



The Newsletter of The North Texas Skeptics

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Skeptical news and views

OPEN FORUM This column is the "readers' forum" open to any and all! Each piece will be individually signed using the format displayed below for the reader's convenience. Please send your items to the Editor by the 15th of each month for inclusion in the next month's issue.

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NTS MEETS MENSA (AND VICE-VERSA)

As some of you know, NTS did a presentation on rational skepticism for the DFW area Mensa group at their most recent general meeting. The attendees all seemed to be very friendly and interested so my initial concerns about "getting in over my head" quickly dissipated and it was an enjoyable evening.

Much of the discussion was about what rational skeptics are and what they are not. Since those basic questions are constantly recurring, the following is a synopsis of the points we presented:

WHAT RATIONAL SKEPTICISM IS

Rational skeptics routinely question claims to truth. They demand 1) explicit definitions; 2) consistent logic, and; 3) convincing evidence before accepting them as being valid beyond a *reasonable* doubt. (Those claims are not regarded as valid beyond *all possible* doubt however, since future discoveries may dictate a reevaluation.)

The philosophy is an essential part of objective scientific inquiry or *any other* search for an extremely reliable level of knowledge. (Virtually *all* progress has been guided by those willing to question, to reevaluate and to continuously seek more valid answers.)

It is not limited to scientific disciplines, per se. It's a *methodology* for acquiring knowledge. (While it *is* essentially the same as the "scientific method" which was derived from rational skepticism that methodology can be applied to many

subjects.)

Rational skepticism tends to produce highly reliable results. It also promotes flexible decisions and value-weighted opinions since freedom from certainty is *the* element that enables us to make value-type judgments. (Credulity, on the other hand, produces dogmatic-type decisions and opinions, unreliable results and is potentially very dangerous.)

Skepticism cannot endanger *real* truth. If a contention is valid, even the most demanding questioning should only produce additional confirmation. If it's wrong, we gain an opportunity to discover the *correct* answer. (Either way, we come out ahead; sincere questions should be welcomed, not avoided.)

WHAT RATIONAL SKEPTICS ARE *NOT*

There are a number of misconceptions about skeptics. The most common ones seem to be that they are:

Indecisive - Skeptics are simply realistic. They're aware that their decisions and opinions are typically based on the best available information and they proceed accordingly. (In the flying business that's called "having a strong sense for self-preservation".)

Cynical, hyper-critical or "negative" -- Actually skeptics tend to be very open-minded. No ideas are rejected "out of hand."

(Objective questioning is *not* "criticism" -- and criticism should *not* be confused with *critical thinking*.)

Atheists There is no (known) objective test for a Deity so rational skeptics concede that there's a finite possibility *either* way. (They may have *opinions* as to the probabilities, however which can, likewise, be either way.)

Advocates of the paranormal, "fringe" science, etc. Skeptics spend a fair amount of time evaluating such claims, but that's simply because there are so many of them. Uncritical acceptance of them can be hazardous so a very critical, but fair, evaluation seems to be dictated. Interest in evaluating a subject does not imply one is, in any way, an advocate of it. (I've included this one because we get a fair amount of mail from the "fringe" types that seem to feel we might help with their "crusades." Sorry y'all got a wrong number!)

Note: I realize the above may be "old hat" for many of you. If so, I offer it merely as a "handy-dandy" check list for your convenience. At the same time, I've noted that many of our readers are still not QUITE sure what rational skepticism (or NTS) is all about so I decided to "go for it."

— **JV**

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ASTONISHING PSI-MISSING

You'd think that the psychics making their January predictions of the year would be paying more attention, wouldn't you? I mean, who have been better candidates for timely death than Ezra Taft Benson, the late Prophet of the Mormon Church, and Rabbi Schneerson, the also recently-departed leader of the Jewish ultra-orthodox Lubavitcher sect? Both men were in their 90s and known to be in poor health, after all. But did any of our psychic prestidigitators foresee the death of these men? It would also have been a fair bet to say that many in the Lubavitcher camp would deny that their Messiah was actually dead yet none of those who claim to be tuned in to future vibrations ventured that prediction either, it seems. I can understand the absence of any psychic visions of, say, the O.J. Simpson matter, or former President Jimmy Carter's running off to North Korea to save the world from the brink of nuclear destruction. But failing to "predict" the deaths of people in their 90s? How pathetic!

— **TG**



PSEUDOSCIENCE ON NETWORK TV

NBC appears ready to challenge CBS's lead in airing pseudoscience on network television with their July 5th broadcast of *CURED! Secrets of Alternative Healing*, a two-hour showcase of pro-quackery gibberish hosted by that eminent health authority, Olympia Dukakis. The same network that admitted to rigging exploding gas tanks on GM pickups to further an investigative report has done their stockholders, viewers and advertisers a great disservice by besmirching what is left of NBC's good name with the largely fact-free *CURED!* schlock-u-drama.

When television producers are faced with filling two hours on a subject devoid of objective, scientific evidence in favor of their proposition, they resort to the tactic of creating the appearance of fact with dramatized, anonymous anecdotes. Save for an occasional skeptical sentence or two from leading health-fraud experts Dr. Stephen Barrett and Dr. Victor Herbert, the *CURED!* format was to present vignettes of alleged and anonymous cases portrayed by actors, where, you guessed it, "conventional" medical science utterly failed the patient and they turned to "alternative" medical modalities as a last resort. Miraculously, in each of the six cases profiled, including that of a dog named Rocky (!), the buffet of pseudoscientific treatments provided stunning positive results and each segment ended with happy, healthy patients with sunshine and smiles all around.

The segment on homeopathy was particularly offensive to rationalists. The vignettes started with scenes from ancient Greece purporting to show that Hippocrates "invented" the homeopathic process of "like cures like," later "re-discovered" by medical illustrator C. F. Samuel Hahnemann in the early 1800s. The show repeatedly used the term "Law of Similars" as if it is a demonstrable and well-accepted point of scientific fact when it is nothing more than a catch-phrase invented by homeopaths to try to attach the language of science to their anti-science alchemy. The very term "re-discovered" makes the viewer think that homeopathy has an objective scientific foundation of some sort, when in fact homeopaths have yet to provide a suitable explanation of how their potions *could* conceivably have any effect given the immutable laws of physics that work against their vanishingly dilute concoctions. Homeopathy was touted as a mainstream medical practice in France, Britain and India worthy of emulating here in the U.S.; the viewer is left to wonder why the health care practices of any of those countries should be adopted in place of the United States' preeminent system of scientific medicine.

Homeopathy, herbalism, acupuncture, guided imagery, and other dubious and fraudulent treatments were profiled, each depicted in the vignettes and narration as wondrous breakthroughs only now being "re-discovered" by Western practitioners. In Rocky's case, the pet's owners were interviewed at length by the homeopathic veterinarian before he decided on a dilution of belladonna in tablet form to treat the dog's herniated disc. The show went on to say that this case helps to "prove" the efficacy of the homeopathic pseudoscience, since animals are presumed to be immune from the placebo effect. Another segment showed a woman accepting medical advice from a cruise ship's *cabin steward* for treatment of her bleeding fibroids with a cayenne pepper mixture! The ship's medical doctor was portrayed as a well-meaning but ineffectual chap who could offer the woman nothing.

Throughout the show, commentary and innuendo by the narrator and by host Dukakis intimated that all these forms of pseudoscience are effective and proven the world over, except that here in the U.S. they face blind opposition by the big, bad modern scientific medical establishment. Additional clips in the show used the nonsensical approach of asking lay people in street interviews what their impressions of various alternative medical scams were, and how effective they considered each. What any of that had to do with the substance of the issue at hand is known only to the producer, for it served no purpose toward an intelligent examination of the question.

NBC will claim that they are off the hook for this egregious dissemination of virtually unchallenged hokum by virtue of the disclaimer shown for 10 seconds at the start of the 120-minute program. The production company, Coast to Coast, also offered to sell the credulous copies of the program on videotape via an 800-number for \$20, enriching themselves and spreading the nonsense even further. *Shame on NBC.*

— M.S.

SN&V Contributors this month: J.V. - Joe Voelkering; T.G. - Tim Gorski, M.D.; M.S. - Mike Sullivan

Skeptical cogitations

I believe that much 'knowledge' is indeed merely 'memory,' and that this is why so many misconceptions persist for such a long time. ... Because so many people are so thoroughly schooled in the common misconceptions, however, only the most brilliantly skeptical of them will ever discover a mistake. And even then, it will likely be denied for generations to come.

— **Marilyn vos Savant**

A skeptic is one who is willing to question any claim to truth, asking for clarity in definition, consistency in logic, and adequacy of evidence. The use of skepticism is thus an essential part of objective scientific inquiry and the search for reliable knowledge.

— **Paul Kurtz**

Science ... looks skeptically at all claims to knowledge, old and new. It teaches not blind obedience to those in authority but to vigorous debate, and in many respects that's the secret of its success.

— **Carl Sagan**

An optimist thinks the glass is half full; a pessimist thinks it is half empty; a rational skeptic wonders if it is simply double the required capacity.

Evaluate the other possibilities.

— **Jay von Gliker**

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Healthy Skepticism

By **Tim Gorski, M.D.**

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Bio-Tech Innovations Unfairly Attacked

The Luddites were disgruntled British factory workers who between 1811 and 1816 burned factories and destroyed newly-installed labor-saving equipment. But at least the Luddites could credibly claim that they were trying to keep from being replaced by machines. It's a bit harder to understand the fierce opposition of professional agitators like Jeremy Rifkin and their followers to the innovations in biotechnology now becoming available.

One of these is Calgene's "Flavr Savr" tomato, which stays fresh longer and can therefore be left to ripen on the vine instead of being picked green. No chemical agents or exotic additives are required to achieve this feat, either; the genetically-engineered tomato simply carries an anti-sense gene for the gene that codes for an enzyme involved in the softening breakdown of the tomato's fruit.

Think about it: a tomato plant would have a hard time perpetuating itself if it remained red, ripe, and firm. The softening and eventual physical disruption of the fruit (Yes, yes, it's a "vegetable," but technically speaking the edible portion of the tomato plant is a fruit.) is what facilitates the escape and dispersal of its seeds. It also facilitates ingestion by foraging animals, with the seeds passing through their digestive tracts and being further dispersed in this way.

This natural softening process occurs because the tomato produces an enzyme that causes it. And, like all proteins, this enzyme is produced from RNA which is transcribed from the tomato's genetic endowment of DNA. The *Flavr Savr* tomato contains an *antisense* gene for this enzyme. What this means is that, while the gene for the enzyme produces an RNA molecule which reads, say, ...AUGTAGTU..., the *antisense* gene produces an RNA molecule which reads ...TGUATUAG... This sequence of base pairs is complementary (i.e., A for Adenine base-pairs with T for Thymine, and G for Guanine base-pairs with U for Uracil and vice-versa) to the RNA message for the enzyme, and therefore specifically binds with it just as complementary strands of DNA form a stable double helix. But an RNA message which is bound up with an antisense strand of RNA is one which cannot be translated into the enzyme in question, which is consequently produced in much lower amounts, and with the expected and desired results.

The only difference between the *Flavr Savr* tomato, therefore, and the still-ripe "garden variety" is that the former has an extra stretch of DNA and a bunch of messenger RNA strands bound to their complementary opposites. When you eat it, the extra bits of DNA and RNA are degraded into the same constituents as any other DNA or RNA. Indeed, while some plants, including the tomato in its green parts, are known to contain deadly substances which may be alkaloids or other small molecules, and even proteins, nobody has yet been able to link any sort of toxicity whatsoever to a piece of ingested DNA or RNA. With the exception of viral particles containing such nucleic acids, which are vastly more complicated and invariably protected by protein coats of different kinds, DNA and RNA are completely nontoxic when eaten.

The *Flavr Savr* tomato is not spoilage-proof. Some of the enzyme in question is inevitably produced because the binding of its RNA messenger is not complete. Therefore it's reasonable to assume that the antisense RNA is also translated into small amounts of a protein. But while the amino acid sequence of this protein is determined by the sequence of base pairs in the RNA transcribed from the antisense gene, there will be no particular "sense" to the protein itself. The three-nucleotide groups that correspond to the various amino acids are redundant (there being only 20 amino acids and 64 combinations of nucleotides) and follow no discernible rules. There is no reason to suppose that the small amounts of protein made from the anti-sense gene would not be harmless, therefore, or that it would not be quickly degraded into amino acids like other proteins once ingested.

The impact of the *Flavr Savr* tomato, therefore, is that better-tasting tomatoes will be available to consumers. Fewer tomatoes will be lost due to damage and spoilage. In a word: *progress*.

Just as stupid, by the way, is the token opposition, reported in the media as if it were serious, to the newly available *Bovine somatomammotropin*, or *BST*. *BST* is an injectable hormone which, when given to cows, increases milk production. It's not a steroid hormone, though; it's not even synthetic. Small amounts of *BST* are found in milk naturally. But, because it's a protein hormone that's rapidly degraded into amino acids by the digestive system, it poses no hazard to humans.

In fact, the only material objection that the modern-day Luddites have been able to muster against *BST* is that cows with greater milk production may be more susceptible to infections of the udder, or mastitis. (The same is true of humans: most cases of mastitis are in breastfeeding mothers.) These cows will then be given antibiotics, goes the argument, which will find their way into the nation's milk supply. This, despite the fact that milk from *any* cows receiving antibiotics is supposed to be discarded. (Whereas, in humans, curiously enough, the usual recommendation for women with mastitis who are placed on antibiotics is to continue breastfeeding.)

Thus, there are no credible objections to the use of *BST* that would not apply just as well to the time-honored methods of breeding dairy cattle for greater milk production. It's a bio-technological shortcut, the result of which is more milk for less feed and, we might reasonably expect, at lower cost.

This information is provided by the D/FW Council Against Health Fraud. For more information, or to report suspected health fraud, please contact the Council at Box 202577, Arlington, TX 76006, or call metro 817-792-2000. Dr. Gorski is a practicing physician, chairman of the D/FW Council Against Health Fraud and a North Texas Skeptics Technical Advisor.

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The third eye

By Pat Reeder

It's summer in Texas, and the heat is on. The heat is also on proponents of "recovered memories," only it ain't hot enough yet. Here's the scoop ...

During its annual convention in Chicago, the American Medical Association issued a new policy statement on recovered memories. The statement read, "Few cases in which adults make accusations of childhood sexual abuse based on recovered memories can be proved or disproved. It is not yet known how to distinguish true memories from imagined events in these cases." They went on to urge therapists to address the mental and emotional needs of patients without dwelling on the truth or falsity of their "recovered" abuse memories.

Well, that's something, but it's not enough for many AMA members. They believe that the organization did not come down hard enough on recovered memories. Richard J. Ofshe, a social psychologist from U.C. - Berkeley, was typical of those who felt the AMA's stand was too weak. He said, "The recovered memory epidemic is the psychological-psychiatric quackery of the 20th century," but he believes the AMA and American Psychiatric Association have difficulty saying so because too many of their members have used the technique and would be risking their careers if their mistakes were exposed (just last month, a Napa, California, jury awarded what I consider a paltry \$500,000 to the father of a therapy patient whose questionable "recovered memories" of child abuse cost Dad his job, his family and his reputation).

Come on, AMA, you can do better than this! Your first duty should be to tell the truth, not to protect members who would profit by avoiding it.

Just remember, guys: If it ducks like a quack, it's a quack.

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It's so damn hot in Texas, let's circle the globe and see if there's any cool news out there ...

Reuters news service brings us several stories which remind us why there'll always be an England. First of all, London recently hosted Britain's first Convention of the Bizarre (not counting soccer games, sessions of Parliament or royal family reunions). About 1,000 people, believers and skeptics alike, turned out for the event, which was sponsored by The Fortean Times, the journal of strange phenomena. The usual topics were covered: alien abductions, links between UFOs and ancient archeological sites, and SHC, or spontaneous human combustion (sort of like what happened to O.J. Simpson).

The most interesting aspect of the story was the rundown of the merchandise for sale in the stalls. For instance, you could buy a video called "UFO Secrets Of The Third Reich" for \$20, a T-shirt that glows red in the presence of extraterrestrials for \$17 (it's probably just a plain red T-shirt, but I bet it sells big to paranoids), and my favorite item, the \$15 "Alien Defense Kit." If it keeps you from becoming an alien abductee, then I assume it contains a gun with which to shoot your hypnotherapist.

Unfortunately, at least 12 Britons could not attend the convention because they had jury duty, but they turned it into their own little convention of the bizarre. This jury found one Stephen Young guilty of murdering a honeymooning couple, but Young's attorney asked for an appeal, after he was anonymously informed that the jury arrived at their verdict by consulting a Ouija board. Three of the jurors allegedly contacted the dead groom, and he fingered Young as his killer, despite the handicap of no longer, technically, having fingers. I don't know who tipped off the lawyer ... maybe his Magic 8-Ball.

Also, after a rash of Satanic abuse claims (helped along by "recovered memories"), the British government conducted a lengthy and expensive investigation ... and discovered no evidence whatsoever that any of the claims were true. This naturally caused the pro-Satanic ritual forces to cry foul and accuse the government of a cover-up. For proof, they might consider the case of rock singer Bob Geldof, former leader of the Boomtown Rats and organizer of the Live Aid concert, whose garden was vandalized recently. The gardener found evidence of something having been burned there, and the word "Satan" spelled out on the grass with masking tape. Geldof was not home at the time, so don't blame him. Frankly, I think it was just a disgruntled fan, burning Bob's last solo CD and registering his displeasure that the Rats broke up.

Jetting eastward, we arrive in Iran, where soccer fans were allowed to watch World Cup games on TV for the first time since the 1979 Islamic revolution. But viewers were baffled when the cameras cut away from the players, who were suffering through a sweltering day in Chicago, to show the spectators, all covered from head-to-toe in overcoats and woolly hats. Turns out the Iranian government was splicing in crowd scenes from a winter game in order to protect viewers from the un-Islamic sight of women in revealing clothes, such as shorts and T-shirts. This proves once again that what keeps America a great and free nation is our right to bare arms!

Our final stop: Japan, land of the rising lunch. If you wonder why George Bush chucked upward while in Tokyo, then you probably haven't been keeping up with recent Japanese food fads. Health food advocates have been gobbling everything from shiitake mushrooms to (brace yourself) tuna fish eyeballs ("Here's looking at you!" I imagine them saying before each bite).

AP reports that the latest rage is a canned vegetable soup made with a fibrous root called burdock. The soup was invented and marketed by best-selling diet author and health guru Kazu Tateishi, who claimed that eating it could cure cancer and diabetes, lower blood pressure, and fix up a hangover. He says the soup made his bones so strong, he once let someone run him over with a four-ton truck and came away with nothing but a few tire marks. Just since April, he has sold over 800,000 cans of the soup at more than \$2 per can, and personal consultations cost up to \$180 each. Scads of Japanese, including the Prime Minister, swear by his soup. So what's the problem? There are two ...

1. Doctors at Kumamoto University's School of Medicine declared Tateishi's claims for his soup to be "insane."
2. The Asahi magazine discovered that Tateishi is not a doctor, as he claimed, but a cab driver. This could explain why being hit by a truck didn't faze him.

Tateishi is currently in jail, charged with illegally practicing medicine. In the meantime, his loyal followers continue to insist that the soup has cured them of all sorts of ailments. I would like to suggest an appropriate name for this cult: "Chowderheads."



Well, it's still too hot to get all worked up over any one subject, so let's close out with a couple of quick items, then all go in for lemonade, shall we? ...

The Environmental Protection Agency will not let San Diego clean up the river separating the city from Tijuana, even though it is polluted with raw sewage. The reason: the cleanup might disturb the "sewage-based ecology." That is to say, the slimy organisms which thrive in raw sewage are now protected species. Congress must have extended them protection as a professional courtesy. All I can say is, anyone who thinks that mold and bacteria are endangered species should take a peek at the grout in my shower.

On June 15th, Jay Leno took his *Tonight Show* cameras to a local UFO convention for some utterly hilarious deadpan interviews. We skeptics are often accused of not being open-minded when we suggest that at least some UFO proponents are ... how can I put this gently? ... NUTS! Well, as Jay showed the world, calling them "nuts" is redundant, because some of them might as well have a blinking neon sign hanging around their necks, reading, "Hi! I am NUTS!"

From the guy who insisted he's visited every planet in the solar system (but looked like he couldn't find Los Angeles on

a map) to the hollow-eyed guy who said that none of his vital information would be reported because all the reporters at the convention were really CIA plants sent there to suppress it (he included Jay Leno in his spook count), these people were such transparent loonies, the more serious UFO researchers must've been cringing to watch them. Personally, I laughed until I lost all track of time!

Speaking of unintentional comedy, the Fox Network recently premiered their latest paranormal embarrassment, *Encounters*. The first episode on UFO abductions and crop circles (is ANYBODY still baffled by crop circles?!) featured some interviewees who made Leno's pals look sane, combined with some wildly twisted statistics ("as many as five million Americans believe they have been abducted by UFOs!"). But I cannot hope to improve on the eloquence of Ft. Worth *Star-Telegram* critic Steve Smith. To quote: "Perhaps the worst series to premiere on network television since Fox's own *Good Grief*, which cast Howie Mandel as a zany, slapstick undertaker ... Nothing presented here is quite as inexplicable as how some highly paid network executive embraced this mess ... An irresponsible waste of good electricity." I should also quote Lisa Simpson of *The Simpsons*: "The Fox Network has sunk to a new low."

Speaking of twisting statistics to advance an agenda, check out Christina Hoff Sommers' new book, *Who Stole Feminism?* or read the lengthy excerpt in the June 27th *National Review*. Sommers recounts some of the most alarming and alarmist claims made by feminists and shows that they are not only completely false, but should never have been accepted at all by anyone with an ounce of rational thinking ability. For instance: Gloria Steinem, Naomi Wolf, and other feminist authors have trumpeted the claim that "150,000 females die of anorexia nervosa in the U.S. each year" (Ms Wolf says they were "starved not by nature but by men" ... certainly, they were not starved by themselves!). That is more than three times the total annual number of U.S. fatalities of both sexes from car wrecks!

In fact, according to the National Center for Health Statistics, the number of deaths from anorexia nervosa in 1991 was 54. The 150,000 number was an estimate of the number of sufferers of the disease. Yet the erroneous death figure has been repeated in numerous feminist writings, quoted in Ann Landers' column, and now appears in a women's studies college textbook ironically called *The Knowledge Explosion*.

Prof. Sommers does a great job of ferreting out phony statistics ("Domestic violence causes more birth defects than all other causes combined! Wife-beating increases 40% on Super Bowl Sunday!" ... both claims are utterly bogus), and tracing them back to their source. She then notes that despite the obvious ridiculousness of these claims, the media eagerly accepted and repeated them without question. This brings her to ask the pertinent question, "Where were the skeptics?"

Sitting here in front of a fan, keeping cool, asking embarrassing questions, and refusing to swallow anything ... except my lemonade.

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