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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:** Are all Nightshades Deadly? **Ancestral Health:** Paleo Diet Good for Fat Women. **Buyer Beware:** GMO Gluten-free Wheat. **The Human Journey:** First Farming Women – Bones Stronger than Elite Rowers. **Fake News:** Paleo Calumny. **Ancestral Health:** Our Living Gut – part XIX. **From the Labs:** Salt a Factor in Dementia. **When to put Baby on Solids.** **Fish Oils best Fight Cancers.** **Briefing:** Epigenetic Effects – part VIII. **Letter:** Childhood Social Life. **Ancestral Child Development:** The “Nested” Human – part III. **Hints & Tips:** Sunbeds Ok after all. **Siren Songs:** Maca Root Update. **Events:** Talk at Oxford University

### Question of Month

#### Are all Nightshades Deadly?



Deadly Nightshade (*Belladonna*)

**Q.** *Potato is a member of the nightshade family and we know it has plant poisons. But what about other nightshades like tomato, egg-plant, bell peppers and chilies?*

**A.** First of all, a caveat: just because we lump together various subjects into a category does not mean that they are all tarred with the same brush. See: **What's in a Name? Nov 2009** [1]

Having said that, potatoes do indeed contain plant poisons like glycoalkaloids and lectins and this is one of the reasons we avoid eating them. Even in modest amounts they create “leaky gut”, inflammation in the gut and are a factor in IBS and Crohn's disease for example [2].

All edible nightshades do contain glycoalkaloids and lectins but, on the whole, in much smaller amounts to the point where most people cope with them very well.

Indeed, in low doses, plant poisons create a ‘beneficial stress’ which triggers healthful responses in the immune system.

; > p2

### Ancestral Health

#### Paleo Diet Good for Fat Women

Dr Caroline Blomquist of Umeå University, Sweden, finds that fat women put on a Paleolithic diet maintained weight loss over two years compared to those on a ‘prudent’ Nordic diet [3]. On average, the Paleo-dieters lost 9 kg (20 lb). Moreover they reduced inflammation both in the fat tissue and in the circulation. The Paleo Diet led to improved insulin sensitivity and lower triglycerides.

Their so-called ‘Paleo diet? It focused on unsaturated fats, vegetables, lean meats, fish, poultry, eggs, shellfish, seeds, nuts, oils and fruit. It had good protein intake and had a low glycemic index. Unlike the Nordic diet, it excluded cereals, milk, refined sugars and salt.”

**My View?** A good result for a genuine Paleo-conforming diet.

### Buyer Beware

#### GMO Gluten-free Wheat

In California, I've been struck by the new awareness of gluten and the public demand to see it gone. Restaurant menus announce their gluten-free dishes and groceries prominently label gluten-free products.

The message has not been lost on Agro-industry. They are beavering away to produce a GMO strain of wheat that has almost no gliadin (the main culprit in gluten) [4]. Don't be deceived! Apart from being GMO, gliadin-free bread is just as bad as the regular sort. See: **Gluten-free Bread, Aug 2012** [5]

### The Human Journey

#### First Farming Women: Bones Stronger than Elite Rowers



Ethiopian village woman grinding spelt on a quern

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

The average prehistoric (neolithic) agricultural woman had stronger arm-bones than living female rowing champions. So finds a study from Cambridge University, UK [6]. These oarswomen, in their twenties, trained twice a day and rowed 75 miles a week. They won the Boat Race, breaking the course record. Even so, their arm-bones were 20% weaker than early farmer (neolithic) women; the average student was even weaker by some 40%.



Cambridge University oarswomen on the Thames tideway.

<http://bit.ly/2oYzb1y>

Say the researchers: “Bone is a living tissue. It reacts to physical impact and loading by changing shape, curvature, thickness and density”.

What is going on? Yes, the poor >3

### Fake News

#### Paleo Calumny

**Q.** *What do you make of this Internet blog which rubbishes the Paleo (& Ketogenic) diets?*

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

**A.** This is half-baked junk science from a publicity-seeking air-head called 'Smoothie-girl'.

There are thousands of opinionated bloggers peddling misleading and downright untruthful rubbish on the Internet.

We just have to ignore their siren songs. Like Odysseus, sail on past these seductive voices – they will only shipwreck us on the rocks.

### Ancestral Health

#### Our living Gut – part XIX

[Last month](#) [7] **Gut Worm Helpers**

#### part I. Now for Part II

A second pathway is via the regulation of 'Tregs' which are powerful immune system killer cells (See the segment: '*Inflammation and Auto-Immune Diseases*', Our Living Gut, [Aug 2016](#) [8].)

The worms secrete various chemicals that educate Tregs in such a way that they only attack bad bacteria. Without this education, Tregs can also deregulate other T-cells such that they erroneously attack body tissues – that is, they provoke auto-immune reactions.

In this way, the *absence* of gut worms can trigger a cascade of events which finish in diseases like psoriasis, multiple sclerosis, inflammatory bowel disease, and Type I diabetes.

However I, along with most of us, balk at deliberately seeding ourselves with gut worms.

Nevertheless, gastroenterologists use this technique with great success on patients with inflammatory bowel diseases such as colitis, Crohn's and IBS [9]; Other researchers believe that seeding with gut worms could help with autoimmune diseases, including multiple sclerosis, psoriasis, rheumatoid arthritis and lupus. [10]

[Next Month](#) [11]: **Part XX**, Fecal Transplantation.

### From the Labs

#### Salt a Factor in Dementia

The hunter gatherer diet was very low in salt. The only source of sodium was what was intrinsic to the food they were eating – which wasn't much.

Moreover it is generally agreed that the over-consumption of salt today is a **BAD THING** – for many reasons.

Now a new reason has been uncovered: a high salt intake impairs cognitive function via a previously unknown pathway [12].

Salt in the gut increases the activity of immune system white blood cells called TH17 which in turn provokes high levels of the inflammatory molecule "Interleukin-17" (IL-17) which in turn suppresses the production of nitric oxide in the lining of the gut.

These low nitric oxide levels constrict blood flow to the brain by some 28%. Brain function is correspondingly undermined to the point of dementia.

Abnormal levels of IL-17 are also associated with autoimmune diseases like MS, rheumatoid arthritis, and IBS. Opine the researchers, a low salt diet should help sufferers of these illnesses too.

**My View?** Once again we see how deviation from the forager template upsets highly complex processes in utterly unexpected ways.

#### When to put Baby on Solids

Over the past 60 years, US guidelines have progressively stretched out the time before introducing solids from 3 months (1958), 4-5 months (1970s), and 6 months (1990s).

However, only a third of babies are introduced at the recommended time and over 50% are started too soon [13].

What would a hunter-gatherer think of this? They would also introduce babies to solids at about 6 months. Generally the mother would pre-chew some food into pap and spit it into the baby's mouth.

But she would also breast feed for a further three years, so solids only progressively became the norm slowly and over an extended period of time.

Certainly the evidence is piling up that introducing solids too soon and too rapidly, overwhelms the baby's immature biochemistry and digestive apparatus to the point where it is confused and never develops properly.

#### Fish Oils best Fight Cancers

Prof. David Ma of Guelph University, Canada, finds that, compared to omega-3 oils of vegetable origin, fish oils are **EIGHT TIMES** more potent [14].

**My View?** We know that human biochemistry struggles to convert vegetable omega-3 (alpha-linolenic acid, ALA) into the forms it can use, namely EPA and DHA aka 'fish oils'.

Common ALA sources are Canola (rapeseed), flax and hemp oil. So far so good, but we are far better off focusing on the "SMASH" oily fish: Salmon, Mackerel, Anchovy, Sardine, Herring. One can also add trout and shellfish, such as oyster and mussels.

### Continued from Page 1

#### Are all Nightshades Deadly?

However, some people are particularly susceptible to these plant poisons, particularly where it concerns autoimmune diseases like rheumatoid arthritis. See: **Tomato and Autoimmune Disease**, [Nov 2011](#) [15], **Arthritis and Nightshades**, [April 2008](#) [16] and **Tomatoes, Deadly Harvest**, [Ch 3](#), p 56 [17].

My view is that, unless you suspect an adverse reaction to edible nightshades, they can be consumed without concern.

To limit any possible impact, tomatoes should be eaten as ripe as possible. Cooking also helps to limit the potency of nightshade plant poisons.

### Briefing

#### Epigenetic Effects – Part VII

[Last month](#) [18] we saw: **Absence of feeling hungry; and Good intentions pave the way to unintended consequences.**

Now we conclude:

**Moral?** There are two main lessons that we can learn:

- *You are not doomed by your genes!* You might have vulnerability

to a variety of epigenetically inherited diseases – but it does *not* make them inevitable. You will just have to be more rigorous than average in your practice of the Savanna Model. See: **Bad Genes don't Doom us**, [April 2010](#) [19].

- Thinking of becoming a parent? It *matters* – for both of you – to have a lifestyle – *before insemination* – that gives your child and its descendants the best chance of lifelong health. And that means practicing the Savanna Model in your daily life.

### Letter

#### Childhood Social Life

From Natalie, UK

The Times (of London) has a letter about not hugging children [*below*]. It's all very sad and adds to the loneliness of modern life that you write about [last month](#) (**Hunter – gatherer socializing**, (20))

I feel sorry for men. Their contact with children is now constrained by public suspicion that they might be pedophiles. It holds men back from engaging with children.

#### HUGGING CHILDREN

Sir, Further to your leading article "Hugging Along" (Feb 7), when I was training for the volunteer reading scheme in schools we were told that on no account should there be any physical contact with the children. If, for example, a very young child tried to take your hand to show the way to the classroom you were to distract them and not take it. If a child was upset, you were not to put an arm round them or wipe away their tears. This in a building full of people, where it was compulsory to keep doors open when teaching individual children.

Common sense has gone out of the window.

Brenda Wolfe  
Liverpool

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

**My View?** Yes, we have totally dysfunctional family relationships compared to our evolutionary past.

For eons children were brought up in a forager band of about 50 people, all of whom felt part of what we now call an 'extended family'.

Every adult member felt kinship, loyalty, responsibility, and care for the well being of every child in the forager band – a phenomenon known as 'alloparenting'.

Every child felt safe, and found innocent care and affection with every adult. See:

**Childhood: Forager Indulgent or Modern Discipline? Part I**, [Sept 2011](#) [21],

**Extended Family goes Nuclear**, [April 2012](#) [22] and

**Childhood, Deadly Harvest**, [Ch 8](#), Page 218 [23].

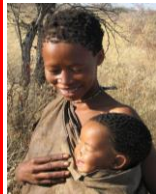
**Stranger danger:** Mind you, children were particularly vulnerable during hostilities with neighboring forager bands – and that is where males had a major purpose in life: the physical protection of children.

This role required the use of brute force and a willingness to fight: propensities which are actively discouraged in modern males.

Meanwhile, modern women are brainwashed into going out to work as wage slaves while handing their children over to strangers for the day. See: **Career Women Will Die Out**, [Oct 2007](#) [24].

### Ancestral Child Development

#### The "Nested" Human part III



[Last month](#) [25] Dr Dacia Narvaez, evolutionary psychologist, at Notre Dame University, Indiana,

says that young brains are very malleable until adulthood, and that childhood experiences will wire-up our brains for the rest of our lives. Darcia continues:

#### Lots of holding, carrying, rocking, and positive touch.

Psychologist Harry Harlow studied the effects of maternal touch deprivation on the brains of monkeys, finding long-lasting effects on individuals' self-regulation and sociality. Maternal touch decreases cortisol release, which benefits neurons and immune systems.[10]

#### Deep social support and a positive climate for mother and child.

"Moms are more responsive when they feel supported.[13] In one of our studies, *maternal social support* positively correlated with child cooperation at eighteen and thirty months of age, child social competence at twenty-four months, and reduced aggressive behavior at eighteen months [14].

Social support is also a result of child spacing, which was typically greater among small-band hunter-gatherer communities, [15].

Children grow up with few siblings, surrounded by playmates of various ages, making sibling rivalry less of an issue. This was due to lengthy

breast-feeding with an average four year age of weaning.

[Next Month](#) [26] Self-directed play; How it works with hunter-gatherers.

### Continued from Page 1

#### First Farmers: Women's Bones



...benighted early farming women had a life of drudgery – spending some 5 hours a day grinding wheat on a quern. (And that was after they had done a multitude of other chores to do with tending and planting in the fields.) The repetitive arm action is similar to that of a rower.

**My View?** The farming revolution has been called "Humanity's worst mistake". These poor people had hold of a tiger by the tail and had no means of letting go.

Hunter-gatherer women, did not have the over-developed bone mass of an Olympic rower or a Neolithic woman grain grinder.

See: **Farming – Double Edged sword**, [Dec 2005](#) [27]

### Hints & Tips

#### Sunbeds OK after all

In **Tanning Salons Are Useful** [Aug 2004](#) [28] and in **Vitamin D: From Sun or Food?** [Nov 2011](#) [29], I opined: "I don't subscribe to the demonization of sunbeds" [30].

In fact, all the evidence suggests sunshine in any form is a vital element in human health.

To reinforce this view, dermatologist, Professor Jörg Reichrath of Saarland University, Germany, robustly refutes two reports from EU and the World Health Organization (WHO) [31].

He says: "The opinions of the two committees are incomplete, unbalanced and uncritical. Science does not show that moderate solarium use results in an increased risk of melanoma."

**My View?** We are still tropical creatures and the absence of sunlight in winter for those living in higher latitudes is a major health hazard. The lesser of two evils is to

take 10 minutes of sunbed once a week. Modern sunbeds imitate normal sunshine very well with about 93% UVA and 7% UVB. Also see: **Vitamin D: Diet or Sunlight?** [March 2008](#) [32], **Sunscreen and Sun protection**, [May 2007](#) [33]

### Siren Songs

#### Maca Root Update

Since I first talked about **maca root powder** [Feb 2011](#) [34], its popularity has rocketed, mainly due to extravagant claims about its miraculous curative powers. Is this justified?

We still don't know for sure. Quite a few studies have now been done but they suffer from severe drawbacks. The studies are mostly sponsored by maca producers, are small in scale, are poorly designed,

are done on animals, and are published in third-rate journals.

For what its worth, these are the claims and references. Maca **MIGHT**: Increase sex drive in men and women [35], increase male fertility [36], relieve menopause symptoms [37], improve anxiety and depression [38,39], improve cognitive function and memory [40], reduce prostate size [41], boost sports performance and energy [42,43]. On the other hand there is no scientific evidence that maca benefits muscle mass or strength.

As a cruciferous vegetable (like cabbage and broccoli), maca contains goitrogens, which interfere with the thyroid gland. Cook it first, if this worries you,

**My View?** The "functional food" industry heavily promotes maca as a supplement. But if you eat right,

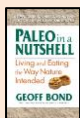
you have no need of such things – even if they are found to work.

### Spreading the Word

**EVENTS:** <http://bit.ly/bond-event>  
Talks to private organizations.

### PUBLIC TALK

**Oxford University:** April 11, 2018  
**Time:** 7:15 pm for 7:30 pm  
**For:** Speedwell Trust  
**At:** Green-Templeton College, Woodstock Road, Oxford, OX26HG  
**Map:** <http://goo.gl/maps/iky3O>  
**Title:** **Is Cancer Optional?** Our evolutionary history gives us revolutionary insights for avoidance and remission.  
**Contact:** Mary Perryman.  
**Tel:** +44 (1865) 552688.  
[mary.perryman4@gmail.com](mailto:mary.perryman4@gmail.com)



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