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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

Q of Month: Gwyneth's Raw Food Diet Fatal? **Human Climate History:** Comet Strike starts Mini-Ice-age. **Curiosities:** Is Obesity Genetic? Depends on your Political Affiliation. **Spreading the Word:** Paleo in a Nutshell is here. **Questions:** Osteoporosis and Vitamin K. **From the Journals:** Walking Triggers Brain Waves; Amazon Indians – Healthy Arteries. **Human Behavior:** Group Tolerance Linked to Perception of Fairness & Harm; Wide-eyed – Sexual Interest; Does FGC Control Female Sexuality? **Generational Epigenetics:** Autism – Mum's Mom Smoking. **Constructing Paleo Lifestyle:** Forager Mobility Measurement; Climate always Changes – Live with it! **Ancestral Health:** Our Living Gut – part X

Question of the Month

Gwyn's Raw Food Diet Fatal?



Q. What do you make of Professor Steve Jones' widely reported comment that Gwyneth Paltrow's raw food diet could prove fatal after six months? [1] He claims that: "we have lost the enzymes and absorptive mechanisms to digest raw food."

A. Prof. Jones is a celebrity scientist who always makes me uneasy when I hear him pontificating – particularly when he strays outside his geneticist expertise. In my view he is given to making sweeping generalizations which grab headlines but which are not particularly helpful to thoughtful understanding.

His dire view of the raw food diet is patently wrong. Not ideally perhaps but Eskimos manage on a 95% raw meat diet, preferably frozen!

However, humans, and even our predecessors, *Homo erectus*, have had fire for over a million years. Our ancestral heritage did not program us for an exclusively raw diet. See **Raw Food Hitting Mainstream**, [Oct 2004](#) [2]. **Raw Food**, [Dec 2005](#) [3].

Indeed some authorities like Richard Wrangham claim that cooking was an essential factor in human evolution. **Cooking Helped Evolution?** [July 2009](#) [4]. > p.2

Human Climate History

Comet Strike Starts mini Ice-age



Our species, *Homo sapiens*, has lived through some major swings in climate in our entire existence of 200,000 years. Most of these swings are due to rhythmical changes in various physical factors such as sun-spot activity.

However, some come about due to catastrophic events such as asteroid strikes. The one some 65 million years ago that wiped out the dinosaurs and sent the world into a 'nuclear winter' has been well documented since the 1980s.

Now researchers have deciphered evidence on ancient stone carvings from Gobekli Tepe (in today's Turkey) that suggests that, much more recently, the earth suffered a major comet strike some 13,000 years ago [5]. It wiped out the woolly mammoth and changed the course of human history.

It marked the start of the 'Younger Dryas', a sudden mini-ice age that afflicted early communities in the Fertile Crescent in the Middle East.

It forced independent bands to work together to develop survival food supply strategies. In effect it triggered the farming revolution and the first neolithic civilizations. See: **Climate always changes: Live with it!** p. 4

Curiosities

Is Obesity Genetic? Depends on your Political Affiliation

If you are an obese Democrat, you are more likely to believe it is genetic than if you are a Republican [6].

On average, Republicans (contrary to Democrats) believe that personal responsibility is the major factor in weight control.

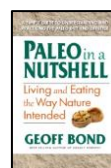
Say the researchers, the belief that obesity is due to genetics removes blame and a sense of responsibility. Policymakers who only focus on lifestyle changes such as exercise, good diet and taxing soft drinks will not persuade some 50% of the population to change their ways.

My View? Western politics seem to be splitting into those who are most comfortable with taking personal responsibility for their lives and those who seek comfort from communal solidarity.

This reflects the tension in forager bands where there is constant juggling between self-interest and the necessity to hang together as a group. See: **Tribal Relationships**, [Deadly Harvest, Chap 8](#), p 206 [7]

Spreading the Word

Paleo in a Nutshell is Here



Geoff's new book is an update, simplified, user-friendly edition of [Deadly Harvest](#).

Check it out at: www.paleo-harvest.com

Amazon links

USA: <http://bit.ly/2P-Nutshell>

UK: <http://bit.ly/2P-Nutshell-UK>

Questions

Osteoporosis & Vitamin K2

Q. My wife, age 66, has been diagnosed with osteoporosis. She is considering taking Vitamin K2 & Calcium. My diet has significantly more fruit, vegetables, salads and nuts than hers. I plan to be tested for Osteoporosis and see if 17 years of mostly Natural Eating habits makes a difference.

If one takes calcium, is it recommended to take K2 with it? In the same house, her urine ph is 5.5 compared to mine at 7.75. Our bodies are so complicated. Any insight you can offer is appreciated. I am so thankful my wife noticed your book at the UCLA book store in 2000.

A. I am sorry to hear about your wife's osteoporosis and, as you suggest, it is the result of a non-conforming lifestyle. However, there is hope. As I reported in October 2016, Nicole, who has just turned 80 has the bones of a young woman -- a considerable improvement of the state when she was 55 years old. See: [Oct 2016](#) [8]:

This is the result not only of diet but also, amongst other things, the right physical activity and good sunshine exposure.

It is interesting that you have a mildly alkaline urine test, which is about right, whereas your wife has acidic urine. That means she simply is not consuming enough alkalizing plant food, mainly colored salads, vegetables and fruits; she is probably also eating grains and potato which are not alkalizing. That acidic state is draining her bone-strength.

Along with a myriad other factors, vitamin K (1 & 2) has a role to play, but without the conforming lifestyle, it is just futile to imagine that it (with calcium) will be the magic bullet. Moreover, what is often overlooked is that fragile bones are also due to the loss of the collagen 'connectors' that hold the calcium phosphate struts together -- and that the collagen is particularly vulnerable to low-level

chronic inflammation -- a common feature of modern lifestyles.

For what I have to say about Vitamin K2 see: [June 2006](#) [9].

Continued from Page 1

Gwyn's Raw Food Diet Fatal?



So what is Prof Jones wittering on about? We don't know. He did his opining at the Hay Festival of Literature and Arts, Wales, UK where, one supposes, scientific rigor is not the prime criterion.

What are these enzymes we are missing? The chief foods that are indigestible in the raw state are starches (cereals, potato...), and legumes (beans, lentils...).

Well, we know that we shouldn't be eating them anyway!

What about the lifestyle Paltrow is plugging? In my view, if her flagship website, [www.goop.com](#), is anything to go by, her ideas reflect a mystical and unearthly humbug not actually grounded in what works.

For what **DOES** work, check out my new book [Paleo in a Nutshell!](#) [10]

From the Journals

Walking Triggers Brain Waves

We've known for a long time that the blood circulation relies on walking to act as a secondary pump for the lower leg. See: **Lower Leg Circulation, Chapter 8** [11] p. 189, [Deadly Harvest](#).

Now there is an added dimension: Researchers at New Mexico Highlands University (NMHU) found that the foot's impact during walking sends pressure waves through the arteries that significantly modify and increase the supply of blood to the brain [12].

Though walking creates a lighter foot impact compared with running, it still produces good pressure waves to increase blood

flow to the brain. Moreover the waves were greater than the effects seen during cycling, which involves no foot impact at all.

My View? We know that walking and occasional running was the main form of physical activity for foragers. Down the eons the body came to rely on it being there -- and if it isn't things go wrong.

Here is one more reason to get in your 10,000 steps a day! See **10,000 Steps a Day?**, [July 2014](#) [13].

Amazon Indians: Healthy Arteries



Village in Amazon Rain Forest

The Tsimane people -- a forager-horticulturalist population of the Bolivian Amazon -- have the lowest reported levels of vascular aging for any population, with hardening of the arteries being five times less common than in the US. So says a study reported in the prestigious journal *The Lancet* [14].

The Tsimane people have lifestyles which still conform to the forager one: a diet rich in dietary fiber, low in fat (only 14% of calories), low in saturated fat, high in wild game and fish.

While westerners are inactive 54% of waking hours, Tsimane live a subsistence lifestyle of hunting, gathering, fishing, and farming and are inactive for only 10% of the day. Men are active 6-7 hours a day and women 4-6 hours.

Moreover none of them smokes.

According to CT scans, 65% of 75 year olds had **ZERO RISK** of heart disease compared to only 13% of Americans of the same age.

My View? I rest my case! But the Tsimane are now receiving the 'benefits' of civilization in the form of roads, motorized canoes, and commercial food markets. Little by little their health is correspondingly deteriorating.

Human Behavior

Group Tolerance Linked to Perception of Fairness & Harm

Foragers are notoriously sensitive to fair dealing and cheating. This applies both within the 'in-group' members as well as with 'out-group' bands.

Now a study finds that us moderns will share a society with all kinds of groups with differing beliefs provided they share a commitment to the same values – of fairness and condemnation of cheats [15].

Say the researchers: "This study provides insights about others, but also ourselves. We distance ourselves from others when we don't trust them to treat us well."

My View? Trust is a vital element in healthy tribal relationships and it can only occur in people who know each other. That is why we feel so much alienation in an atomized society which is so impersonal.

See: **Ethnic Diversity is Not How Nature Intended**, [Oct 2007](#) [16].

Population Density and the Lift Effect, [Feb 2008](#) [17].

Wide-Eyed - Sexual Interest

It is said the eyes are windows to the soul. Now, it seems, the pupils are windows to ones deepest sexual desire.

Researchers find that sexual interest in someone else shows up as dilated pupils. And, this is new, even a disinterested bystander (not just the object of desire) notices it too [18].

My View? Some researchers have all the fun!

Does FGC Control Sexuality?

Female genital cutting (FGC) is extremely rare amongst modern hunter gathers although the Hadza do perform partial clitorrectomy [19]. It is thought that they adopted the habit from their neighbors, the Masai where it is common amongst pastoralists.

Even so, in ancient times, before the arrival of sharp knives – or broken bottles – the practice is unlikely to have come about.

So why is it so prevalent amongst many societies today?

Conventionally it is argued that it controls female sexual behavior, reducing women's sexual activity before or within marriage. That provides their potential husbands with increased paternity certainty.

Therefore cut women are more desirable marriage partners, and FGC is perpetuated by families hoping to enhance their daughters' marriageability.

Some intrepid researchers have now tested these ideas on five West African societies [20].

They find that having FGC does not reduce sexual activity before marriage; that men consider the benefits to be "social acceptance for women" rather than "prevention of premarital sex".

They also find that male paternity certainty is not an issue but that women without FGC are significantly more likely to be married later than average.

Conclusion: FGC does not reduce female sexual activity, but it enhances marriage opportunities. Opine the researchers: cultural evolutionary forces seem to be underpinning its persistence.

My View? FGC seems to be an example of how sick ideological thinking trumps what nature intended.

Generational Epigenetics

Autism: Mum's Mum smoking

Scientists from the University of Bristol, UK, have found that if a girl's maternal grandmother smoked during pregnancy, the girl is 67% more likely to display certain autistic traits, such as poor social communication skills and repetitive behaviors [21].

Even if the maternal grandmother smoked outside pregnancy, this increased by 53% the risk of her grandchildren having a diagnosed autism spectrum disorder (ASD).

It seems that if a female embryo in the womb is exposed to cigarette smoke, it could affect her developing eggs -- causing

changes that affect the development of her own children.

My View? Autism is running rampant today. There seem to be many lifestyle factors implicated. Mass smoking by women began in the 1930s – and they are those who are now the grandmothers. Stranger things have been!

Constructing Paleo Lifestyle

Forager Mobility Measurement



Enlarge: <http://bit.ly/2rX72vQ>

Batek Forager Family, Malaya

We are always on the look-out for clues that help us to reconstruct, as faithfully as possible, the ancient Paleo lifestyle.

Physical activity is an important dimension.

This study of the Batek hunter-gatherers, who live in the tropical rainforest of Malaya, slots in some more pieces of the jigsaw [22].

Over 93 days the Batek moved camp 11 times, staying for an average of 8.2 days at each camp. Men generally hunted small game and women gathered wild yams and fruit.

In accordance with so-called 'marginal value theorem', the foragers moved on once the resources became depleted to a level where it was more trouble than it was worth to seek them out. In other words, they moved on before completely depleting the local resources.

The decision to move was made in an unspoken recognition by the members of the band that it was time to go.

My View? Compared to the !Kung Bushmen or the Hadza, the Batek moved camp rather more frequently. On the other hand they are living in a rich tropical rainforest which offered easy pickings nearby.

Climate Always Changes: Live with it!

There have been times in the Earth's history when it was entirely covered in ice. Other periods when it was tropical jungles all the way to the poles.

The Aborigines were able to walk all the way to Australia 60,000 years ago because sea-levels were 450 feet lower than they are now. The Greenland Vikings succumbed to a cold period in medieval times.

Another cold snap 13,000 years ago, the 'Younger Dryas', sent the embryonic farmers back on their heels (see: **Comet Strike Starts mini Ice-age**, page 1).

Meanwhile, a warm period 4,000 years ago enabled farming in what is now the harsh environment of the Scottish Orkney Islands: **Climate Cycles**, [Nov 2007](#) [23].

Geologist Ian Plimer puts all this into perspective in his evidence to the UK's Parliamentary committee

on climate change:

<https://youtu.be/4rLRObEhC4I>

Ancestral Health

Our living Gut - part X

[Last month](#) [] we saw how gut dysbiosis is a factor in **Toddler Temper**. We continue

Metabolic changes

Gut flora regulates the glutathione and amino acid metabolism of the host. Glutathione is a key antioxidant, found in every cell in our body. Deficiency of glutathione contributes to oxidative stress, which plays a major role in several lifestyle diseases, for example: obesity, type 2 diabetes, atherosclerosis, and non-alcoholic fatty liver disease. [24]

Microbe diversity decimators

Alexandra Zhernakova MD and team at University of Groningen, Netherlands find that at least 19 different kinds of medicine reduce microbiome diversity, amongst them antacids, antibiotics and the diabetes drug metformin. [25]

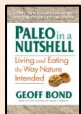
Obesity Link

Differing microbial populations in the gut allow the body to harvest more energy (calories), making people more susceptible to developing obesity. These small differences can, over time, profoundly affect an individual's weight. The microbial composition among obese patients is significantly altered compared with both normal weight individuals and those who have undergone gastric bypass surgery. [26] So finds Peter J. Turnbaugh of Washington University, St Louis, Missouri. Obesity is associated with changes in the relative abundance of the two dominant bacterial divisions, the '*Bacteroidetes*' and the '*Firmicutes*'

[Next Month](#): **Uveitis, Cold, Pre-eclampsia**

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Talks to private organizations



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