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# The Bond Briefing

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

**Health Policy:** Young Cooks Fare best Later; Plus-size Normalization Risks. **Scientific Integrity:** "Climate Scientists are Giving Science a bad Name". **Ancestral Environment:** Hygiene & Mental Disorders. **Physician's Corner:** Cretan Bread OK? **News Shorts:** Adult Male Testosterone Depends on Childhood Environment; Leg Exercise vital for Brain Health. **Universal Human Behavior:** Six Types of Disgust. Team Sports have Ancient Roots; Social Bonding and Soccer Violence. **Human Social Dynamics:** Out-group & Anti-social Behavior; Tyranny of the Minorities – Social Change Tipping Point.

## Health Policy

### Young Cooks Fare Best Later



Adolescents who were good in cooking ability had, 10 years later as adults, fewer fast food meals, more meals as a family, and more frequent vegetable-based meals [1].

The researchers draw the moral that, in order to have a healthier adult population, we need to teach adolescents how to cook. They lament the abandoning of school cookery lessons since the 1960s. See: [Cookery Lessons for UK Fatties](#), Oct 2017 [2]

### Plus-size 'Normalization' Risks

Seeing the huge potential of fuller-sized fashions, retailers have enthusiastically promoted plus-size clothing. It is now so common that its ubiquity is making it seem a perfectly normal thing to be.

This has had the effect of duping overweight and obese people into thinking they are of normal weight. So finds Dr Raya Muttarak of East Anglia University, UK. [3]

In particular he found that the percentage of fat English men thinking that they are normal has risen from 48% in 1997 to 58% in 2015. English women were more self critical. Even so their numbers rose from 24% to 31%.

Dr Mutarrak also found that > p 4.

## Scientific Integrity

### "Climate Scientists Give Science a Bad Name"



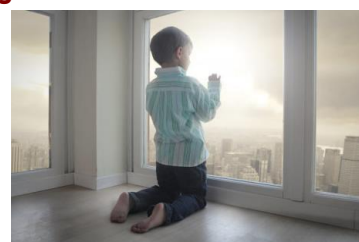
So says a leading atmospheric physicist in an essay on the global warming debate [4]. Professor Garth Paltridge, formerly a chief scientist with Australia's Commonwealth Scientific and Industrial Research Organisation (CSIRO) Division of Atmospheric Research, says that the behavior of certain members of the climate science establishment is "seriously threatening the public's perception of the professionalism of scientists in general."

Many climate scientists are much less sure about man-made global warming than they will admit in public, he says. But rather than reach out to skeptics in order to open up the debate and explore the uncertainties, they have instead closed ranks and rubbished anyone who disagrees with them.

Their high-handedness, Paltridge says, "Is redolent of 'medieval religion': It is not even certain that climate science qualifies as an actual science. Being driven by a political agenda rather than by experimentation and evidence, it is more akin to post-modernism. Post-modern science is a counterpart of the relativist world of post-modern art and design where, inspired by Nietzsche's nihilism, they posit that: "There is no > Next column

## Ancestral Environment

### Hygiene & Mental Disorders



Children who grew up in an urban environment without pets had a much-exaggerated inflammatory immune response [5]. They had elevated levels of inflammation markers like interleukin 6 and PBMCs (peripheral blood mononuclear cells).

Their levels of anti-inflammation markers such as interleukin 10 were depressed.

Such conditions open the way to depression and post-traumatic stress disorder (PTSD) later in life. In contrast, children raised > p 4

## Scientific Integrity (Cont.)

### Climate Scientists give Science a Bad Name (Continued).

objective truth, only interpretations."

"It is a much more dangerous beast, where results are valid only in the context of society's beliefs, and where the very existence of scientific truth can be denied.

Post-modern science envisages a sort of political nirvana in which scientific theory and results can be consciously and legitimately manipulated to suit either the dictates of political correctness or the policies of the government of the day.

Climate science is an example of 'post-normal science' in which 'the facts are uncertain, values are > p 4

### Physicians Corner

#### Cretan Bread OK?

**Q.** *I have told you how I lost 40 pounds and my lipids went to astounding levels when I eliminated grains and dairy from my Mediterranean diet. I have maintained the weight loss, and my wife has joined me in the diet. However, we really miss real bread, straight from the farmers market, made only from whole grain, water, yeast, and salt. We also miss the benefits for digestive regulation and prevention of breast and colon cancer. In the last #BondBriefing [June 2018], you say the Cretans: "Ate bread—a rough-ground, whole-wheat variety." As an immunologist, I know that even small amounts of antigen can provoke and maintain a boisterous immune response. So my question is: Would adding back 2 slices of whole grain bread daily counteract all of the benefits of the paleo diet? Would that amount of grain induce leaky gut, immune activation, and inflammation, thereby nixing the paleo diet benefits?*

**A. "Real Bread":** Ah yes! How enticing! As I frequently say, the Cretans and their Mediterranean lifestyle go a long way to the ideal. In fact, if everyone in the western world lived that way, a huge burden of sickness, disease, and misery would be lifted from its populations. However, from a purist Paleo point of view, the Cretan consumption of bread, albeit rough-ground and whole-wheat is a lapse. Such bread still contains gluten and is actually more loaded with anti-nutrients and plant poisons than the modern, refined sort. Be that as it may, the Cretan health and longevity demonstrate that they largely get away with it. You speak of keeping "regular" and having concerns about colon health. Yes, this fiber-rich bread will surely help with bowel movements, although what it does to the microbiome is still a mystery. The gut might be a little leakier and the immune response a little more "boisterous" but, being pragmatic, and if your body handles the antigens without obvious distress, then in my view eating bread like a Cretan is a good compromise.

### News Shorts

#### Adult Male Testosterone Depends on Childhood Environment

Men who grow up in environments where there is much infectious disease are likely to have lower testosterone levels in later life than those who spend their childhood in healthier environments [6].

Co-author Prof. Gillian Bentley of Durham University, UK, points out that our bodies are constantly juggling energy investment priorities:

In environments where people are more exposed to disease or poor nutrition, developing male bodies direct energy towards reinforcing the immune system at the cost of producing testosterone.

#### Leg Exercise vital for Brain Health

Using the legs, particularly in weight-bearing exercise, sends signals to the brain that are vital for the production of healthy nerve cells, essential for the brain and nervous system [7].

Cutting back on exercise makes it difficult for the body to produce new nerve cells -- some of the very building blocks that allow us to handle stress and adapt to challenge in our lives.

Says researcher Dr. Raffaella Adami, Università degli Studi di Milano, Italy: "It is no accident that we are meant to be active: to walk, run, crouch to sit, and use our leg muscles to lift things."

People who are unable to do load-bearing exercises—such as patients who are bed-ridden, or even astronauts —not only lose muscle mass, but their body chemistry is altered and their nervous system is adversely impacted.

It helps to explain why patients with motor neuron disease, multiple sclerosis, spinal muscular atrophy and other neurological diseases often rapidly decline when their movement becomes limited.

Indeed limited physical activity decreased the number of neural stem cells by 70%.

Furthermore, both neurons and oligodendrocytes —specialized cells that support and insulate nerve cells—didn't fully mature when exercise was severely reduced.

**My View?** We can never second-guess the wondrous complexity of the natural world.

So, we learn, brain/nervous system health is a two-way street. Yes, the brain tells the muscles to 'lift,' 'walk,' and so on but, surprisingly, in turn the same muscles instruct the brain to replenish its nerve cells.

### Universal Human Behavior

#### Six Types of Disgust



*Diabetic foot wound*

Disgust is an emotion common to human beings all over the planet. It has long been recognized as having evolved over aeons to help our ancestors avoid parasites and illness. In the latest study [8], people found that pus and infected wounds were the most disgusting, followed by:

- Unhygienic conditions including bad body odor; vomit, excrement.
- Disease-spreaders such as mice, cockroaches and mosquitoes.
- Promiscuous sexual behavior.
- Infection cues including abnormal body shape; deformity; wheezing & coughing; and high risk contextual cues such as homelessness.
- (less strongly) food that shows signs of rotting or spoilage.

Interestingly, women showed more disgust in every category than men. This is consistent with the well-known fact that men indulge in riskier behavior than women. In particular women were most strongly put off by sexual promiscuity and animals carrying disease.

The researchers say: "Our long co-evolution with disease has 'wired in' this intuitive sense of what can cause infection."

**My View?** Most of this is uncontroversial except for one thing: recoiling at signs of disability or vagrancy.

The researchers suggest that if we accept that this is a normal reflex, then that helps us rise above it.

### Team Sports have Ancient Roots

Competitive team games in which men test their mettle against others are universal across the world, and seem to have deep roots in our evolutionary past.

Among hunter-gatherers, these games enable men to hone their physical skills and stamina, assess the commitment of their team members, and see how each performs under pressure. All these activities practice skills involved in lethal raiding [9].

The most common games use sticks to hit objects (and people) followed by kicking and rugby-type games.

Other activities involve running, grappling, parrying and throwing. These physical skills mirror those used by hunter-gatherers when raiding other groups.

Mock warfare was found in 39 per cent of cultures and boys' mock warfare in 26 per cent.

These games also require teamwork. Men learn to anticipate, monitor and strategically respond to the actions of their opponents, and continuously assess situations as both sides tire or lose combatants.

**My View?** In forager societies it is the men who do the fighting. As I say in *Deadly Harvest*, [Ch 8](#), p.198 [10]

“Women respond to extreme danger with a cascade of brain chemicals, including one called oxytocin. These hormones drive women to tend children and gather with other women. This is the “tend and befriend” response [11]...

“It is interesting to reflect that, in an emergency on the African savanna, the women were programmed to round up the kids and get everyone into a huddle, while the men, pumped up on testosterone and adrenaline, battled off the danger.”

So, rough games seem to be a psychologically important part of boys' upbringing.

See: **Social Bonding & Soccer Violence**, next item, and **Tyranny of the Minorities: Social Change Tipping Point**, this page

### Social Bonding & Soccer Violence

Outside of the football community, most football hooligans lead normal

lives and are not in any way dysfunctional [12]. So what is going on?

According to anthropologist Dr Martha Newson of Oxford University, “violent behavior is almost entirely focused on those seen as a threat - usually rival fans or, sometimes, the police...”

“The psychology underlying the fighting groups was likely a key part of human evolution. It's essential for groups to succeed against each other for resources like food, territory and mates, and we see a legacy of this tribal psychology in modern ‘fandom’. The violence comes from a positive desire to ‘protect’ the group.”

Dr Newson adds: “fighting extreme behavior with extreme policing, such as the use of tear gas or military force, is likely counterproductive and will only trigger more violence.”

**My View?** As we've seen, evolution has programmed males, particularly young men, with a yen for fighting.

In recent times, civilized societies recognized this and channeled the aggression into vigorous team games. It is no coincidence that rugby was invented in a British boarding school (Rugby School).

In *Deadly Harvest*, [Ch 8](#), p 222 I said:

“In many ways, we have dismantled male initiation rituals. We are raising a population of boy-men, in touch with their feminine side but hesitant in their masculinity. It should not be surprising, then, if some young men prefer life in a street gang or criminal activity. There, they find the excitement, danger, challenges, and combat that their souls crave.”

See: **Team Sports have Ancient Roots**, p 3; **Tyranny of the Minorities: Social Change Tipping Point** this page; **Male Physique Brands Politics**, [Oct 2012](#) [13].

## Human Social Dynamics

### Out-group & Anti-social Behavior

[Last month](#) I talked about **Enforcing Social Norms** and who the people are who **DO** the intervening.

Now Dr Fang Wang of Beijing University looks at the people who **BREAK** social norms [14].



He found that people who were **OUTSIDERS** to the community were much more likely to flout the social norms of that community than members of that group.

However, he also found that, if such ‘out-groupers’ felt that they were being observed, then they would fall into line.

**My View?** It is surprising that it takes a big study to come up with such an obvious conclusion – even though it does go against post-modern Pollyanna-ish ideology.

I have been an out-grouper in a large variety of different cultures and I can identify with these conclusions.

In Cyprus I am still an immigrant out-grouper and I have the feeling that I am just an outside observer just trying to fit in to an alien culture without feeling part of it.

It could be quite easy for someone not professionally committed like I am, to simply pooh-pooh local ways and do what comes naturally – as my culture has programmed me

### Tyranny of the Minorities: Social Change Tipping Point

Embedded in our society we have minority pressure groups of highly motivated individuals who have an agenda for some kind of social change.

In many benign cases they succeed – as in the examples of votes for women, gay marriage, and racial equality.

Others are malign – such as, in 1933, when the German people accepted the minority Nazi party to govern them.

The social dynamics are complicated and for the past 50 years scientists have tried to identify the critical size, of such a pressure group.

Such studies have found anything from 10% to 40% as sufficient to provide a tipping point. Now Prof. Damon Centola of Pennsylvania University has come up with a sophisticated analysis [15].

He found that when the committed minority reached 25%, there was an abrupt change in the group dynamic, and very quickly the majority of the population adopted the new norm.

In one trial, a single person accounted for the difference between success and failure.

**My View?** Clearly there are lessons for us today, and we must be aware that there are risks in the 'silent majority' remaining silent. As the Anglo-Irish philosopher Edmund Burke observed:

"All that is necessary for the triumph of evil is that good men do nothing."

But are there lessons from hunter-gather life? It seems that even at the level of a forager band of just 50 people it is enough for just a few zealots to drive dramatic action.

For example, famed American anthropologist, Napoleon Chagnon, observed a few aggrieved Yanomamo warriors in the Amazon rain-forest whipping up the rest of the band into murderous raiding parties on neighboring bands.

It seems to me that this phenomenon is also intimately tied up with social bonding and avoidance of being 'different' to the rest of your group. See: **Social Bonding & Soccer Violence**, p.2; **Team Sports have Ancient Roots**, p.3

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### Plus-size Normalization Risks

... the misperception of weight tended to be in the lower socio-economic classes who themselves were surrounded by people who were also

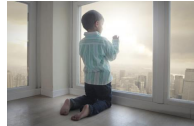
fat. A phenomenon, Dr Muttarak calls 'visual normalization'

**My View?** The laudable rush to avoid stigmatizing obesity, has the unintended consequence of making it harder to do anything about the obesity crisis.

**Continued from Page 1**

### Hygiene & Mental Disorders

in a rural environment, surrounded by animals and



bacteria-laden dust, grew up to have more stress-resilient immune systems and were at lower risk of mental illness than pet-free city dwellers. Say the researchers:

"Your immune system needs exposure to these micro-organisms in order to develop a balance between inflammatory and anti-inflammatory forces. A chronic, low-grade inflammation and exaggerated immune reactivity can lead to allergy, autoimmune disease and psychiatric disorders"

**My View?** The natural world consists of a myriad of organisms all living in a state of dynamic equilibrium. *Homo sapiens* is no exception and we cannot divorce ourselves from this soup of micro-organisms without harm.

However, we do need to focus on the 'Old Friends' which we get from living in a natural environment and avoid the

illness-causing bugs like salmonella and some streptococcus.

See: **Allergies: Hygiene Good, 'Old Friends' Germs, Good**, [Nov 2012](#) [16]

**Continued from Page 1**

### Climate Scientists give Science a Bad Name

"... in dispute, stakes are high and decisions are urgent'. In such circumstances it is virtually impossible to avoid sub-conscious cherry-picking of data to suit the popular theory of the time. Even Isaac Newton and Einstein were not immune to the problem."

**My View?** As I have said on many occasions, the Earth's climate is always changing and we are currently in a post-glacial warming period. But, at any time, we could have a Little Ice Age, like the one that wiped out the Greenland Vikings. See **Climate Warming Cycles**, [Nov 2011](#) [17]

All this is redolent of a pressure group that has captured the commanding heights of the governing élite, and yet has failed utterly to convince the silent majority. See: **Tyranny of the Minorities: Social Change Tipping Point**, p.3

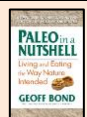
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Geoff has some availability to talk to all organizations including Lions, Rotary and U3A etc. Contact: [geoff@geoffbond.com](mailto:geoff@geoffbond.com)



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**1** Jennifer Utter. Self-Perceived Cooking Skills in Emerging Adulthood Predict Better Dietary Behaviors and Intake 10 Years Later. *J Nutr Education & Behavior*, 2018; DOI: 10.1016/j.jneb.2018.01.021

**2** <http://bit.ly/2LEbObO>

**3** Raya Muttarak. Normalization of Plus Size and the Danger of Unseen Overweight and Obesity in England. *Obesity*, 2018; 26 (7): 1125 DOI: 10.1002/oby.22204

**4.** [www.thegwpf.org/content/uploads/2018/05/Paltridge2018.pdf](http://www.thegwpf.org/content/uploads/2018/05/Paltridge2018.pdf)

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**11** Biobehavioral Responses to Stress in Females: Tend-and-Befriend, Not Fight-or-Flight." *Psychol Rev* 107:3 (2000): 411–429

**12** Martha Newson, Brazil's football warriors: Social bonding and inter-group violence. *Evolution and Human Behavior*, 2018; DOI: 10.1016/j.evolhumbehav.2018.06.010

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**14** The lure of antagonistic social strategy in unstable socio-ecological environment: Shijiang Zuo, *Evolution and Human Behavior*, Vol. 39, Issue 3, p364–371

**15** Damon Centola et al. Experimental Evidence for Tipping Points in Social Convention. *Science*, 2018 DOI: 10.1126/science.aas8827

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**17** <http://bit.ly/2MjFsnf>