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The Science and Art of Living the Way Nature Intended

The Bond Briefing

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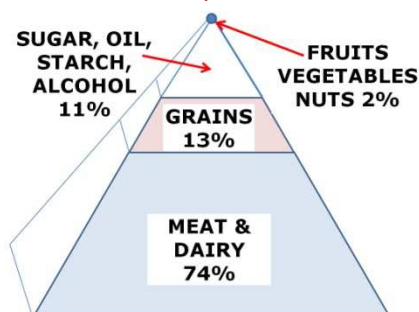
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Food Politics: USDA – Gamekeeper and Poacher. **Human Behavior:** Price of Ideal Female Shape. **Human Psyche:** Boss's Gender Impacts Stress. **Quote:** Vitamin D Targets Too Low. **Recipe:** Vegetable Loaf. **Q&A:** Foragers' Fingernail Trimming. **Hints:** Drop Caffeine for Weight Loss. **Jungle Lore:** Beware Magic Bullet Mentality. **Medicalization:** Medicine's Manifold Side Effects. **Evolutionary Biology:** Breast Fed for Right Gut Bacteria. **Worthy Idiots:** Medicate Oldies Willy-nilly. **Unintended Consequences:** Calcium Pills Increase Fractures. **Unknown Unknowns:** Brain Regulates Bone Mass. **Sunshine is Human Food:** Sun Reduces Multiple Sclerosis; Sun Reduces Kid's Asthma; Sun Reduces Kid's Allergies. **Letters:** Evolutionary Method Rings True. **Events.**

Food Politics

USDA: Gamekeeper and Poacher



Why does a salad cost more than a Big Mac? Follow the money!

This pyramid shows the massive influence of the beef, dairy, grain, sugar and even alcohol lobbies. Huge subsidies for them and virtually zero for fruit, vegetables and nuts.

Conflict of Interest

But doesn't the USDA also publish Dietary Guidelines saying we should eat far more fruit, vegetables and nuts? Too right! (See [Feb 2011](#)).

In one stroke, Congress could improve the nation's health, and vastly improve its budget, by removing farm subsidies altogether.

That's perhaps too much to hope for, but they could make a start by having a different agency responsible for making dietary recommendations.

As we have seen, the USDA's 'MyPlate' [[May 2011](#)] is hopelessly vitiated in order to please the very agro-industrial interests who sup at the USDA's trough of subsidies.

Human Behavior

Price of Ideal Female Shape



On many occasions I have talked about studies which demonstrate that the ideal female shape is largely the result of evolutionary pressures wiring our brains to recognize health and fertility [[May 2010](#); and 'Fertility Assessment' [Ch 8](#), p 215, *Deadly Harvest*].

Women are not oblivious to the sex appeal of a beautiful body image, and many would give up much to have an hourglass figure.

In a study conducted by the University of West of England, 30% of women would give up between one to 21 years of life to look like celebrity Kelly Brook (above) [1].

Moreover 93% of the women surveyed reported negative thoughts about their appearance during the past week.

We cannot get away from the fact that, to a frog, another frog appears beautiful. They are programmed that way. Humans are not exempt from such brain programming – to recognize human fitness for purpose.

Cont. Page 4

Human Psyche

Boss's Gender Impacts Stress

A recent study reveals something that most of us might feel intuitively.

Women working for a woman supervisor feel more stressed than if working for a man [2]. Men also feel more stressed working for a woman. It seems to be a deeply programmed response, so why?

In earlier Briefings, e.g. [Jan 2010](#), I have noted that employers and employees did not exist in our evolutionary past. It is against human nature, dysfunctional and stressful to have someone else in charge of your very livelihood.

Women and men worked separately in our evolutionary history and their methods of working are different: [Feb 2010](#). Put them together and it is like a badly matched pair in a three legged race. **Cont. Page 4**

Quote

Vitamin D Targets Too Low

"Most scientists now believe that the minimum target for blood levels should be upped to some 60 nanograms/ml to prevent the major vitamin D-deficiency diseases. Only 10 percent of the US population has levels in this range, mainly people who work outdoors." – *Robert Heaney, Research scientist* [3]

My View: Sunlight? Just so! In addition Heaney is now doubling the healthy norm for vitamin D.

See too: *Sunshine is Human Food*, page 3.

Food Ideas

Vegetable Loaf

Yield: 6 servings

This recipe makes a tasty "loaf" of vegetables. Eat a thick slice as a starter or part of a main meal. It is good as a party nibble too. Carrots? Yes, they are a little glycemic, but a serving contains only two thirds of an ounce (20g) giving a low glycemic load of 2. (See 'Glycemic Load' [Feb 2004](#))

- 1 onion (about 6 ounces)
 - 4 medium cloves garlic
 - 2 carrots (about 4 ounces)
 - 3 celery stalks of about 6 inches long (about 4 ounces)
 - 2 tablespoon fresh parsley, roughly chopped
 - $\frac{1}{4}$ cup chicken broth (or vegetable broth)
 - 1 tablespoon light soy sauce
 - 2 tablespoons olive oil
 - 2 eggs
 - 1 $\frac{1}{2}$ cup almond meal (about 5 oz)
 - black pepper, to taste
 - 4-6 drops Tabasco sauce, to taste
 - olive oil spray
1. Quarter the onion, halve the garlic cloves and cut the carrots and celery stalks roughly into pieces and combine in the bowl of a food processor. Mix the vegetables, using the blade accessory.
 2. Add the parsley, the chicken (or vegetable) broth, the soy sauce, the olive oil, the eggs and the almond meal and blend all together into a rough vegetable mixture.
 3. Season with pepper and Tabasco sauce to taste.
 4. Spray a loaf mold (10-inches long, 5-inches wide, 3-inches high) with olive oil and fill with the mixture.
 5. Bake for approximately 45 minutes in a hot oven at 360°F (180°C). Check the center for doneness.

Questions

Foragers' Fingernail-trimming

Q. *I've often wondered: how, in a state of nature, did hunter-gatherers trim their nails?*

A. It is remarkable how questions like this, seemingly so simple, have not been systematically studied (or at least reported).

It is also remarkable how, with the first contact with civilization, hunter gatherers quickly adopt such things as cooking pots and steel knives.

Such was the case with my African experience. However, during the *Human Behavior & Evolution* annual conference (see page 4), I was privileged to meet Dr Frank Marlowe, currently of Durham University, UK. Marlowe is the foremost researcher of the Hadza hunter gatherers of Tanzania.

He confirms what one might suppose intuitively: that, under the conditions of hunter gatherer life, nails get worn down of their own accord.

Practical questions like this are common. What did forager women do about menstrual flow? I responded to this, after a fashion, in *'Menstruation Mysteries'*, [Jan 2010](#).

What did foragers use instead of toilet paper? Maybe their stools didn't leave such a mess, but my observation of acculturated tribes chimes with what chimpanzees have been observed to do: they just grab a handful of dirt and grass and use that.

I would be interested to hear from any readers who have a specialist's insight into any of these, or similar, matters.

Hints & Tips

Drop Caffeine for Weight Loss

We know that caffeine messes with blood glucose control but under reasonable consumption for healthy people this is not highly significant. (See inset: **'Caffeine'**, *Deadly Harvest*, [Chapter 7](#), p 169.

Nevertheless, according to Dr James Lane of Duke University, USA, caffeine does temporarily reduce glucose tolerance, even in healthy people [4].

So, if you are trying to lose weight, then it seems advisable remove all impediments and go caffeine-free.

Saturated Fat/Caffeine

We trust that none of our practitioners is consuming saturated fats in any quantity.

In a University of Guelph, Canada study, researchers found that drinking two cups of caffeinated coffee FIVE HOURS after a saturated fat meal, blood sugar levels increased by 65% [5].

The researchers found that the fat and the caffeine combined to interfere with hormonal signals between the gut and the pancreas.

The hormones in question are the *'incretins'* which, inter alia, signal the pancreas to release insulin.

Beware Medicalization

Medicine's Manifold Side Effects

Where medical drugs are concerned it is said that, 'there is no effect without side effect'.

But the actual scale of side effects is breath-taking. Researchers found that commonly prescribed drugs labeled around 100 side effects. Some were remarkably high, with a single label containing as many as 525 reactions [6].

The greatest number of side effects was found in antidepressants, antiviral medications, and newer treatments for Restless Legs Syndrome and Parkinson's disease.

These are excellent reasons to live like we say, stay healthy as nature intended – and so avoid the need for medication.

Jungle Lore

Beware Magic Bullet Mentality

Beet Juice Promotes Brain Health!

Black Raspberries Prevent Colon Cancer!

Blackberries Ward off Alzheimer's!

So scream a multitude of headlines like this – but what are we to make of them?

The studies themselves [7,8,9 respectively] are sober enough but the popular press hypes up the press release. And what they are doing is committing the 'magic

bullet' fallacy. That is the conceit that for one disease there is one drug, in this case a 'special' food.

This does food a terrible injustice. We need to reverse the thinking. Bodies with these diseases are, inter alia, starving for want of a constellation of micronutrients.

A huge variety of colored fruits, salads and vegetables contain these micronutrients and we just need to be doing what nature intended: eat plenty.

By all means eat black raspberries and blackberries, but no need to obsess about them. On the other hand I would go easy on the beet juice – it is rather glyceemic.

Worthy Idiots

Scientists often do worthy work but spoil it with daft conclusions.

Medicate Oldies Willy-Nilly

Existing screening methods for heart disease and stroke include measuring cholesterol and blood pressure and are expensive and time consuming.

The authors of a new study from Barts (a London teaching hospital) and The London Medical School find that this screening is no better than simply considering the person's age. If they are over 55 then that is all you need to know.

This is equivalent to correctly identifying 84% of all the people in a population who risk a stroke or heart attack, while incorrectly identifying 24% who don't.

Current screening methods can achieve the same 84% detection rate with a false-positive rate of 21%.

Now comes author Professor Sir Nicholas Wald's daft conclusion: Simply medicate everyone over the age of 55, whether they need it or not, to prevent heart attacks and strokes!

This proposal joins other silly ones like the one to provide a statin pill with every fast food meal, see 'Big Mac with Statin Sides', [Sept 2010](#).

Unintended Consequences

Calcium Pills Increase Fractures

A number of studies suggest that bone health is not helped by calcium supplementation.

In the latest, researchers at Uppsala University, Sweden, find that there is no benefit above 750 mg calcium per day from food and pills and that increasing it can INCREASE the risk of fractures [10].

This chimes with research, such as that of Diane Feskenich [11] which finds, against current dogma, that milk intake INCREASES bone fractures.

No, bone health is dependent on a range of factors, most of them under hormone control. Bones disintegrate because the bone refurbishment cells have gone haywire under conflicting orders from a non-conforming lifestyle.

For the full lowdown on bone health, see 'Osteoporosis', [Chapter 9](#), *Deadly Harvest*.

For another surprising angle on how the body controls bone-building see: 'Brain Regulates Bone Mass', this page.

Evolutionary Biology

Breast Fed: Right Gut Bacteria



Human milk contains kinds of carbohydrate called oligo-saccharides.

Curiously, babies do not digest them directly. Instead, specialized gut flora does the job for them.

Babies who are exclusively breast fed have colon flora in which three strains of the bacterium *Bifidobacterium longum* predominate [12].

Early colonization of the infant gut by these bacteria appears to be yet another factor in supporting babies' health. As they wean so the gut flora changes to the profile found in adults.

Bottle-fed babies do not have the same beneficial gut bacteria. No one knows (yet) what this means for their health.

Unknown Unknowns

In our conceit, we are arrogantly ignorant of the infinite complexity of bodily processes and the surprises they can spring on us.

Brain Regulates Bone Mass

New findings show that bone formation is delicately orchestrated by the brain. It does so by sending and receiving signals via the nerves and hormone systems [13].

It's as if the brain sends out a global memo saying 'make more bone'. Bone-making cells can fine-tune this directive saying, 'we're not going to waste time putting on bone here when more is needed over there'.

The brain controls a myriad of processes throughout the body in ways we are only just beginning to understand.

See: 'Calcium Pills Increase Fractures' Previous article.

Sunshine is Human Food

Starving the body of sunlight is a factor in many diseases:

Sun Reduces Multiple Sclerosis

There have been many studies showing a link between sunshine deficiency and MS (e.g. [June 2010](#); [Aug 2007](#))

Interestingly, a recent study measured HOW MUCH sunlight makes a difference.

Researchers at the Australian National University in Canberra find that for every increase in sun exposure of 1 kilowatt per second per square metre, the risk REDUCED by 30%. [14]

Don't focus on the obscure measure of sunlight exposure – just note that the more sunlight you have, the less likely you are to get MS.

A second study discovers the chemical pathways by which sunlight works to restrain the autoimmune attacks on nerves' myelin sheaths [15].

Sun Reduces Kids' Allergies

Low levels of vitamin D are linked to sensitivity to a number of allergens including ragweed, dogs, and peanuts.

Vitamin D deficient children were 2.4 times more likely to have a peanut allergy than those with sufficient [16].

Sun Reduces Kids' Asthma

A Spanish study finds that, *just within Spain*, kids who live in the less sunny parts are more likely to have asthma [17].

The researchers conclude that people who live in higher latitudes than 40° need to take special measures to get enough sun, especially in winter.

That region includes Canada, most of Europe, and USA north of the Sunbelt. In the southern hemisphere only New Zealand's south island is concerned.

But even if you do live in a sunny place, you still have to actually get out of doors and into the sunshine!

See: 'Vitamin D Targets Too Low', Page 1

Letters

Evolutionary Method Rings True

"Over the years with your Natural Eating, I've come to understand nutrition a lot better. Since you take an anthropology approach, I understand it much better than from a chemistry approach.

"Oftentimes we hear nutritionists say something is good, and come to find out it may not be. You say the truth as it is, and that's what I like." – Steve Sellin, CA, USA.

Events

EVOLUTIONARY BEHAVIOR CONFERENCE

I recently attended the annual four day conference of the Human Behavior and Evolution Society which took place this year in Montpellier, France.

It had a wondrous collection of top researchers from all over the world giving a feast of keynote talks and split-off sessions.

I will report more over the coming months on what, for me, were the most salient presentations.

ADVANCE NOTICE

Geoff will be speaking at *The Body Conference* which takes place 5th & 6th November 2011 at The Royal Society of Medicine, London.

From Page 1 Human Behavior

Price of Ideal Female Shape

Beauty is not so much a question of fancy hairdo's, expensive creams or painted nails. On the contrary, all that is for nothing if good health signs and attractive female shape are lacking. The

good news is, just live like we say and they come good of their own accord!

From Page 1 Human Psyche

Boss's Gender Impacts Stress

See 'Working Patterns', Deadly Harvest, [Ch 8](#), page 201.

In a forager band, men mostly didn't have to take orders from anyone, but if they did, it was from the commonly accepted male 'leader'. On average, a man will feel more comfortable taking orders from another man, whereas taking orders from a woman is an affront to his dignity.

Women worked together as equal colleagues but there was also constant competition to improve position in the pecking order. Women are equipped with subtle manipulative skills both to dominate and to resist domination. [Deadly Harvest, [Ch 8](#), p. 208].

It is not surprising if today's woman is made nervous and insecure by a female supervisor's manipulative power over her.

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email: admin@NaturalEater.com

Tel: +357 99 45 24 68 Skype: gvlbond

Twitter: www.twitter.com/savveater

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