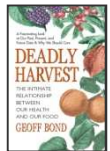




The Bond Briefing

The Science and Art of Living the Way Nature Intended

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Book Review Part II

Hunter-Gatherer Studies II



The Hadza Hunter Gatherers of Tanzania - Frank W. Marlowe [1]

Continued from [last month](#)...

The range of phenomena Marlowe reports on is truly startling: In a lifetime on average, Hadza women only menstruate 100 times, compared to 400 times with western women; boys get their first bow and arrows at the age of three (and spend hours a day practising); grandmothers provide more food than any other group; and paste from the baobab fruit is weaning food.

Squabbles are more prevalent in bigger camps than smaller; for protection, the foraging party of women bring along a young boy armed with his bow and arrows; scavenged meat (often rotten) gives them stomach aches – but they still eat it!

Fruits provide 40% by weight of the diet in camp; male body-fat percentage is 10 and female 18; the pull on an average Hadza bow is high at 69 lb; falling out of baobab trees is a notable cause of death in old age; women walk 5.5 km per day when foraging, men 8.3 km per day when hunting;...

There is so much more, most of it seriously scientific.

Cont p 4.

Question of Month

Getting Omega-3 into Eggs

Q. You say that eggs have always been part of the human diet but you recommend the 'omega-3 enriched' ones. How do they do that? Do they inject them with fish oil?

A. No injections! Quite simply, the hens are fed right – notably they are fed food enriched with, for example, flaxseed.

In *Deadly Harvest*, [Ch 5](#), p 129, I recount how hens running around the Ampelistra farmyard in Greece laid eggs, quite naturally, with a perfect fatty acid profile with omega-3 and omega-6 in equal balance, whereas the supermarket egg had a 'bad' ratio of 1 to 20.

Omega-3 pioneer researcher, Artemis Simopoulos in his 1998 paper makes comparisons [2]:

Egg Origin	Omega 6/3 Ratio
Farmyard (Ampelistra)	(best) 1.3
Supermarket	(bad) 19.9
Fishmeal	(better) 6.6
Flax	(best) 1.3

In this study, he also found eggs from fishmeal fed hens. Some suppliers still do this, but it is impossible to know from the packet. Clearly, flax-fed (or if you can find it, farmyard!) is best.

Eggs as Weaning Food

In another paper, Simopoulos examines the ancient practice of using egg yolk as weaning food [3]. This is important, since formula milk of the time (1992) was badly deficient in essential fatty acids. It works brilliantly.

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News from the Labs

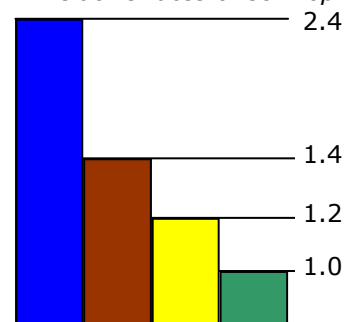
City Living Disturbs the Brain



Foragers lived in close contact with nature and at a population density of about one person per square mile. So what happens when you take humans, pack them in like sardines and expose them to a concrete jungle?

Not surprisingly, things go wrong, notably with the mentality. We've known for decades that people raised in cities are more prone to mental disorders than those raised in the countryside [4].

Relative rates of schizophrenia



Capital City
Suburbs
Provincial town
Rural

Professor Meyer-Lindenberg of Heidelberg, Germany, wanted to find out if city life is **PERMANENTLY RE-WIRING** the brain [5].

Cont: page 4

Food Ideas

Mock Potato Salad

Yield: 2 servings (as main dish)



This is a yummy dish with an uncanny resemblance in taste and texture to a great potato salad. But this recipe (with no potato) is fully conforming. Eat as much as you like.

- 1 cauliflower head (1½ - 2 pounds)
- 1 tablespoon Dijon mustard
- 2 tablespoon Canola oil
- 3 tablesp. conforming mayonnaise*
- 1 medium onion (about 4 oz), finely chopped
- 3 celery stalks (about 3 oz), finely chopped
- 4 sprigs fresh parsley, finely chopped
- 2 eggs, hard boiled and diced
- Freshly ground black pepper to taste.
- 1. Divide cauliflower into small florets (about 1/2 inch).
- 2. Steam cauliflower for about 10 minutes, until tender but still crunchy. Set aside to cool.
- 3. Meanwhile in a large bowl combine the mustard with the oil and mayonnaise.
- 4. Add the onion, celery and parsley.
- 5. Mix in the cauliflower florets and combine with all the ingredients.
- 6. Carefully stir in the eggs and season with pepper to taste.

*Conforming mayonnaise: the original – and best – mayonnaise is made only from olive oil, eggs and maybe some lemon juice and mustard. You can substitute Canola (rapeseed) oil for olive oil.

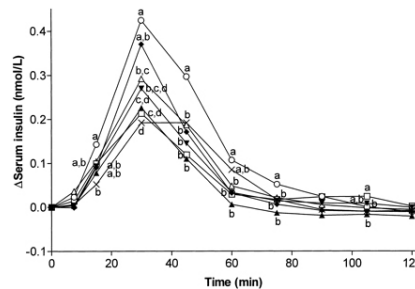
If buying ready-made, try to find a product that conforms as closely as possible to these ingredients – e.g. Spectrum Naturals Canola Mayonnaise:

www.spectrumorganics.com

News from the Labs

Milk is Insulinemic

Often it is impossible to second-guess the workings of the body. Such is the case with milk and its effect on insulin levels – it raises them dramatically.



One study found that the addition of milk to a low G.I. meal raised insulin levels to that of a white bread meal [6].

The researchers went to say that the mechanism for this effect is unknown, and “the long-term metabolic consequences need to be elucidated”.

My View? Well, yes and no! It would be nice to know what’s going on from a scientific point of view, but the moral is: milk is not human food anyway!

Africans More Vulnerable to Omega-6 Vegetable Oils

We demonize the over-consumption of omega-6 oils because the body uses them to create powerful hormones which increase, *inter alia*, inflammation.

But in order to do that, our biochemistry has to perform some complicated tricks. In most people this is an inefficient process – perhaps only 5% of the oil gets converted. (But 5% of the average daily intake of 10g of oil still makes an immensely powerful dose of hormones).

However, some racial groups carry genes that do the conversion more efficiently. Such is the case with African Americans according to a recent study [7].

The authors surmise that this fact helps explain why African Americans bear a large proportion

of the diseases of inflammation – notably cardiovascular disease and diabetes.

Baby's Gut Microbe Diversity Best Defense against Allergies

It is the composition of intestinal microflora during the first weeks of life that is critical to the immune system's development.

Gut diversity was significantly greater in the healthy children at one month of age compared to those children who later developed allergies [8].

Gut diversity in certain groups of bacteria appears to be particularly important: ‘*Proteobacteria*’ protect against allergies and are common in children who grew up on livestock farms with cattle. ‘*Bacteroides*’ counteract inflammation.

Myth-bust: Pro-biotic Yogurt

However, contrary to popular myth, ‘*Bifidobacteria*’, beloved of health mavens as a supplement in dairy products (especially yogurt), had no protective effect.

Crohn's Less at Sunny Latitudes

Further to our article in [Feb 2010](#), a new study finds a link between sunshine starvation and Crohn’s Disease and Ulcerative Colitis [9].

In the USA, women in sunny southern latitudes had 50% **LOWER** risk of Crohn’s and 35% **LOWER** risk of ulcerative colitis compared to women in northern latitudes.

Food Politics

Congress: Pizza is a Vegetable

In [February 2011](#) I wrote about the new USDA dietary guidelines. For all their faults, I thought them a worthy attempt to rectify the ugly American diet.

Congress however, finds that it is still not ugly enough – at least not as far as school children are concerned. It has just gutted a law that would have made school lunches conform to the dietary guidelines.

The Agriculture Department’s proposed changes were meant to reduce childhood obesity by adding more fruits and colored vegetables to lunch menus.

Once a week [only!], school lunches would have had to offer at

least one half-cup serving [only!] of dark green vegetables, orange vegetables, legumes, and "other" vegetables, including tomatoes.

Furthermore there would have had to be a reduction in saturated fat, refined grain, French fries and salt... – Nothing too controversial about that you might think.

But Congress had its eye on its paymasters – big agribusinesses like Schwan's Food Service Inc (which supplies frozen pizza to 75% of U.S. schools), the American Frozen Food Institute, the National Potato council, and ConAgra Foods Inc. – who lined up with money and menaces to vehemently oppose the bill. Senators duly bent the knee.

Consequence? A pizza now counts as a 'vegetable' thanks to its two tablespoons of tomato sauce!

Plus, of course, there is no restriction on refined grains, French fries, potatoes or salt.

See: '*Sinister Taste Manipulation*', page 3

See also: Kristin Wartman's article in Huffington Post - *Pizza is a Vegetable? Congress Defies Logic, Betrays Our Children* <http://bit.ly/GCVA5G>

Agri-business Exec's Campaign against GMO's and Additives

Robyn O'Brien used to be a high-powered agri-business executive. She was in the forefront, aggressively promoting the patenting and sale of corn and soy bean genetically modified to resist Monsanto's Roundup weed-killer.

Until, that is, her children developed allergies at an early age. When she looked into the question, she was aghast at how her GMO crops were insinuating totally alien chemicals into our food supply.

She was even more aghast to find that most other countries in the world, including the EU and neighboring Canada had already banned these 'Frankenfoods' and, moreover, refused to import them from USA.

"How come these products are still permitted in USA?", Robyn asks. See her campaign at <http://youtu.be/rixyrCNVVG> and <http://www.robynobrien.com/>

As Nature Intended

'Barefoot' Running



'Barefoot' running shoes.

I have spoken many times about how, throughout our evolutionary history, humans ran barefoot.

In [January 2010](#) I reported on how modern, heavily padded running shoes actually CAUSE knee and joint injuries.

In [Feb 2010](#) I told how the natural way of running makes you land on the ball of your foot, not the heel.

I have always used plimsolls (a light deck-type shoe) for running but this time I have replaced them with specially designed 'barefoot' running shoes – of which there are several brands on the market.

They have minimal soles – just enough to protect against sharp stones – and the toes are separated out. It's rather like wearing gloves for the feet.

I am a convert. They certainly force you to land on the ball of the foot, not the heel. This gives a natural springy stride which already looks and feels livelier and healthier (see my 20 second YouTube [clip](#) [10]).

I find that running in this fashion actually STRENGTHENS the knee muscles – a vital factor in avoiding knee injury.

It is a curious sensation too, to feel each toe working independently. It is probably very good for foot skeletal health.

Finally, the massaging of the soles of the feet from barefoot running is good for circulation. See: '*Cobblestones for Heart Health*', [August 2005](#)

Viewpoint

Sinister Taste Manipulation

Foragers never ate French fries or pizza, so how come our children prefer them over anything else?

The answer is that the food industry works hard to shape and change the palates of our children – much like giving out free cigarettes at the school gates. "Get them hooked young and that's a customer for many decades", is their motto.

It is extraordinary how the child's preferences can be altered from simple real foods (which have no profit margin) to sugary, salty and fatty industrial products that generate high mark-ups.

This is not paranoia: a study, finds that the food industry works assiduously to: "fundamentally change children's taste palates to increase their liking of highly processed and less nutritious foods" [11].

See: '*Congress: Pizza is a Vegetable*', page 2

Human Behavior

Childhood: Forager Indulgent or Modern Discipline? Coda

In parts [I](#), [II](#), [III](#), [IV](#) [V](#) I talked about the historical rise of fierce childhood punishment..

My motive in presenting this topic was to explore the interesting contrast between how foragers bring up children and some downright vicious ideas that developed since the farming revolution.

Today, parents struggle to find the right course with child discipline. How it happened in nature – with hunter gatherers – can offer some clues. This clearly struck a chord since I received an unusual number of responses to this article, mainly from people who themselves had suffered traumatic childhoods.

However, the subject is vast and there are dangers in trying to condense a complex argument into such a short space. I used missionary (now Professor) Daniel Everett's account as an interesting example of the collision between forager ways and modern (well, – Victorian) ways. I also used Abelow's hypothesizing about how such attitudes might have carried over into some strands of western religions.

In my summing up I didn't reiterate that the ideology of fierce

childhood discipline has pagan origins in the first ancient civilizations and, if it were to be found in the occasional strand of thought in more recent religions, it is an anachronistic hang-over.

This left the impression for some that it is my personal view that fierce childhood punishment is a mainstream feature of Christian teaching. One reader, Tom Davis, wrote me an eloquent exposition, citing chapter and verse, as to why this is not the case.

The Briefing is not doing its job if its message is lost through, quite irrelevantly, sparking a theological debate. So, rather than report Tom's comments in these pages, I'll be happy to pass them on to anyone interested.

Tom also wrote an interesting comment on the lamentable state of indiscipline in modern America. I have posted it at our Facebook Group: <http://on.fb.me/Group-Bond>. See also Dr Spears [Ten reasons not to hit a child](#).

Continued from Page 1

Hadza Hunter Gatherers

... That makes this book a valuable work of reference in naturally adapted human behavior, feeding patterns, physical activity, spirituality, and lifestyle generally. It provides rich material for studies like mine where we analyze and describe how lifestyle

diseases typified by cancer, heart disease, stroke, diabetes etc. are due to the mismatch between the way we live today and the lifestyle designed by our hunter-gatherer evolutionary past.

As an evolutionary lifestyle anthropologist, I fully recognize the unique contribution this book makes to our state of knowledge, and this encyclopedic information would have provided enriching backup for my own (but earlier) book [Deadly Harvest](#).

I thoroughly recommend Marlowe's book to anyone interested in understanding what it means to live like nature intended – and of course, anyone studying evolutionary anthropology and related fields.

Oh, and by the way – for those new to such topics, Marlowe helpfully provides simple introductions to the ideas of natural selection [12], altruism within blood relations [13], parent-child conflict [14], and game theory to explain sharing patterns within groups [15].

This review on Amazon:
<http://amzn.to/Bond-Marlowe>

Continued from Page 1

Getting Omega-3 into Eggs

Of course, foragers have used eggs since time immemorial as a weaning food. Simopoulos tested hard boiled eggs, but foragers

used them raw. Seemingly it doesn't make any difference.

Continued from Page 1

City Living Disturbs the Brain

Indeed city rearing **is** permanently rewiring child brains. The team scanned the brains of 32 student volunteers while they were subjected to social stress. This 'social stress' activated many brain areas, two of them specifically correlated with the volunteers' history of urban living: the *amygdala* and the *cingulate cortex*. They both process emotion and were activated **ONLY** in those who grew up in cities.

These studies cut across the social sciences where there is reluctance to admit that there are tangible brain differences to account for behavioral differences. So Meyer Lindenberg's next project is to do joint studies with social scientists – if he can find any who will agree!

Recent Links

Natural Eating Kindle (German)

<http://amzn.to/NE-Kindle-Deutsch>

Radio Interview

<http://bit.ly/Bond-audio>

Body Language Article

<http://bit.ly/Bond-BL-article>

Body Conference Interview, UK

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