Vaccines and Brain Health
A GOOGLE SEARCH FOR ‘VACCINE SAFETY’ will return an overwhelming amount of conflicting, and often emotionally-charged, rhetoric about vaccines. Objective, scientifically-validated information about the risks and benefits of vaccines can be difficult to identify. As a passionate believer in the power of informed consent, I feel that we have a right to know the full breadth of available data so that we’re empowered to make our own decisions about our bodies and our children. As a practicing psychiatrist, my major concern is how vaccines affect brain health, behavior, and cognition. As a mother and a woman, I bring special entitlements to the conversation about bodily integrity, health choice freedom, and autonomy. To make your own judgment, it’s important to understand how vaccines work, who is recommending them, and why - and to ask questions. Because no one should be threatened by the process of further inquiry.

As such, I recently published a peer-reviewed scientific article, entitled ‘Psychobiology of Vaccination Effects: Bidirectional Relevance of Depression,’¹ that analyzed over 100 scientific studies to explore whether vaccines can be linked to neuropsychiatric disorders like depression. In this article, the new model of depression as an inflammation-mediated evolutionary mismatch, as opposed to a serotonin deficiency, is introduced and supported by a number of scientific studies. Next, information is presented that shows that inflammation can be promoted by many factors, including psychosocial stress and pro-inflammatory foods, and that this inflammation underlies many chronic diseases like depression. I then argue that since vaccines were designed before the discovery of DNA, the understanding of epigenetics, and the relevance of chronic inflammation as a disease driver, the inflammation that is deliberately caused by vaccines should be independently

¹ https://www.ncbi.nlm.nih.gov/pubmed/26348610
examined as a risk factor for inflammation-linked diseases, especially as vaccine-induced immune responses are fundamentally different from those generated by natural infection.\(^2\)

A key point of my article was that each person’s immune system is unique, and many of the responses to infections or vaccines cannot be predicted by controlling for measurable parameters like age, sex, and ethnicity. Of particular interest is an article aptly titled ‘Variation in the Human Immune System Is Largely Driven by Non-heritable Influences,’ which presents the many ways in which each person’s immune system is different.\(^3\) Researchers measured over 200 immunological markers from 210 healthy twins, showing that less than half of these immune parameters are determined by genetics. Notably, immune variability increases with age, suggesting that cumulative environmental exposures play a role in immune responsiveness. Given all these factors, the study concluded by showing that the influenza vaccine created variable immune responses, even among twins.

Ultimately, I suggested that the current one-size-fits-all approach to vaccination needs further scientific study, especially in terms of disease protection claims and brain-related adverse effects. Emerging science has called into question the effectiveness of vaccines, including the documentation of outbreaks in highly to completely-vaccinated populations\(^4\) and the finding that disease-causing microbes are quickly evolving to escape vaccine-induced immunity.\(^5\) Importantly, women, who are underrepresented in scientific study groups and more prone to autoimmunity, may incur an increased risk of adverse effects from vaccines.\(^6\)

Since the publication of my review article, another study emerged that linked vaccines to psychiatric disorders. Analyzing data from thousands of children, researchers found that children who had been diagnosed with OCD, anorexia, anxiety, tics, or ADHD were more likely to have received a prior vaccination than their matched controls. The highest degree of association, quantified by a Hazard Ratio, was for children with anorexia who had received a vaccine in the 3-month preceding period.

Perhaps even more compelling is an April 2017 scientific article, the first of its kind, that compared age-matched vaccinated and unvaccinated children to determine if there were significant differences in the diagnoses of acute and chronic illnesses. Researchers polled the parents of over 650 homeschooled children, aged either 6 or 12. In this mostly-Caucasian group, 39% of children were unvaccinated, 31% partially vaccinated, and 30% fully vaccinated. Using sophisticated statistical analyses to control for other variables, researchers determined the likelihood of acute and chronic illnesses with respect to vaccination status.

In terms of acute illnesses, vaccinated children were significantly less likely to have had chicken pox, whooping cough (pertussis), and rubella (though the rubella incidence was not significant). Vaccinated children were more likely to have suffered from otitis media (ear infection) and pneumonia, and there was no difference between vaccinated and unvaccinated groups in terms of Hepatitis A and B, high fever, measles, mumps, meningitis, influenza, and rotavirus.

Now here’s where it gets interesting. Vaccinated children were significantly more likely to have been diagnosed with a variety of chronic diseases. Perhaps most alarmingly, children who had received vaccines had higher incidences of neurodevelopmental disorders, including learning disabilities, ADHD, and Autism.

Spectrum Disorder, at a rate of 10.5% compared to 3.1% of unvaccinated children. Here is a full table of increased chronic illness due to vaccines:

<table>
<thead>
<tr>
<th>Chronic Illness Diagnosis</th>
<th>% Vaccinated Children Diagnosed</th>
<th>% Unvaccinated Children Diagnosed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allergic Rhinitis</td>
<td>10.4%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Other allergies</td>
<td>22.2%</td>
<td>6.9%</td>
</tr>
<tr>
<td>Eczema/atopic dermatitis</td>
<td>9.5%</td>
<td>3.6%</td>
</tr>
<tr>
<td>Learning disability</td>
<td>5.7%</td>
<td>1.2%</td>
</tr>
<tr>
<td>ADHD</td>
<td>4.7%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Any neurodevelopmental disorder</td>
<td>10.5%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Any chronic illness</td>
<td>44.0%</td>
<td>25.0%</td>
</tr>
</tbody>
</table>

You can read more about the details of this study [here](#).

Why am I writing this article, which will cover the fundamental mechanisms of vaccines as well as current studies? I wish to provide an objective, scientific foundation for open dialogue on a topic that affects all of us.

I've written about the risks of vaccines before. I advise all pregnant women to follow their intuition around current flu vaccine recommendations. I've exposed attempts to cover up the thousands of adverse events caused by the HPV vaccine, Gardasil. I've questioned the fundamental logic of the "us versus them" anti-germ premise that underlies vaccine design, presenting data that shows that vaccines can actually hinder immunity.

Given the increasingly polarizing dialogue around this one pharmaceutical product recommended to every healthy individual the world over, I'm called to raise a general awareness around this topic to enable people to draw their own conclusions, based on science that speaks to your personal belief system.
Vaccines Are Designed to Promote Inflammation

VACCINES AS WE KNOW THEM were born about 200 years ago, when Edward Jenner, widely considered the father of vaccination, took pus from a cowpox lesion on a young dairymaid’s hand and injected it into an 8-year-old farmhand to ‘protect’ him from smallpox. Subsequently, the boy developed a fever and lost his appetite for 9 days. Two months later (in July 1796), Jenner injected the boy with smallpox and noted that he did not develop disease. Jenner then concluded that this type of inoculation trains the immune system to be ready to fight off impending threats.

Amazingly, the way vaccines are made today is not much different from two hundred years ago.

Fundamentally, vaccines are designed to cause inflammation. Following Jenner logic, most vaccines contain a part of the “threat”, called an antigen, combined with chemicals that stimulate the immune system, called adjuvants. For example, the hepatitis vaccine contains a genetically-engineered version of the virus, along with aluminum salts as adjuvants. The purported mechanism is that the inflammation created by adjuvants is specific for the antigen (just like the concept that a pharmaceutical only affects its target and leaves the rest of the body alone), and therefore this targeted inflammation confers protection against the threat.

However, independent science is revealing that the immune system is far more complex than we realize. Specifically, there are three emergent scientific discoveries that should completely change the game: the microbiome, exosomes, and the role of psychology or beliefs in medical outcomes.

8 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1200696/
First, there has been an explosion of research attempting to characterize the microbiome, the collection of trillions of microbes like bacteria, viruses, and fungi that live in and on us. We’re learning that these microbes perform functions vital to our survival, including digestion, nutrient assimilation, and hormone production. The fast evolution of microbes helps us keep pace with our changing world; for example, gut bacteria can detox modern cleaning chemicals. Perhaps most importantly, a healthy microbiome is essential for effective immunity and mental health, and as such, any health interventions, including pharmaceutical products like vaccines, should be designed to work with this complex human-microbe ecosystem (or at the very least acknowledge its relevance).

Exosomes are nano-sized vesicles that cells secrete to communicate across long distances. These vesicles, which look like mini-cells, can contain proteins, RNA, DNA, and other signaling molecules that influence genetic expression. Exosomes are being intensely researched in the context of brain health, especially neurodegenerative and psychiatric diseases. While scientists are only beginning to understand the origins and functions of exosomes, researchers have shown that toxins like mercury and aluminum (which are contained in vaccines) induce the release of exosomes encoding ‘danger signs,’ suggesting that vaccines may alter the exosome network in disruptive ways that we simply do not understand.

Finally, the influence of our emotions and beliefs on immunity cannot be overstated. Both rigorous science\textsuperscript{15} and powerful experiences have confirmed the mind-body connection and the power of placebo. When people believe that they will heal, they do: the placebo effect has been shown to resolve depression, mend broken bones,\textsuperscript{16} and extend the life of cancer patients.\textsuperscript{17} The mandatory nature of vaccination implies that we cannot trust our bodies to fight off disease, and this fear-based implication erodes the very beliefs that enable true health.

\begin{itemize}
\item \textsuperscript{15} https://www.ncbi.nlm.nih.gov/pubmed/9656499
\item \textsuperscript{16} https://www.ncbi.nlm.nih.gov/pubmed/10069091
\item \textsuperscript{17} https://www.ncbi.nlm.nih.gov/pubmed/12509397
\end{itemize}
The Current Vaccine Development Process and Schedule are Predicated On Outdated Science

How are vaccines developed, anyway? After pharmaceutical companies devise concoctions of antigens and adjuvants, they run experiments on lab-grown cells and animals, like mice, to show that formulations induce immune effects. Vaccines are approved by the Food and Drug Administration (FDA) for human use after human trials have been done that show that formulations produce antibodies, a type of protein the immune system uses to coat invading disease components like viruses and bacteria. Notably, the FDA does not conduct these trials, but instead takes the word of the company seeking approval of their product. Because of financial pressures to get these products to market and to maintain patents, these results have even been fraudulently reported. For example, in the case of the Mumps vaccine, two Merck scientists sued in 2010, claiming that for 10 years, they had been compelled to use supplemental rabbit blood to manipulate the antibody efficacy of this vaccine. Vaccine manufacturers continue to argue that if the vaccine can generate antibodies that are specific for components of a disease-causing microbe, then the vaccine will be protective against that disease. However, several scientific insights conflict with the notion that antibody generation equals disease protection.

First, protective immunity involves parts of the immune system beyond antibodies, and studies have confirmed that the presence of antibodies doesn’t directly translate into protection. For example, even though the flu vaccine creates

18 [source](https://www.ncbi.nlm.nih.gov/pubmed/22386268)
antibodies, this vaccine is notoriously ineffective,\(^{19}\) with protection estimates ranging from 19% - 48% depending on the season.

Furthermore, the **vaccine schedule is a one-size-fits-all approach that has never (not once) been studied in its ever-growing entirety.** Additionally, vaccine formulations have never been studied against a true placebo for FDA approval. These studies can be even further compressed since the introduction of ‘fast-tracking’ in 1992, a method that pharmaceutical companies can pay extra for to accelerate FDA approval of their vaccine candidates, like Gardisil.\(^{20}\) These fast-tracked vaccines are often studied against false ‘placebos,’ like aluminum or another vaccine, raising the background rate of adverse events and ultimately making it impossible to identify the true risks of the vaccine relative to non-intervention. When they are, like in the Cowling et al study of the flu vaccine, the results are not industry-favorable - this study showed a 4x increase risk of non-flu infection after receiving the seasonal shot.\(^{21}\)

To suggest that a pharmaceutical product should be delivered to all persons regardless of age, weight, health status, and history is to ignore all of the advances of modern science that suggest that biochemical individuality is the key to health and wellness. **Many studies have shown that people react differently to vaccines based on age, stress levels,\(^{22}\) health status,\(^{23}\) previous exposures,\(^{24}\) genetics,\(^{25,26}\) and other ‘host factors’ that we can’t quantify** - like current

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\(^{21}\) [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3404712/](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3404712/)

\(^{22}\) [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2637301/](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2637301/)


\(^{26}\) [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2843136/](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2843136/)
Yet there have been no efforts to tailor vaccines to specific physiologies. As each person contains a unique signature of interrelated characteristics, people can react in wildly different ways to the same vaccines.

The current vaccine schedule requires multiple inflammatory chemicals to be injected with little to no time in between, with people (especially babies!) often getting multiple shots in a single office visit. This barrage of antigens and inflammatory chemicals can over-activate the psychoneuroimmune system for years. Amazingly, the MMR vaccine package inserts clearly state that co-administration with other vaccines has not been studied. And only one longitudinal study has been done to assess the whole vaccine schedule in primates; in this study, infant macaques that received the standard vaccination schedule showed significant changes in amygdala volume and activity. That’s right; vaccines can literally change brain structures.

While we don’t know who will react more seriously to vaccines in the short term, we do know that vaccines cause inflammation that may lead to psychiatric disorders like depression. Indeed, several studies have shown that vaccinating an animal creates inflammation in the body and brain. In some people, vaccines only create temporary and local inflammation, but in others, they can lead to harmful brain swelling, called acute disseminated encephalomyelitis. Based on reports suggesting that vaccines triggered a type of encephalitis in which antibodies attack brain receptors, researchers analyzed the relationship between vaccine components and the molecules attacking the brain. Finding strong associations, researchers concluded that encephalitis may be triggered by vaccines for H1N1, polio, or tetanus/diphtheria/pertussis. That is, the vaccine created antibodies that attacked brain molecules. How can reactions like this happen?

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29 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3889594/
Many Vaccine Ingredients are Known Toxins

Let’s revisit the flu vaccine, which millions of people of all ages are advised to get each year. What exactly is being injected into people’s muscles?

Vaccine Ingredients

Vaccines contain ingredients, called antigens, which cause the body to develop immunity. Vaccines also contain very small amounts of other ingredients – all of which play necessary roles either in making the vaccine, or in ensuring that the vaccine is safe and effective. These types of ingredients are listed below.

<table>
<thead>
<tr>
<th>Type of Ingredient</th>
<th>Examples</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preservatives</td>
<td>Thimerosal (only in multidose vials of flu vaccine)*</td>
<td>To prevent contamination</td>
</tr>
<tr>
<td>Adjuvants</td>
<td>Aluminum salts</td>
<td>To help stimulate the body’s response to the antigens</td>
</tr>
<tr>
<td>Stabilizers</td>
<td>Sugars, gelatin</td>
<td>To keep the vaccine potent during transportation and storage</td>
</tr>
<tr>
<td>Residual cell culture materials</td>
<td>Egg protein</td>
<td>To grow enough of the virus or bacteria to make the vaccine</td>
</tr>
<tr>
<td>Residual inactivating ingredients</td>
<td>Formaldehyde</td>
<td>To kill viruses or inactivate toxins during the manufacturing process</td>
</tr>
<tr>
<td>Residual antibiotics</td>
<td>Neomycin</td>
<td>To prevent contamination by bacteria during the vaccine manufacturing process</td>
</tr>
</tbody>
</table>

Flu vaccine ingredients

30 https://www.cdc.gov/vaccines/parents/vaccine-decision/index.html
All the flu vaccine components are potentially toxic; thimerosal is a mercury-based preservative, formaldehyde is a known carcinogen, gelatin and egg proteins are allergens, antibiotics are literally designed to kill cells, and I can’t even imagine how muscle cells respond to an influx of straight sugar.

The most common vaccine ingredient, aluminum, is in at least 18 vaccines, including the HepB vaccine that’s ‘required’ for infants. Even though aluminum salts have been injected into people since the 1920s, a 2015 scientific review paper confirmed that we still don’t know how they work. Aluminum stays in the body for several years, and it has been linked to chronic fatigue and cognitive decline, among other disorders. A pubmed search for ‘aluminum’ and ‘human toxicity’ returns over 4200 studies. My colleague, Dr. Suzanne Humphries, has explored the nature of this toxicity extensively.

A 2011 study states that aluminum is a risk factor for autoimmunity, long-term brain inflammation, and associated neurological complications.\(^{34}\) In fact, aluminum has been so frequently documented as triggers for autoimmunity that a new term has been coined: Autoimmune/Inflammatory Syndrome Induced by Adjuvants (ASIA).\(^{35}\) Autoimmunity is intimately connected to depression, as these conditions are both symptoms of a misfiring immune system. In fact, a study of 3.5 million people showed that having an autoimmune disorder increased the risk of a mood disorder by a staggering 45%!\(^{36}\)

Just a handful of scientific studies connecting vaccines with autoimmunity.


Further, we do know that these aluminum particles can reach the brain.\(^{37}\)

Mercury, another of the most common vaccine ingredients, is a known neurotoxin. The ‘safe dose’ of mercury recommended by the EPA is 2 parts per billion (ppb) per liter of drinking water. Amazingly, the **flu vaccine contains 50,000 ppb of mercury**.\(^{38}\) Even in very low concentrations, mercury can be toxic to brain cells. In one study, a dose of 0.5 ppb was enough to kill human brain cells.\(^{39}\) A person who complies with the current vaccine requirements will develop a staggering toxic burden, since mercury is in several vaccines, including whooping cough, tetanus, meningococcal, and Hepatitis B.

Vaccines contain a multitude of other toxins that can cross the blood-brain barrier, like formaldehyde, monosodium glutamate (MSG), detergents,\(^{40}\) and foreign proteins that can set off a variety of unpredictable immune responses. Further, several vaccines contain ‘weakened’ versions of viruses, which can activate latent viruses that are otherwise normally harmless.\(^{41}\) Activation of these latent viruses has been linked to schizophrenia and bipolar disorder.\(^{42}\)

Antibiotics in vaccines may be the most worrisome component. Antibiotics can kill beneficial bacteria in the microbiome, which orchestrates 70-80% of immune responses.\(^{43}\) Preliminary studies suggest that antibiotic-containing vaccines change the microbiome for the worse. In one study, researchers found that injecting mice

\(^{37}\) [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4981857/](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4981857/)

\(^{38}\) [http://www.nvic.org/faqs/mercury-thimerosal.aspx](http://www.nvic.org/faqs/mercury-thimerosal.aspx)


\(^{43}\) [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2515351/](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2515351/)
with a human flu vaccine led to colonization by harmful bacteria, like *Staph aureus*.\textsuperscript{44} And if you’re pregnant, exposure to antibiotics can increase the chances of your baby developing diseases like IBS, asthma, obesity, and diabetes later in life. Everything is connected, and many of these metabolic diseases coincide with psychiatric diagnoses like depression.

Louis Pasteur, famous for his work in pasteurization and vaccination, later regretted his war on microbes.

**So vaccines must work really well to compensate for all these risks, right?**

As much as I’d love to tell you that the benefits of vaccines are worth the risk, the scientific evidence suggests otherwise. Despite the aggressive vaccine schedule for infants, America has an abysmal infant mortality rate, with 1 in 143 babies dying before age 1.

\textsuperscript{44} [http://mbio.asm.org/content/5/1/e01040-13.full]
Scientific evidence is mounting that shows the link between vaccines and sudden-infant death syndrome (SIDS). Most infants die of SIDS at age 2-4 months, when babies are subjected to 11 shots containing 16 different vaccines.

Many will argue that vaccines have been helpful to eradicate diseases like smallpox. However, it’s important to contextualize the onset of vaccines with the decline in disease mortality rates; for example, several vaccines were introduced when infectious diseases, like measles, were already declining for other reasons.
In terms of modern infections, the flu vaccine is notoriously ineffective, with the current estimate of 48% effectiveness against a few strains of many. One study showed that receiving the influenza vaccine actually hampers your immunity, and another showed that this vaccine made people more susceptible to a worse version of the flu, H1N1 (swine flu). Further, several studies have shown that disease outbreaks occur in highly or completely vaccinated populations, and that vaccines can accelerate the evolution of existing microbes in a similar way that rampant antibiotic use creates antibiotic-resistant bacteria. Perhaps most strikingly, recent studies suggest that the immune response created by vaccines is incomplete, leading to increased infection risk.

References:
45 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3209321/
Overall, scientific data has confirmed the risks, but not benefits, of vaccines. Furthermore, over $3B has been paid out to vaccine-injured adults and children since 1989, and vaccine injuries are likely grossly underreported. It was in 1986 that pharmaceutical companies demanded protection from the government if they were to continue to manufacture vaccines that were incurring so many lawsuits at that point, arguing that they would be financially disabled by the continued consumer wrath. Because of subsequent legislation, you can no longer hold a pharmaceutical company, nor your doctor, responsible for injuries or even death that may occur as a result of vaccination. Despite the hundreds of studies that show the toxic effects of vaccine components and counter-indicate vaccination, more and more vaccines are being governmentally mandated.
So Where Do We Go From Here?

IF YOU’RE READING THIS and panicking (a natural reaction!) because you’ve been vaccinated, or you feel guilty for allowing your children to get vaccinated, the good news is that our bodies are remarkably forgiving. I’ve dedicated my clinical practice and beyond to helping people recover from psychiatric diagnoses, like depression, with proper nutrition, meditation practices, exercise, detox, supplementation, and mindset shifts. As it can be difficult and overwhelming to swap inflammatory habits, like stress and sugar, for nourishing ones, I have shared my approach in *A Mind of Your Own* (most of which is available in blog form for free on our site!) and created *Vital Mind Reset Program* to gently guide you towards radiant health. One of the best parts of this program is the supportive and energetic community that accelerates healing. Hundreds of people have reversed psychiatric diagnoses, reclaimed abundant energy, and felt their best.

Further, I encourage grassroots, sacred activism and urge everyone to stay abreast of the latest, unbiased research. Learning that vaccines are a cocktail of brain-penetrating inflammatory agents causes many people to ask questions about how they work and why we need them. I’d love to involve as many people as possible in these important conversations. Working together, we can enable real informed consent and encourage people to take a truly holistic approach to build their immunity through nutrition and wellness practices, no injections necessary.
Resources For Further Exploration

Books
- Vaccine Epidemic
- Dissolving Illusions
- Vaccine Illusion
- Saying No to Vaccines

Video
- http://www.greatergoodmovie.org/
- http://www.boughtmovie.com/
- http://vaxxedthemovie.com/
- The Truth About Vaccines

Websites
- http://www.drpalevsky.com/
- http://www.nvic.org
- http://www.greenmedinfo.com
- http://www.fearlessparent.org
- http://www.vaccinationcouncil.org
- http://www.hormonesmatter.com