

*The Wit & Wisdom of*

**HARRIET  
HALL, M.D.**

**THE  
SKEPDOC**

**TOP TEN THINGS YOU  
SHOULD KNOW ABOUT**

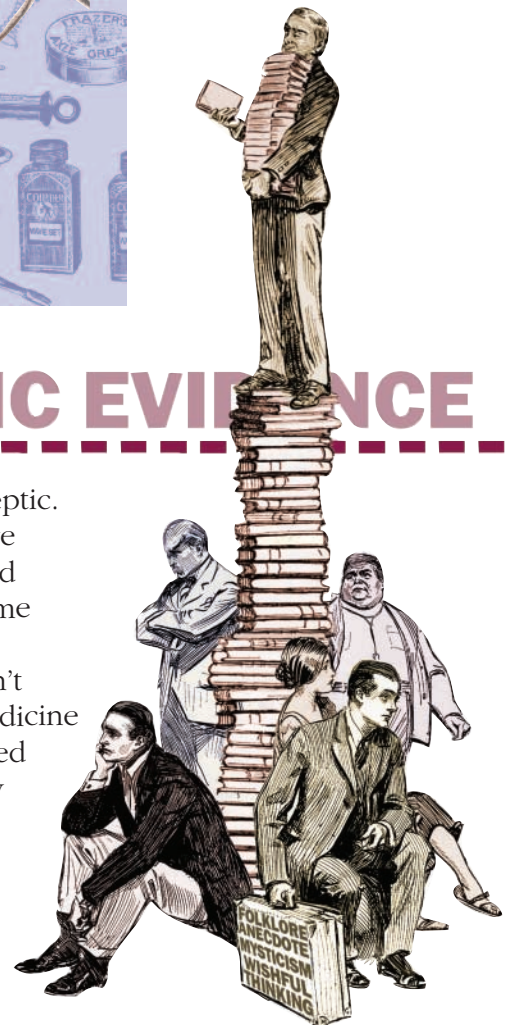
**ALTERNATIVE MEDICINE**

**1**

**ALTERNATIVE V.  
CONVENTIONAL  
MEDICINE**

## SCIENTIFIC EVIDENCE

I'm an equal opportunity skeptic. I'm skeptical about alternative medicine, pseudoscience, and quackery; but I apply the same standards of skepticism to conventional medicine. I don't write about conventional medicine so much, because I don't need to. Science itself is inherently skeptical and scientific medicine is self-criticizing and self-correcting. When better evidence comes along medical practices change.



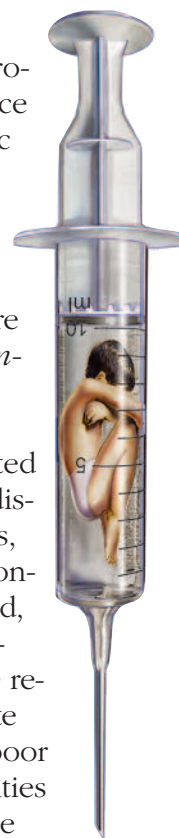
## 2 SWINE FLU VACCINE FEARMONGERING

Between April 15 and July 24, 2009, there were 43,771 confirmed and probable cases of H1N1 influenza (“swine flu”) in the U.S. There were 5,011 hospitalizations and 302 deaths, 39% among those aged 25 to 49, in contrast to the usual flu where 90% of the deaths are in people over age 65. The anti-vaccine zealots are scary. They are not insane, just self-deluded and misguided. I hope the swine flu won’t develop into a reprise of 1918; but if it does, the false information these people are spreading could be responsible for a great deal of death and suffering. These people are irresponsible fear-mongers. They are wrong, and they are dangerous.



## 4 VACCINES AND AUTISM: A DEADLY MANUFACTROVERSY

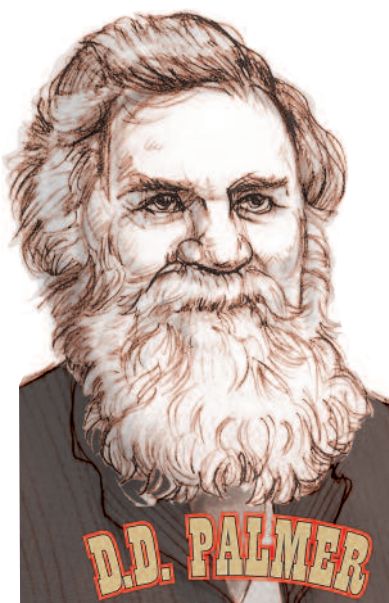
There is no vaccines-autism controversy. The evidence is in. The scientific community has reached a clear consensus that vaccines don’t cause autism. There is, however, a *manufactroversy*—a manufactured controversy—created by junk science, dishonest researchers, professional misconduct, outright fraud, lies, misrepresentations, irresponsible reporting, unfortunate media publicity, poor judgment, celebrities who think they are wiser than the whole of medical science, and a few maverick doctors who ought to know better.



Thousands of parents have been frightened into rejecting or delaying immunizations for their children.

The immunization rate has dropped, resulting in the return of endemic measles in the U.K. and various outbreaks of vaccine-preventable diseases in the U.S. Herd immunity has been lost. The public health consequences are serious and are likely to get worse before they get better—a load of unscientific nonsense has put us all at risk.

D.D. Palmer, a grocer and magnetic healer, invented chiropractic on September 18, 1895. He did something to a deaf man’s back. The man said he could hear again. This is particularly ironic, because the nerves to the ear don’t go anywhere near the spine, and no chiropractor today claims to be able to cure deafness.



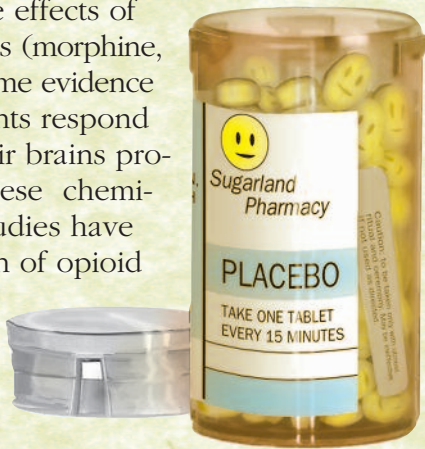
Chiropractic theory is based on three principles: (1) bony displacement causes all disease; (2) displacement interferes with nerve function; (3) removing the interference allows *Innate* (a vitalistic force) to heal the body. All three of these principles are false. (1) Chiropractic subluxations have never been demonstrated; (2) No impairment of nerve function has been documented; (3) No such vitalistic force has been detected.

## 3 CHIROPRACTIC: A LITTLE PHYSICAL THERAPY, A LOT OF NONSENSE



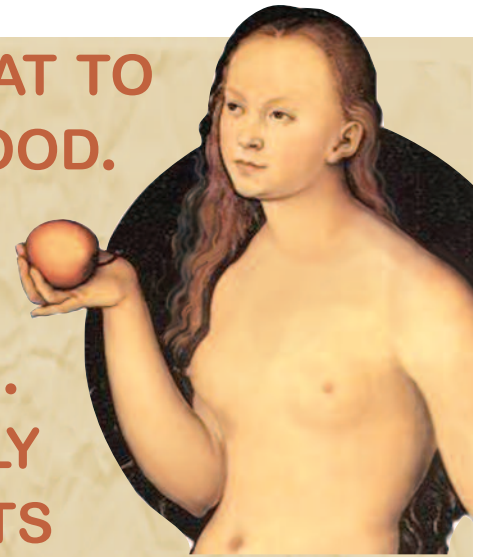
There's evidence that several things might be going on with placebos: expectancy, motivation, conditioning, and endogenous opiates.

(1) *Expectancy*: If we expect to feel pain we are more likely to feel pain. If we are told to expect a strong pain-killer, we're more likely to get pain relief. (2) *Motivation*: Patients who are strongly motivated to get well are more compliant and follow health advice more conscientiously. And patients who are more compliant about taking their placebo pills regularly get a stronger placebo response. (3) *Conditioning*: People learn to associate pills and medical treatments with relief of symptoms. (4) *Endogenous opiates*: pain-relieving chemicals produced in the brain mimic the effects of opium-like drugs (morphine, etc.). There is some evidence that when patients respond to placebos, their brains produce more of these chemicals. Imaging studies have shown activation of opioid receptors in the brain when people are told that a placebo is a painkiller.



## 5 THE PLACEBO EFFECT

## 6 WHAT TO EAT: FOOD. NOT TOO MUCH. MOSTLY PLANTS



*Organic* has become a meaningless buzzword; I flinch when I see it on a label: it inclines me not to buy that product. What we really want is sustainable agriculture that does minimal damage to the environment and produces food that is nutritious, tastes good, and has no unnecessary contaminants. *Organic* food as currently defined doesn't necessarily achieve those goals. Produce may have been trucked long distances using up fossil fuels and making it less fresh than local produce; it may cost more and not look as pretty. It may not use land efficiently. Absent pesticides, plants may produce higher levels of natural pesticides for self-defense—could that be bad for us? Sometimes locally grown foods that are not technically “organic” are a better choice. We should ask questions rather than reflexively buy “organic.”

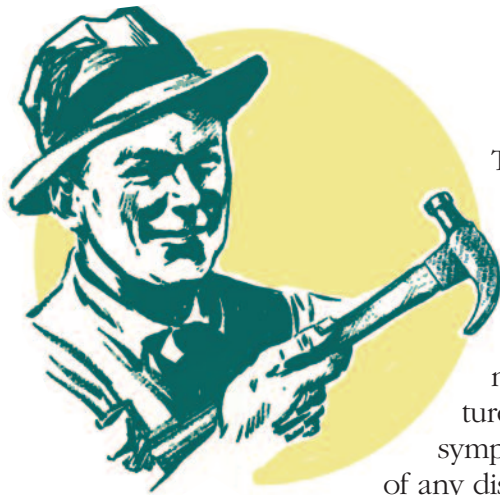
## 7 HOMEOPATHY: STILL CRAZY AFTER ALL THESE YEARS

Homeopathy was invented by Samuel Hahnemann in the late 1700s. It is based on the now-outdated principle that “like cures like,” and the more dilute the dose the better in homeopathy. How dilute? Serious dilution, as in comparable to one drop diluted in all the water on Earth. When they realized that no molecules of the original substance were left in most homeopathic dilutions, homeopaths rationalized that the water must “remember” what it had come into contact with—as in clusters of water molecules somehow holding the memory of their encounters with the allegedly curative substances. Unfortunately, homeopaths have failed to explain how water can remember what it's supposed to remember, and forget all the other memories of coming into contact with various trace contaminants, elements, bacteria, and what ever else happened to float by at the time.”

I'm rather fond of my recipe for the the Common Cold” column:” “start hope that the water remembers the



homeopathic Oscilloccocinum from my “Curing with duck liver, dilute the duck out of it, and duck.” In my opinion, all that leaves is a “quack.”



## 8 ACUPUNCTURE

There were originally 360 acupuncture points (based on the number of days of the year rather than on anatomy). Currently more than 2000 acupuncture points have been ‘discovered,’ leading one wag to comment that there was no skin left that was *not* an acupuncture point. There were either 9, 10, or 11 meridians—take your pick. Any number is as good as another, because no research has ever been able to document the existence of acupuncture points or meridians or chi. Acupuncture has been shown to ‘work’ to relieve pain, nausea, and other subjective symptoms, but it has never been shown to alter the natural history or course

of any disease. Studies have shown that acupuncture releases natural opioid pain relievers in the brain: endorphins. Veterinarians have pointed out that loading a horse into a trailer or throwing a stick for a dog also releases endorphins. Probably hitting yourself on the thumb with a hammer would release endorphins too, and it would take your mind off your headache.



## 9 BUT IT'S NATURAL, AND NATURAL IS GOOD!

When you really stop to think, is there any reason a remedy *should* be better just because it's natural? There are plenty of natural poisons, from hemlock to strychnine. Plants have to protect themselves from predators, and they have invented quite an array of chemical defenses. We go organic out of concern for artificial pesticide residues in our food, but natural pesticides make up 99.99% of the pesticides in our diet. Plants have no intention of helping us. If there's a chemical in a plant that's medically useful to us it's not natural: it's unnaturally good luck.

## 10 Detoxify This!

People who want to “detoxify” often don't have any idea what ‘toxins’ they're talking about. They may vaguely believe that modern life contaminates us with lots of bad things that we ought to get rid of. It's reminiscent of religious fasting and purification rites. Orthodox Jewish women go to a ritual bath (Mikveh) that restores them to purity after childbirth or menstruation. Shamans used smoke for purification.

Numerous religions observe periods of fasting. American Indians used sweat lodges for purification and sacred ceremonies. It's mysticism, not science. Our bodies come equipped with livers, kidneys, stomachs, intestines, enzymes, and metabolic processes that deal with toxins efficiently with no outside help. There is no medical evidence to support any other methods or benefits of “detoxification”.

