respiratory failure" (1974) stated that platelet injury by endotoxin may result in a dramatic rise in serotonin. Serotonin can initiate coronary chemoreflex causing profound bradycardia, hypotension and cardiac collapse. Tissier, H. (1900, 1905 and 1908) reported that bottle-fed babies have much higher levels of intestinal E. coli than breast-fed babies, a fact subsequently demonstrated by others. Hauck, F.R. (1996) and others have stated that bottle-fed babies had three times the risk of SIDS as breast-fed babies. Pourcyrous, M. et al (1998) detailed severe cardio-respiratory symptoms of apnoea, bradycardia, and oxygen desaturation (compatible with E. coli endotoxemia) following administration of DPT vaccines, and Hib, HBV and IPV together. Although immunological findings suggested bacterial infection, no foci could be found. Woodruff, P.W.H. et al showed (1973) showed that absence of foci is consistent with evidence of endotoxemia of intestinal origin as a result of reticuloendothelial system damage. Many articles establish that breast-feeding dramatically reduces E. coli colonisation. Dr C. Svanborg's work (1995 and 1999) expands dramatically new medical understanding of breast-milk's immunological priming and policing properties.

1) Reisinger, R.C.: A final mechanism of cardiac and respiratory failure. Pub. In SIDS 1974. Proc. Of Camps International Symp. on SUD in Infancy. Also congressional record S.1745, September 20, 1973. Website: www.erols.com/drrobert.sids
2) Pourcyrous, M. et al., Interleukin-6, C-Reactive Protein, and Abnormal Cardiorespiratory Responses to Immunization in Premature Infants. Pediatrics Vol. 101 No. 3, March 1998.

Health Professionals are generally ignorant as to the effects of immunisations and breast-feeding on the immune system. The official line is that vaccines effect the body the same way as disease and give the same immunity. And we can also be told that breast-milk is not good enough to do the job. Here are three typical examples:

Letters to the Editor, New Zealand Herald, Friday, June 25, 1999: A10.

Hanafiah Blackmore misses the crucial issues to do with immunisation and is factually inaccurate. Vaccination is not against all childhood diseases and is not intended to be. The purpose of vaccination is to prevent severe diseases that threaten the health of children. Vaccination would never be used against the huge range of mild childhood diseases. In New Zealand it is directed only at nine particularly severe diseases.

Immunisation conveys the same immunity to a specific disease as catching the disease does. It is the same immune mechanism and results in the same immune response. As soon as babies are born, they are introduced to at least 50 different antigens. Children are immunised in New Zealand, starting from six weeks of age, because of the concerns over the danger of babies catching whooping cough. They need immune protection as soon as possible from this disease. A child does not get any natural protection against whooping cough from the mother's immune system, regardless of whether the mother has had whooping cough.

Megan Bexley,
Practice Nurse,
Hobsonville.

Hanafiah Blackmore has an incorrect idea of what immunisation is and does.

A child's immune system is stimulated daily by antigens (any substance that the body regards as potentially dangerous and against which it develops antibodies) - that is, everything breathed in, such as dust and pollens as well as viruses and bacteria.

Vaccination does exactly the same thing as is happening naturally. The body produces antibodies in the same way. Vaccines that have had their virulence removed protect only against a specific disease, such as measles. The measles vaccine has considerably less risk of side-effects than the real disease, in which one in 1000 children can get encephalitis (infection of the brain) with resulting mental impairment or death.

A mother's immunity is passed on in breast-milk in a passive way which gives only temporary immunity to some diseases and none at all to whooping cough. The baby needs vaccination to stimulate its own immunity to some serious diseases of childhood.

Helen Tomson,
ProCare Immunisation coordinator.

Letters to the Editor, Herald Monday June 28, 1999, A14

In response to Hanafiah Blackmore, the nine vaccine-preventable diseases of childhood are still with us and continue to cause distress, disability and death.

Vaccination is, without a doubt, one of the greatest public health triumphs of this century. It has saved millions of lives and prevented the crippling of countless others.

A small but persistent group, probably in good faith, continue to propagate inaccurate myths about immunisation. There is no scientific evidence to support statements that diseases such as measles help the maturation of the immune system.

Natural immunity does provide higher levels of protective antibodies than vaccination, but the protection is the same. Relying on natural immunity, however, means risking the disease and severe complications.

Unfortunately, there is a disease, pertussis, that has no protection passed from mother to baby. It is highly contagious and causes significant morbidity with complications or even death for every unimmunised child. This is why vaccinations are started at six weeks of age.

Jane Cunningham,
Nurse coordinator,
Immunisation Advisory Centre.

Since these amazingly similar (orchestrated?) letters, there have been more from different people within the same organisations who continue to display an ignorance of immunological processes, medical literature and Governmental data.

“Modern Hygiene’s Dirty Tricks”

Science New (26 August, 1999, Volume 156, No 7, Pg 109)
By Siri Carpenter.

While the decline in infectious diseases is due in part to the development of better sanitation and a cleaner living environment, a growing number of scientists are touting the theory - known as the hygiene hypothesis - that society has been too successful in its fight against infectious organisms and has eliminated contact with many harmless bacteria and microbes that actually help the immune system build its defenses against more toxic infections. The immune system consists of two basic parts: Th1 lymphocytes, specialised white blood cells that directly attack infected cells, and Th2 lymphocytes, which try to prevent foreign organisms from invading cells. Researchers speculate newborns’ bodies primarily rely on Th2 and that the Th1 system can only develop protections by being exposed to “practice” infections with microbes that cause no harm. In support of this theory, a study of Japanese children vaccinated against tuberculosis found those who exhibited a strong Th1 response - meaning they had been in contact with the disease-causing bacteria in the past - were less likely to have allergies or asthma. Some of the children’s allergy problems declined after they received the vaccine. Graham A. W. Rook, from the University College of London Medical School and a main proponent of the hygiene hypothesis, believes children’s bodies do not necessarily need exposure to disease-causing microbes but that they need contact with harmless microbes to provide their immune systems with an extensive workout. Based on this theory, researchers at the University of Southhampton in England are performing studies to test a Th1-inducing vaccine that may help relieve asthma. Despite the advances, researchers admit the immune system is much more complicated than the Th1/Th2 relationship and that the research is just beginning to reveal the bigger picture.

Survival and the Immune System

The question “How do vaccines effect the developing immune system?” has become more urgent in the light of a proven dramatic increase in allergies, asthma and atopy in the last 40+ years. Worldwide, parents, organisations and medical people opposed to enforced vaccinations have steadily maintained that immunisations have the potential to damage the immune system. And still do.

For those overseas readers who may not know who I am, my first public statement on the subject was in the New Zealand Herald, Saturday, February 1 1986:

> “Does the attenuated or weakened live virus used in some vaccinations stay in the body and become part of its genetic makeup, or does it subtly set up a constant state of false immunity?”

Knowledge of the Th1/Th2 system was not around at that time, nor did I know about all the OTHER raft of things in vaccines which could have potent immune effects, such as mercury, aluminium, and lists of other potential immune triggers. MORE magazine in October 1987 took up the issue again but discussing another aspect of one of my concerns. In the article I had said:

> “The key is that immunisations are given mainly by injection in concentration early in life when immune systems aren’t fully developed and some people’s systems can’t cope later on...”
>
> ‘When confronted with the theory that our immune systems may be degenerating through immunisations, Plunket’s medical services director (Dr) Ian Hassall, chortles, “That’s laughable! Anyone who purports something like that must be examined critically. The idea of our immune system being destroyed like that is very odd.” ’

Never said destroyed — just changed for the worse, but never mind. Another doctor, Michael Soljak said:

> “Immunable diseases are only a proportion of those floating around. There are dozens of other viruses being distributed quite freely and stimulating the immune system like hell — so it seems to me there’s no evidence we’re preventing children’s systems having the experience of natural infection.”

Never said that either, but never mind… Thirteen years later, we still hear the same line of logic from the medical profession. But there is one big difference now, which might make the whole picture a lot clearer. Scientists are BEGINNING to gain an understanding of how the immune system works, and their medical research is showing that perhaps the "loonies" are right.

There is one big obstacle though, which is common whenever theories have the potential to reverse of medical dogma. Some of the doctors involved in the research realise the implications of their work. If certain media people asked certain key questions (which they haven't so far) parents might realise that vaccines do have the potential to profoundly skew a baby's immune system.

> "That's nonsensical. What we're doing with immunisation is challenging the body's immune system in the same way it would be if we got the actual disease, except it does so in a relatively safe way." — (More magazine - Dr John McLeod)

It has occurred to many "heretics" that one of the basic tenets of medical researchers is to protect one's DOGMA at all costs, and if something comes up with the possibility of throwing a monkey wrench at an old dogma, the safest thing to do is to put a new twist on it, and change it so that it can be incorporated INTO the OLD DOGMA without the public knowing a thing.

Pro-immunisation protagonists appear to be unaware of current immunological research, though they profess deeply held knowledge. Research which it is vital for parents to come to grips with and understand, because I believe the immunological integrity of our babies, children and future generations depends on it. Yet medical readers of this paper may insist that vaccines are so beneficial that to withhold them is "child abuse", even though they and their parents are "vaccine deficient" according to today's vaccine schedule.

There are several things lay readers need to understand about the immune system first. I assume that medical readers are fully conversant with the following immunological history lesson:

- In 1987 doctors' understanding of the immune system was about the same as Christopher Columbus's knowledge of Indians, or the extent of America's land when he first stepped onto the shores of U.S.A. Like them, Columbus thought he had reached his destination. (A rather apt analogy from a medical article.)
- Immunologists have finally decided they better start exploring and see if their pre-conceived theories of what the immune system was like, matches what they discover.
- Immunologists are now discovering that vaccines can indeed prime the immune system in the wrong way, which DOES make the "vaccines are normal, natural and safe" theory of the past, a potential time bomb even though not one immunologist has the courage to clearly spell out or elaborate on the obvious — mixed amongst their medicalese.
- I believe parents are not being told what immunologists know in a way they can understand it, because the establishment doesn't want parents to know. They hope that they can minimise, undo, or prevent future damage in ways which I will explain later on. And they appear to think that their new ideas are as fool-proof, and flawless as they viewed their ideas of the past, and that the new solutions to their "created" problems will not have some nasty little tricks of their own.

For parents to understand the significance of this, they must try to understand some immunology relating to pregnancy and newborn babies, the sequence of "immunity" development and the key players in that learned "game". The best way to start is to describe the important parts of the immune system, how they relate to pregnancy, and the many factors involved in how a baby develops immunity. A tall order. And this needs to be understandable.

As the New Science article states:

> "...the immune system is much more complicated than the Th1/Th2 relationship...research is just beginning to reveal the bigger picture."

But first, we do need to have a basic understanding of the Th1/Th2 immunity, because it is vitally important.

The Bigger Picture: Th1/Th2 Immunity — in a nutshell

Put in a simplistic way, in the context of research already done, the immune system can be divided into two main areas: Primary ... and Secondary lymphoid organs. All of which may read like a Russian novel. The best method of attack is to get the gist, and never mind pronouncing the words.

The primary lymphoid organs are the Bone Marrow, Thymus and Bursa of Fabricius (see glossary). These are where the lymphoid stem cells mature into antigen-sensitive T or B lymphocytes. Recently Harvard researchers discovered that T cells in the blood can also regulate themselves. It was previously thought that the Thymus was the only “quality controller”.

The secondary lymphoid organs are where these lymphocytes migrate to, and these are the places where immune responses to foreign antigens take place, and can be categorised into two inter-connected systems:

1) Antigens that enter the body via the upper respiratory and gastrointestinal tracts are filtered through the tonsils, adenoids, peyer’s patches and appendix as well as local lymph nodes.

2) Antigens that enter the bloodstream are filtered out by macrophages in the spleen, liver and lungs. Only the spleen is capable of mounting an immune response to blood-borne antigens.

The immune system involved in dealing with infectious antigens can be divided into two broad areas at the moment (I believe there will be at least a third).

These are Th1 and Th2.

Th1

This is commonly referred to as cell-mediated immunity but for the sake of simple understand I call this the search and destroy department of health.

Lets say your child breathes in a measles virus through the mouth and nose, and this virus lands on the mucus surfaces of the tongue and the back of the nose. The first line of defence for the body is what is known as the Waldeyer’s ring of lymphoid tissue. Anything coming in through the NOSE is “processed” by the nasopharyngeal tonsil (or the adenoids) which is at the back, and on the ceiling of the pharynx, and two tubal tonsils on the opposite floor. The mucosa of the nose has a very complex secretory immune system in which IgG, IgA and IgM (ig = immunoglobulins = antibodies) are detectable from as early as five weeks from conception, in utero. Most of the Ig is in the form of IgA spread through serous salivary cells. In people who are IgA deficient, its function may be replaced by sIgM (secretory IgM) . The key to successful mucosa protection lies in the ability of the IgA to stop bacteria and viruses sticking to the skin of the nose area. The sponge-like arrangement of the epithelial cells create spaces filled with infiltrating lymphoid cells which allow movement of roving macrophages, dendritic cells and Langerhans cells, which are present in the crypt (highest part) as early as 15 weeks from conception.

Anything coming through the MOUTH is “processed” by the palatine tonsils — two areas on the upper back “west” and “east” sides of the “wiggly worm” (epiglottis) which hangs down from the ceiling at the back of the mouth, and the lingual tonsils on the back third of the tongue.

The Waldeyer’s ring could be seen as two gates, one at the back of the nose, and one at the back of the mouth, which are the first defences against antigen which enter the nose or throat.

Many of you belong to a generation whose doctors considered tonsils, adenoids and appendix to be useless appendages which God put there as a joke, and therefore could be removed without a second thought. And indeed, there are still doctors who think like this. After all, there are still some doctors practising today who were taught that rheumatoid arthritis, gout, endocarditis, pericarditis, myocarditis, chorea, neuritis, myositis and acute or chronic glomerular nephritis were all definitely CAUSED by the tonsils. (While there are some diseases linked with malfunctioning tonsils and adenoids, exact mechanisms and causations are very unclear) Up until the 70’s, the normal enlargement process of tonsils which most often occurs between the ages of 4 and 8 years of age was considered an automatic reason for tonsil removal.

The tonsils and adenoids are vital primary outer guards to the inner immune system at the places they are most needed.

Studies have found that HIV-1, Epstein Barr, measles and scrapie and the new variant Creutzfeldt-Jacob disease can be isolated from palatine tonsils. Most of the work has been done on the palatine tonsils and adenoids, since these are still very accessible from surgeons' dustbins in generous quantities. Virtually no work has been done on the lingual or tubal tonsils, since to remove lingual tonsils would remove the tongue, and the tubal tonsils are not very accessible, so little is know about their exact function, or what problems can be attributed to them.

There is a very close relationship between the Waldeyer's ring, and the salivary glands, which secrete immunologically laden "water" into the mouth. The other name for Waldeyer's ring is the mouth associated lymphoid tissue (MALT).

Let's say a child gets measles. Scientists do not know how the measles virus impacts on the immune system. What is known is that it is processed in the tonsils, and tonsils from patients with measles contain multinucleated giant "Warthin-Finkeldey" cells which are a T cell phenotype (2).

The mouth associated lymphoid tissue (MALT) is known to be linked with the gut associated lymphoid tissue (GALT) and bronchial associated lymphoid tissue (BALT), and all the primary functions of these structures is "search and destroy". This system is primarily part of the Th1 system. The immunological action taken against a primary attack of measles is primarily Th1, with a later antibody back-up Th2 antibody, which is dependant on the initial Th1 response, and a dampening down of the Th1 system, which is Th2 effected. Immature B cells wait for the call to respond to foreign antigens presented to them by specialised macrophages called histiocytes. These scavengers not only eat and kill viruses and bacteria, but they also express some of the antigenic matter on their surfaces for B cells (surface immunoglobin - sIg) to recognise, and after a second "signal" from another lymphocyte called a helper T cell (CD4), the B cell is stimulated to grow, divide, and differentiate along its pre-programmed path towards becoming an antibody forming cell . This is the beginning of the process which leads to a memory antibody response specifically against that antigen, hopefully to protect against a second attack. The Th1 system provokes immediate B cells of the IgM class. This is a large molecule consisting of a ring of ten individual antibody molecules which have many sites for combining with and inactivating large quantities of antigen. It does this within blood vessels since its large size prevents its escape. For this reason, only a small amount of IgM is needed for an early effective response to infection. Later on, IgA and IgG2a class antibodies are produced. This IgG has the same combining site as the IgM but is much smaller, so it can go through capillary walls, and combine with the antigen. These combined antigen/antibody complexes inactivate the harmful properties of the invaders and the large size of the complexes restricts invasion of body cells. The presence of the complexes also activates a series of enzymes that cause bacteria to swell and burst. The "bits" are then grabbed by granulocytes and monocytes and released as a degraded product that is removed by the lymphoid tissue in lymph nodes and in the liver and spleen.

Th2

Th2 is commonly called humoral immunity, and initially starts at the same sites as Th1 immunity. After a strong Th1 response gets on top of the search-out-and-kill activity, Interleukin 4 and 10 promotes a change of class of antibody from IgG2a (Th1) to IgG1 isotype (Th2) produced by memory cells, and also suppresses the activity of the killer cells and starts to shut down the Th1 immune response. The production of memory cells is dependant on a strong Th1 immune response. Having said that, people who are not capable of making antibodies at all, or who can't make specific types, do not necessarily die from infectious diseases. Other sections of the immune system try to compensate, and in many people, succeed.

There is always a lag time between when the search and destroy process starts, and when antibodies are seen in the blood. Although B cells spend most of their time in tonsils, adenoids etc, they are able to circulate through the blood and the lymphatic system.

For the sake of a mental picture, I prefer to think of humoral immunity as blood borne antibodies placed there to protect vital structures quickly accessible via the blood like the brain or the heart. Th2 is the "memory" line of defence, but also performs the function of shutting down the first line of defence (Th1) when the search and destroy mission is completed. You could see this as they tidy-up cops coming in after the cavalry to clean up the mess, gather up the horses, and put everything back in place to be ready for the next front-line advance. But the Th2 system also is primarily responsible for allergic responses, anaphylaxis etc. A strong presence of IgE in the blood is evidence of prominent Th2 activity.

> "It is now generally accepted that allergic respiratory disease in adulthood is associated with active T cell immunity to common inhalant allergens that is skewed towards the T helper (Th) 2 cytokine phenotype, in contrast to the expression of Th1 skewed immunity in non-responsive normal subjects." — Thorax 1997;52:1-4

This article talks about anything and everything that might do this, and then discusses using Th1 selective adjuvants at birth, to try to prevent Th2 skewing in the all important neonatal period, but does mention the theoretically disastrous pitfall of delayed type hypersensitivity and covert autoimmunity which could result from that approach. Further, the conclusion states:

> "It is imperative that relevant ethical issues remain paramount in these discussions, as inappropriate interference in the development of allergen-specific immunological memory during childhood may have lifelong consequences."

Yet none of these scientists can see the one thing, staring them in the face that we know has the potential to skew a baby's immune system from Th1 - Th2.....vaccines.

Vaccines: How they effect the Immune System

> "I would challenge any colleague, clinician or research scientist to claim that we have a basic understanding of the human newborn immune system. It is well established in studies in animal models that the newborn immune system is very distinct from the adolescent or adult. In fact, the immune system of newborns in animal models can easily be perturbed to ensure that it cannot respond properly later in life."

This testimony was given verbally to the United States Senate on May 12, 1999 by Dr Bonnie Dunbar, Professor of Immunobiology with specialist work in vaccine development and autoimmunity for over 25 years, the past 17 at Baylor College of Medicine in Houston. Dr Baylor was asking the Senate for a moritorium on the Hepatitis B vaccine, which she maintains is extremely dangerous, and which carries serious debilitating side-effects. Her research and finding are dismissed by all medical bodies worldwide, including the WHO.

Yet recent research in Nature Medicine in which researchers tried to work out how they could have got it so wrong using the powerful Edmonston Zagreb measles vaccine in young babies proved Bonnie Dunbar right. Babies — even at 6 months — have a vastly different immune system to adults; something no-one knew before, because they hadn't looked. Researchers with no experience in animal neonatal models let alone humans, just assumed — and STILL assume — that babies are miniature adults. They are not. And this is the crux of the issue.

The Herald letters told readers that vaccines are safe, save lives, use the same immune "mechanism" as disease, and give the same immune response as natural disease. Further, all three said that babies obtain no immune protection against whooping cough, either from the mother or from breast-feeding.

There were no medical references to substantiate these beliefs. On the basis that most medical practitioners are unaware of any medical literature dealing with these topics, that lack is not surprising. The worst of it is that these nurses have no idea that they, and their supposedly more educated colleagues, through propagating their own brand of ignorance, may be contributing to the explosion of on-going chronic ill health amongst children and adults today.

Evidence presented by medical specialists to the United States Senate in May, and in a second hearing in August 1999, showed that vaccinations, far from being the greatest public health triumph of this century, has precipitated an epidemic of health problems such that some paediatricians called it a "national catastrophe." In particular, they are concerned about the Hepatitis B vaccine given at birth, and the MMR.

Before looking at why vaccines could damage the immune system, lets look at the medical definition for safety as defined in the "biologics regulations". Biologics include such things as vaccines, monoclonal antibodies, anti-toxins etc:

> "the relative freedom from harmful effect to the persons effected, directly or indirectly, by a

> product when prudently administered, taking into consideration the character of the product in relation to the condition of the recipient at the time." — (21 CFR 600.3)

The best example of this "weighing of odds" in New Zealand was in August 1998, when we were all told by the media, for several months, that there was a child "seriously ill with diphtheria". This turned out to be untrue. On admission to hospital the doctor wrote "tonsillitis in well unimmunised child" in the hospital file, and sent him home on amoxicillin. His G.P. had queried diphtheria solely on the basis that he was unimmunised, his parents had just come back from Bali, and the tonsillitis was not resolving to the doctor's satisfaction. His symptoms were consistent with tonsillitis for Strep A pyogenes, and the child showed no clinical signs of diphtheria, like a membrane etc.

Ten days later, a "lost and found" laboratory test showed that as well as Strep A pyogenes, there was a mitis strain of diphtheria, so the child was returned to hospital for reassessment, where they could find absolutely nothing wrong with him. All signs of the tonsillitis had gone. He was not given antibiotics specific for diphtheria (erythromycin), and because diphtheria anti-toxin is a very dangerous substance, and in healthy people can cause death, anaphylaxis reactions, and auto-immune system problems such as arthritis which can become permanent, the two attending specialists considered it too dangerous to give to him. This was written in his file as well as the fact that his tonsillitis was compatible with Strep A pyogenes and he was probably only "carrying" the diphtheria bacteria. But, had he had signs of diphtheria, anti-toxin would have been administered. It's safety was therefore considered in relation to the character of the antitoxin, and the condition of the recipient at the time.

With vaccines, the medical issue of safety must be assessed in regard to the individual child. And one question no-one wants to address is "How do we know THIS 6 week old baby has a normal immune system? For a start what is normal? The risks of giving a live virus vaccine to a child with a suppressed immune system outweigh any benefits such a vaccine might give. But how a doctor weighs his knowledge, might not be how a parent sees the same information. Some people see the donut - others see the hole. Another question is, do doctors have the right to force their opinions on parents?

It is important to have a clear understanding of factors which effect an immune system, both as an adult, and as a baby. Where there is allergy in a family, that often shows up as an immune abnormality that is genetically handed down. But sometimes, everyone in your family can have "normal" immune systems, and your baby might be born with an immune system which is just "different" from the start. Or your baby might appear normal, then something might happen to change your opinion. Most honest paediatricians will admit that in terms of suspecting illness a mother's instinct is always right. Funny how a mother's views on health can provoke a very different response.

Stress plays a huge role in immune dysfunction especially in today's world. Historically, war and famine are always followed by pestilence and plague, as it used to be called. As the Herald stated July 6, 1999 A11, "A tidal wave of information (e-mails and internet!) may be causing an epidemic of stress"... and can cause immune problems such as colds, headaches and aches and pains".

And this article may also cause you some "stress". Hopefully it will at least get you really thinking about what vaccines could be doing to babies, whose immune systems are not like adults.

For real - stress can cause the immune system to crash. For instance, medical students who happen to get Epstein Barr just before their exams show an abnormal immune response.

> "This virus is usually controlled by a Th1 response ...Thus even a potentially Th1-inducing virus may fail to induce Th1 during a time of stress" — (Lancet, 1997, Volume 349, pg 1832.)

Babies can also suffer from stress - temperature variation, feeding problems, poverty, overcrowding, family psychodynamics, and most lethal of all - bottle-feeding. I make no apologies to the politically correct who promote guilt-free bottle-feeding. The fact is that anyone who knows the medical facts cannot avoid the logical conclusion that breast-feeding is the single most important thing already provided to a woman that is specifically designed to ensure a rapid assisted transition to a Th1 immune system, and for the long-term health of her child. And IF she can, she should. But breast-feeding has become a political football, almost as contentious as abortion - the catch-cry being "a woman's right to choose".

Parents are constantly told vaccines save lives. The most recent example of this was in 1997 when we were told how many children would die from measles or be permanently injured from encephalitis. Similarly, the claim that the Hib vaccine has "wiped out" Hib meningitis has led doctors to say that the Hib vaccine has "saved lives". This statement is incorrect, not by what it says but by what it does not say.

A recent study in Europe stated :

> "Conclusions: The spectrum of encephalitis in children has changed due to vaccination programs. The incidence, however, appears to be about the same due to increasing frequency of other associated old and new microbes" — (European Journal of Pediatrics, Vol 156, Number 7 July 1997, pgs 541–545.)

The same is true of meningitis in Finland, USA and New Zealand. The use of Hib vaccines has displaced haemophilus as a cause of disease and death, but the number of cases caused by other organisms like the far more serious, and more untreatable pneumococcus, or other bacterial meningitis types have risen to take the place of Hib as principal causes of meningitis. Exactly the same thing happened with adenovirus when a vaccine was first brought into use in the United States. More virulent types started to take the place of ones the vaccine was supposed to stop. Fortunately the authorities saw the potential disaster for what it was, and withdrew the vaccine from the civilian population and allowed the less serious types of Adenovirus to re-establish their previous balance.

The elimination of one "cause" does not automatically cause a drop in the <u>total</u> death rate of either encephalitis, or meningitis. It may simply leave that person, who could have died from X disease, open to dying from another. In both examples, the numbers of cases eliminated have been replaced by an equal if not greater number of cases initiated by other microbes perhaps not so prominent in the past. The evidence in New Zealand is reflected in newspaper articles detailing increasing numbers of children admitted to Starship with infections, particularly pneumococcus.

An astonishing article in the Herald about the increase of disease in battery raised hen factories recently stated that:

> "Salmonella enteritidis has been steadily increasing and the leaps in the eighties correspond to our control of salmonella pullorum and chicken typhoid...We were shocked by the notion that in eradicating two diseases we had allowed a far stronger and more dangerous salmonella to emerge.
>
> "The scary fact seems to be that by man intentionally eradicating a disease, he simply opens up an ecological niche for another unheard-of illness. The consequences are frightening." — (Herald, Monday, January 3, 2000, A12.)

How amazing that they can see it in animals, but refuse to recognise it in man. But, you will guess - their solution for their feathered money-maker is .... A better vaccine.

Why did Hib become so common in day-care centres? Because they were functioning the same way as the equally unnatural battery raised hens.

The "vaccines save lives" is a well worn slogan, used wherever it can be manipulated to suit the need. A new, unsuccessful but typical example of this "saves lives" phenomenon was seen in Canada where the Pharmaceutical Advertising Advisory Board, Toronto, Canada, recently ordered Merck-Frosst Canada to withdraw advertising that claimed that its new chickenpox vaccine "saves lives". The Board said "There's no proof the claim made by Merck-Frosst Canada about the drug Varivax is true." — (CBC News Canada news release, web-posted Friday, April 2, 1999.) Normally medical people get away with little folk-tales like this.

Like ..... vaccines are "natural" and just do the same as the little bugs...

Historical medical research on how vaccines effect the immune system

It first occurred to doctors that repeated immunisation might not be so hot when it was noticed in 1902 that horses intensively immunised to diphtheria toxin developed amyloidoses (Zbl. Allg. Path 1902, 13: 334.) Many more studies followed. Then in July 1965 the question of problems relating to repeated immunisations was raised:

> "…the likelihood that the number of such agents will continue to grow indefinitely as new vaccines are developed, has raised the question as to whether repeated immunization produces adverse

> effects in man...it might be speculated that intensive immunization may interfere with the recipient's ability to respond to immunologic challenge."

The medical article then detailed that ten years before, in 1956 and 1957 with the very limited ridiculously archaic testing they had in those days, a series of laboratory tests were performed on skilled labourers and laboratory workers who had undergone intensive immunisation to the following: Botulism, tularemia, brucellosis, anthrax, diphtheria, Rocky Mountain spotted fever, Q fever, plague, typhus, psittacosis, Rift Valley fever, poliomyelitis, tetanus, smallpox, yellow fever, influenza, Eastern, Western, and Venezuelan equine encephalitis. (Bet you never knew they used such an arsenal at one time!) Ages varied from 28 - 65 years of age. There is a Table 3 in the article which lists a huge, worrying list of illnesses these people suffered, yet none of them were considered to be attributable to intensive immunisation.

The conclusions were that there was no indication that intensive immunisation interfered with the ability to produce adequate antibody titres after antigenic challenge. And that was all that mattered. As to the test abnormalities - there was some discussions that they might be related to immunisation, but they were not similar to those in experimental animals, so were basically dismissed with the comment:

> "At present, the most that can be said of the abnormalities observed... is that they seem to occur with an incidence greater than that expected in a normal population. The abnormalities described are not only persistent upon repeated study, but are increasing in incidence with continued immunization. Whether they represent the prodromata of anatomical changes to follow, or are simply interesting temporary laboratory changes of no prognostic significance will be answered only with continued observation.
>
> "Approximately 25% of the men had an unexplained peripheral lymphocytosis. Nearly 40% has some abnormality of one or more tests of liver function not explained by history or physical examination. Twenty-three per cent had a peculiar abnormality of serum protein electrophorectic pattern, characterized by alterations in mobility of the alpha-2 and beta globulin fractions. It was noted that similar abnormalities had been described previously in patients intensively immunised with diphtheria toxin." — (Annals of Internal medicine, July 1965, Volume 63, No 1 pgs 44–57)

In other words, they didn't have a clue.

In 1974 the US Army decided to look at the issue again, finding 77 of the original 1956 study, and 11 postmortem records were reviewed. The control group were 26 aged matched, long-term civilian male employees from Fort Detrick who had never received special immunisations or been exposed to laboratory infections. All clinical histories were evaluated, and again it was decided that no clinical illnesses could be attributed to repeated immunisation. Though time had returned many of the tests to normal, the sedimentation rate was significantly raised in the immunised group. Values for partial thromboplastic time were prolonged for 19 immunised persons, but were within normal limits for all control subjects. Mean value for 24 hour urine protein excretion of immunised subjects was lower, and the mean value for creatinine clearance was higher than controls. The mean value for serum hexosamine in the immunised group was significantly higher than the controls, serum electrophoresis studies showed statistically significant differences in albumin, a2 globulin and B globulin. The immunised group had depressed serum iron and elevated serum copper. Again, the researchers could come to no conclusions, feeling that because they could not attribute any clinical signs to the abnormal laboratory results, they were reassured they could go ahead with further repeated immunisation without problems. They did sound a caution about cancer, and that there was a possibility that repeated exposure to a single antigen might initiate immunologic abnormalities, but the general tone was much the same as the first study. (Annals of Internal Medicine, 1974, Volume 81, Number 5, pgs 594–600) Full speed ahead.

Following this, a paper called "Immunomodulating Agents and Hepatic Drug-Metabolizing Enzymes" by Jacques Descotes, Laboratory of Pharmacology, Faculty of Medicine, Lyons France published in "Immunotoxicology", 1987 stated:

> "…depression of hepatic drug mechanism has been seen after administration of bacterial vaccines to cancer patients, ... several human pharmacokinetic studies have further shown that vaccination may deserve full consideration as a cause of inhibited hepatic drug metabolism; influenza vaccination impaired theophylline elimination with a 122% increase of its half-life, and to inhibit aminopyrine metabolism markedly... marked depression of theophylline elimination following BCG vaccination."

(For the really morbid, you can find in the old medical literature, literally thousands of case-studies of single or multiple events of all sorts of problems following any vaccine. Some guess at an immunological cause, but none investigate how that vaccine caused that problem. The frequency of renal disease following vaccination from 1947-72 and beyond is quite startling, makes you wonder why no-one has asked lots of questions. One answer could be that if a doctor doesn't understand or accept a connection, their denial of any association with a vaccine isn't questioned.)

More recently the Mediterranean Journal of Surgery and Medicine 1996, May 9 looked at 30 children who had neither genetic nor metabolic anomalies, but who had suffered demyelination following vaccination. The authors found and described in their article changes in inherited HLA types - in other words, traceable biochemical markers of vaccine-induced genetic damage.

A three year study funded and conducted by the Chronic Illness Research Foundation in collaboration with the University of Michigan School of Medicine found abnormal RNA in the blood of 50% of sick Gulf war veterans, indicating that chromosomal damage had occurred. This genetic material was not found in any of the healthy controls. The authors interpreted the finding to indicate that certain genotypes may be particularly at risk for sustaining chromosomal damage after exposure to "toxic events" (Internet posting PR Newswire, Washington DC. May 1999)

When I read these two pieces of information I asked myself some questions. How was it that at the age of 19 years, I had an initially (typically) denied serious reaction to a Measles/Rubella vaccination which led to auto-immune disease (chronic arthritis — again association initially denied), which led to an immunodeficiency being diagnosed when our youngest child was 5? Previous immunological testing in my teens had not picked up any immunological problems, though one might say that it was the state of Ark technology. How it is that my immunodeficiency is supposed to be inherited autosomal recessive? How is it that NO-ONE else in my family has any laboratory evidence of this condition?

In "Immunotoxicology" 1987, a warning was sounded about the fragility of cellular interactions required for antigen recognition, antigen processing and presentation:

> "A serious consequence of dysregulation of these networks could be the development of autoimmunity which could follow from an involvement of cellular or humoral components or both...chemically induced immune defects can occur at any stage in life. However, there is evidence that the newborn and the senescent may be more susceptible to chemically induced immunological injury...the health implications of immune dysfunctions are increased risk of infectious diseases, development of neoplasia, autoimmune disorders and allergies...It needs to be recognized that many of the components of the immune system are, as yet, poorly defined and in consequence the study of their complicated interactions is greatly hampered...there is no agreement on the significance, or even existence, of minor forms of immune dysfunction. In medical practice little attention is paid to lesser degrees of ill health, and priority is naturally given to life threatening diseases and many distressing conditions with immunological involvement receive scant attention."

About the time this article was written, Hepatitis B vaccine was being administered nationwide to newborn babies in this country.

AS to HOW any vaccine could potentially effect a baby — that was still considered irrelevant. It was assumed to be the same as natural infection, because you "got" antibodies. All that was studied or considered necessary was an "end-product" detectable on existing tests. After the disaster in Africa in the late 80's when a trial of a new high potency measles vaccine (Edmonston-Zagreb) caused hundreds, if not thousands of children to die as a result of immune suppression, scientists finally admitted that they didn't have the foggiest as to how the measles virus effected the immune system, or how the vaccine effected the immune system in the body:

> "Unfortunately, Griffin says, scientists know very little about how the measles virus interacts with the immune system." — (Diane Griffin, a virologist at John Hopkins University, SCIENCE, VOL 258, 23 October 1992, pg 546)

Research had already shown that babies vaccinated at less than 12 months who did not respond to the measles vaccine, and who were re-vaccinated later, 51% again showed no response. The recommendation was:

> "In the face of an observed altered response in many infants less than one year of age, it would appear prudent to withhold vaccine in this age group until the consequences of such an approach are better defined." — (Journal of Pediatrics, June 1979, Vol 94, No 6, pg 865)

Even more disturbingly a different study revealed:

> "The fact that none of seven children, vaccinated at less than fifteen months produced anti-measles IgM, whether or not they had been revaccinated, suggests that they had been sensitized by the vaccine so that their response to re-exposure was modified. Furthermore, booster immunisation did not give protective levels of immunity in these children." — (Journal of Pediatrics 1982, Vol 101, No 3, pg 393)

About the only thing researchers knew about the measles virus, was that after natural infection, some children's immune systems remained suppressed for some time, as shown by a transient non-response to tuberculin tests, and lowered responses to mitogens and common antigens by lymphocytes taken from measles patients. So, they wanted to find out how the ordinary Swartz measles vaccine effected the immune system when given to young babies:

> "The reports of higher mortality after immunizations of 4–6 month old girls with high-titred measles vaccines has increased the need to understand the generalised effects of immunisation on immune responses. Our studies have shown that decreases in mitogen-induced lymphoproliferation are common and that these abnormalities are present 3 months after measles immunization of infants. Immune suppression was most profound in infants with the highest antibody responses and was associated with increased numbers of circulating CD8 T cells and with increased plasma levels of soluble surface molecules and cellular products associated with immune activations...
>
> "These alterations support the hypothesis that the immunologic alterations induced by immunization activate type 2 cell responses, leading to improved antibody production, while suppressing type 1 T cell responses, leading to reduced lymphoproliferation." — (JID 1996; Vol 173, pg 1324–1325)

Read that again. Do you understand the implications of this? Simple. Plenty of antibody, at the expense of the ability to "search and destroy" — to fight other infections. And this is the key — the difference between Th1 and Th2 immunity, and the ability of a vaccine to skew the immune system abnormally — while still producing the measurable endpoint — antibodies.

In 1996, researchers reported that children vaccinated against measles had twice as much atopy than those who had had the measles naturally:

> "Our findings are consistent with the hypothesis that measles infection may prevent the development of atopy" — (Lancet, Vol 347, pgs 1792–96)

Why didn't the vaccine? Because the immunity is different. And, true to form, when someone's dogma doesn't like the implications of research — a recent study has come out to tell us about how measles disease is worse than the vaccine.

The NEED to know how babies respond to the measles vaccine was because doctors wanted to vaccinate children earlier in life than before 1969. Why? Because researchers had found a progressive decline in the mean titer in cord sera from babies between 1969 and 1980 as vaccinated girls became mothers, resulting in babies receiving less antibody at birth and becoming susceptible to measles at a much earlier age. (J Pediatrics 1983, Vol 102, pg 191. Yeagar A.S. et al).

This should have been warning enough that the immune systems of young babies were very different from that of an 18 month old, or an adult. But in the absence of any facts, the medical profession continued to confidently assume that a newborn's immune system was a constant factor which could be manipulated at an ever earlier age in the time honoured "adult" way, and that neonatal "age" posed no obstacles.

The public, the media and medical people to this day, think this way — which is one reason why the medical people can get away with writing nonsense to newspapers. But there is a more insidious reason which has nothing to do with truth or knowledge.

When I tried to see if I could get some balance into the pro-immunisation coverage in the Herald, a member of the editorial staff made the following coments. (July 19th 1999.) Pardon the language, but this IS what was said.

> "Your only recourse is to write a letter to the editor, but to be frank, you are pushing shit up the hill with a stick. People want to hear that vaccines will protect their children. People do not want to hear that vaccines could do anything else. And most people don't give a damn about vaccines anyway. I can write a piece about immunisation and get no response, but when I write one about homosexuality or the church I get inundated. As for me, I am pro-vaccine, and for the greater good, and if the Health authorities asked me to roll up my sleeve and have all the childhood vaccines again I would. We pay them to do a job, and they do. And yes, we should have compulsory vaccination for children to get into schools. It's for the greater good."

In other words, free speech is an illusion and on our terms.

It is my guess that most of you in the audience filed this, unread, in the little round file and for those of you who read it…with what sort of mind? Open, or blinkerred? After all many of you have heard this before — from a real scientist: Dr Reisinger himself. There will be many of you in the audience today who will continue to ignore the implications of all these medical facts and say "epidemiology proves you wrong". Let me ask YOU a question: "If your epidemiology has all the answers, why are there so many people at each successive SIDS conference with vastly different theories who all think they alone are right?"

All the "epidemiology" from measles research should have alerted immunologists to the fact that in babies under 15 months the immune responses were different. This should have led to work defining the differences between neonatal and adult immunity. But it didn't. Why? Because as Dr John Emery said about SIDS:

> "We have not found the right answers because we have not asked the right questions." — (Modern Medicine, 1984. Oct 9–11)

…Or to quote another one liner seen at the bottom of a page in a medical journal: "Epidemiology is like a bikini: what is revealed is interesting: what is concealed is crucial."

When researchers come to terms with the crucial concealed unanswered questions then we might get some answers…or could John Emery be right when he stated: "Among research workers there is much vested interest against change. Lip service is paid to possible multiple causes, but each acts as if his or her own theory is universal." — (BMJ, Vol 299: 18 Nov 1989, pg 1240)

In the meantime, parents need to know some facts, which they are not being told. Like, whether vaccines produce natural immunity or not.

By 1992, Pabst H.F. showed that vaccines could induce antibodies in the mother of a different isotype than that of the natural disease (Pediatr Res. 1992; 31: 173A) leading to speculation that this, and the lower titres, was the cause of babies not getting immunity from their mothers any more. — (Arch Pediatr Adolesc Med Vol 148, July 1994, pg 698.)

It was only with the full realisation of the difference between the Th1 and Th2 immune system, that real differences in immunity were able to be characterised with more accuracy. I say more, because there is another cytokine class, the function of which is undefined. Who knows what they will find when they factor that in!

What are the implications of skewing Th1/Th2 immunity?

To revise, Th1 immunity is what immunologists call cellular immunity, or in my venacular "search and destroy" defences. So when you get an infection, the Th1 system sets into motion a clear sequence of events which have the focus of "find that thing, collect it, show us what it is and at the same time destroy it". This is the primary mechanism in the fighting of all infections and cancer. This is what the tonsils and adenoids (amongst others) are all about — first line Th1 defence.

Th2 is the other side of the linking circle. It is called humoral immunity, and takes place further down the line than cellular immunity. About the same time as the Th1 immune system is surrounding, killing and getting rid of the problem, particles of the "problem" are being presented to cells which make antibodies. In order

for there to be a long-lasting antibody response, there must be a strong Th1 (cellular) response. Th2 is the "memory" line of defence, which also "shuts" down the Th1 side of the immune system. You could see this system as the tidy-up cops cleaning up the mess, telling Th1 hanger-oners to go home, and putting everything back in place ready for the next front-line Th1 fight.

The key to fighting infectious diseases is to have a strong Th1 immune system. The assistant to helping prevent a repeat attack is Th2. They work hand-in-hand, but a healthy immune system is Th1 focused, since "search and destroy" is the most needed capacity of the immune system in every day life.

A breakthrough in the understanding that chronic conditions could be caused by an immune system which was skewed to Th2 came with the findings that people with asthma and immune system problems had predominantly Th2 like T cell populations.

So how do you get an immune system skewed towards Th2? While the immunologists are not absolutely sure, they have come to some conclusions...

> "Modern vaccinations, fear of germs and obsession with hygiene are depriving the immune system of the information input upon which it is dependent. This fails to maintain the correct cytokine balance and fine-tune T cell regulation, and may lead to increased incidences of allergies and autoimmune diseases." — (Immunology Today, 1998, Vol 19, No 3 pg 113)

But according to our learned letter writers, there is plenty of "natural" learning. Could it be that early injections "teach" the immune system a "back to front" immunity? And skew it?

In other words, if you disturb a natural learning progression of search and destroy processes, and disrupt sequential learning, you can have problems....Just how much do medical people know about cytokines? Prior to the above article, medical knowledge in 1994 could be summarised by:

> "cytokine modulation of immunity generated by vaccines has only been addressed in a very simple manner so far, and few studies have been carried out where the response has been fully characterized...Redirection of the immune response following immunization appears to be a fundamental problem which has to be overcome with some present, as well as future vaccines. Studies in which this concept is being assessed are in their infancy" — (Pg 112, "Modern Vaccinology", By Edouard Kurstak, Pub. 1994)

What does that word "redirection" mean? As said before, the only issue of interest was the "end-product" i.e. antibodies, but there was a dawning realisation that vaccines "redirected" the immune system. In other words, vaccines produce a different immunity to disease. We have a nice new sanitised word — "redirected" immunity. But is it "natural" immunity? Has it long term disadvantages? Immunology Today gets more specific:

> "Vaccination replaces recovery from infections with a rather different type of immunological stimulus. This can have unexpected effects. In the measles system, both vaccination and the infection itself have profound and long-lasting effects on the immune system, but these effects are not the same."
>
> "For example, recovery from natural measles infection reduces the incidence of atopy, and of allergic reactions to house dust mite to half the incidence seen in vaccinated children, suggesting a systemic and non-specific switch to Th1 activity."

All immunological models state that disruption early in life can have life-long permanent effects. But equally, the comment that "chemically induced defects (of the immune system) can occur at any stage of life" has been borne out by another controversy provoking modern vaccine disaster - the Gulf War syndrome. So what relevance does this have to vaccinating babies? The author of this study says:

> "indeed learning (immunological) is an absolute necessity, and these systems have evolved in the "anticipation" of appropriate inputs provided in an appropriate sequence after birth, and continuing throughout life"

A healthy immune system has a "bias" towards Th1. People who have allergies, asthma and disease with an auto-immune origin have what is known as a Th2-skewed immune system. (New England J. Med 1992, Vol 326, No 5, 298–304 was one of the first of many references).

When a mother is pregnant, her pregnancy is controlled by cytokines, and requires a suppression of her immune system with a predominance of Th2 cytokines in order not to reject the baby. (Acta Paediatra 1997; 86: 916-918) A “Th1 driven” immune system would treat the baby as a graft from the father, causing a miscarriage. Drugs are used to suppress the immune systems of transplant recipients for the same reason - so that the patient accepts the other person’s kidney, for instance. That person has an artificially Th2 skewed immune system - and they sure know about it if they get an infection and need to use the old “search and destroy”! It can cost them their life if they are not very careful.

After the “Th2-skewed” baby is born, the mother’s immune system changes back to normal very quickly, and breast-milk quickly helps start the process of changing the baby’s balance towards a Th1 dominance. Research has shown, for instance, that Ig A in breast-milk primes the baby’s immune system to a far greater degree than can be attributed to the amount in the milk. Other immune factors in the milk also stimulate the immune system, provide a “buffer” against many infectious processes, and assist in the development of the baby’s Th1 immune system, even to the point of being protective, later in life, against some chronic diseases.

The first 24 months of life are the most crucial time for a baby to learn “natural” immunity. The portal of entry, and learning pathways of the Th1 system help teach and mature the immune system, and help to prevent both allergy-development and auto-immune disease. Inhaled and swallowed “antigens” of many different kinds are processed, with the help of immunological factors in breast-milk, the baby’s cued-in immune system, through the mucous membranes and the various “layers” of the internal immune system, which then turns over to the Th2 system to produce an end-point called antibodies. As Dr Bonnie Dunbar points out it is very easy for the immune system of newborns to “be perturbed to ensure that it cannot respond properly later in life.”

Some recent research which is as yet unpublished (I wonder who would have the guts to publish it) is looking at mothers who have abnormally high levels of antibodies following measles vaccination. Their children, who became autistic after the MMR vaccine, are also found to have abnormally high levels of antibodies to measles. The unsolved puzzles to this finding are: Is there an inherited immuno-dysfunction here? Why did some vaccinated mothers develop abnormally high levels of antibodies? Did these antibodies from the mothers cause their babies to have an immunological reaction to the MMR vaccine? What cytokine model are we looking at in BOTH the parents and children?

The answer is that we don’t know, because the “establishment” won’t as yet research these issues.

Published medical research makes it clear that vaccines can and do skew the immune system towards the Th2 system. Researchers looking at the cytokine balance of sick Gulf War Vets given multiple vaccines have found that their cytokine system is Th2 skewed. Right from the start, the soldiers blamed the vaccines they were given, but the medical people didn’t want to know, so initial research centred around that fact that it was “all in their minds” (some doctors still think that), then looked at a mite-sized sand fly in the middle east called “Phlebotomus papatasi” which can cause leishmaniasis (the Honolulu Advertiser, December 11, 1994, Front page).

When that didn’t stack up, the next excuse was that an unlicensed drug called pyridostigmine bromide which the US armed forces thought would protect against nerve agents that Iraq might use, could have done it. But the nail in all those coffins came when it was found that military personnel who had never gone to The Middle East or experienced mites or pyridostigmine bromide were also showing identical health problems. All those tested so far appear to have Th2-skewed immune systems, and the only common factor is the vaccines given to them all. In a medical article discussing this skewing effect it was written:

> “Indeed, the same effect can occur sporadically in the general population as a result of vaccinations or other Th2-inducing environmental stimuli and infections, and may also account for the frequency of chronic fatigue syndrome.”
>
> “Unlike BCG, most of the vaccines that are administered to children are Th2 inducing; furthermore the only adjuvant licenced for use in adults is alum which is a Th2 adjuvant. Pertussis is given to children at the same time as other vaccines in order to exploit its adjuvant effect, but this is also Th2 inducing. The effects of these vaccines are mediated largely through neutralizing antibodies, so Th2 responses are adequate, but they do not provide a balanced stimulus for Th1 activity” — (pg 114)

So long as doctors assume that antibodies are the be-all and end-all of vaccine induced immunity and refuse to look at anything else, they will not understand the basis of vaccine reactions, allergy, or auto-immunity.

Contrary to widespread misinformation, mothers do give children some protection against whooping cough. It was found early on that there was a problem vaccinating babies whose mothers had natural immunity too early because:

> "...high levels of transplacentally acquired pertussis antibody may also interfere with the ultimate primary immune response of infants vaccinated early in life, by dint of IgG antibody feedback immunosuppression or complexing inactivation of parenteral antigens" — (Journal of Pediatrics 1985, Volume 107, No 2 pgs 245–246)

A second study which worked on the basis that transplacental protection in young infants is "poor at best" found antibodies in infants comparable to that of their parents, and that unlike the old whole-cell vaccine, the newer acellular vaccines could over-ride maternal antibodies. (J Infect Dis 1990; 161:487–492)

This result was confirmed the same year by Japanese researchers at Department of Pediatrics at the St Marianna University School of Medicine in Kanagawa Japan who found that

> "antibodies pass easily through the placenta according to the antibody levels of the mother. Passive immunity transmission is, therefore, thought to be possible in pertussis infection." — (Abstract 48, Sixth Int, Symp. Pertussis, published DHHS, USPHA.FDA 1990.)

The same was found in 57 pregnant women who were vaccinated. All passed antibody through the placenta. (Infectious Diseases in Children, August 1996, pg 28.)

The other widespread belief is that mother's breast-milk cannot protect against pertussis. Ten years ago, researchers at Howard University College of Medicine in Washington DC found that:

> "the results show that breast-milk samples contained significant titres of specific IgG and IgA to four organisms (Bordetella pertussis, Haemophilus influenzae type B, Streptococcus pneumoniae and Neisseria meningitidis), although the mean IgG antibody levels were higher in maternal sera than in breast-milk. On the other hand, the mean IgA antibody levels to the four organisms were higher in breast-milk than in both maternal and infant sera... the significant concentrations of specific IgG and IgA antibodies in milk samples may indicate a protective role for breast-milk against the four infections in early childhood." — (Ann Trop Paediatri 1989;4:226–232)

Five years later, an Italian hospital study looking at 90 self-selected children (1–12 months) hospitalised for pertussis concluded :

> "No protection seems to be conferred by human milk against pertussis-like illness" — (Acta Paediatr 1994; 83: 714–18)

which is actually a ridiculous conclusion. It would have been more correct to say that "These babies got pertussis, because perhaps THEIR mothers had no immunity in their breast-milk.

The authors admit that their diagnostic methods of defining "pertussis" (hence the term "pertussis-like") would not satisfy readers. They did not test the breast-milk to see if it had antibodies to start with. They stated that another 1985 study showed that antibodies in milk did protect breast-fed babies.

There would have been more point looking for antibodies in the mothers milk, and also <u>in other mothers whose babies did NOT manage to get pertussis</u>, and compare the results.

Back to babies, and the immune system response to pertussis. According to Immunology Today, March 1998,:

> "The second essential role of the information input that the immune system anticipates in the early months and years of life is in the fine-tuning of expression of the T cell repertoire"

The way the immune system of a child handles the disease whooping cough, is not how the same immune system processes the vaccine:

> "Peripheral blood T Cells from children with whooping cough secrete interferon μ (gamma) but not interleukin 5 on antigen stimulation, implying that immunity generated by natural infection is mediated by Th1 - like cells. We also know that T cells from children immunized with acellular vaccine secrete high levels of interleukin 5 and relatively low levels of interleukin 2 and interferon μ implying a mixed Th1/Th2 cytokine profile." — (Arch Pediatr Adolesc Med, 1998, Volume 152 pg 737)

We also know that when a child is vaccinated against MMR, the vaccinated child produces large amounts of interferon μ for a prolonged time, and this is the principal cytokine produced after measles immunisation. (Vaccine, 1997, Volume 15, No 1 pages 1–4) yet the immune response to the measles vaccine is clearly not the same as that from natural immunity. We don't know why.

What we also do not know, is the amount of interferon μ produced in a baby which has just been given the following vaccinations in combination: Hepatitis B, Haemophilus, Pertussis, Diphtheria, Tetanus and Polio. Logic would say that if the immune system reacts individually to each vaccine, the CUMULATIVE amount of inteferon μ produced could be far in excess of anything resulting from one natural infection. But no-one has studied that as far as I know.

We also know that interferon μ directly effects the barrier function of intestinal cells (Journal of Clinical Investigation, 1989, Volume 83, No 2 pages 724–727) and that it also increases the permeability on the blood/brain barrier (American Journal of Pathology 1993, Volume 142, No 4 pages 1265–1278). Six other studies between 1991–1999 have shown that increased permeability of the blood-brain barrier is associated with a variety of illnesses resulting in invasion of the Central Nervous System.

The fact that (whooping cough) vaccine induced immunity is unnatural is confirmed by the fact that "Ig A antibodies are formed after infection, but not immunization." — (J Infect. 1984:8;149–156 and J Med Microbiol 1983;16:417–426) But the significance of vaccine-induced skewing of the immune system has the potential to be more serious than just the absence of certain cytokines. The biochemical problems that the excesses of interferon can create, are just as serious as the potential theoretical implications arising from the measles vaccine causing excess Interferon μ (?interferon damaging intestines and blood brain barriers creating the potential for autistic or demyelination conditions?)

In the original pertussis vaccine project, Rates, Nature and Etiology of Adverse Reactions associated with DTP vaccine by Larry J. Baraff MD, the original brief prepared for the Bureau of Biologics (FDA) dated March 18, 1990, on page 16 when discussing the occurrence of SIDS stated:

> "Possibly, these episodes are in part due to hypoglycemia which may be associated with hepatic dysfunction and cerebral edema post-immunisation."

Post-immunisation cerebral edema? How? Post-immunisation hepatic dysfunction? Clearly Dr Baraff already knew the biochemical significance of what vaccines can do. Why? Because even as far back as 1955 the following had been published:

> "Administration of Diphtheria-Petussis-Tetanus Toxoid (DPT) can cause temporary liver dysfunctions in infants similar to those resulting from viral hepatitis, and inoculation of killed Bordetella pertussis organisms makes some strains of mice 200 times more sensitive to histamine and three to five times as sensitive to endotoxins for approximately 14 days" — (Am J. Dis Child 1955; 89:701–716)

"So what?" you say. A superb article on the role of endotoxin in liver injury states: "The liver stands as an effective barrier to the passage of bacteria and their products from the intestinal tract to the systemic circulation. The possibility that failure to normally perform the function of detoxifying endotoxin might initiate or perpetuate liver injury, or lead to systemic effects, has intrigued investigators for many years." — (Gastroenterology 1975: 69; 1346–1356)…but these "intrigued investigators" have seemingly disappeared judging by the huge numbers of American parents on internet who claim their newborn hepatitis B vaccinated babies all had prolonged jaundice, and now have permanent liver damage.

Did Pourcyrous know about all this? It appears not.

In 1990, scientists reported that:

"DTP vaccine increased hexobarbital-induced sleep time in mice injected with a single human dose of the vaccine. Measurement of barbiturate-induced sleep time (the time from injection to return of the redressment or righting reflex) is a sensitive indicator of specific cytochrome P-450 enzyme function (in the liver). Sleep time increased significantly 12 h after DTP vaccine administration and reached a maximum increase of 2.2–2.4-fold above controls 7–10 days after a single injection. The effect declined rapidly to levels not significantly different from the controls by day 14."

"DTP vaccine caused dose and time-dependent alterations in hexobarbital-induced sleep time and drug-metabolizing enzyme activities. Microsomal cytochrome P-450 and other microsomal and cytosolic enzyme activities were altered in a time-dependent manner in mice injected with DTP vaccine. Spectrally assayed cytochrome P-450 was decreased by 50% for 7 days, and ...(more liver signs) The increased hexobarbital-induced sleep times were not limited to DTP vaccine; other vaccines with Bordetella pertussis components caused alterations in drug metablism...endotoxin content for the products containing Bordetella pertussis components correlated well with the increased sleep time (but) it is apparently not the only cause of inhibition." — (No 19, Centre for Biological Evaluation and Research, Bethesday, Maryland abstract — published 1990, sixth International Symposium on Pertussis)

Liver function is vitally important. Other environmental factors also mentioned in the Immunology Today article may also put further stress on a baby's immune system:

"A decrease in the frequency of breast-feeding has altered the nature of human bowel flora, as have other changes in other factors: consumption of processed foods; substitution of artificial sweeteners for sugar; and intermittent exposure to antibiotics. These factors, together with the largely Th2-inducing vaccination schedules, have modified the pattern of Hsps and adjuvants that the system encounters."

One of the most important influences on the gut are antibiotics, which when given to babies tend to create an even more alkaline environment, destroy lactobacillus, encourage candida, and further weaken Th1 mucosal immunity. (Lancet 1997, Vol 350 (suppl ll) 5-9.) Yet doctors still hand antibiotics out as if they can do no harm.

The key to normal healthy bowel flora is breast-feeding, but most parents are not told exactly what breast-feeding does, or why this little immune system all-of-its-own is so vital. It is breast-feeding which helps give a baby the most sophisticated defence system from birth, which helps to protect the baby, and helps teach the immune system how to work. It is breast-feeding which helps modify the baby's environment in such a way that the immune system learns the correct way to process and neutralise antigens, pathogens, and any other bug coming in that way.

The intestinal flora of a bottle-fed baby (including partially breast-fed, since their gut resembles the gut of a bottle-fed baby) is quite different to a breast-fed baby, and has the potential to be a silent time-bomb:

DIFFERENCES IN BACTERIAL FLORA, PH AND PHYSICAL CHARACTERISTICS OF INTESTINAL CONTENTS OF INFANTS FED HUMAN COMPARED WITH COW'S MILK OR FORMULA:

	Human milk	Cow's milk or formula
E. coli	10^6–10^7/Gm	10^9 - 10^{10}/Gm
Ph, Faeces	4.5–5.6 (acid)	7.0–8.0 (alkaline)
Curds	Soft and fine	Hard and coarse
Bowel movements	Frequent	Infrequent

One bottle of formula is enough to change a baby's gut dramatically, and it takes two weeks of breast-feeding to return the gut back to normal. How can this happen? E. coli is a putrifactive protein loving bacteria. The protein content of human breast-milk is lower than in any other mammal. The higher protein content of formula or milk supplements has a direct influence on the numbers of E. coli in the gut. The very low protein content of breast-milk creates a more hostile acid environment unsuitable for E. coli, and breast-milk also contains specific E. coli neutralising factors.

For the parents among you, let me explain a bit about E. coli. When I talk about E. coli lipopolysaccharide (endotoxin), I actually mean something quite simple. E. coli is a gram negative bacteria. It has a rigid mucopeptide layer on the outside, or "envelope" if you want a mental picture, called a lipopolysaccharide — a mixture of sugar and protein. It is this envelope which is the "endotoxin". This coating is normally trapped in the liver by cells called phagocytes, and destroyed. We all have E. coli in our guts, but how much depends on our diets. If we eat lots of raw food, vegetable fibre and lactobacillus foods, and have frequent stools, we won't have very many. If we eat lots of protein and meat, and are regularly constipated, then you can guarantee there is plenty of E. coli. The secret to keeping E. coli in control is an acid faecal reading, frequent stools, plenty of fibre. You want to literally sweep it out.

A similar thing happens with babies. Being a protein loving, putrefactive bacteria, E. coli flourishes best in the alkaline conditions created by cow's milk or formula. These stools are often hard, smell horrible, and it is not uncommon to hear mothers say that their babies only pass a stool once every three or four days. I have heard doctors say that constipation is quite normal. It is not.

I know, from 7 years experience, that breast-fed babies create very dirty nappies at least three times a day. The stools are soft, sweet-smelling and frequent. There are still some E. coli in the breast-fed baby's gut, but there is 1,000 times LESS than in the bottle-fed baby's gut.

When I talk about E. coli endotoxic effect I mean that if the liver, which normally traps and degrades the coating (endotoxin), stops working, the endotoxin can pass through the liver, into the blood, and then we have the potential for endotoxic shock. There could be a gradual build-up of E. coli in the absorptive portions of the small intestine to the point where the liver is working too hard. And maybe the baby gets a cold, which might lead to a temperature. A temperature will cause the E. coli to multiply faster, meaning that the liver has to process more, but it can't, so small amounts of endotoxin start leaking through the liver, and the parent starts to notice instinctively that the baby is "not right". It might be that the baby is then vaccinated which can cause the liver to partially shut down. Then suddenly E. coli endotoxin has unrestricted access into the blood supply where it can cause what is described in a few more paragraphs by Dr Reisinger as "the final mechanism" of SIDS.

We know that E. coli has been found in SIDS babies WHERE IT HAS BEEN SPECIFICALLY LOOKED FOR. We also know that if you don't look for something, you most often won't find it.

Several studies have shown that babies who died of SIDS have a high prevalence of E. coli in the flora of the gut. Some suggest that the E. coli "have acquired a plasmid which confers toxigenicity" (Med J Aust, 1989, Vol 151, pg 538). But E. coli is intrinsically toxic. The outer coating (lipopolysaccharide) is the toxic component, but the key to the toxicity level is the speed with which it can multiply, given the right circumstances. These factors include bottle-feeding, stress, overheating, viruses, vitamin deficiencies AND the suppressive actions of vaccines on the reticuloendothelial system (liver).

In 1974, Dr Robert Reisinger presented a paper at an International SIDS conference. He quoted many authors who found SIDS predominantly among bottle-fed babies. Included in the authors quoted (but not referenced) was Shirley Tonkin from New Zealand:

> "Tonkin reported that in her series of 86 SIDS cases, only two were breast-fed. Since twenty-five percent of her control population were breast-fed, she should have had 21 cases of SIDS in breast-fed infants if the risk were the same in both breast-fed and bottle-fed."

He also quoted R. Coombs in the National Institute of Child Health and Human Development book "Sudden Death in Infants":

> "Coombs stated that if SIDS were relatively as common in the breast-fed as in the bottle-fed infant he should have had 17 breast-fed cases in his series, whereas at that time he had not one."

Having quoted research from 1955 about DPT causing temporary liver dysfunction (and not knowing about Pourcyrous's (and others) more recent work supporting this clinical observation) Dr Reisinger went on to describe the final mechanism of death in infants who have temporary liver dysfunction, and E. coli in the gut:

> "Absorption into the bloodstream over hours of time of small amounts of bacterial endotoxin not detoxified by a temporarily dysfunctional reticuloendothelial system results in removal of blood platelets and fibrinogen from the circulating blood. The result is release of relatively large amounts of serotonin from platelets into the blood plasma (in some experiments the increase of plasma serotonin is almost 100-fold). Serotonin initiates in some cases the coronary chemoreflex (Becold-Jarisch reflex) in which there is inhibition of sympathetic outflow and increased activity of the cardiac (efferent) vagus, leading to profound bradycardia, hypotension and cardiovascular collapse. The complex pathogenesis of endotoxemia depending on time and dosages, also involves release of norepinephrine, epinephrine, corticosteroids etc. However, if death occurs early in the course of this syndrome, it is due primarily to serotonin effect. Serotonin is associated with deep sleep and in certain circumstances strongly inhibits respiratory movements... Endotoxin also has a more direct effect on cellular respiration, since it interferes with oxidative metabolism of mitochondria in vitro as well as in vivo... Between three and six hours, vascular capillary permeability has become more substantial, and varying amounts of edema and haemorrhage by diapedesis are apparent. After six to eight hours or more, fibrin-platelet clots have formed, and disseminated intravascular coagulation (DIC) is present in lungs, kidneys, and other organs and tissues."

Recent proof that vaccines can provoke pathology leading to SIDS

In a recent study in Pediatrics Vol 101, No 3 March 1998 on 89 premature infants who received a whole-cell DPT vaccine, all responded with elevations of interleukin-6 and C-reactive protein (CRP) concentrations characteristic of bacterial disease, yet no infection foci could be found. (There was no indication that tests for Interferon μ was done.) Abnormal cardiorespiratory signs occurred frequently after immunisations, but were unrelated to the magnitude of IL-6 and CRP elevations. So the authors assumed that the pertussis endotoxin component was the sole cause of the premature babies' immune responses, even though it also occurred following HBV, Hib and IPV given together.

> "In part 1, 3 infants were extremely irritable, and 24 infants (30%) had abnormal cardiorespiratory signs that increased in frequency or appeared for the first time. These signs included apnoea, bradycardia, and oxygen desaturation that required vigorous stimulation, initiation, or increase in oxygen supplementation"
>
> "Although there were no cardiorespiratory signs in 10 infants after they received the acellular form of pertussis vaccine in part 2, there were moderately severe signs of cardiorespiratory disturbance in 3 infants after immunisations with Hib, HBV, and IPV together"

They quoted two other studies which reported Abnormal CRP response to immunisation as an incidental finding (Arch Dis Child 1994;71:F149) and cardiorespiratory signs after DPT (Pediatr Res. 1996;39:293A. Abstract)

Another comment was:

> "The lag time for CRP response in rabbits after injection with E. coli lipopolysaccharide was 4 to 12 hours. As defined by the schedule of blood collections, we observed a lag period of 12 to 29 hours. CRP increased in all but one infant; however, 69% were asymptomatic."

Why mention E. coli? A blinding revelation of the obvious which was promptly ignored? IL-6 is a known indicator of endotoxin biological effects. — (J. Allergy Clin. Immunol., Jan. 1990: Vol 85, No. 1, Part 1, pg 48)

While there was no “bacterial” infection found, neither was there mention of E. coli lipopolysaccharide endotoxemia. LET ME BE PRESUMPTIVE, and say - they failed to put two and two together, because they did not know the facts about what DPT (or any other vaccine) does to the immune system, or the role that formula feeding can have in problems with E. coli lipopolysaccharide endotoxemia. I will give my hypothetical conclusion where they have given none:

The researchers of this study were observing the precise “final mechanism” that Dr Reisinger described in 1974. These babies given whole-cell DPT, or Hib, HBV and IPV showed signs compatible with endotoxemia. Vaccines have the capacity to temporarily disarm the reticuloendothelial system which is also the primary detoxification agent of E. coli endotoxin from the gut. An acute rise in E. coli endotoxin unprocessed by the liver, would then enter into the blood-stream exacerbating the effects of the injection. The symptoms exhibited by these babies reflect the classically known clinical signs of endotoxemia/endoxic shock, and had there not been stimulation and oxygen saturation, they would probably have died from the “final mechanism” described by Dr Robert Reisinger…

What disturbs me most is that with everything that has been written about endotoxic shock, these researchers had no idea what they were looking at. Without the researchers realising it, this study proved the mechanism by which DPT vaccine can, and does cause SIDS in babies. In some babies I believe the endotoxin in the vaccine, on its own is enough to cause problems, especially if the baby is already struggling.

Pourcyrous et al assumed that what they saw was caused ONLY by finite amounts of endotoxin in the pertussis vaccine. Even though other vaccines caused the same symptoms.

This is because they missed the actual mechanism, and the fact that further endotoxin can be supplied from the gut of babies with a temperature, or under stress, especially bottle-fed babies. The P450 enzyme pathway is the only way a baby has to deal with endotoxin from the gut, and is one of several liver enzymes shut down temporarily by vaccines. That some babies were asymptomatic in spite of elevated CRP could reflect variations in P450 disruption, and/or variable gut concentrations of E. coli resulting in slower endotoxin absorption into the bloodstream. The clinical picture does not just reflect the effect of the endotoxin component in the vaccine.

> In my opinion, suppressive or skewed immune responses in a baby provoked by ANY VACCINES are biochemically capable of CAUSING SIDS, AND ARE IN NEED OF URGENT STUDY.

The fact that there was nothing in the references of the article quoted above detailing previous work on endotoxic shock, suggests that the researchers are oblivious to the effects of vaccine endotoxin, immunology relating to vaccines, or the animal and human research which already exists on the relation of E. coli in the gut, vaccine induced liver-failure, and SIDS.

Why did Pourcyrous et al not mention this extract from Woodruff?

> “the absence of a septic focus as a source for endotoxemia in many of these patients is consistent with evidence that endotoxemia of intestinal origin commonly develops when the antibacterial defence mechanism has been depleted AS A RESULT OF SEVERE DAMAGE TO THE RETICULOENDOTHELIAL SYSTEM.” — (J. Infect Dis, Vol 128, Suppl. July 1973, pg S290.)

In the same journal is a superb article by Dr D. Keast (pgs S104–109) in which he details neonatal models effected by bacterial endotoxin, in which he said:

> “There was no evidence of microbial infection, platelet aggregation, leucocyte accumulation, and vesicle morphology suggested that effects of endotoxin predominated. In both cases, stores of glycogen were markedly reduced.”

And we know that SIDS babies have markedly reduced glycogen stores. Dr Henry Lardy reported considerably lower levels of the enzyme phosphoenolpyruvate carboxykinase (PEPCK) in livers of SIDS babies than in normal babies in 1975, and we know that endotoxin blocks synthesis of PEPCK — which can lead to hypoglycemia. If a vaccine shuts down P450, lets endotoxin through, which shuts down PEPCK, which causes hypoglycemia along with serotonin release etc…what then…?

Is this what Dr Baraff was talking about in relation to SIDS after vaccination? Why has it not been further researched?

Dr Keast goes on to describe how endotoxin causes complete thymus ablation (depletion of T cells) by unremitting low-grade endotoxemia, which can induce immune senescence. His conclusion states:

> "It is becoming increasingly obvious that the microbial component of the host often plays a major role in the survival of the patient…man is known to be extremely sensitive to the effects of bacterial endotoxemia."

Why is it that no-one has continued this work? Ask any animal researcher WHY they develop germ-free animals. One reason is that most viruses which cause disease/death in humans do NOTHING in germ-free animals. But give measles to an animal with a load of E. coli, and you can kill it. Yet, if I said to you that MAYBE E. coli has something to do with measles complications or deaths in humans, you would probably tell me I had E. coli on the brain.

Same journal, another author called Louis Chedid:

> "It is now well established that, in many cases, immunological imbalance produces susceptibility to endotoxins."

And what does Dr Chedid indicate could cause this imbalance and decrease in host resistance to endotoxins? Amongst other things:

> "Immunostimulation by BCG…hemophilus pertussis which are potent immunoadjuvants and render the host susceptible to endotoxins…histamine…and passive anaphlyaxis…hyperreactivity to endotoxins establishes itself rapidly in BCG treated mice and lasts for several weeks." — (pgs S112–117)

What about these so-called "at risk" babies we BCG vaccinate at birth? Is it just a co-incidence that they are the ethnic groups who have an excess of SIDS?

Karl Bettelheim must have considered E. coli significant to have said:

> "In 37 of the 46 cases of sudden infant death syndrome, strains of E. coli were cultured."

Nothing abnormal in that — except that in the control babies hospitalised for non gastroenterological reasons who had <u>not</u> received antibiotics, there were NONE. — (Med J. Aust, Nov 5 1989: Vol 151, pg 538: and Scand J. Infect Dis 1990: 22; 467–476.)

And later still, Beryl Oppenheim wrote that 48% of SIDS babies had IgG EndoCAb compared to 17% of controls, elaborating:

> "Overwhelming infection has been suggested as a cause of SIDS but in most cases evidence of infection is not found. A picture of sudden collapse and death in some ways resembles endotoxic shock…for these reasons measurement of IgG and IgM EndoCAb was thought a possible useful indicator of endotoxaemia in SIDS."

> "These results suggest that as a group, the children who died of SIDS had an unusually early or more severe exposure to endotoxin than other infants of a similar age." — (Arch Dis Child 1994: 70; 95–98.)

Even Bettiol found an unusually high isolate rate of E. coli from SIDS cases in Tasmania. — (Epidemiol Infect 1994: 112; 275–284.)

But not one of the researchers mentioned, reflected in their references, a good understanding of the significance of endotoxin, the relevance of what they had found, or any suggestion of how it could have been in SIDS babies. Any of Pourcyrous's researchers, or Bettelheim or Oppenheim or Bettiol could have found out what biochemical havoc endotoxin can wreak by reading Am J Physiol 1964: 207; 518–522, Chien et al alone. But because this article is nearly 40 years old, does that mean it has nothing useful to contribute? It appears so.

What would Dr John Emery deduce from this? (see quote pg 14)

As researchers before have stated, there is a MOUNTAIN of information in the medical literature — at your finger-tips — on E. coli, vaccines and liver dysfunction, and their relationship to SIDS, but as of today, I am sure I will be "reliably" informed that E. coli is irrelevant, and that vaccines do not cause SIDS. And shortly two more "experts" are about to stand up to try to convince you of this.

But can you still categorically state "We know that vaccines and E. coli have no role in SIDS?" If so, where is the proof?

Such a basic lack of endotoxin, vaccine, immunological, and breastfeeding knowledge means that all current epidemiological studies are missing vital puzzle pieces, because the right questions have not been asked.

And do you know the exact constituents of vaccines? And what they do to the immune system?

For those who continue to tell parents that vaccines are only just "bugs" or toxins, the following could be educational. You put vaccines into our children which contain the following:

> "A combined DT vaccine contains a large number of antigens, i.e. the two toxoids and the remaining impurities, and in such a vaccine, aluminium may no longer be a major cause of side-effects" — (Acta Paediatr 1994, Volume 83, p 162.)
>
> "Many antigens in current vaccines are irrelevant and may actually be harmful." — (New Ethicals April 1990, Vol 27, No 4, pg 45.)

...including mercury, which has been a source of concern to me for many years. The type of mercury used is thiomersal (ethyl mercury), which has the same action as methylmercury. The World Health Organisation has been looking at this issue since 1990, and has only now suggested that thiomersal be removed from all vaccines. There are many more things in vaccines, all of which provoke immune responses. If parents knew what was in vaccines they would be horrified.

Vaccines are injected into new-born babies, by-passing the normal search and destroy, or Th1, portals of entry. They do not in any way, shape or form resemble an inhaled or swallowed bacteria or virus because they are changed, attenuated, and injected as multi-antigens into the body along with heavy metal derivatives, other contaminants and antibiotics.

Take the new Rotavirus vaccine, which despite being withdrawn from the American market in 1999 on suspicion that it causes bowel obstruction in babies, has just been approved for use in Australia. Parents are being told that "It's just against a nasty wee diarrhoea bug, and we'll just give these wee drips the natural way, in the mouth." (No-one is being told that breast-fed babies don't get Rotaviral diarrhoea.)

Is this vaccine just a wee diarrhoea bug? No. This description taken from the package insert of WyethAyerst Oral Rotavirus vaccine called Rotashield describes the contents as being rotaviruses which are grown in aborted monkey fetal tissue, (which has been "immortalised", i.e. self replicates ad nauseum, the same as human aborted fetal cultures do). Added to this is blood taken from calves still inside their mothers in the meat works (Fetal bovine serum), neomycin sulfate and amphotericin B, which the package inserts say "are removed but still in the final product at a concentration of less that 1 ug per dose". (Are they removed or not?) Added to the final vaccine product is sucrose, monosodium glutamate, potassium monophosphate and potassium diphosphate to stabilise the rotavirus. This is then mixed with an irradiated sterile citrate-bicarbonate diluent containing 9.6 mg/mL of citric acid and 25.6 mg/mL of sodium bicarbonate. This purpose of this diluent is to neutralise stomach acidity in the baby to prevent the acid in the baby's gut from destroying the rotaviruses.

Although this vaccine is dripped into the mouth (a "normal" portal of entry) far from functioning "naturally" the purpose of this vaccine is to deliberately disrupt the normal immune system central to the gut's patrolling function.

But it is sufficient to say that injectable vaccines by-pass not only the Th1 immune system, but also the primary guard of a baby's supplementary immune system — breast-feeding. Vaccines are in every sense of the word and world unnatural, and cause the baby to produce unnatural immunity which is "back to front". The body does not deal with vaccine antigens in the normal sequence of infection. Each component, being an antigen in its own right, requires a separate immune response. The only neonatal

immune system primed today in the CORRECT, NATURAL WAY is the UNVACCINATED, BREAST-FED BABY. And this “normal” baby is a vary rare species in today’s world.

The immune system of a breast-fed baby functions quite differently to that of a bottle-fed baby. One of the foremost researchers into breast-feeding, and it’s effects on the immune system is Dr Catherina Svanborg at Lund University in Sweden. A recent article in DISCOVER described her work as follows:

> “she and her group had studied the nature and function of epithelial cells, the gut-lining cells that come into contact with breast-milk in nursing infants. And they experimented with mothers’ milk many times. They had shown that it does a terrific job of blocking infection by pneumococcus bacteria, the cause of pneumonia, and that breast-fed children suffer significantly fewer ear and upper respiratory tract infections than babies who don’t nurse. They traced down studies showing that breast-milk also protects against cancer (the relative risk of childhood lymphoma is nine times higher in bottle-fed infants), and the risk for carcinoma is also elevated.”

> “In August 1995 they announced that breast-milk kills cancer cells and pinpointed the killer, which turned out to be one of the most abundant proteins in the milk. It’s called alpha-lactalbumin (alpha lac for short), and it helps produce lactose, the sugar found in milk.”

The key to the explanation of how breast-milk kills cancer lies in the breakneck reproduction of the cells lining an infant’s gut which can proliferate out of control, or never fully mature or stabilize, lurking in the system like time bombs, ever ready to burst forth into tumours. According to Dr Svanborg, alpha-lac;

> “targets not only cancer cells but all kinds of immature, rapidly growing cells, and leaves mature stable cells alone.”

Alpha-lactalbumin is a multi-functional protein, which:

> “furnishes a wide array of molecules that restrict microbes, such as antibodies, bactericidins, and inhibitors of bacterial adherence. Multimeric alpha-lactalbumin killed all transformed, embryonic and lymphoid cells, but spared mature epithelial elements....milk contributes to mucosal immunity not only by furnishing antimicrobial molecules, but also by policing the function of lymphocytes and epithelium ... multimeric alpha-lactalbumin induces apoptosis in transformed epithelial cells which could lead to the design of antitumor agents. — (Proc Nat Acad Sci USA 1995, 92(17):8064-8)

DISCOVER mentions another key to the equation, a “mysterious” factor in breast-milk which along with the acidity level created by breast-milk, causes a shape-shift, and transforms alpha-lac into HAMLET (Human Alpha-lactalbumin Made Lethal to Tumor cells) which will be the subject of a future medical article from Lund University. The team is now exploring how to turn HAMLET into a usable treatment for cancer and bacterial infections.

Along with all that, they confirmed that not only was breast-milk related to possible enhancement of cognitive development, it also protected the baby from diarrhoea, lower respiratory infections, otitis media, bacteremia, bacterial meningitis, urinary tract infection, necrotizing enterocolitis, sudden infant death syndrome, insulin-dependent diabetes mellitus, Crohn’s disease, ulcerative colitis, and allergic diseases.

More importantly, breast-feeding may help a baby’s immune system to mature more quickly than the immune system of a formula-fed baby. The intestines develop faster in babies who are breast-fed. The article further states that the only babies who should not be breast-fed are babies who inherit a condition called galactosemia, and whose mothers have TB or HIV. (DISCOVER June 1999, pages 70–75). The most important statement to understand is this:

> “Because the LINING OF THE GUT (a prime meeting point between the inside of the body and the hazards of the outside world) IS A HEADQUARTERS OF THE IMMUNE SYSTEM, THE VIGILANCE (OF BREAST-MILK) MAY HELP THE CHILD’S IMMUNE DEFENSES DEVELOP.” — Pgs 72–73

Which brings us back to the beginning… The Th1 immune system. How do neonatal immune systems function?

Another study by Catherine Svanvorg's team showed that with the respiratory tract infections Haemophilus influenzae and Streptococcus pneumoniae, attachment and persistence is counterbalanced by anti-adhesive as well as bactericidal molecules in secretions such as human milk. "These examples illustrate the balance between host defenses and microbial virulence as it has co-evolved to maintain the health of the respiratory mucosa" — (Am J Resp & Critical Care Medicine 1996; 154 (4 pt 2): S187–91)

> "Protection against Haemophilus influenzae type B (Hib) infection is enhanced by breast-feeding up to 10 years after lactation. For each week of breast-feeding, the protection improved." — (J Epidemiol 1997;26: 443–50 quoted in Annals of Allergy, Asthma & Immunol 1998, Dec. Volume 81 on page 530. See also ref 54)

If, amongst all of that, some nurse is going to tell you that whooping cough goes rampant when all other diseases are fought by breast-milk, then I find that quite extraordinary — except in the case of a breast-feeding mother with no immunity to pass on. And why would that be?

One comment often thrown at mothers is that "as soon as a baby is born, they are introduced to at least 50 different antigens" Herald, Friday, June 25, 1999 (Megan Bexley, Practice nurse, Hobsonville). That may be so, but what Megan Bexley does not appreciate is the difference between 50 different antigens processed and moderated initially by the baby's tonsils, adenoids and peyer's patches and hopefully the mother's breast-milk - then the baby's immune system; — AND something a nurse or doctor injects into a muscle, totally by-passing the immunological mechanisms which must be "learned" and the mother's protective screen which is breast-milk. There is a huge difference.

Megan Bexley, also equates "natural immunity" with antibodies. The two are not synonymous. For instance, babies less than 6 months old very rarely develop antibodies to measles even if they have no maternal antibodies. Why? Because it has only been discovered in the last 18 months, that babies from 1–12 months have totally different immune systems to children or adults. The fact is that the peripheral blood lymphocytes of babies are unusually susceptible to suppression by measles virus infection, (Nature Medicine, Volume 2, No 11, November 1996 pg 1253) and babies rely on the immune factors in the mother's breast-milk to prevent exposure to measles at an inappropriately early age. In other words, the baby's immunity is "age-specific", or perhaps its better to say "immunity-maturity" specific.

Many medical people now realise the true value of breastmilk:

> "We conclude that breast-feeding is prophylactic against atopic disease - including atopic eczema, food allergy, and respiratory allergy - throughout childhood and adolescence" — (Lancet 1995;346: 1065-69)

> "Human milk is rich in protective proteins which play a part in the prevention of microbial infections in suckling infants. These include IgA, lactoferrin, lysozyme, antiproteases, complement, and many other factors." — (Arch Dis child 1998;87:235–239)

> "Children who are not breast-fed tend to have weaker immune systems and are at greater risk from infectious diseases" — (BMJ, 1999, Volume 318, pg 688)

> "Breast-feeding may, in addition to the well-known passive protection against infections during lactation, have a unique capacity to stimulate the immune system of the offspring possibly with several long-term positive effects" — (Ann Allergy Asthma Immunol 1998; 81: 523–537)

Breast-fed babies have a better inteferon μ production (marker of Th1 response) than bottle-fed babies (Annals of Allergy, Asthma and Immunology, 1998, Volume 81, pg 527) Anti-idiotypic antibodies as well as T and B lymphocytes are transferred via the milk and seem to actively stimulate the immune system of the offspring - numerous anti-inflammatory factors, cytokines and growth factors in the milk might also direct the immune system of the infants with lasting effects. (pg 529)

Several studies have confirmed that formula-fed infants have smaller thymus glands (one orchestra conductor of cytokine production) than breast-fed babies. One said:

> "The cause of this difference is unknown but human milk contains many immune modulating factors that might cause this effect." — (Acta Paediatr 1996; 85: 1029-32.)

Lets be quite blunt here. Breast-feeding not only provides immunity within the milk to many things, it develops, primes and matures the immune system. Bottle-feeding CAN NOT.

Medical people have long known that breast-fed children rarely get Rotavirus infections, haemophilus influenzae, E. coli, cholera, giarrdia, salmonella and a whole host of other infections written up in reams of medical articles.

What is more, recent newer research shows that breast-fed babies have much better neurological synapse connections in the brain, which may be why studies find long-term breast-fed babies are brighter than bottle-fed babies.

If the mother has a good diet, breast-milk provides the correct balance of vitamins and minerals for the baby. Vitamins can have a huge impact on the Th1-Th2 response of the immune system. While the research on this is in its infancy, and no doubt there will be inconsistent findings as there always is to begin with, some interesting findings are emerging showing that vitamins have a direct effect on the Th1 or Th2 immune system. (Pediatric Infectious Disease Journal, Vol 18, No 3, March 1999 pages 283–290)

It is known, for instance that Vitamin C seems to suppress the Th2 system, and promote the Th1 system (pg 286, ref above), which is why asthmatics on Vitamin C have fewer and less severe attacks than those who don't take Vitamin C. (Trop Geogr Med 1980;32:132-7). It has also been shown that the mean Vitamin C levels in patients with asthma is significantly lower than in healthy control subjects (Afr J Med Sci. 1985;14:115-120) and that Vitamin C can have a protective effect and block Exercise-Induced Asthma (Arch Pediatr Adolesc Med Vol 151, April 1997, pg 367).

If any baby IS vaccinated from birth, it seems to me that there is a possibility that the immune system will react incorrectly. The result might be a Th2-skewed immune system. What I have found very interesting is that if you look at the medical histories of the babies who have bad vaccine reactions, there are markers all along the way that the early vaccines have driven the pattern toward Th2 with the development of wheeze, eczema, allergies, milk intolerance, wheat intolerance, chronic ear infections, glue ear, and chronic runny noses. Most of these babies have had months and months of antibiotics to the point where their parents are experts on the side-effects of them as well. But the babies that react worst of all, are always the bottle-fed babies.

Some babies seem to do okay to begin with, THEN they have an MMR, or some other vaccine, which is the final domino sending the whole immune system haywire, and the result is.....

According to the medical profession, in general, a COINCIDENCE. And we live in a medical world which delights in saying things like the following:

> "Since there are virtually no contraindications to measles vaccination, measles vaccine should be administered regardless of the patient's health status. Measles vaccination is particularly important for malnourished children and for those with chronic illnesses, as they are at increased risk of complications due to measles. An exception to this recommendation are children, who, on admission, are so ill that they are at serious risk of dying. Although administration of measles vaccine is not dangerous in such cases, parents may incorrectly attribute a death to the vaccination." — (Bulletin of the World Health Organisation, 1997: 75 (4) pgs 367–375)

The concern at the moment in USA is the use of Hepatitis B vaccine which has been given to two-day old babies since 1990, and the MMR. I ask the American readers of this position paper to seriously consider the implications to the Th1/Th2 immune system of a newborn baby of giving this vaccine at birth. When we did the same thing at birth here for about a year, we had problems (Health Department memorandums read that "Minor side effects from the first H-B-Vax injection in a newborn baby may be confused with more serious ill health .... Dated 21 March 1988). A New Zealand doctor sent a submission to the National Institute of Health in America who were conducting a review on vaccine safety to express dismay at the high number of cases of prolonged jaundice following Hepatitis B vaccination at birth in the district. Official complaints were also laid with the New Zealand Health Department and the vaccine manufacturer requesting reasons as to why this astonishing change had occurred. No answers were forthcoming but the vaccine manufacturer replied to the doctor that no research had been conducted on how Hepatitis B could effect a newborn's liver or their immune system. Shortly after the Health Department memorandum to all Area Health Boards the schedule was changed to give a double dose at birth to babies of carrier mothers only, and the rest received their first one at 6 weeks. The issue of the Hepatitis B vaccine causing liver problems was not raised again nor researched to my knowledge.

Why this long discussion on natural immunity, vaccines and breast-feeding?

Because no-one is telling parents.

The research focus of immunologists seems to be to use either a VACCINE or a special Th1 adjuvant which, given right at the start, would skew the immune system towards Th1 instead of Th2, thus avoiding allergy. But as one article said:

> "the potential pitfalls of such an approach are excessive amplification of Th1 immunity leading to allergen specific delayed type hypersensitivity and stimulation of covert Th1 mediated diseases processes including autoimmunity." — (Thorax 1997;52:1–4)

The fact is that the immune system is much more complex than anyone previously understood. Every day immunologists are finding out new things never even conceived of. As I said earlier, there is another cytokine system, presently called "autoimmune" T cells. But "neither the cytokine profile of these cells, nor the way in which they inhibit disease, is yet known" — (Immunology Today, March 1998, pg 116).

The author goes on to say:

> "In conclusion, it may be prudent to start ensuring that vaccines do not merely protect from infections, but actually replace them as immunological stimuli. Furthermore, new forms of immunotherapy are required that are not designed to protect against any specific disease, but rather to maintain the correct cytokine balance, and the correct constraints on the activity of autoreactive T cells. Meanwhile, we should be aware of the possible existence of two 'input deprivation syndromes' which could be called the 'cytokine imbalance syndrome' and the 'uneducated T cell regulation syndrome'."

The real problem as I see it, is how are the scientists going to work out just what is "normal" for babies without a proper control study population? If parents who long-term breast-feed and don't immunise, are FORCED to vaccinate their children there will be no "normal" babies left to compare with vaccinated babies.

By doing this, the manufacturers and authorities also eliminate all possible proof that vaccines are, and have been, in the opinion of many many people, the single major preventable cause of the huge increase in allergy, asthma and auto-immune reactive disorders in children that the world has ever seen.

The way the New Zealand system is going at the moment, having ratified the United Nations Charter of Children's Rights a few months ago, which gives the Health Department the right to forcibly administer vaccines to a child, and having made "the belief that vaccines have unacceptable risks" a form of child abuse (see Children and Young Persons manual (June 1999) under "Types of Neglect") the stage is set to eliminate parental choice, dissent and scientific research.

In the meantime, I stand by the thrust of my abstract to this conference:

VACCINES can and do alter the immune system. They can also cause reticuloendothelial suppression and cause pathology in babies which is compatible with, and mistaken for SIDS. Further research should be focused at the roles of:

1) Vaccines in immune suppression.

2) Vaccines in reticuloendothelial suppression.

3) The TRUE differences in intestinal flora between PROPERLY breast-fed babies and formula-fed babies.

4) The final mechanism of endotoxic effect in SIDS.

5) The role of vaccine induced immune suppression in chronic illnesses which show a Th2 skewed immunological profile.

Hilary Butler
11 February 2000

Glossary

Adjuvant: Compound capable of potentiating an immune response.

Antibody: Five different classes of protein molecules known as immunoglobulins (Ig) produced by lymphoid cells. Their job is to combine with antigen.

- IgM: The largest antibody in the blood comprising 10% of volume and weighing 970,000 daltons. It is a pentameric protein (10 receptor sites), it stays in the blood and is the first Ig produced in an immune response, and produces early antibodies only.
- IgG: A smaller monomeric (one site) antibody weighing 146,000 daltons with four different classes, all of slightly different weights and functions, and comprises 70–75% of the total pool. Because it is small, it diffuses readily into intravascular spaces and is the only class able to cross the placenta. It is a potential antitoxin, an effective barrier, and carries late (memory) antibody.
- IgA: Comprises 15–20% of Ig's in the blood, is a dimeric protein found predominantly in tears, saliva, tracheobronchial secretions, gastrointestinal tract, colostrum, breast-milk, and genito urinary secretions. Its primary function is to protect surfaces, and prevent bacteria or virus from sticking and gaining entry to cells.
- IgD: Comprises less than 1% of Igs and is a membrane associated molecule on the surface of mature antigen sensitive B cells.
- IgE: Weighs 98,000 daltons, and is about 1% of total Igs, but rises steeply during allergy attacks, parasitic infections and hypersensitivity conditions. High levels are associated with an abnormal Th2-skewed immune system.

Antigen: A foreign substance capable of provoking the lymphoid tissue to mount an immune response directly at the inducing substance and not other unrelated substances. An "antigen" can be anything such as a bacteria, virus, fungus, pollen, chemical, egg albumin, foreign serum protein.

Complement: An enzymatic system of serum protein that is activated by antigen/antibody reactions. Complement digests holes in lipopolysaccharides and attracts phagocytes to places where antigen and antibody interact. In hypersensitivity states, complement activity releases histamines and plasma kinins.

Interferon: Various glycoproteins of a small size (30,000 daltons) which can diffuse through extracellular fluid, and increase the efficiency of the killing mechanisms by attracting natural killer cells, enhancing the ability of cytotoxic T cells to kill their targets, or stimulating class I MHC expression on the target cells so that they can be recognised more efficiently. It also induces transient protection from viral infection in non-infected cells. It is a key component of the TH1 search-and-destroy system.

Interleukin: There are at least 12 types of interleukins, which are immunological hormones secreted by, or acted on by lymphoid tissues. Different interleukin have different roles, either switching on, or switching off various immunological functions. I think of these as traffic lights.

Lymphocytes: All cells of lymphoid tissues — adenoids, tonsils, spleen, blood or bone marrow, peyer's patches and appendix. In the text is mentioned Bursa of Fabricius which is known to exist in birds. There is still debate as to whether humans have an equivalent. Some immunologists think humans do, and there is speculation that it could exist somewhere in the gut-associated lymphoid tissue.

Peyer's patches: These are areas of lymphoid tissue in the submucus of the small intestine which contain lymphocytes, plasma cells, germinal centres and T cell dependant areas, and involve the mucosal immunity. Breast-fed babies' intestinal immune systems develop faster than bottle-fed babies, and they have very well primed mucosal immunity because of constant priming and patrolling by immunological factors in the breast-milk.

B cells: Derived from bone marrow or fetal liver. Refers to the resting state of the cell, and is a subset of lymphocytes responsible for production of antibodies.

T cells: Derived from the thymus, and are long-lived, mobile cells which work with interferon, interleukin, and are involved in "inflammatory" responses. They can be divided into helper cells (Th) or suppressor cells (Ts) and cytotoxic or "killer" (Tct or Tk) cells. They also regulate the antibody responses of B cells.

All immune cells are interdependent and work in a specific learned pattern. People with certain immune system dysfunctions develop other means of coping. Other parts of the immune system try to take over missing functions. Sometimes that works, sometimes it doesn't. But the immune system requires an age-related learning sequence, and as Bonnie Dunbar stated, and others are beginning to realise, you interfere with the immune system of any neonate of any species at your peril.