



The science & art of living the way nature intended

The Bond Briefing

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

Ancestral Habits: "Sleep Divorce" for Healthy Sleep. **Our Physical Heritage:** Daniel Lieberman Quotes. **Q of Month:** Eating Banana Skins. **In the News:** Coastal Living aids Mental Health. **Spreading the Word:** ARTZT Public Lecture. **Q&A:** Pegan Diet. Book Review Part III – Stonewyldle Novels. **Ancestral Biology:** Constipation Part I. Daylight Saving Time – Long Term Brain Damage; High Blood Sugar Mutates DNA. **News Flashes:** Infant Gluten & Type 1 Diabetes. Ketogenic Diet Worsens Psoriasis. Deep Sleep Requires Anxious Brain. **Climate Watch:** Breast Feed to save the Planet? **Hints:** Before-breakfast work-out burns more fat. Spreading the Word: Lecture – Oxford University.

Ancestral Habits

"Sleep Divorce" for Healthy Sleep



Dr Wendy Troxel of the Rand Corporation is a sleep specialist. She has done a TEDx Talk: **Sleepy teens: A public health epidemic** [1]. She is not alone, see: **School Starts too early**, and **Daylight Savings Stupefies Teens**, both in **Oct 2015** [2].

Dr Troxel also works on the sleeping patterns on couples who share the same bed.

Not surprisingly, she finds that both partners have worse sleep length and quality than if they slept in separate beds. > p 4.

Our Physical Heritage

Quotations from physical anthropologist Dr Daniel Lieberman's **The Story of the Human Body** [3] (See **last month**)

- "Humans are poorly adapted to high population densities, to be too physically idle, too well fed, too comfortable, too clean and more..."
- "Diabetes doubles cost of health care..."
- "Health care costs (USA) \$2 trillion per year – and it is 70% preventable!"
- "There is no wisdom of the body that naturally guides us to select foods that are healthy..."
- "Human evolution was driven by climate change..."

Question of Month

Eating Banana Skins

Q. What do you make of the new fad of eating cooked banana peel? It is claimed to help with skin, sleep, and weight.



<http://bit.ly/36cvf0l>

A. We eat them quite often. The trick is to start with bananas that are so green that you can't even peel them. Wash and then chop them into about 1-inch sections and simmer for 10 minutes.

This process softens the skins and removes the bitterness from the fruit. The tasty sections can then be eaten directly.

Green bananas are rich in resistant starch, a dietary fiber: see **Resistant Starch – Revisited – Green Bananas** **Oct 2015** [4] and **Green Banana Flour Pancakes**, **Dec 2016** [5].

Banana skin is also rich in dietary fiber, notably pectin. One study on mice concluded that, thanks to its high antioxidant content [6] "banana peel has an anti-anxiety, antidepressant effect as well as strengthening the memory" [7].

All this is very wonderful, but no need to go overboard – just include banana skins in your diet if you want. They can also be whipped up into a smoothy or blended and then used in recipes for Paleo baked goods.

In the News

Coastal Living aids Mental Health



Enlarge: <http://tinyurl.com/zuv6x86>

In **Ocean Views for Mental Health**, **May 2016** [8], I wrote:

"I have reported many studies finding that the absence of green spaces leads to a deep sense of alienation. Our savanna-bred natures need to feel 'at home'! Now, in an interesting twist, a study finds a similar effect with the absence of 'blue space' – that is: 'ocean views'."

Yet another study finds that those who live in towns within ½ mile from the sea have better mental health than those who live further inland [9]. The effect was largest in those who come from poorer backgrounds.

My View? Is this hankering for sun and sea buried deep in our psyches from our ancestral past? Quite possibly. > p 2

Spreading the Word

PUBLIC LECTURE



Date: Feb 1, 2020

Time: 14:15 – 15:15

Title: The Paleolithic lifestyle for optimum health and fitness.

At: ARTZT Symposium, Montabaur Castle, near Frankfurt, Germany.

<http://bit.ly/2Q9cbfP>

Web: <http://bit.ly/Artz-symposium>

Contact: Astrid Buscher
+49-2433 980 706 astrid@artzt.eu

Questions

Pegan Diet

Q. What do you make of the Pegan Diet (Paleo + vegan) created by celebrity doctor Mark Hyman?

A. Very close – indeed I don't know where the 'vegan' side of it comes into it, since Hyman's diet includes meat, seafood, poultry and eggs, albeit in moderate quantities.

The major part of the diet consists of foods with a low glycemic load; eating lots of fruits, vegetables, nuts, and seeds. With fats, favor omega-3s and unsaturated fat. Just like us, Hyman avoids dairy, grains, and desserts (the conventional ones).

So far so good. However, he is ambiguous about beans, opining that they are a bit starchy but that lentils are the best option.

However, starches are not the major problem with beans and lentils. The problem is with their antinutrients like lectins, and allergens (of which soy is notoriously loaded). Our bodies do not know how to handle them. See:

Cooking, Antinutrients, Legumes, and, **'Blue Zone' Legumes** [June 2014](#) [10].

Sprouting can lessen the impact but that's not good enough. See: **Nutrition of Sprouted Beans**, [May 2007](#) [11] and **Sprouting Grains & Pulses**, [Jan 2016](#) [12]

Hyman also advocates avoiding chemicals, additives, pesticides, and GMOs; and eating organically and locally. Can't argue with that either. With meats, he advocates grass-fed or sustainably raised meats. That's worthy but not good enough.



See **Feeding Cows Right**, [Aug 2018](#) [13] and **Feeding Sheep Right**, [Feb 2015](#) [14]. This is where we see that mammals like cows and sheep are supposed to be fed on 'browse' from low lying bushes, shrubs and flowering plants.

Today's production of beef, lamb and, worst of all, pork have fatty acid profiles that are hopelessly out of tune with our savanna-bred biochemistries.

Book Review (part III)

Stonewylde Novels by Kit Berry
Gollancz, 2011 [15]


From [last month](#). Continuing the review of novels about a community of villagers living in an isolated enclave in England and still living the way of life led by their ancient Celtic-Saxon ancestors.

Rites of Passage: An important one, vital in forager societies (but withered away today) is the transition from child to adult. The Stonewylde 'Rite of Adulthood' ceremony was a vital feature in the calendar for youngsters. It was the time, and procedure, when a boy became a man – and a girl became a woman. See **Rites of Passage**, [Ch 8](#), p 222 [Deadly Harvest](#).

A second Stonewylde Rite is when a boy and girl become 'handfasted' that is, betrothed, at a special celebration. Other rites revolved around marriage and death – when the corpse was ceremoniously dispatched on a funeral pyre.

Was this world idyllic? Far from it! For a start it was a feudal society with a lord of the manor ('Magus') and his entourage who dominated the peasantry in the village.

This could never happen in the small scale forager band. But more importantly these people were subject, just like foragers, to feelings of jealousy, meanness, gossip, and cruelty, contrasted with generosity, helpfulness, compassion, good neighbourliness, and love.

They were given to intrigues, plotting, cheating and bullying. As Sylvie says to her much tortured villager, her beloved swain, Yul: "Some are born to endless night... It's a poem by William Blake. About injustice and equality..."

That is a bleak outlook. In the finely balanced dynamics of the forager band, no one could bully or control the others with impunity.

[Next Month](#): Continues – Part IV

Continued from Page 1

Coastal Living aids Mental Health

As we saw last month, **Human Origins near Zambezi?**, we had our origins around a massive lake in southern Africa.



Then our ancestors migrated northwards to settle around the huge lakes in the Rift Valley.

It's not for nothing that waterfront properties command a huge premium over landlocked ones. There must be something deeply satisfying and reassuring about sea and lake vistas.

The researchers note that no one in UK is more than 70 miles from the sea and that: "more people could harness the well-being benefits of improved access to the sea."

Ancestral Biology

Constipation - Part I

There is no clinically precise definition of constipation. Medical practitioners commonly use the rule of thumb that 2 bowel movements per week or fewer is constipated. This follows the so-called Rome IV guidelines. [16,17].

Other criteria are also taken into account such as straining, lumpy-hard stools, abdominal pain, bloating, and sensation of incomplete evacuation.

Only 2 bowel movements a week! That seems incredibly unnatural. How does this compare with foragers? The closest we can get is from UK's Dr Denis Burkitt study in the 1970s [18].

He found [19] that rural Africans passed stool that was up to five times greater by mass, had intestinal transit times that were more than twice as fast, and ate 3 to 7 times more dietary fiber (60–140g versus 20g) than their Western counterparts. See: **Our Living Gut - part I**, [June 2016](#) [20].

This is a huge contrast. And, to be fair, upping fiber intake is usually the first recommendation that doctors make. Other recommendations are also to do with lifestyle, including increasing physical activity.

[Next Month](#): Part 2 - **The Squat Position**

Brain Damage in Obese Teens

Researchers using MRI have found signs of damage in the brains of obese adolescents [21]. Since obesity

and especially fat deposits pump out inflammatory cytokines (small signalling molecules) all around the body, the brain is attacked as well.

In particular, there was a decrease in white matter (the tissue composed of nerve fibers) and in the 'middle orbito-frontal gyrus', an important brain region controlling appetite, emotions and cognitive functions.

My View? Childhood obesity is a ticking time-bomb. This study shows how obesity triggers a vicious circle where the obesity itself undermines the brain's ability to control food cravings. (Verily 'increase of appetite doth grow with what it feeds upon.')

Daylight Saving Time: Long-term Brain Damage

"It's not one hour twice a year. It's a misalignment of our biologic clocks for eight months of the year." So says neurologist Beth Malo MD, at Vanderbilt University, Tennessee [22].

Average sleep duration shrinks by 20 minutes during daylight saving transitions. Sleep deprivation increases heart rate, blood pressure and inflammation. Result? An increase in strokes, heart attacks other ailments - and accidents.

Malow welcomes the debates in the USA about dispensing with time changes. Currently policies are decided by individual states or even by counties and Indian reservations. "They are all over the map" See: **Social Jetlag, Fatigue & Obesity**, [Sept 2012](#) [23].

Malow advocates returning to Standard Time where, at midday, the sun is at its height.

My View? Just so! I have long advocated the return to an unchanging Standard Time. Malow makes the interesting point that it is unhealthy to be out of phase with the sun for eight months of the year.

Meanwhile the European Union plans to abolish clock changes and each constituent country must decide by 2021 whether it wishes to stay on permanent summertime or wintertime.

See: **Daylight Savings & Heart Attacks**, [Feb 2019](#) [24]. **Daylight Savings Stupefies Teens**, [Oct 2015](#) [25]; **Daylight Savings Paradox in Later School Start Times**, [May 2019](#) [26].

High Blood Sugar Mutates DNA

Why do diabetics have 250% times higher risk of cancer? We know that high insulin levels stimulate wild cell overgrowth and that cancers thrive on high blood sugar levels. Moreover, many diabetics are overweight – and their fat deposits pump out immune suppressing inflammation. See **Brain Damage in Obese Teens**, p 2.

Now researchers find an even sneakier factor – abnormally high blood sugar levels. They cause DNA **MUTATIONS** and, worse, **SUPPRESS** the body's ability to repair the damage.

My View? Truly we are self-destructing on the "worm i' the bud" – the modern high glycemic diet.

News Flashes

Infant Gluten & Type 1 Diabetes

A child's gluten intake average of 8.8g per day at 18 months of age is linked to increased risk of later developing type 1 diabetes [27], with risk increasing by 46% for each 10g per day increase in gluten intake.

My View? The studies are legion indicating how wheat – and its gluten – can trigger type 1 diabetes in babies. Gluten (from wheat, rye or barley) is not baby -- or human – food! See: **Gluten Linked to Diabetes I**, [Dec 2013](#) [28]. **Gluten Wean for Diabetes**, [Oct 2003](#) [29]. **Type I Diabetes linked to Wheat**, [Oct 2009](#) [30]. See also: **Gluten in Pregnancy linked to Diabetes Type 1 in Offspring**, [Oct 2018](#) [31]

Some Keto Diets Worsen Psoriasis

Ketogenic diets are heavy in fats (up to 70% calories). Frequently the focus is on 'medium-chain fatty acids' like coconut oil. However such versions of the diet worsen skin inflammations like psoriasis [32]. The researchers recommend that ketogenic dieters focus on 'long-chain fatty acids' like olive oil, fish oils, nuts, and avocado.

My View? I am not a fan of the ketogenic diet as a way of life – it is simply not the human way to be. See: **Ketogenic Diet Dangers**, [April 2012](#).

Nevertheless, it has its uses, for example, in epilepsy, Parkinson's and maybe MS. In this case, this advice helps to reduce the risk of skin inflammation and, probably, other, yet-to-be-discovered, drawbacks.

Deep Sleep Rewires Anxious Brain

We have met sleep scientist Prof. Matthew Walker several times over the last few years. See **Sleep Deprivation Clogs Brains**, [Feb 2019](#) [33]

Now he has published a paper saying that while a full night of slumber stabilizes emotions, a sleepless night can trigger a 30% rise in anxiety levels [34]. Even subtle changes in sleep affected anxiety levels.

A new function of deep (non-dream – "NREM") sleep is to decrease anxiety overnight by reorganizing connections in the brain.

Says Walker: "NREM sleep seems to be a natural anxiety inhibitor, so long as we get it each and every night. Sleep is a natural, non-pharmaceutical remedy for anxiety disorders."

My View? It's tough in today's world but it is a vital objective to do our best to align our sleeping habits with the way nature intended. See: **Sleep in a State of Nature**, [Oct 2015](#) [35] and **Sleep Detoxifies Brain**, [Nov 2013](#) [36]

Climate Watch

Breast Feed to save the Planet

"The production of unnecessary infant and toddler formulas exacerbates environmental damage and should be a matter of increasing global concern," [37]. So argue experts in the prestigious doctors' trade journal, The BMJ.

For the UK alone, carbon emission savings gained by breastfeeding equates to taking some 77,500 cars off the road each year,

The authors point out that (worldwide) formula milk uses dairy (30% of greenhouse gases); 86,000 tons of metal & 364,000 tons of paper in the packaging; additives of palm oil, coconut oil, algal oil and fish oil; and various minerals and vitamins.

Add in costs of transport, disposal of waste, boiling water to make up the feed then, as the authors say (in contrast): "Breastfeeding is part of the jigsaw to reduce the carbon footprint in every sphere."

My View? I always like to look behind the numbers. Here they are Mickey Mouse. Of total world production, 86,000 tons of metal is only 0.004%, and 364,000 tons of paper only 0.09%. So breast feed because it is

best for baby – it won't do much to save the planet.

Breast-milk is nature's food for the new-born. In spite of formula-makers best endeavours, their product is only a pale imitation of the real thing. Over the years I have written much on breast feeding. See the Google archive here: <http://bit.ly/2G7UU0b>.

Hints & Tips

Before-breakfast work-out burns more fat

People who exercised before breakfast burned **DOUBLE** the amount of fat than those who exercised after. [38]

The reason is easy to understand. Before breakfast, and after a night's sleep, one is in a fasting state. The body has to provide energy by mobilizing fat stores.

My View? The study was performed fat people, but it should work on normal weight people too.

What do foragers do? They eat anything they can as soon as they wake up! But so what. If this trick works for us today then why not?

Continued from Page 1

"Sleep Divorce" for Healthy Sleep

According to the National Sleep Foundation, 12 % of married couples sleep in separate beds.



And a recent survey found that 31% of married Americans wished they could "file for a sleep divorce."

Even so many couples, even with disturbed sleep, say that they feel more reassured when they have their partner next to them.

Troxel suggests that a biological drive is at work: A forager is very vulnerable when asleep in the open on the savanna and one derives a sense of safety in connection with others.



Aboriginal foragers sleeping

My View? Dr Troxel has a point. For eons throughout our ancestral past, couples slept straight on the ground with a yard or so of separation. Good enough for a sense of safety yet there is no disturbance from bouncing mattresses or a snoring or insomniac partner.

In addition a little personal fire is right alongside adding to the sense of reassurance and safety

Spreading the Word

PUBLIC LECTURE. ARTZT Symposium, Feb 1, 2020. **Details:** [See page 1](#)

PALEO LIFESTYLE RESIDENTIAL COURSE

This event has been **CANCELLED**

PUBLIC LECTURE

Date: Weds April 1

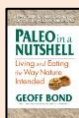
Time: 7:30 pm

At: Green-Templeton College, Oxford University, Oxford, OX2 6HG, UK

Title: To be announced

Contact: Mary Perryman, mary.perryman4@gmail.com.

Tel: +44 (1865) 552688



Paleo in a Nutshell: Geoff's latest work encapsulates, concisely and easily, current thinking on living the way nature intended. www.paleo-nutshell.com



Paleo Harvest Cookbook: Over 170 delicious, Bond Precept conforming recipes www.paleo-harvest.com

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