

***Anaphylactic children - canaries in the public health mine shaft?  
Are vaccines responsible for the epidemic of anaphylaxis in young children today?***

*by Rita Hoffman*

In the presentation speech as winner of the 1913 Nobel Prize in Medicine for his work with anaphylaxis, Charles Robert Richet said, "We are so constituted that we can never receive other proteins into the blood than those that have been modified by digestive juices. Every time alien protein penetrates by effraction, the organism suffers and becomes resistant. This resistance lies in increased sensitivity, a sort of revolt against the second parenteral injection which would be fatal. At the first injection, the organism was taken by surprise and did not resist. At the second injection, the organism mans its defences and answers by the anaphylactic shock." In naming "anaphylaxis", Richet described, "Phylaxis, a word seldom used, stands in the Greek for protection. Anaphylaxis will thus stand for the opposite. Anaphylaxis, from its Greek etymological source, therefore means that state of an organism in which it is rendered hypersensitive, instead of being protected." Richet concluded his lecture by saying, "Seen in these terms, anaphylaxis is a universal defense mechanism against the penetration of heterogenous substances in the blood, whence they can not be eliminated." [1]

Vaccine antigens injected subcutaneously or intramuscularly prompt the immune system to create antibodies in the blood against those antigens. Has medicine, which has used vaccinations containing "alien proteins" as its cornerstone to control infectious diseases, been on the wrong track by injecting heterogenous substances [originating in an outside source; especially: derived from another species] [2] into human beings to "control" disease? What would be the general state of health today if 200 years ago medicine had taken the path of discovering the keys to promoting a strong, unadulterated immune system in conjunction with increased nutrition, vitamin and mineral supplementation along with better sanitation? Has medicine produced false protection by injecting alien proteins via vaccination which, as Richet pointed out in his lecture, can render us hypersensitive instead of being protected?

This hypersensitive state called anaphylaxis is now epidemic in young children who live every day of their life under threat of death from everyday, normally harmless substances. The numbers are staggering. According to Health Canada's web site, "It is estimated that 600,000 Canadians (two percent of the population) may be affected by life-threatening allergies, and the numbers are increasing, especially among children." [3] In 2005 Ontario passed a law to protect anaphylactic students at school while The Toronto Star reported an estimated 40,000 children in Ontario with anaphylaxis. [4]

The recent deaths of three Canadian teenagers exposed to minute quantities of allergen have caused a world wide media explosion of anaphylaxis stories. Everyone is asking - why do we have so many kids with peanut allergies? Why have schools banned peanut butter sandwiches? Why are kids dying? Charles Robert Richet knew that foreign proteins penetrating the body could cause anaphylaxis back in 1913. Some doctors, allergists and anaphylaxis organizations blame skin creams containing peanut oil and North America's roasting of peanuts for the epidemic of anaphylaxis. And perhaps weary of saying that

increased consumption of peanuts is the cause of the increase in peanut allergy some are mentioning the "hygiene hypothesis" as a cause. A few are even mentioning the "v" word. Dr. Bruce Edwards was quoted in a February 21, 2006 Newsday article regarding the hygiene hypothesis. "The theory is that because U.S. children 'use antibacterial soap, get antibiotics at the first sign of a runny nose and are vaccinated for every potential thing out there,' their immune systems do not spend time producing anti-infectious responses to all the diseases they will never get. Instead, their immune systems may be 'shunting their responses to produce things [anti-infectious responses] which are more allergic in nature.'"

In a May 18, 2005 CNN article, in an attempt to explain the peanut allergy epidemic, Dr. Robert Woods of Johns Hopkins University stated, "The more your immune system is kept busy by exposure to germs and infections early in life, the less time it can devote to things like allergy." Anne Munoz-Furlong, CEO and founder of U.S. based The Food Allergy & Anaphylaxis Network (FAAN) in the same article says "Perhaps our homes are too clean - we've done too much to take away the job of the immune system. We don't have parasites, a lot of the childhood diseases you vaccinate and don't have, so maybe for some people, the immune system is looking for something to do and decides, 'Aha, I don't like milk' or 'I don't like peanuts,' and the body then attacks the food protein as if it were an enemy invader." Somehow I think our God given immune systems are smarter than that - that is, if left to do the job without any interference!

Anaphylaxis is not the only allergic disease on the rise. On March 31, 2006 Reuters reported that "Allergies such as hay fever are reaching epidemic proportions in Europe and a failure to treat them properly is creating a mounting bill for society and the healthcare system...Around one third of the European population has some kind of allergy, while one in two children in Britain will have allergies by 2015, costing millions of euros in medical bills, lost work days and even impaired concentration in school pupils." The article goes on to describe, "Allergies were most prevalent in Britain and Ireland, as well as other English speaking countries like Canada, Australia and the United States, Burney said, adding they were also becoming more widespread in new European Union member states." On May 5, 2005 The Toronto Star devoted an entire section to allergies and asthma. An article about eczema states, "In Canada, this incurable skin condition that causes dryness, crusting and thickening afflicts between 2 million and 5 million people. Experts report its incidence has tripled since 1970."

In 2002, prominent Canadian allergist Dr. Peter Vadas went as far to say, in a television show on severe allergies, "There are factors to do with how we vaccinate our kids very early on in life, how much drugs, antibiotics we give the kids early on in life all of which tend to predispose more towards allergy." But when asked, "Do you think early vaccination is not a good thing?" he replied, "No, I think it's a wonderful thing. It's an absolutely crucial thing from the standpoint of public health to minimize the likelihood of severe infections, but on the other hand one of the spin offs is that there are a certain proportion of the population that are going to be more prone to developing allergies as a consequence of that." [5]

In a February 20, 2006 Globe and Mail article entitled "Is clean living making us sick? Hygiene hypothesis on food allergies", Dr. Vadas followed a "party line", eliminating the

"v" word. The "party line" to explain this, he said "holds that consumption of peanuts and the peanut protein has increased in Western societies. As a result, the more exposure to peanuts, the more people will be found to be allergic to them." It sounds like a "party line" to protect the vaccine status quo. This does nothing to explain the explosion of other unusual anaphylactic allergies in children to foods like kiwi, sesame, soybean and tree nuts. Parents should be receiving information regarding all of the potential risks and benefits of vaccines to make an informed decision about vaccinating their children. I was never told that one of the potential "spin offs" of my child being vaccinated would be that he would live every day of his life under threat of death!

If increased consumption of peanut is the cause of peanut anaphylaxis, then why don't the Chinese and Indonesians, who consume large quantities of peanut, have the peanut anaphylaxis problems of the western industrialized nations? [6] [7] China and Indonesia do not routinely vaccinate for Hib (Haemophilus influenza type B), [8][9][10][11] Sweden is a country where 99% of the target population was vaccinated for Hib in 2001. [12] Sweden also has low peanut consumption, yet this low consumption has not prevented peanut allergy in that country. Van Odijk et al concluded that "the reaction pattern to peanuts in Sweden is similar to that in many other countries despite a reported steady and low consumption." [13] It appears that countries that introduced Hib vaccination in their infant schedules have high rates of peanut allergy regardless of consumption.

Children can react to peanut allergens on their first exposure. [14] Sensitization to peanut can occur during breastfeeding. [15] Yet sensitization through breast milk cannot possibly explain the increase in peanut anaphylaxis as mothers worldwide have been eating peanuts while breastfeeding for decades. Zimmerman et al (1989) found in their study that "these results suggest that highly atopic infants are at special risk for sensitization to peanut, even when they have never received peanut...." [16] K.L. Capozza, Health Scout News, in an article entitled "Study Acquits Peanuts in Allergic Reaction" described a recent study by Turncanu et al who took three types of children, those with peanut allergies, those that "outgrew" their allergy and those who have no peanut allergy. Capozza describes how "after magnifying these immune cells, or T-cells, the researchers observed that the T-cells of allergic patients became excited after exposure to peanut. Once the T-cells react to the peanut extract, a cascade of allergic responses ensue, from a skin rash to labored breathing." He describes how "the research shows, the condition stems from a person's abnormal immune response." [17][18]

What has happened to peanut allergic children to cause their T-cells, as Capozza described to become 'excited' to the extent that with some children just being in the same room with peanuts can cause a reaction? Could vaccines be the cause?

Dr. Philip Incao aptly describes how vaccines affect the immune response in his article "How Vaccines Work." "So the trick of a vaccination is to stimulate the immune system just enough so that it makes antibodies and 'remembers' the disease antigen but not so much that it provokes an acute inflammatory response by the cellular immune system and makes us sick with the disease we're trying to prevent! Thus a vaccination works by stimulating very much the antibody production (Th2) and by stimulating very little or not at all the digesting and discharging function of the cellular immune system (Th1). Vaccine antigens

are designed to be 'unprovocative' or 'indigestible' for the cellular immune system (Th1) and highly stimulating for the antibody-mediated humoral immune system (Th2). Perhaps it is not difficult to see then why the repeated use of vaccinations would tend to shift the functional balance of the immune system toward the antibody-producing side (Th2) and away from the acute inflammatory discharging side (the cell-mediated side or Th1)." [19]

Atopic disorders are the cluster of 3 related disorders, allergies, asthma, and eczema with anaphylaxis being the most severe form of allergic reaction. Atopic disorders are pervasive and raise the alert that the immune system has been sensitized and has shifted away from its normal functioning TH1 mode into a chronically reactive TH2 mode.

Anaphylaxis to foods in young children seemed to be rare prior to the introduction of the first Hib polysaccharide vaccine in 1987 (Canada) to a schedule already containing vaccines for diphtheria, pertussis, tetanus and polio, measles, mumps and rubella. Beginning in 1992, many infants were given various Hib vaccines concurrently with DPT-P, and beginning in 1994 in a combined 5 in 1 vaccine called Penta. In 1997 the acellular pertussis 5 in 1 vaccine Pentacel was introduced. The cover story in the September 2000 issue of *Professionally Speaking*, the magazine of the Ontario College of Teachers was "An Abnormal Response to Normal Things." The article begins with "Teachers have to be aware that allergies can kill. A growing number of children are at risk - and a well prepared teacher can make all the difference." The article explains that "About a decade ago, the sudden surge in highly allergic children entering school systems across the province caught many educators off guard." Doesn't this "surge" correspond to the introduction of the Hib vaccine?

In Ontario, the Hepatitis B vaccination series is given in Grade 7, not at birth, so the Hepatitis B vaccine would not have an impact on the numbers of young children with peanut and nut anaphylaxis, yet it remains to be seen if this vaccine may be implicated in increased numbers of teenagers becoming anaphylactic.

Children in Ontario aged 18 and younger could have received up to five different types of Hib vaccines. The first Hib vaccine, introduced in 1987, was a one dose polysaccharide Hib vaccine for children age 2 and up. Infant immune systems did not mount an immune response to the polysaccharide vaccine, so vaccine researchers developed conjugate vaccines to "trick" the infant immune system into recognizing the Hib antibody.

Conjugate vaccines, according to a U.S. National Institute of Health website, link "a 'weak' polysaccharide to a protein easily recognized by the immature immune system." [20] The Hib conjugate vaccines results in "greatly enhanced antibody responses and establishment of immunological memory", and the four conjugate Hib vaccines given to children "differ in a number of ways, including the protein carrier, polysaccharide size and types of diluent and preservative. [21] Who's to say that this 'protein easily recognized by the immature immune system' won't "trick" the infants body into thinking that food eaten at the same time as the vaccine is an invader worthy of a 'greatly enhanced antibody response'?

Although Hib vaccines have been credited as being a public health miracle, the road to the development and implementation of these vaccines seems to have been anything but

smooth. The lack of knowledge about this vaccine's interactions with the immune system is frightening. Here are just a few examples:

One of the most shocking studies I came across was Nicol et al concluding in 2002, a decade after infants were given this vaccine, that 1/10th of the dose of Haemophilus influenzae type B conjugate vaccine (PRP-T) was as immunogenic and safe as the full dose.[22] Considering that the Hib vaccine results in "greatly enhanced antibody responses", does this mean that children have been receiving 10 times the amount of Hib vaccine that would be necessary to provide that antibody response, thus creating a hypersensitivity to proteins encountered during and after vaccination in children, especially children with a tendency toward allergy?

Also shocking was Pichichero (2000) in his paper on new combination vaccines, describes...."the protective threshold for conjugated PRP [Hib] vaccines is not known....." [23]

Pabst and Spady (1990) studied infants immunized at 2, 4, and 6 months with conjugate Haemophilus influenzae type B vaccine. They found that "antibody levels were significantly higher in the breast-fed (57 infants) than in the formula-fed group (24 infants) at 7 months and at 12 months" and that breastfeeding "enhances the active immune response in the first year of life, and therefore the feeding method must be taken into account in the evaluation of vaccine studies in infants." [24] Many anaphylactic children were breastfed as infants, which would have boosted this immune response even more! Breast fed and bottle fed babies receive the same doses of vaccines, even though sixteen years ago the above authors found that feeding methods should be evaluated in vaccine studies! This study was later challenged in Scheifele et al's letter to *The Lancet* in 1992 in which they conclude that "It seems that the earlier conclusions were incorrect and that breastfeeding does not enhance responses to haemophilus b conjugate vaccines, at least when assessed on completion of the primary series." [25]. The Hib vaccine that Pabst and Spady studied was the CRM 197 mutant diphtheria toxin conjugate vaccine. Scheifele's study used the PRP-T (tetanus conjugate) vaccine. If Dr. Scheifele was going to discount Pabst and Spady's results why didn't he use the same vaccine? Oh, well, full speed ahead! One shot must fit all, breastfed or not! We must maintain the status quo!

Numerous studies have sounded warnings regarding combination or concurrently administered vaccines including Hib. Here are just three examples:

Even as late as May 2000, Rennels et al concluded that "In this trial concurrent IPV [inactivated polio vaccine] appeared to interfere with the anti-PRP [Hib] response to DTaP/Hib vaccine suggesting that introduction of new vaccines may require evaluation of immune responses to all concurrently administered vaccines." [26]

The 2004 American Academy of Pediatrics Annual Meeting report on New Combination Vaccines for Childhood Diseases raised red flags about combination vaccines, saying "However, the reactogenicity and potential side effects of the combined antigens have not yet been determined. Since there is the potential for physical and chemical interaction among the vaccine components and the buffers and preservatives, the immunogenicity of

each component needs to be addressed to determine whether these are similar to and as effective as the components given individually." [27]

Redhead K et al (1994) in a very frightening study, state: "However, combination with the Hib vaccine comprising polysaccharide conjugated to tetanus toxoid had dramatic effects on tetanus potency and immunogenicity when assayed in mice. This combination resulted in a five-fold potentiation of the tetanus potency and a similarly large increase in the antibody responses to tetanus toxin and toxoid. The level of the antibody response to the Hib polysaccharide in this vaccine was also elevated, more than 20-fold, as a result of the combination." [28]

Shouldn't these studies be raising red flags? Antibody responses to Hib elevated more than 20 fold? Reactogenicity and potential side effects of combined antigens not yet determined? I haven't seen any studies that look at the IgE (allergy) levels post vaccination. Surely it's not much of a stretch to think that infant's immune systems might be hypersensitive after receiving these vaccines!

Now let's look at what vaccines could be cross reacting with peanut. When researchers study allergies and cross reactive proteins they determine the various molecular weights of the allergen. Foods with the same molecular weight can cause cross reactions in allergic persons. And it's not just foods cross reacting. In a January 22, 2002 news release, the American Academy of Allergy, Asthma and Immunology provided a list of the most common foods that are cross reactive to latex including banana, avocado, chestnut, kiwi and celery. They describe, "The immune system recognizes the 'cross-reactive' protein, symptoms manifest and an adverse reaction occurs. An active immune system may not distinguish the difference between the similar looking proteins, so an allergy to one member of the food family may result in the person being allergic to all the members of the same group."

I have often wondered why vaccines with latex stoppers have not been considered as a potential cause of the tremendous rise in latex allergy among highly vaccinated health care workers. Primeau et al (2001) found that "Natural rubber vial closures released allergenic latex proteins into the tested solutions in direct contact during storage in sufficient quantities to elicit positive intradermal skin reactions in some individuals with LA. These data support a recommendation to eliminate natural rubber from closures of pharmaceutical vials." [29] There are many vaccines that have latex stoppers that may be sensitizing people. Health Canada does not have a list, but the state of Massachusetts provides information regarding which vaccines contain latex or thimerosal [30]

If people with latex allergy can have cross reactions with foods, then one must ask if vaccine ingredients can cause cross reaction with foods having the same molecular weight?

Using PubMed I looked for molecular weights of ingredients in infant vaccines and some of the most common allergenic foods in small children. Measured in kilodaltons (kDa), the most striking molecular weight that could cross react is 50 kDa contained in the following: Hib, Diphtheria, Tetanus, Neisseria Meningitidis, peanut, almond, soybean and cashew. The molecular weight 43 kDa is present in both Hib and peanut. 20 kDa is present in both

Hib and peanut. 37 kDa is present in both Hib and Almond. 49 kDa is present in Hib and Mango.

Molecular weight of proteins in vaccines

- Haemophilus influenzae type B (Hib)  
50, 49, 43, 37, 20, 16, kDa
- Diphtheria - 50, 27 kDa  
(also used as carrier protein in some Hib vaccines)
- Tetanus - 50 kDa  
(also used as carrier protein in some Hib vaccines)
- Neisseria meningitidis - 50 kDa  
(also used as carrier protein in some Hib vaccines)

Molecular weights of  
food proteins triggering reactions

- Peanut  
50, 43, 20, 16 kDa
- Almond 50, 37 kDa
- Soybean 50, 16.5 kDa
- Cashew 50 kDa
- Mango 49 kDa

References:

Hib [31-39] Diphtheria [40-41] Tetanus [42-45] Neisseria meningitides [46]  
Peanut [47-50] Almond [51-53] Soybean [47] Cashew [54] Mango [55]

So the first vaccines my child received, DPT-P + Hib contained Diphtheria (50 kDa), Tetanus (50 kDa), Pertussis, Polio, Mutant Diphtheria carrier protein in the Hibtitre vaccine (50 kDa) plus Hib (50 kDa). Is there any wonder, when my son encountered peanut (50 kDa), Almond (50 kDa) and Cashew (50 kDa) via breastmilk while his body's immune system was processing the vaccines, that his body went on extreme high alert for anything with a 50 kDa molecular weight? Granoff and Munson (1986) describe when conjugate vaccines are prepared, "new antigenic determinants are formed.....but their presence raises the possibility that these neoantigens may elicit antibodies cross-reactive with human antigens." [31]

Cross reactive proteins can be very dangerous for people with allergies. I know a young girl who had vomited after eating cashews as a toddler and was never given nuts after that time. Not long after her school age boosters of DTaP-Polio and MMR she was given a piece of mango and had to be rushed to the hospital. It was only after some investigating that the parents realized that mango and cashew can cross react. This girl's mother happens to love mango, and while she would not bring the fruit into her home she decided it was safe to eat some at her workplace for lunch, afterward carefully washing her hands. Upon arriving home several hours later, the mother kissed the little girl on the cheek. Swelling and hives ensued, and even with anti-histamines it was days before the child's reaction subsided. From a kiss on the cheek! Another child with a nut allergy had an anaphylactic reaction to a fruit juice containing mango, again the parents being unaware of the cashew/mango cross reaction. These bizarre immune responses put children at risk of dying every day.

Stories like these aren't too surprising once you look at the medical literature where the link between vaccination and anaphylaxis seems crystal clear in animal studies dating back as far as

1952. Saul Malkiel, Betty J. Hargis and Leon S. Kind completed numerous studies where vaccinated animals became anaphylactic, many funded in part by the National Institute of Health. Imagine reading, from 1959, "We have repeatedly observed in experiments on mice that a consequence of the administration of *Hemophilus pertussis* phase I organisms given in conjunction with a protein antigen is the enhancement of anaphylactic sensitization to the foreign protein antigen." [56] And we have allergists telling us that skin creams cause anaphylaxis? And I was furious when I read Kind and Roesner (1959), "It is now well known that mice inoculated with *Hemophilus pertussis* vaccine develop enhanced sensitivity to lethal effects of histamine, serotonin, endotoxin, peptone and anaphylactic shock. The ensuing data will demonstrate that pertussis-inoculated mice can also be killed with doses of water soluble extract of pollen rye grass which are not lethal to uninoculated animals." [57] Kind and Richards (1964) in the *Journal Nature*, state "It is now well known that mice injected with *Bordetella pertussis* vaccine plus an antigen will produce more antibodies to that antigen than mice injected with antigen alone." [58] Couldn't the same apply to babies?

And how do researchers make anaphylactic animal models? They vaccinate the animals! Countless studies show anaphylaxis being induced in animals by using toxins and adjuvants used in human vaccines. Here is one example from hundreds:

Helm et al in *Environmental Health Perspectives* article "Nonmurine Animal Models of Food Allergy" discuss ways to create animal models of human food allergy. [59] Animal models are discussed extensively, including "the use of adjuvants (natural or artificial--alum, cholera toxin, *Bordetella pertussis*, and carrageenan are known IgE-selective adjuvants)" in those animal models. They go on to describe, "In the atopic dog model for food allergy (Ermel et al. 1997), newborn pups (day 1) were subcutaneously injected in the axillas with 1 µg of cow's milk, beef, ragweed, and wheat extracts in alum. Food antigen was again administered on days 22, 29, 50, 78, and 85. At ages 3, 7, and 11 weeks, all pups were vaccinated with attenuated distemper-hepatitis vaccine...Immunized pups responded with allergen-specific IgE by week 3 and peaked at week 26 of age...All clinical manifestations are consistent with infant, adolescent, and adult food allergy in humans."

It has been shown repeatedly that vaccination can cause sensitization, including anaphylaxis, to vaccine ingredients. Nelson et al (2000) discuss a 4 month old baby's anaphylactic reaction to the CRM 197 protein in the Hib vaccine. [60] As far back as 1940 Cooke et al noted that "The real object of this presentation is to acquaint the medical profession with proof of the fact that sensitivity can be induced as a result of the present procedures of active immunization to tetanus." [61] Cooke et al also mentioned Neill et al (1929) noted hypersensitivity to diphtheria bacilli. [62]

Patrizi et al (1999) and Osawa et al (1991) noted allergic sensitization to thimerosal. [63][64] Martin-Munoz et al described allergic sensitization to tetanus and diphtheria toxoids simultaneously. [65] Kumagai et al (2002) found "gelatin-specific cell-mediated immunity develops in subjects inoculated with gelatin containing DTaP vaccine" and that the specific cellular immune responses persisted for more than 3 years. [66] Sakaguchi et al (1996) concluded that "We reconfirmed a strong relationship between systemic immediate-type allergic reactions including anaphylaxis, to vaccines and the presence of specific IgE to



gelatin." [67] Nakayama et al (1999) found that "DTaP vaccine may have a causal relationship to the development of this gelatin allergy." [68]

So, if the medical literature shows anaphylactic sensitization to vaccine ingredients, then is it much of a leap to think that protein fragments in those vaccines could be causing cross reactive sensitization with antigens with the same antigenic determinant?

A key piece of the hypersensitivity puzzle is the vaccine adjuvant aluminum according to New Zealand researcher and author Hilary Butler. Butler states that "Aluminium is put into vaccines, because without it, the body will not react to weak strains of antigens. Aluminium is highly reactive, and is a Th2 'skewer'. This is the whole reason why aluminum is added to vaccines. And Aluminium will ALWAYS create IGE, and if this happens in the presence of proteins from vaccines or food antigens in the body, then there is a high chance of allergy developing." She points out the study by Yamanishi et al (2003) who immunized mice against Kunitz-type soybean trypsin inhibitor (KSTI) and concluded that..."we demonstrated that, regardless of the inability to adsorb KSTI, alum exerted its adjuvant activity only when it was co-injected with the antigen. These results showed that some biochemical effect, other than adsorptive activity, to enhance the production of the antigen-specific IgE resides in alum.[69] According to Butler, "this goes along with evidence I have elsewhere that highlights the observation that aluminum does not have to be absorbed onto the antigen in order for an immune response to be stimulated. Another thing is that aluminum produces mostly IgE antibodies (allergic antibodies)." Numerous studies have also shown that aluminum is linked to allergic responses. [70]

VRAN researcher Susan Fletcher notes the importance of digestion (which can be affected by antibiotic use) in the development of asthma and allergies. Vaccinations are routinely given to infants and children even though they may have been given antibiotics for a recent health issue, certainly affecting their immune response to the vaccine. Untersmayr et al (2006) found "for the first time the important gate-keeping function of gastric digestion, both in the sensitization and the effector phases of food allergy." [71]

Charles Robert Richet described back in his Nobel Lecture in 1913, "all proteins, without exception produce anaphylaxis: one had seen this with all sera, milks, organic extracts whatsoever, all vegetable extracts, microbial protein toxins, yeast cells, dead microbial bodies. It would be of more interest now to find a protein which does not produce anaphylaxis than to find one that does."

He then chillingly states in his conclusion, "It does not matter much that the individual becomes more vulnerable in this regard. There is something more important than the salvation of the person and that is integral preservation of the race. In other words, to formulate the hypothesis in somewhat abstract terms but clear ones all the same: the life of the individual is less important than the stability of the species. Anaphylaxis, perhaps a sorry matter for the individual, is necessary to the species, often to the detriment of the individual. The individual may perish, it does not matter. The species must at any time keep its organic integrity intact. Anaphylaxis defends the species against the peril of adulteration." [1]

How can Richet have won the Nobel Prize in 1913 for this knowledge yet the medical community today seems to have no clue why our children are anaphylactic? Why has medicine, to which parents have entrusted their precious children, continued to vaccinate for more and more diseases, knowing that our "organic integrity" could be at stake? May I suggest that researchers or doctors can't see the forest for the trees, or there is one huge cover-up?

With hundreds of new vaccines in the pipeline, how much longer can we continue to inject more and more foreign proteins via vaccination into human beings without eventually creating a totally defenseless population? How many more children will become anaphylactic, be rushed to emergency fighting for their lives or die before something is done?

-----  
Updated July 2006 - Acknowledgments: Special thanks to Amy and John for their countless hours in the medical library, Cindy Stolten, Critical Decisions Count, Sandy Gottstein, www.vaccinationnews.com and especially to Edda West, www.vran.org for believing in "Martin's Story". A big thank you to Suzanne Brezovich, Ingri Cassel, Hilary Butler, Susan Fletcher and Edda West for input and editing. And to my dear little Martin, you are a brave soul. May our Creator continue to bless and protect you.

For further information, including medical journal articles showing a vaccine link to anaphylaxis, please visit VRAN's webpage at www.vran.org under the heading "Anaphylaxis".

#### Footnotes

- [1] Richet, Charles - Nobel Lecture Dec. 11, 1913  
<http://www.nobel.se/medicine/laureates/1913/richet-lecture.html> (April 3, 2006)
- [2] Merriam Webster Medical Dictionary  
<http://www.nlm.nih.gov/medlineplus/mplusdictionary.html>
- [3] Health Canada - It's Your Health - Severe Allergic Reactions. [http://www.hc-sc.gc.ca/iyh-ysv/med/allerg\\_e.html](http://www.hc-sc.gc.ca/iyh-ysv/med/allerg_e.html) (April 3, 2006)
- [4] M. Carolyn Black, "The potential power of Bill 3 - Measure aims to protect estimated 40,000 Ontario students with a life-threatening allergy to such things as peanuts or insect stings" Toronto Star March 30, 2005
- [5] Health On The Line - "Severe Allergies" - Videocassette - Discovery Health 2002
- [6] Beyer K. et al, Effects of cooking methods on peanut allergenicity. J Allergy Clin Immunol 2001 June;107(6):1077-81
- [7] Ewan, PW. Prevention of peanut allergy. Lancet. 1998 Jul 4;352(9121):4-5.
- [8] World Health Organization. Immunization Profile - China  
[http://www.who.int/immunization\\_monitoring/en/globalsummary/countryprofileresult.cfm?C='chn'](http://www.who.int/immunization_monitoring/en/globalsummary/countryprofileresult.cfm?C='chn') (Feb. 17, 2006)
- [9] Levine et al, Haemophilus influenzae Type B and Streptococcus pneumoniae as Causes of Pneumonia Among Children in Beijing, China. Emerg Infect Dis 2000 6(2)
- [10] World Health Organization. Immunization Profile - Indonesia  
[http://www.who.int/immunization\\_monitoring/en/globalsummary/countryprofileresult.cfm?C='idn'](http://www.who.int/immunization_monitoring/en/globalsummary/countryprofileresult.cfm?C='idn') (Feb. 17, 2006)
- [11] World Health Organization. Haemophilus influenzae type B vaccine -  
<http://www.who.int/vaccines/en/haeflub.shtml> (Feb. 17, 2006)
- [12] World Health Organization.

[http://www.who.int/immunization\\_monitoring/en/globalsummary/countryprofileresult.cfm?C='swe'](http://www.who.int/immunization_monitoring/en/globalsummary/countryprofileresult.cfm?C=swe) (April 4, 2006)

[13] van Odijk J. et al, Specific IgE antibodies to peanut in western Sweden - has the occurrence of peanut allergy increased without an increase in consumption? *Allergy* 2001 Jun;56(6):573-7

[14] Ewan, PW, Clinical study of peanut and nut allergy in 62 consecutive patients: new features and associations. *BMJ* 1996 Apr 27;312(7038):1074-8.

<http://bmj.com/cgi/content/full/312/7038/1074>

[15] Vadas, P, et al, Detection of peanut allergens in breast milk of lactating women. *JAMA* 2001 Apr 4;285(13):1746-8.

[16] Zimmerman B, et al. Highly atopic children: formation of IgE antibody to food protein, especially peanut. *J Allergy Clin Immunol* 1989 Apr;83(4):764-70 PMID 2708736

[17] Study Acquits Peanuts in Allergic Reaction - Finds condition stems from abnormal immune response. Accessed April 6, 2006

<http://www.healthcentral.com/news/newsfulltext.cfm?id=512529>

[18] Turcanu V, et al. Characterization of lymphocyte responses to peanuts in normal children, peanut-allergic children, and allergic children who acquired tolerance to peanuts. *J. Clin. Invest.* 2003 Apr; 111:1065-72. PMID: 12671056

<http://www.jci.org/cgi/content/full/111/7/950>

[19] Philip F. Incao, MD. How Vaccinations Work . May 5, 1999 <http://www.ei-resource.org/articles/gulfwar-art07.asp> (April 1, 2006)

[20] NICHD Researchers Honored by World Health Organization for Developing Vaccines Against Hemophilus Influenzae December 10, 1996

<http://www.nichd.nih.gov/new/releases/cviawar2.cfm> (April 4, 2006)

[21] Health Canada Vaccine Preventable Diseases [http://www.phac-aspc.gc.ca/im/vpd-mev/hib\\_e.html](http://www.phac-aspc.gc.ca/im/vpd-mev/hib_e.html) (April 4, 2006)

[22] Nicol M, et al. Haemophilus influenzae type b conjugate vaccine diluted tenfold in diphtheria-tetanus-whole cell pertussis vaccine: a randomized trial. *Pediatr Infect Dis J* 2002 Feb;21(2):138-41 PMID: 11840081

[23] Pichichero, ME. New Combination Vaccines. *Pediatr Clin North Am* 2000 Apr;47(2):497-26 PMID: 10761511

[24] Pabst HF, Spady DW. Effect of breast-feeding on antibody response to conjugate vaccine. *Lancet* 1990 Aug 4;336(8710):269-70

[25] Scheifele et al. Breastfeeding and antibody responses to routine vaccination in infants. *Lancet.* 1992 Dec 5;340(8832):1406.

[26] Rennels MB et al, Diminution of the anti-polyribosylribitol phosphate response to a combined diphtheria-tetanus-acellular pertussis/Haemophilus influenzae type b vaccine by concurrent inactivated poliovirus vaccination. *Pediatr Infect Dis J* 2000 May;19(5):417-23

[27] Pediatric Infectious Disease Issues: Smallpox, Combination Vaccines and Methicillin-resistant *Staphylococcus aureus*, American Academy of Pediatrics Annual Meeting 2004.

<http://www.medscape.com/viewarticle/466494> (March 27, 2006)

[28] Redhead K et al. Combination of DTP and Haemophilus influenzae type b conjugate vaccines can affect laboratory evaluation of potency and immunogenicity. *Biologicals* 1994 Dec;22(4):339-45 PMID 7779360

[29] Primeau MN, Adkinson NF Jr, Hamilton RG. Natural rubber pharmaceutical vial closures release latex allergens that produce skin reactions. *J Allergy Clin Immunol* 2001 Jun;107(6):958-62 PMID: 11398071

[30] Government of Massachusetts

- [http://www.mass.gov/dph/cdc/epii/imm/vac\\_safety/rubberthimerosal.pdf](http://www.mass.gov/dph/cdc/epii/imm/vac_safety/rubberthimerosal.pdf) (April 1, 2006)
- [31] Granoff DM, Munson RS Jr. Prospects for prevention of Haemophilus influenzae type b disease by immunization. *J Infect Dis* 1986 Mar;153(3):448-61 PMID: 3485160
- [32] van Alphen L, et al. Characteristics of major outer membrane proteins of Haemophilus influenzae. *J Bacteriol.* 1983 Aug;155(2):878-85. PMID: [6603458](#)
- [33] Munson RS Jr, Granoff DM. Purification and partial characterization of outer membrane proteins P5 and P6 from Haemophilus influenzae type b. *Infect Immun.* 1985 Sep;49(3):544-9. PMID: [2411657](#)
- [34] Munson RS Jr, et al. Purification and comparison of outer membrane protein P2 from Haemophilus influenzae type b isolates. *J Clin Invest.* 1983 Aug;72(2):677-84. PMID: [6603479](#)
- [35] Pichichero ME, et al. Do pili play a role in pathogenicity of Haemophilus influenzae type B? *Lancet.* 1982 Oct 30;2(8305):960-2. PMID: [6127463](#)
- [36] Hetherington SV, et al. Outer membrane protein binding sites of complement component 3 during opsonization of Haemophilus influenzae. *Infect Immun.* 1993 Dec;61(12):5157-63. PMID: [7693595](#)
- [37] Coulton JW, Wan DT. The outer membrane of haemophilus influenzae type b: cell envelope associations of major proteins. *Can J Microbiol.* 1983 Feb;29(2):280-7. PMID: [6406024](#)
- [38] Barenkamp SJ, Munson RS Jr, Granoff DM. Subtyping isolates of Haemophilus influenzae type b by outer-membrane protein profiles. *J Infect Dis.* 1981 May;143(5):668-76. PMID: [6972422](#)
- [39] Yang Y, Thomas WR, Chong P, Loosmore SM, Klein MH. A 20-kilodalton N-terminal fragment of the D15 protein contains a protective epitope(s) against Haemophilus influenzae type a and type b. *Infect Immun.* 1998 Jul;66(7):3349-54. PMID: [9632604](#)
- [40] Iwamoto R, et al. An antibody that inhibits the binding of diphtheria toxin to cells revealed the association of a 27-kDa membrane protein with the diphtheria toxin receptor. *J Biol Chem.* 1991 Oct 25;266(30):20463-9. PMID: [1939101](#)
- [41] Battistini A, et al. Inhibition of protein synthesis by diphtheria toxin induces a peculiar pattern of synthesized protein species. *Exp Cell Res.* 1988 May;176(1):174-9. PMID: [3371422](#)
- [42] Kegel B, Bonifas U, Silberbach K, Kramer B, Weisser K. In vitro determination of specific toxicity in tetanus vaccines. *Dev Biol (Basel).* 2002;111:27-33. PMID: [12678222](#)
- [43] Mayorga C, et al. Immediate allergy to tetanus toxoid vaccine: determination of immunoglobulin E and immunoglobulin G antibodies to allergenic proteins. *Ann Allergy Asthma Immunol.* 2003 Feb;90(2):238-43. PMID: [12602673](#)
- [44] Roberts M, et al. A mutant pertussis toxin molecule that lacks ADP-ribosyltransferase activity, PT-9K/129G, is an effective mucosal adjuvant for intranasally delivered proteins. *Infect Immun.* 1995 Jun;63(6):2100-8. PMID: [7768587](#)
- [45] Mayorga C, et al. Immediate allergy to tetanus toxoid vaccine: determination of immunoglobulin E and immunoglobulin G antibodies to allergenic proteins. *Ann Allergy Asthma Immunol.* 2003 Feb;90(2):238-43. PMID: [12602673](#)
- [46] De Gaspari EN. Production and characterization of new monoclonal antibody against Neisseria meningitidis: study of the cross-reactivity with different bacterial genera. *Hybridoma* 2000 Dec;19(6):445-53 PMID: [11152396](#)
- [47] Pons L, et al. The 18 kDa peanut oleosin is a candidate allergen for IgE-mediated reactions to peanuts. *Allergy.* 2002;57 Suppl 72:88-93. PMID: [12144563](#)
- [48] Kleber-Janke T, et al. Selective cloning of peanut allergens, including profilin and 2S

- albumins, by phage display technology. *Int Arch Allergy Immunol.* 1999 Aug;119(4):265-74. PMID: [10474031](#)
- [49] de Jong EC, et al. Identification and partial characterization of multiple major allergens in peanut proteins. *Clin Exp Allergy.* 1998 Jun;28(6):743-51. PMID: [9677140](#)
- [50] Lewis SA, et al. The promiscuity of immunoglobulin E binding to peanut allergens, as determined by Western blotting, correlates with the severity of clinical symptoms. *Clin Exp Allergy.* 2005 Jun;35(6):767-73. PMID: [15969668](#)
- [51] Pasini G, et al. IgE binding to almond proteins in two CAP-FEIA-negative patients with allergic symptoms to almond as compared to three CAP-FEIA-false-positive subjects. *Allergy.* 2000 Oct;55(10):955-8. PMID: [11030377](#)
- [52] Lee SH, et al. A 50 kDa maize gamma-zein has marked cross-reactivity with the almond major protein. *J Agric Food Chem.* 2005 Oct 5;53(20):7965-70. PMID: [16190657](#)
- [53] Database of Food Allergens in AgMoBiol - Common Allergenic Foods of Plant Origin - <http://amb1.lsc.pku.edu.cn/yjwy/Allergens2.htm> (April 4, 2006)
- [54] Wang F, et al. Ana o 1, a cashew (*Anacardium occidentale*) allergen of the vicilin seed storage protein family. *J Allergy Clin Immunol.* 2002 Jul;110(1):160-6. PMID: [12110836](#)
- [55] Frylinck L, Dubery IA. Protein kinase activities in ripening mango, *Mangifera indica* L., fruit tissue. III. Purification and characterisation of a calcium-regulated protein kinase. *Biochim Biophys Acta.* 1998 Sep 8;1387(1-2):342-54. PMID: [9748649](#)
- [56] Malkiel S, Hargis BJ. The use of adjuvants in sensitization of the mouse. *J Allergy.* 1959 Sep-Oct;30:387-93.
- [57] Kind LS, Roesner L. Enhanced susceptibility of pertussis inoculated mice to pollen extract. *Proc Soc Exp Biol Med.* 1959 Apr;100(4):808-10.
- [58] Kind LS, Richards WW. IND LS. Local and systemic anaphylaxis in the pertussis-inoculated mouse. *Nature.* 1964 Apr 18;202:309-10.
- [59] Helm RM et al. Nonmurine Animal Models of Food Allergy. *Environmental Health Perspectives* February 2003 Volume 111, Number 2, <http://www.ehponline.org/members/2003/5705/5705.html> (April 4, 2006)
- [60] Nelson MR et al, Anaphylaxis Complicating Routine Childhood Immunization: Hemophilus Influenza b Conjugated Vaccine. *Pediatric Asthma, Allergy & Immunology* Dec 2000,14, No. 4:315-321
- [61] Cooke et al, Allergy Induced by Immunization with Tetanus Toxoid. *Journal of the American Medical Association.* 1940 May;114(19):1854-58
- [62] Neill et al, Studies on Hypersensitiveness to Diphtheria Bacilli. *Journal of Experimental Medicine* 1929 Jan, 44:33
- [63] Patrizi et al, Sensitization to thimerosal in atopic children. *Contact Dermatitis.* 1999 Feb;40(2):94-7
- [64] Osawa J et al, A probable role for vaccines containing thimerosal in thimerosal hypersensitivity. *Contact Dermatitis* 1991 Mar;24(3):178-82
- [65] Martin-Munoz MF et al. Anaphylactic reaction to diphtheria-tetanus vaccine in a child: specific IgE/IgG determinations and cross-reactivity studies. *Vaccine* 2002 Sep 10;20(27-28):3409-12
- [66] Kumagai T et al, Gelatin-specific cellular immune responses persist for more than 3 years after priming with gelatin containing DTaP vaccine. *Clin Exp Allergy* 2002 Oct;32(10):1510-4
- [67] Sakaguchi M. et al, Food allergy to gelatin in children with systemic immediate-type reactions, including anaphylaxis, to vaccines. *J Allergy Clin Immunol.* 1996 Dec;98(6 Pt 1):1058-61.

- [68] Nakayama T, et al. A clinical analysis of gelatin allergy and determination of its causal relationship to the previous administration of gelatin-containing acellular pertussis vaccine combined with diphtheria and tetanus toxoids. *J Allergy Clin Immunol*. 1999 Feb;103(2 Pt 1):321-5. PMID: [9949325](#)
- [69] Yamanishi, R et al. *J Nutr Sci Vitaminol (Tokyo)*. 2003 Dec;49(6):409-13. PMID: 14974731
- [70] Can vaccines cause immune dysfunction resulting in allergies, asthma and anaphylaxis? <http://www.vran.org/vaccines/anaphylaxis/vaccine-ana.htm>
- [71] Untersmayr E, Jensen-Jarolim E. The effect of gastric digestion on food allergy. *Curr Opin Allergy Clin Immunol*. 2006 Jun;6(3):214-9. PMID: 16670517

## Bibliography

*Canadian Immunization Guide*, Sixth Edition. Ottawa: Canadian Medical Association, 2002

Diodati, Catherine. *Immunization History, Ethics, Law and Health*. Windsor: Integral Aspects Incorporated, 1999

Medline Medical Dictionary <http://www.nlm.nih.gov/medlineplus/mplusdictionary.html>

Scheibner, Viera, Ph.D. *Vaccination 100 Years of Orthodox Research shows that Vaccine Represent a Medical Assault on the Immune System*. Australia: 1993

*Your Child's Best Shot*, Ottawa: Canadian Paediatric Society, 1997