



The Bond Briefing

The Science and Art of Living the Way Nature Intended

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Spreading the Word

Successful Bond Paleo Rehearsal



Chef Marios, Nicole

We recently had a terrifically successful dress rehearsal for the Bond Paleo meal event at Archontiko Papadopoulos gourmet restaurant, Cyprus to be held on August 30th. See the menu and photos at:

<http://bit.ly/paleo-lunch>

Details of the forthcoming Bond Paleo Theme Dinner are on **p 2**, and <http://bit.ly/bond-event>.

Radio Interview

Listen to the recording of my radio interview with Rosie Charalambous of CyBC at: <http://youtu.be/rPLAqhxE4Ss>.

Also at <http://bit.ly/Bond-Audio>.

Coming Soon: Video Shorts

Evolutionary Medical Anthropology



For the last ten days I have been shooting 5 to 10 minute video shorts for a camera-crew from the quirkily named Salmonella Place web platform for medical students.

There will be some 30 videos, to be issued steadily over the next few months. First one:

<http://youtu.be/33UDs6K1TVU>

Real Food Campaign

Pupil Shames her School Lunches



Martha Payne, nine, took photos of the meals at her Scottish school and rated them for taste and healthiness in a

blog set up with the help of her dad Dave.

First was a [snap](#) of a slice of pizza, a potato croquette, a



teaspoon of sweet-corn and a cupcake for dessert.

[Another](#) was of a cheese-burger,



two potato croquettes, tiny slices of cucumber and an ice lollipop.

Her blog 'NeverSeconds' was a massive Internet sensation with more than 7 million views and fans including TV chef Jamie Oliver.

In this Martha joins Jamie Oliver's campaigns to improve school meals (see *Rolling Back School Junk Lunches*, [Oct 2008](#))

But jobsworths at Argyll and Bute council, UK, ordered Martha to stop. However, Martha's case went viral on Twitter ranking third worldwide. That forced red-faced officials to back down.

Cont: p. 4

Question of Month

Prickly Pear for Diabetics?



Q. There are infomercials about a 'wellness juice' called 'Nopalea' made from the nopal

(prickly pear). They claim that nopal is good for diabetics, blood pressure, arthritis and inflammation. Are these claims true?

Indian tribes in Arizona still use nopal as a natural medicine to help their massive diabetic problems. As a diabetic, do you think nopal would help me control my blood sugar levels and not present any adverse threats?

A. Let us focus on the basic ingredient, prickly pear. It is low sugar and, interestingly, quite rich in the gel-like fibers pectin and mucilage, a useful attribute (see *Forager Tubers*, p 2).

It does contain a flavonoid, 'luteolin', which can slow down blood sugar spikes. It does it by slowing the sugar digestion enzymes maltase, sucrase and alpha-glycosidase.

Other effects are due to the fiber slowing absorption of sugar in the gut [1] and slowing the liver's creation of glucose [2].

Studies suggest that extracts and capsules are ineffective but 500g (1.1 lb) of the whole stem broiled has a significant effect [3].

Does nopal have any harmful effects? Studies on one variety (*Opuntia megacantha*), suggest that its plant toxins (alkaloids amongst others) might harm kidney function [4]. **Cont: p 4**

Food Ideas

Gourmet Chef to do Bond Paleo



As announced [last month](#), we are partnering with the gourmet restaurant, Archontiko Papadopoulou to have a Bond Paleo event, 30 August 2012

Reservations: +357 22531000

More at: <http://bit.ly/bond-event>



Moreover you can overnight in an authentic Tochni village guest house at a special price of €30 for B&B.

www.cyprusvillages.com.cy

Menu

All dishes are Bond Paleo conforming. Dishes marked (*) are from [Healthy Harvest](#); others are published in [Bond Briefings](#), some are in press (S) and the rest are created by Chef Marios.

Bread

- Olive cake*
- Almond Flour bread ([Sept 2011](#))

Starters

- Avocado and marinated fresh mushroom salad
- Purslane and baby rocket, cucumber, cherry tomatoes, capers, olives
- Mock potato salad ([Feb 2012](#))
- Greene taboulé ([Sept 2011](#))
- Spicy Citrus prawn and marrow salad

Main Courses

- Mediterranean seafood symphony
- Grilled sea bass fillet
- Stuffed Calamari with ratatouille
- Oven baked sardines
- Greens ragoût with mixed mushrooms and fresh herbs
- Olive oil and lime dressing

Desserts

- Coconut cake^S with chocolate mousse*
- Lemon tart *

Coffee

Sample photos: [click](#) for enlargement



Purslane salad



Almond bread,
Olive loaf



Greene taboulé



Mock potato salad



Sea bass &
Mediterranean
vegetables



Coconut &
chocolate gateau

Questions

Forager Tubers

Q. What is the tuber you mention in your YouTube video? [<http://youtu.be/li2ep0ZsEDg>] Are there tubers that we should be eating today? I don't have any tubers in my diet right now.

A. The tubers in our ancestral homeland are ones we don't even have English names for.

The San use (for example) *Bauhinia esculenta* and *Coccinia rehmanii* [5]. The Hadza use (for example) *Rhynchosia comosa* and *Vigna frutescens* [6].

The singular peculiarity about forager tubers is their content of fiber: soluble, insoluble and inedible. So the challenge is to understand their *carbohydrate profile*. See 'All about Carbohydrates' this page.

Apart from anecdotal evidence, this has been rarely examined scientifically. However, Margaret Schoeninger, professor of Anthropology at UC San Diego, USA, did have a go at some of the Hadza tubers [7].

Contrary to earlier studies (which used the 'classic' and highly flawed methods) she finds that some 40% to 80% of forager tubers consist of inedible fiber which is usually spat out and that, compared to cultivated tubers, such as yam,

cassava, sweet potato (which are high glycemic and not recommended anyway) they yield less than 50% of the nourishment but contain some **10 TIMES** the fiber.

Comparable Tuber Today?

To answer your question: it is hard to imagine anything comparable in today's world. Perhaps a very old, stringy carrot! Most conforming storage roots, like radish and turnip, have had the woodiness bred out of them.

Does this matter?

- a) Not if we obtain the fiber from other sources – i.e. most kinds of conforming plant food. Prickly pear, p. 1, is a rich source but we are not obliged to go that far, and,
- b) Not if we use other kinds of chewy food. See 'Your Jaws are what you Chew' [Aug 2011](#).

Human Cognitive Evolution

Bow & Arrow – Brainy Invention

The San Bushmen have them, the Hadza Tribesmen have them, yet the Australian Aboriginal never seems to have developed the bow and arrow.

Indeed, the evidence indicates that these weapons have been around

for only some 60,000 years. That is, after the Aborigine's ancestors left their African homeland. What took so long? Researchers have analysed what it takes to invent

these weapons – and it is surprisingly complex.

No fewer than ten different tools are needed to manufacture a simple bow and arrow with foreshaft. It takes 22 raw materials and three semi-finished goods (binding materials, multi-component glue) and five production phases to make a bow, and further steps to make the arrow to go with it [8].

Moreover, it required BRAIN-POWER to conceptualize the finished article and figure out how to do it.

The bow-and-arrow, the researchers think, represent a quantum leap in human cognitive development.



Briefing

All about Carbohydrates

A vast range of foodstuffs are classed as carbohydrates. They can be divided into two categories: "fast carbohydrates", which readily break down into simple sugars, and "slow carbohydrates", which are not readily digested.

Typically, fast carbohydrates are:

a) Sugars ('*monosaccharides*' and '*disaccharides*') such as table sugar (sucrose), glucose, and maltose. (Fructose is not 'fast', and is an exception).

b) Starch, which is a variety of '*polysaccharide*'.

Fast carbohydrates spike blood sugar levels rapidly to an unhealthy level. That is, they have a high glycemic index (GI). We are not naturally adapted to eat 'fast' carbohydrates.

Typically, slow carbohydrates are

a) Non-starch '*polysaccharides*' such as *cellulose* and *chitin* and,
b) '*Oligosaccharides*' which include fibers such as *inulin*, *pectin*, and *mucilage*.

They do not cause damaging blood sugar spikes – they have a *low* glycemic index. The human organism, notably the colon, is designed to work on these compounds and, if they are not there, things go wrong [9].

Our knowledge of the carbohydrate composition of a food is bedevilled by lack of detail. The classic way is to measure the weight of everything else (protein, fat, and water) and deduct it from the total weight. Thus total carbohydrate is not usually measured directly. Worse its component parts are rarely identified at all. So we know little about the mono-, di-, poly- and oligo-saccharides in our foods.

But as we have seen, a knowledge of this detail is vital to understanding whether a food is right for us or not. Nevertheless these things CAN be measured and we are gradually building up some knowledge of commonly consumed foods. See: *Forager Tubers*, page 2

From the Labs

Male Testosterone in Old Age

Declining testosterone levels are not an inevitable part of the aging

process. Any declines are largely explained by obesity and depression [10].

In healthy men, testosterone levels decreased less than 1 percent each year. Unmarried men had greater testosterone reductions than did married men. The researchers observe that regular sexual activity tends to increase testosterone.

Our View? Back in 1904, Dr (later, 'Sir') Robert McCarrison, in his pioneering studies of the Hounza tribe high in their Himalayan valley, was surprised to find that men were still procreating well into their 70s ([Natural Eating](#) page 40 [11]).

Of course, in our own era, personalities from Picasso to Rupert Murdoch fathered children at advanced ages. They were slim indeed - but it helps to be rich and famous with a nubile wife!

Sun Reduces Pancreatic Cancer

A recent study finds that sunshine exposure strongly **REDUCES** risk of pancreatic cancer [12]. Especially:

a) High levels of ultraviolet at birth location gave 24% lower risk. [It is helpful to grow up where bright sunlight is plentiful]

b) Pale skin gave 49% lower risk. [Pale skin soaks up the sun's rays more efficiently; dark skinned people have to work harder at getting enough sunshine]

c) A history of skin cancer gave 40% lower risk. [A really curious (but hopeful) result for which the researchers offer no explanation.] The researchers warn that sun-phobia due to a misplaced fear of melanoma is increasing likelihood of cancer elsewhere in the body.

Our View? This news, combined with other similar studies, is causing much heart-searching in the anti-sunshine lobby.

But it is no surprise to us: humans evolved stark naked in the tropical sun. The body came to depend on it and, without it, things go wrong.

Calcium & Vit D: Kidney Stones

In a nice example of the law of unintended consequences, a recent study finds that long-term use of calcium plus vitamin D supplements causes hypercalciuria and hypercalcemia which contribute to kidney stones [13].

Our View? When thinking of second guessing nature, humility is the order of the day. Live like nature intended and then the body sorts these things out just fine.

Humbug Watch

MD Twaddle Creates Confusion

There is much confusion about proper human nutrition, but not only are many physicians ignorant of human nutrition, they contribute to the confusion with books prescribing half-baked nonsense. Dr Rita Stec, a long-time supporter of the Bond Precepts and author of *A Woman's Home Health Companion* [14] writes:

As an MD myself, I am amazed at how much contradictory info is out there on nutrition.

I read about a book entitled: "How starches can treat high blood pressure, diabetes and obesity", written by an MD.

Another one, also written by an MD, about how fruit is worse than glucose for your health and should be avoided at all costs!

My View? MDs seem to be queuing up with governments and other authority figures to spread contradictory and false rumours.

You don't have to be paranoid to begin to wonder if it is not some dastardly plot to keep the masses confused, pliable and therefore controllable. See my review of Susan Schenck's book [April 2012](#). Actually I think it more likely that this is a coincidental juncture of ignorance, vanity, sloppy logic and, yes, malign vested interests.

But either way, Dr Stec and I will never be out of work in our mission to bring sanity to health matters!

Evolutionary Biology

Forager Breast Milk: More DHA

A mother's diet strongly affects the composition of her breast milk. Variations are found between individuals, communities and countries. But what is the 'right' composition? Why – the forager one of course!

This verity is dawning on the pediatric community. Researchers from the Cincinnati Children's Hospital set off to study the women of the Tsimane tribe, a group of

Amerindians who live in the Bolivian Amazon jungle.

They found that Tsimane mothers' milk DHA (omega-3) was 400% *richer* than that of the Cincinnati mothers. Meanwhile their linoleic acid (omega-6) was 84 percent *lower*, and trans fatty acids were 260% *lower* [15].

The Tsimane breast milk had, therefore, an ideal ratio of omega-3 to omega-6 compared to the unhealthy one of U.S. mothers. Moreover DHA, the brain building fat, is crucial for infant cognitive and visual development. The mothers' milk stayed DHA rich for the first two years during which infants' brains achieve peak growth and maximum DHA uptake.

Say the researchers: "the American diet is eroding the fats that are critical to infant development." But gratuitously they go on to say: "It's not surprising that, Americans are last on international tests of math and science."

Er, well, that doesn't actually follow: other developed nations have the same milk profiles as the USA. Maybe there are other factors, like quality of teaching? Pupil motivation? Discipline? Application? Who knows?

Infant Formula: Currently infant formulas are designed to conform to USA mothers' milk. The researchers say that this is not good enough: the norms should be derived from foragers such as the Tsimane. Moreover, high DHA

intake must be kept up for two years

Forthcoming Happenings

Lecture

Monday September 17, 2012

At: Green Templeton College, Oxford University

Time: 7:30 pm.

Who can come: Anyone

Title: Evolutionary Medicine:

Rediscover your genetic heritage, live as nature intended and find optimum health and long life.

Info: <http://bit.ly/bond-event>

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Pupil Exposes School Lunches



Our View? The quality of school lunches in the UK has not improved since I reported on Jamie Oliver's campaigns 5 years ago.

Was it better in my day? Hardly, although the menu was different: a dollop of stewed cabbage, crudely mashed potato, a rasher of bacon and a slice of jam roly-poly.

Small rations: One thing I shared in common with Martha: the portions were so small that we finished almost as hungry as when we started. Perhaps, given their quality, that is a good thing. But anyway, it is health-helpful to feel hungry from time to time.

Power of Social Networking:

But the bigger picture is the success of Martha's campaign. In a way that was unimaginable just 10 years ago, the lid is lifted on

shabby practices. It shames the perpetrators into mending their ways; it educates millions into healthier eating patterns.

Consumer Power: In my view, this is the only way we will get radical improvement in our dysfunctional eating environment – the exercise of consumer power.

Continued from Page 1

Prickly Pear Helps Diabetes?



My view is that prickly pear (nopal) is a useful addition to the range of conforming plant food – but don't go overboard (1lb a day for a lifetime?)

At normal levels of consumption it will help, in a minor way, blood sugar control. But don't think of it as a drug which can absolve you from strictly following the Bond Precepts which are, of course, the most diabetes-friendly way to go. Your point about the Indians of the American South-West makes my point perfectly. They have the highest rate of diabetes in the USA. They have it because of their addiction to sugar-filled pancakes and similar high-glycemic foods – whereas their consumption of nopal matters not a whit!

Danger: Infomercial Prowling

As for the fad 'wellness juice' *Nopalea* and its infomercials, strap yourself to the mast and ignore those siren songs. Your health is not on their agenda; their agenda is to separate you from your money!

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