INTRODUCTION

The first article in this series (Macrobiotics Today, January/February 2005) provided background information regarding the history of vaccination and how the immune system functions. It was suggested that, due to multiple hazardous side effects, newborns should not be vaccinated, except under rare circumstances such as when the mother is hepatitis B positive, in which case the hepatitis B vaccine is indicated. The two most hazardous infant and childhood vaccines, hepatitis B vaccine (HPV) and oral polio vaccine (OPV), were discussed. An error appeared regarding the two polio vaccines: It is believed to be the oral polio vaccine (live-virus vaccine) that has been associated with transmittance of the simian immunodeficiency virus (SIV) to humans.

The present article will discuss childhood vaccination schedules, different kinds of bacterial and viral vaccines, and side effects of vaccination procedures. The third and final article will deal with the illnesses vaccines are intended to prevent and current trends in vaccination procedures. Perhaps the best online vaccine information source is the National Vaccination Information Center, http://www.909shot.com. Virtually all information necessary for making a decision regarding childhood vaccinations can be found at that site. Another important online source is http://www.thinktwice.com.

SIDE EFFECTS OF INFANT AND CHILDHOOD VACCINATIONS

The major debilitating side effects observed for infant and childhood vaccinations include juvenile onset diabetes, autism, asthma, immune system dysfunction, seizures, encephalitis/encephalopathy, and death. As well, many less severe reactions such as developing the illness which the vaccine is supposed to prevent, headache, inflammation, uncontrollable crying bouts, and fever are well known. Unfortunately, due to incomplete reporting to the Vaccine Adverse Effects Reporting System (VAERS), as well as control and censorship exercised by the medical-industrial complex, it is not currently possible to accurately estimate the frequency of occurrence any of these side effects.

As indicated in Part I, there are currently ten mandatory infant and childhood vaccines, each of which will be administered in various combinations several times to each child by the time the child is 4 to 6 years old. These vaccines are: hepatitis B, polio, diphtheria, tetanus, pertussis (whooping cough), measles, mumps, rubella (German measles), chicken pox (varicella-zoster), and Hib (Hae-mophilus influenzae b). Generally, diphtheria, tetanus and pertussis (DPT), and measles, mumps and
Table 1. Approximate Schedule of Childhood Immunizations. *

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>birth</th>
<th>2 mo</th>
<th>4 mo</th>
<th>6 mo</th>
<th>12 mo</th>
<th>4-6 yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>HBV (Hepatitis B)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DPT (diphtheria, tetanus, pertussis)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Chicken pox (varicella zoster)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OPV (oral polio vaccine)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>MMR (measles, mumps, rubella)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Hib-conjugate vaccine (Haemophilus influenzae b)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


rubella (MMR) are given as combination vaccines, as indicated in Table 1, which provides a sample of the approximate scheduling of these vaccinations. Scheduling may vary from state to state and country to country, and for different individual situations. The oral polio vaccine has generally been replaced in the United States by the injected vaccine, but the schedule is still similar.

**WHAT KINDS OF MICROBES ARE VACCINES PRODUCED TO PROTECT AGAINST?**

Before we discuss the major side effects of the various vaccines, it is valuable to review some of the information regarding the kinds of vaccines that are produced.

There are two major classes of microbes for which vaccines are produced: 1. bacteria and 2. viruses. Among the vaccines listed in the table above, anti-bacterial vaccines include diphtheria, pertussis (whooping cough), tetanus, and *Haemophilus influenzae* type b (which causes meningitis and other symptoms, not influenza, as the name implies. Influenza is caused by a virus). Anti-viral vaccines include measles, mumps, rubella (German measles), chicken pox, polio, and hepatitis B.

In order to appreciate some of the various side effects of the vaccines that are produced to act against these two types of microbes, it is valuable to have some information regarding how these microbes produce disease. This will also help in understanding why anti-viral vaccines are able to cause childhood onset diabetes (Type 1 diabetes).

**HOW DO BACTERIA PRODUCE DISEASE?**

In general bacteria do not directly produce disease. Instead, some bacteria secrete toxins which cause the disease symptoms; these are referred to as gram positive bacteria, due to certain staining characteristics. Other bacteria are killed by the body's defense system which causes them to release a toxin from the cell membrane that causes the disease symptoms; these are referred to as gram negative bacteria.

Vaccines used against gram positive bacteria (those that produce a toxin that causes the disease symptoms) use the purified toxin. In this case our bodies produce antibodies that recognize the toxin produced by the bacterium. (Anti-gram positive vaccines may also use inactivated bacteria, but none of the vaccines we are discussing fall in this category. Inactivated bacterial vaccines include those for pneumococcal pneumonia and cholera.)

Vaccines used against gram negative bacteria employ fragments of the bacterium, usually polysaccharide fragments of the cell wall. In this case, our bodies produce antibodies that recognize the bacterium itself (actually the cell wall of the bacterium).

**HOW DO VIRUSES PRODUCE DISEASE?**

Viruses are unable to reproduce outside a living host. For this reason there is some question as to whether viruses are living organisms or not. Some scientists think they are and others think they are not. Viruses are composed of either DNA or RNA, and may have a protein or glycoprotein coating. Viruses must enter cells in the body, and once within the cell they commandeer the cell's reproductive machinery to begin to reproduce.

DNA is mandatory for replication of a virus, as it is for any living cell. Therefore, if the virus is an RNA virus, the invaded cell first makes viral DNA from the RNA and this allows the virus to replicate. If the virus is a DNA virus, it can be directly replicated upon entry into a cell. In this regard, viruses can be quite dangerous since portions of the viral DNA can attach to the host cell DNA causing a DNA adduct. This has the effect of altering the host cell's hereditary structure.

Some of the newer anti-viral vaccines that are produced by genetic engineering could become very
dangerous in this regard – they could result in a DNA adduct that would change the very nature of humans. Viral DNA adducts are known that cause cancer. However, my assertion that a genetically engineered viral vaccine that causes a DNA adduct could change the physical constitution of humans is presently hypothetical.

However, the assertion is supported by observations regarding genetically engineered corn, soybeans, and other crop plants. “Roundup-Ready” corn is produced by inserting a gene into corn DNA that will allow the corn to metabolize the herbicide, Roundup. Thus Roundup can be used to kill all of the plants in an area while the Roundup-ready corn will grow because it can detoxify the Roundup. Since the introduction of Roundup-ready corn in North America, this genetically modified corn has spread and is found throughout the world, including remote places where Roundup-ready corn has never been grown.

A similar phenomenon could happen with human DNA that has a viral DNA adduct. Reproduction could result in transmission of the mutant DNA. Think of the consequences of a world-wide campaign to vaccinate everyone with a genetically engineered viral vaccine that produces a DNA adduct that causes mental retardation. Sounds like science fiction, but science fiction has a way of becoming science fact. The reason I mention this here is in order to emphasize how very important it is to avoid allowing your child to become a victim of any new experimentally engineered viral vaccine. Be aware and do not allow any new viral vaccine to be used on your child.

**How Many Types of Anti-viral Vaccines are There?**

Anti-viral vaccines are of three major types:

1. **Attenuated whole-virus vaccines.** Viruses tend to become less virulent if they are grown in culture for a long period of time or if they are passed through several generations of growth cycle. The oral (Sabin) polio vaccine is an example of an attenuated virus vaccine. Since the virus is not “killed”, and since it is grown in monkey kidney, the oral polio vaccine has been held responsible for conveying to humans the SV-40 virus that causes cancer and the SIV virus that has mutated to give rise to the HIV virus that causes AIDS.

2. **Inactivated or “killed” virus vaccines.** The quotation marks here are used to indicate that viruses may not even be living organisms, so how can we refer to them as being “killed”? These are vaccines made from viruses that have been treated by a chemical that causes them to be unable to penetrate a cell, and unable to reproduce if they should enter a cell. Formalin and phenol are two chemicals that are used to produce “killed”-virus vaccines. The Saulk polio vaccine, which is injected rather than taken orally, is an example of a “killed” viral vaccine. It is generally assumed (but not proven) that any extraneous monkey virus that may be present in the vaccine is also “killed” by treating with the chemical used to kill the vaccine virus.

3. **Subunit vaccines.** An antigenic fragment of the virus is used. The various subunit vaccines are primarily genetically engineered vaccines, and will be discussed at greater length in the final section of the next article.

**What is the Mechanism by which Anti-viral Vaccines Cause Type 1 Diabetes?**

One reason for providing this rather technical discussion of the differences between anti-bacterial and anti-viral vaccines at this point is because one potential side-effect of anti-viral vaccines is Type 1 diabetes (juvenile-onset diabetes). This may be a side effect of any anti-viral vaccine, even “killed” virus vaccines.

Viral infections often are associated with the onset of Type 1 diabetes. In particular, the mumps virus, Coxackie virus, and hepatitis C virus may lodge in the insulin-producing cells of the pancreas (beta-cells) where they stimulate the autoimmune destruction of the beta cells. The body recognizes something foreign in the beta-cells, and makes antibodies against the beta-cells in an effort to destroy the foreign organism lodged there. This results in destruction of the beta-cells. Observations on the development of Type 1 diabetes subsequent to vaccination with anti-viral vaccines indicate that these vaccines may behave similarly. The triple virus vaccine, MMR (measles, mumps, rubella) may be especially obnoxious in this regard. There is no cure for Type 1 diabetes. For additional information regarding viral vaccines as a cause of diabetes refer to the internet site, [www.909shot.com/Diseases/Diabetes](http://www.909shot.com/Diseases/Diabetes).

Type 1 diabetes may also be induced by the Hib (*Haemophilus influenzae b*) vaccine, which is a bacterial vaccine. Although this information is not conclusive the vaccine has been demonstrated to induce
autoantibodies to pancreatic beta cells, and to stimulate production of autoantibodies in individuals who are already autoantibody positive [J. Pediatr Endocrinol Metab 2003, Apr-May; 16(4): 495-508].

Can Infant Vaccination Result in Autism?

Autism is a type of neurological damage that results in a type of mental retardation frequently characterized by unresponsiveness and inability of expression. Frequently autistic children speak with a very limited vocabulary if they speak at all. First described in 1943, by the 1950s and 1960s hundreds of cases were known, and by the late 1980s over 4500 new cases were occurring each year in the U.S. alone. The first cases of autism were described when the pertussis (whooping cough) vaccine was becoming increasingly available. One characteristic of the pertussis vaccine is its affinity for the brain and central nervous system. Pertussis bacteria have been used in a variety of experiments to provoke brain inflammation (encephalitis) and brain deterioration (encephalopathy) in experimental animals. Brain deterioration has been documented following pertussis vaccination in some children. For an early review see A Shot in the Dark, Coulter, H.L. and Fisher, B.L., Avery Press, 1991.

We will return to the roles of the pertussis vaccine and mercury in vaccines in the next section, but let us first follow the interesting historical developments that have resulted in numerous epidemiological studies that have denied any relationship between the MMR vaccine and autism.

In 1963 a vaccine for measles was licensed; in 1968 the mumps vaccine was developed; in 1969 the rubella (German measles) vaccine was licensed. Finally, in 1979 the combined MMR (measles, mumps, rubella) vaccine was added to routine childhood vaccination schedules. Within a few years after that there was a sharp increase in autism, and several papers appeared linking the MMR vaccine to autism.

Unfortunately, these reports linking MMR to autism resulted in a huge effort to disprove this relationship — and the true link between pertussis vaccine and mercury in vaccines as causes of brain damage and autism were lost. This also overshadowed the other hazards of the MMR vaccine, which include arthritis, meningitis, encephalitis, polyneuritis, anaphylaxis, and death.

In 2002 a now famous epidemiological study involving more than half a million Danish children concluded: “...avoid allowing your child to become a victim of any new experimental genetically engineered viral vaccine.”


So there you have it. MMR vaccination is not related, according to the best epidemiological studies to date, to the increase in autism that has occurred since the 1980s when MMR was added to the childhood vaccination schedule. Why have these studies failed to find a relationship if one does exist? We cannot currently answer that question, but we should ask why these studies have focused so intently on MMR when it is the pertussis vaccine and mercury in vaccines that have caused most of the brain damage and autism resulting from vaccination programs? Perhaps the combined effect of MMR with pertussis (actually with DPT) should have been examined. This is a very complicated issue, and it becomes increasingly complex as more and more vaccines are discovered and may be added to childhood vaccination schedules. None of the cited studies demonstrate safety of the MMR vaccine; they have, in fact, avoided any attempt to show that the MMR vaccine is safe for children.

As stated earlier, MMR vaccination is believed to induce antibodies to the beta-cells of the pancreas, causing the irreversible destruction of these cells resulting in Type 1 diabetes. The epidemiological studies cited above would be more useful if they had attempted to study the association of MMR with the whole gamut of disease conditions that MMR is suspected of causing! But such is the limited nature of epidemiology.

Additional information in this regard can be found at www.thinktwice.com and www.909shot.com.

What Is the Evidence That Thimerosal (Mercury) In Vaccines Causes Serious Neurological Disorders, Including Autism?

Mercury is a cumulative neurological poison. Once mercury has entered the brain it is very difficult
to remove it. In fact, as far as can be told at present, virtually all of the mercury that enters the brain will remain there indefinitely. And yet, some vaccines continue to contain thimerosal (an ethyl mercury compound). Why? Because health authorities that direct vaccination programs, in particular the Centers for Disease Control and Prevention (CDC) deny that mercury in vaccines is a problem. A CDC fact sheet on vaccines states, “there is no evidence that children have been harmed by the amount of mercury found in vaccines that contain thimerosal,” and “mercury exposure from vaccines containing thimerosal is within the guidelines established by Federal agencies.”

Let me refer to a recent study, “A comparative evaluation of the effects of MMR immunization and mercury dose from thimerosal-containing vaccines on the population prevalence of autism.” [Geier, DA and Geier MR. Med Sci Monit. 2004, Mar; 10(3): PI33-9]. Conclusions: “These studies have shown that there is biological plausibility and epidemiological evidence showing a direct relationship between increasing doses of mercury from thimerosal-containing vaccines and neurological disorders, and measles-containing vaccines and serious neurological disorders. It is recommended that thimerosal be removed from all vaccines, and additional research be undertaken to produce a MMR vaccine with an improved safety profile.”

The FDA Modernization Act of 1997 made it necessary for mercury content of all drugs to be stated. More current efforts by the FDA have been directed toward elimination of mercury from all vaccines, but that still has not been accomplished. Mercury content of some of the vaccines licensed in the US can be found at www.immunize.org.

The Pertussis (Whooping Cough) Vaccine Causes Autism and SIDS

The pertussis vaccine was the first vaccine to come under fire with the publication of the book, “A Shot in the Dark: Why the P in the DPT Vaccination may be Hazardous to Your Child’s Health,” by Harris L. Coulter and Barbara Loe Fisher (Av- erly Publishing, 1991). In addition to having written this very important book, Barbara Loe Fisher maintains the web site previously mentioned, www.909shot.com. The book lists some of the numerous “side-effects” of the pertussis vaccine which include: fever as high as 106 degrees, pain, swelling, diarrhea, projectile vomiting, excessive sleeplessness, high pitched screaming, inconsolable crying bouts, seizures, convulsions, collapse, shock, breathing problems, brain damage including autism, and sudden infant death syndrome (SIDS). Babies die of SIDS at a rate seven times greater than normal within three days after getting a pertussis shot. Refer to Vaccines. Are They Really Safe & Effective? by Neil Z. Miller, New Atlantean Press, 2003, for a more complete discussion.

The purpose of the present article is to update information contained in the source books that are somewhat out of date. The information in those books is still valid, but updating is necessary. For this purpose I have chosen a recent article to update the pertussis vaccine issue: “An evaluation of serious neurological disorders following immunization: a comparison of whole-cell pertussis and acellular pertussis vaccines.” [Geier, DA and Geier MR, Brain Dev. 2004, Aug; 26(5): 296-300]. This article is important because it compares the two pertussis vaccines available today.

Background: Briefly, in 1981, Japan developed a new pertussis vac-
They examined emergency department visits, life-threatening reactions, hospitalizations, disabilities, deaths, seizures, infantile spasms, encephalitis/encephalopathy, autism, sudden infant death syndrome (SIDS), and speech disorders reported with an initial onset of symptoms within 3 days following whole-cell pertussis and acellular pertussis vaccines among those residing in the United States from 1997 to 1999. Statistical increases were observed for all events examined following whole-cell pertussis vaccination in comparison to acellular pertussis vaccination, excepting cerebellar ataxia. It is pointed out that the whole-cell pertussis vaccines contain 3000 different proteins, including several known neurotoxins.

Evidently a switch to the acellular pertussis vaccine is indicated, and presently only a small percentage of whole-cell pertussis vaccines are in use in the United States. However, it must be acknowledged that even that switch has not resulted in a safe vaccine. We will discuss the pertussis vaccine at greater length in the third and final article of this series.

Jym Moon was a personal student of Roger Williams at the University of Texas for 10 years and obtained his Ph.D. in biochemical Toxicology from Simon Fraser University in Burnaby, British Columbia. He is a fellow of the American College of Nutrition, a Certified Nutrition Specialist, and a lifetime member of G.O.M.F. Jym is working on a new book, Reaching for the Sun. He can be contacted by mail: Jym Moon, 2334 N. Fairmount St., Davenport, IA 52804 or by e-mail: jymmoon1@yahoo.com.

---

Silence

Though words have their time and their place
Our silence should be what we most revere
There are times when what’s said should be erased
Much better if those words disappeared

The calm that’s ere created by our silence
A strength for all to build upon and grow
All our idle chatter we needn’t dispense
For silence is God’s voice here below

Those who always chatter waste God’s energy
Through their ignorance all that Light is lost
Silence is the keynote to all harmony
Tapping vistas of Light, yet uncrossed

Too many spoken words limit power
Let points be made with meager words or less
Silence helps attunement to then flower
Touching hearts with Heaven’s sweet caress

As the space that silence creates grows fatter
If attention is not centered on our God
It opens the floodgates to all carnal chatter
Over delicate Light rays it runs roughshod

Ask the pearl shell what creates its content
What pray tell does make you so disposed?
The response received is truly heaven sent
It’s silence you see, for years my lips were closed

---

Multi-Instrumentalist and macrobiotic enthusiast Todd Green performs concerts and clinics around the United States and Canada on over 30 instruments, along with recording CDs, writing poetry, and creating music for film. Visit him at www.toddgreen.com.

© copyright 2005 by Todd Green