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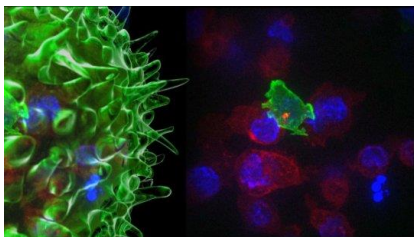


RATIONAL EVIDENCE-BASED COMMENT FOR THE GENERAL PUBLIC & HEALTH PROFESSIONALS. WE SAY EXACTLY WHAT WE THINK

**Immune System Defenses:** Cancer-killer T-Cells in Action. **Basic Instincts:** Spider Threat Awareness. **Frankenfood:** Cows Genetically Modified to Yield Fish Oils. **Recipes:** Avocado Butter. **Headline Critique:** Could Alzheimer's be Type 2 Diabetes? **Policy:** Corruption of Health Care Delivery System. **News Flashes:** Vitamin D Advice Low-balls; Sunny Coastlines; Obesity Bacterium is Diabetes Factor. **Letter:** Corruption of GMO Science. **Evolutionary Activity:** Shift to Farming Weakened Bones; Treadmill Desk. **Worthy Idiots:** Stopping Grannies Retiring Early. **Unintended Consequences:** Statins Strongly Linked to Diabetes.

### Immune System Defenses

#### Cancer-killer T-Cells in Action



Click to see video clip on YouTube:  
<http://bit.ly/1D5QEEj>

A dramatic video has captured the behavior of killer T-cells as they hunt down and eliminate cancer cells (shown blue) [1]. These T-cells patrol our bodies, identifying and destroying cancer cells and they do so with remarkable accuracy.

There are billions of T-cells within our blood. Each cell is engaged in the ferocious and unrelenting battle to keep us healthy. The cells, seen in the video as orange or green amorphous blobs, move around rapidly, investigating their environment as they travel.

When a killer T-cell finds a cancer cell (blue), membrane protrusions rapidly check out the surface of the cell confirming that it is to be destroyed. The T-cell then injects 'cytotoxins' (poisons) into the cancer cell. Its fate is sealed and we can watch as it withers and dies.

**My View?** Watch this film! Think about this wondrous microscopic world! Think of its furious activity working away to protect us! It reinforces my view that cancer only occurs when, in our ignorance, we sabotage our body's ability to deal with it.

### Basic Instincts

#### Spider Threat Awareness



The chances are, on this page, this image grabbed your attention first; not my portrait, not the cancer cell. So say researchers who studied how we have eyesight programmed for 'visual attention and awareness' of 'immediate and specific threats' throughout our evolutionary history [2].

Observers who were focused on specific tasks were not readily distracted by other images (such as a house-fly) coming into the edge of their vision. However, anything remotely spider-like grabbed their attention.

This phenomenon applied irrespective of any fore-knowledge, personal quirks or relevance to the task in hand. In the words of the researchers, "spiders demonstrated a singular ability to surmount 'inattentive blindness' and capture viewers' attention despite their very brief, unexpected, and peripheral appearance."

**My View?** Snakes evoke a similar reflex, see 'Hyper-fast Snake Response' [Nov 2013](#) [3]. Interestingly, babies' brains take about 3 years to wire up the reflex. In the meantime, parents must provide the protection.

### Frankenfood

#### Cows Genetically Modified to Yield Fish Oils

AgroIndustry is tireless in its pursuits of markets without any consideration as to how it is corrupting our food supply.

Now Chinese scientists have genetically modified cows to yield beef rich in omega-3 fish oils [4].

The team from Northwest A&F University and the National Beef Cattle Improvement Centre, both in Yangling (Shaanxi), introduced a gene into Luxi Yellow cattle, a Chinese breed with a high beef yield.

The 'fat1' gene, isolated from a nematode worm [really!], makes enzymes that convert omega-6 oils to omega-3 oils.

Say the researchers, "There is much to learn about the best scientific techniques to make beef a rich source of fish oils so that people eat beef that is better for them."

**My View?** What a travesty! We know perfectly well what we have to do to make beef conforming: just FEED the cows RIGHT! – and, breed them naturally back close to their ancestral aurochs form. See: 'Food Type Impacts Body-fats', [Jan 2014](#) [5]; 'How to Make Good Body-fat', [March 2010](#) [6]; 'Red Meat and Game Mammals', Deadly Harvest, [Chapter 3](#), page 58 [7].

See also:

- 'Corruption of GMO Science', page 3;
- 'Corruption of Health Care Delivery System', Page 2.

## Recipes

### Avocado Butter

Yield: about 1/2 cup



This is delicious on Paleo Bread or on Nicole's crackers (see: *Paleo Harvest* Chapter 3, Breads, Crackers & Crusts [www.paleo-harvest.com](http://www.paleo-harvest.com))

½ ripe avocado (about 3 oz, 85 g)  
2 tablespoons coconut butter, softened  
1 teaspoon fresh lime juice  
¼ teaspoon salt  
¼ teaspoon garlic powder  
ground black pepper, to taste  
7 drops of Tabasco, or to taste

Scoop pulp of avocado into a small mixing bowl.

Add coconut butter and all the other ingredients and process until smooth with an electric hand-mixer, or an immersion blender. Chill for 1 hour, but use at room temperature.

## Headline Critique

### Could Alzheimer's be Type 2 diabetes? (Daily Mail) [8]



80% of Diabetics are Obese

**Q.** What do you make of this article in the Daily Mail which says that Alzheimers is due to diabetes type 2?

There's a bit of re-inventing the wheel here because we've known for years that high insulin levels are A FACTOR in Alzheimer's. I wrote about it in 'Alzheimer's and Dementia', *Deadly Harvest*, [Chapter 9](#), page 253 [9].

The researcher, Ewan McNay opines that Alzheimer's is a

'diabetes of the brain' and that it might be possible to find ways of injecting medications into the hippocampus to improve insulin sensitivity.

This attitude depressed me until McNay added: " There is another way of staving off diabetes and any consequential Alzheimer's: Go to the gym and eat fewer Twinkies!"

**My View?** Just so!

## Policy

### Corruption of Health Care Delivery System

Eisenhower in the 1950s warned of the rise of the military-industrial complex. He warned that it will become a self-perpetuating Gargantua with such money and power over lobbying, subversion of lawmakers, and manipulation of the media – that governments could not control it.

Today we see similar complexes driving our lives like BigPharma and AgroIndustry.

Now, according to Drs. Glyn Elwyn and Elliott Fisher of The Dartmouth Institute, NH, USA., healthcare has suffered the same fate [10].

It has become less about well-founded, trusted relationships between healthcare professionals and patients, rather, it looks more like a profit-driven service industry, where commercial interests have influenced the value chain.

"The pharmaceutical industry has influenced medical practice by selective reporting, targeted educational efforts, and incentivizing doctors to prescribe in their favor."

"Also, the pharmaceutical industry has spent billions of dollars in direct-to-consumer advertising and has created new disease labels, so-called disease-mongering, and by promoting the use of drugs to address spurious predictions."

"Another mischief is 'publication bias', where results of trials that fail to demonstrate an effect remain unpublished, but trials where the results are demonstrated are quickly published and promoted."

Most damagingly they assert that in the USA, "consumer demand for healthcare is manufactured and manipulated, driving up cost, waste and harm."

Drs. Glyn Elwyn and Elliott Fisher paint a picture of a Behemoth manipulating the science, manipulating the medical profession, and manipulating the public to spend ever more ruinous sums on its industry.

It drives us to feel anxious and seek comfort in its solutions. It has absolutely no interest in sickness prevention.

## News Flashes

### Vitamin D advice Lowballs

On many occasions, of which the latest was [last month](#) [11], we emphasize how sunshine starvation is a major factor in disease. Largely, the impact is due to vitamin D deficiency.

Now the situation is even worse than thought: researchers reckon that the Institute of Medicine's (IOM's) under-estimates the requirements by a factor of TEN! [12].

### Sunny Coastlines

Meanwhile, to boost both sunshine and vitamin D levels, the English would do well to move to the coasts. Compared to inland dwellers, coastal populations have better health and well-being with higher vitamin D levels [13].

Opine the researchers: "coastal environments promote physical activity and reduce stress, but our study also suggests that higher vitamin D levels explain the health benefits seen."

## Obesity Bacterium is Diabetes Factor

A surprise finding shows how obesity is connected to diabetes through a quite unexpected route.

The skin of obese people is home to a toxic bacterium *Staphylococcus aureus* (staph). Its toxins disrupt the immune system, and are responsible for deadly effects such as toxic shock, sepsis and endocarditis (inflammation of heart tissue).

The latest study shows that the staph inflammation is a factor in diabetes [14].

**My View?** This is a quite unexpected angle on the harmful effects of obesity and its convoluted connection with diabetes.

### Letter

#### Corruption of GMO Science

"I am currently reading *'Altered Genes, Twisted Truth'* by Steven Druker.

"I can't tell you enthusiastically enough how his work is thoroughly convincing. He reveals that pro-GMO scientists have been influential in the huge scam and fraud forced upon the EPA [Environmental Protection Agency] and NAS [National Academy of Sciences].

"It has resulted in much of the scientific community actually believing that recombinant DNA seed production is more natural than natural breeding of plant crops, and that GMO crops are proven to be safe, though no research has been done to verify that premise.

"It has settled my mind about where the truth lies in the controversy between those who claim the safety of GMO foods and those who seriously question their safety."

- Dr Joe Thompson, WI, USA

Thanks for bringing this book to my attention, Joe. I don't know how such an important and vital work slipped me by!

I've looked at some of the reviews and it certainly seems that Druker has blown the lid on yet another Big Business conspiracy to subvert and misinform not only the general public but also the authorities who are supposed to protect us. See *'Corruption of Health Care Delivery System'*, page 2; *'Cows Genetically Modified to Yield Fish Oils'*, page 1.

### Evolutionary Activity

#### Shift to Farming Weakened Bones



Thigh bone cross sections: Paleolithic left, Medieval, right.

Modern humans have noticeably weaker bones than hunter-gatherers.

A study [15] by Prof. Christopher Ruff, PhD of Johns Hopkins University has some interesting conclusions. He examined the bones of hundreds of humans who lived over the last 33,000 years and found that the rot set in with the adoption of farming some 11,000 years ago.

Already, by medieval times, bones had got to the fragility that we know today.

"By analyzing many arm and leg bone samples from throughout that time span, we found that European humans' bones grew weaker gradually as they developed and adopted agriculture and settled down to a more sedentary lifestyle. The recent move into cities and other factors had little impact."

At the root of the finding, Prof. Ruff says, is the knowledge that putting bones under the 'stress' of walking, lifting and running leads them to pack on more bone and grow stronger. For example professional athletes often have bones as strong of those of hunter-gatherers. "The difference

in bone strength between a professional tennis player's arms is about the same as that between us and Paleolithic humans."

**My View?** Weak bones are optional. A change of lifestyle to increase activity, especially load bearing, will bring them closer to the strength that nature intended. See: *'Importance of Load Carrying'*, [Aug 2014](#) [16].

#### Treadmill Desk



We've talked about the adverse health impacts of sitting too long and how standing up regularly to work at a desk is healthier and improves cognitive function. See: *'Kids think Better on their Feet'*, [May 2015](#) [17]; *'More on Excess Sitting'*, [April 2015](#) [18].

Now, some people take the process one step further – they work on a treadmill desk, walking at about 1.5 mph.

But, you may ask, doesn't this make working more difficult? Two researchers at Brigham Young University, Utah, have checked it out [19].

They find that there is a slight reduction in cognitive function and in typing efficiency. However there is no impact on less demanding tasks such as checking email, telephoning or other non-fine-motor skill activities.

All things considered, say the researchers, the health advantages outweigh the slight reductions in efficiency.

**My View?** It's a sad commentary on how far we have diverged from our naturally adapted lifestyle. But I know to my own cost that we

have to make the best of the situation we find ourselves in.

### Worthy Idiots

#### Stopping Grannies Retiring Early

Researchers Robin Lumsdaine and Stephanie Vermeer at the American University, Washington D.C., find that women who have new grandchildren are 9% more likely to retire early than those who do not [20].

In qualification as 'Worthy Idiots', the researchers (both women) consider that this is a problem that needs to be fixed. In particular they want public policies that provide more childcare so as to "keep the older generation in the workforce longer" [Aargh!].

**My View?** The human species only survived thanks to the grandparent generation. In particular forager grandmothers

were vital in providing childcare and foodstuffs.

It is heartening to know that grandmothers are responding to ancestral voices calling them to look after the grandchildren. This is an instinct written in the genes and public policy should work with the grain of human nature, not oppose it.

### Unintended Consequences

#### Statins Strongly Linked to Diabetes

A very large and authoritative study finds that those taking statins were some 90% more likely to develop diabetes [21]. This occurred even in perfectly healthy people taking statins as a prophylactic.

They were also 14% more likely to become obese or overweight. Says lead author Dr, Ishak Mansi, "Short term clinical trials

do not show up the long-term risks of statin use for primary prevention [use as a prophylactic]... Ideally it is better to make lifestyle changes [diet and exercise] and avoid taking statins if possible."

**My View?** Just so! But BigPharma is not taking lying down this kind of adverse finding. It is busy drumming up studies to find something positive to say about statin use. Don't be fooled! See: '*Corruption of Health Care Delivery System*' page 2.

For 'Worthy Idiots' promoting prophylactic statin use, see: '*Big Mac with Statin Sides*', [Sept 2010](#) [22].

For BigPharma's manipulation of the evidence, see: '*Statin: Two faced Harlot*', [March 2015](#) [23].



**Deadly Harvest:** Geoff's latest work encapsulates current thinking on lifestyle anthropology. [www.deadlyharvest.com](http://www.deadlyharvest.com)



**Paleo Harvest Cookbook:** Over 170 delicious, Bond Precept conforming recipes [www.paleo-harvest.com](http://www.paleo-harvest.com)

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