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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: Three Meals a Day – Really? **Human Behavior:** Men Prefer Women’s Back Curved. **News Flashes:** Doc: Diet’s Role in Mental Health. **Recipe:** Egg-free Pumpernickel. **News Flashes:** Feeding Sheep Right; Mercury in Fish OK (yet again); Too much Salt Reprograms Brain; Gut Bugs Manipulate Brain. **Human Nature:** Women Emote more Intensely than Men. **Our News:** Talk at Mirage Medical Group; Magazine Article: “Paleo Living”.

Question of Month

Three Meals a Day – Really?

Q. An article on three meals a day said the idea was just a tradition, coming from farming life in Europe. There is no metabolic reason for three meals a day and the time of eating is relatively unimportant.

A. Just so. The forager lifestyle had eating patterns that were much more variable depending on circumstances, the seasons and luck.

They opportunistically ‘grazed’ throughout the day whilst foraging and hunting, and then had a communal meal towards evening when everyone came back from their trips, carrying with them the fruits of their efforts. This is known as ‘central place provisioning’.

In the ‘berry season’ they would camp amongst the berry bushes and, on waking, gorge themselves on the berries. These wild berries are very fibrous with little pulp around the large seed. So they have to eat a great many [1].

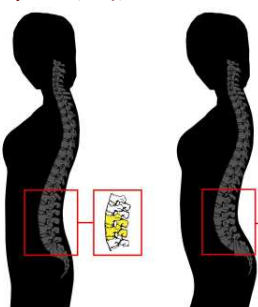
At other times they would sit around for an hour waiting for the day to warm up and might not eat until they set off on the daily food search.

Tubers take a couple of hours for the women to dig up. They roast and eat a few on the spot and then take the rest back to camp. Likewise the men would eat as the opportunity presented itself.

Cont: page 4

Human Behavior

Men Prefer Women’s Back Curved



Men prefer the model on the right

Theory predicts that evolutionary pressures wire our brains to recognize health and fertility – see ‘Fertility Assessment’ [Ch 8](#), p 215, Deadly Harvest [2].

Now a study has looked at how men rate the attractiveness of various degrees of lower-back curvature in women [3].

They find that men rated the ‘optimum’ curvature of the model on the right as most attractive. It creates an angle of about 45°. Angles greater or less than this were rated less attractive.

The researchers suggest that this tilt of the pelvis is the optimum position to allow a pregnant woman to forage most efficiently.

I have a couple of quibbles:

a) The research used American young male students, not real-life foragers who typically prefer greater curvatures.

b) Forager men did not have much choice of women – they took what they could.

Cont: p.4

News Flashes

Doc: Diet’s Role in Mental Health

As I have highlighted on numerous occasions, foragers, in spite of the rigors and vicissitudes of their lives, are ‘well-adjusted’ [4]. So why are we prosperous, secure, moderns so subject to mental disorders?

It has finally dawned on the psychiatry profession that perhaps it has something to do with lifestyle.

In an article in the prestigious journal *The Lancet*, psychiatrist Jerome Sarris makes the case that one factor is poor diet [5].

He says: “The transition from traditional lifestyles... has been linked to increases in depression and other mental disorders... the current medically focused model has achieved only modest benefits...nutrition is as important to psychiatry as it is to cardiology...”

The nutrients that he links to brain health include: omega-3s, B vitamins, choline, iron, zinc, magnesium, and vitamin D.

But, says Sarris, it is certainly better to focus on getting these nutrients, plus many others, FROM FOOD. Moreover, to lower the disease burden, governments should promote “change in dietary habits back towards a traditional whole-food diet.”

In addition, there is a ‘CRUCIAL NEED’ for doctors ‘to be educated on the role of nutrients in brain health.’ **Cont: Page 4.**

Recipes

Egg-free Pumpernickel

Yield: about 15-20 slices
(depending on thickness)



- 1½ cups pumpkin seeds (7 oz)
 ¾ cup almond flour (3 oz)
 ¾ cup green banana flour (3 oz)
 ½ cup sunflower seeds (3 oz)
 3 tablespoons psyllium husk
 2 tablespoons chia seeds
 ½ teaspoon salt
 2 cups water
 olive oil spray
1. Mill 1 cup of the pumpkin seeds in a coffee grinder to obtain a smooth flour.
 2. In a large mixing bowl combine the pumpkin flour with the almond and banana flour.
 3. Add the remaining pumpkin seeds, sunflower seeds, psyllium husk, chia seeds and salt. Whisk to combine.
 4. Stir in the water and mix all together, with an electric hand-mixer.
 5. Let the mixture stand for minimum one hour to absorb the water. The mixture should be VERY firm before baking.
 6. Spray a loaf mold (about 7.5 x 4 x 3 inches) with the olive oil and fill with the mixture. Press the seed-nut mixture into the pan, pressing down to extend to the edges and make a flat, smooth top.
 7. Bake in a hot oven at 350°F (175°C) for about 60 minutes.
 8. Carefully lift the bread out of the loaf mold. Invert the loaf and place back in the oven directly on the baking rack and bake for another 10 minutes, more if moisture has developed and needs to dry. Cool in switched-off oven.

9. Only slice when truly cool. Keep in the fridge and/or wrap in cling film and freeze.

News Flashes

Feeding Sheep Right

The red meat industry is well aware that it has a problem: their product is demonized as unhealthy. Chiefly this is due to the poor fatty acid profile.

So the industry is trying to do something about it. It has commissioned a study into how to feed sheep so that their meat has a 1:1 ratio of omega-3 to omega-6 and has a much lower percentage of saturated fat [6].

As I say in *Deadly Harvest page 129* [7]: "Sheep actually prefer eating the type of plant called "forb," which is any herbaceous plant EXCEPT grass. Today, perversely, sheep are fed only on grass (if they are lucky) or otherwise on artificial concentrated feed made from reject grains, vegetable oils, and soybean waste."

The researchers looked into this method of feeding, and the alternative: forb or, as they call it, 'high value forage'.



Surprise, surprise they find that by far the best results are obtained if they feed the sheep on high value forage comprised of: red clover, white clover, birdsfoot-trefoil, sainfoin, sulla, plantain, rape, chicory, and alfalfa. Does this sound familiar? We met a similar roll call of wonderful meadow plants in the diet that Joel Salatin of the Shenandoah Valley fed his cows - see *'Feeding Cows Right'*, [Aug 2014](#) [8].

My View? Little by little we can expect to see Paleo conforming red meats back on the market.

See also: *'How to make good body Fat'*, [March 2010](#)

Mercury in Fish OK (yet again)

Every so often another study comes out to suggest that mercury for fish is NOT a problem. See my last report *'Mercury in Fish - Again'*, [Sept 2013](#) [9].

Now three decades of research in the Seychelles (an island group in the Indian Ocean) find that a high fish intake by pregnant mothers (average 12 meals a week!) produces NO developmental or cognitive problems in their children [10].

The study followed more than 1,500 mothers and their children. At 20 months old, the children underwent tests to measure their communication skills, behavior, and motor skills. The researchers found that mercury exposure did NOT affect test scores.

But they did find that the children of mothers with higher levels of 'good' omega-3 fish oils did better. In contrast, the children of mothers with high levels of the dreaded omega-6s did worse.

Mercury can inflict damage through oxidation and inflammation. The researchers note that fish oils are ANTI-INFLAMMATORY and so quench any tendency to inflammation. This means that omega-3 oils have a double benefit since they also boost brain function directly.

This comes on top of the findings that fish are rich in the antioxidant selenium and this also suppresses any possible adverse effects of mercury. See *'Fish still OK'*, [July 2013](#) [11].

My View? As also related in the cited Briefings, mercury is in many other foodstuffs apart from fish.

So let us stop obsessing about this issue and boost our oily fish intake. These Seychelle islanders are eating TEN TIMES as much fish as the average westerner - and, pregnant or not, it doesn't do THEM any harm!

Too much Salt Reprograms Brain

Katrina Choe PhD, of McGill University, Montreal, Canada finds that excessive salt intake

reprograms the brain, so interfering with a natural safety mechanism that normally prevents the body's blood pressure from rising [12].

What is happening is this: high salt intake triggers the brain into releasing vasopressin - a hormone which increases water retention and constricts blood vessels. This is why high levels of vasopressin COULD increase blood pressure.

But this effect is normally prevented by a potent reaction by chemicals in the aorta. This would act to neutralize the raised blood pressure.

However, the high salt levels also reprogram the brain's neurons into SUPPRESSING the ability of the aorta to mobilize these neutralizing powers.

Net result: high salt intake increases blood pressure.

My View? Phew! It is always fascinating to understand the incredible complexity of our biochemistry. But this is just the tip of the iceberg: even today, we only understand a tiny part of what is going on in our bodies.

Which is why our understanding of human origins comes to the rescue. We don't HAVE to understand these things to live healthily. Sodium was a minor player in our ancestral diets and we should keep it that way. Otherwise we are subject to all the mischiefs we know so well. See: 'Salt', [Chapter 3](#), page 74, *Deadly Harvest* [13].

Gut Bugs Manipulate Brain

Over the past 10 years, studies have linked our gut flora to a range of complex behaviors, such as mood and emotion, and appetite and satiety.

Not only does the flora help maintain brain function but it also influences the risk of psychiatric and neurological disorders.

Professor of Microbiology, Sarkis Mazmanian explores the link between gut bacteria and mental

disorders. He has discovered that our gut bugs talk to the brain via molecules that they pump into the bloodstream.

These are powerful molecules - and the wrong ones can induce autism, anxiety, and neurotic behaviors [14].

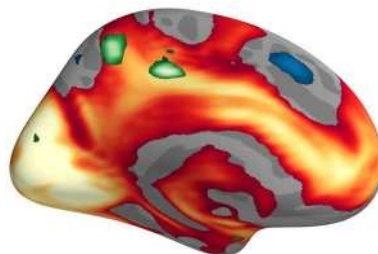
More worryingly Mazmanian's findings indicate that gut bugs are sensitive to stress, and a stressed mom passes on her faulty gut bugs to her baby. The newborn's brain then gets programmed by the bad bugs - something that will last the child's lifetime.

My View? Mazmanian does not know yet which profile of gut bacteria is 'right'. But everything else we have learned about gut health suggests it is one produced by a Paleo lifestyle.

See: 'Doc: Diet Role in Mental Health' page 1.

Human Nature

Women Emote more Intensely than Men



Brain scan: Women, uniquely, activate the 'emotional' areas shown green.

Women rate emotional images as more emotionally stimulating than men do and are more likely to remember them. So say neuroscientists from Basel University, Switzerland [15].

In particular, women reacted more strongly than men to both NEGATIVE and POSITIVE images. Moreover, the women had a better MEMORY of both types of image.

What to make of it? At a banal level, men will like confirmation of their suspicions: women are more emotionally expressive and, moreover, have a superior recall of such emotional events.

For neuropsychiatry, mental illnesses are often gender-specific and this casts light on how to deal with them.

But the researchers cast no light for the evolutionary behaviorist. Presumably this phenomenon is tied up with women's 'tend-and-befriend' response. See 'Women Respond to Stress Differently to Men', [March 2002](#) [16] and 'In-Group, Out-group', [Chap 8](#), page 198, *Deadly Harvest* [17].

Our News

Talk at Mirage Medical Group



Click to enlarge: <http://bit.ly/1xvZyxu>
Dr Svetlana Rubakovic (pictured left) laid on a splendid Bond-conforming buffet prior to the talk that Geoff (right) gave in her Palm Desert clinic, Rancho Mirage, CA ([Events](#) [18]).

Magazine Article: "Paleo Living"



I have just published an article for *Gluten-Free Heaven* on behalf of www.UggFoods.com

It is an overview of the Paleo way of eating and why it is right for us humans. Read it here:

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

FaceBook comments

(From <http://on.fb.me/Group-Bond>)

"I love the, 'in a nutshell' articles. Easy to share with others who think I'm "nuts" for eating my greens as much as I do." -Duncan Cunningham

"Really brilliant, concise and easy to read." -Jill Gardner

Continued from Page 1**Three Meals a Day - Really?**

This would include honey during its season, and baobab fruit. Sometimes they might roast and eat some of the game before taking the rest back to camp.

Frank Marlowe, an authority on the Hadza of Tanzania, estimates that, while away from the camp, they consume, 50% of berries, 40% of honey, 25% of tubers, 20% of baobab, and 15% of meat [1].

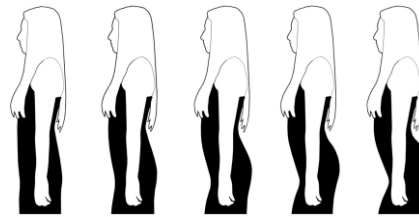
Back at the camp, they would eat in family groups towards the end of the day. Later, if any food is still left, they will eat it after dark around 7:30 pm.

What does this mean for us?

So, yes, that would work for us, too. Paleo snacking at various times of the day complemented by a larger, communal meal in late afternoon.

And yes, our mealtimes have gotten progressively more rigid since the Farming Revolution.

But it got much worse with the Industrial Revolution just 200 years ago. It started with everyone having their day strictly regimented by the clock, factory work, and railway timetables; now we eat not when we want to, but when we have to.

Continued from Page 1**Men Prefer Women's Back Curved**

26° — 34° — 43° — 52° — 61°

The 43° curve is just right

All viable women had mates and made babies apparently at the same rate. So it is difficult to see how men chose a mate could have made a difference.

See also: 'Low Female Waist-to-Hip Best', [May 2010](#) [19];, and 'Price of Ideal Female Shape', [June 2011](#) [20].

Continued from Page 1**Doc: Diet's Role in Mental Health**

My View? Welcome to the party! Sarris supports my contention that psychiatric counselling and medications do not deal with the underlying causes of most mental illness.

With rare exceptions, mental problems are due to the mismatch between the artificial lives we live today and the way nature intended.

It is not just diet but also, for example, physical activity, sunshine, and sleeping patterns. Moreover, I have written many times about the mental health benefits of green spaces and living close to nature [21].

Today, it is no wonder that many of us feel alienated from nature and are depressed and neurotic.

I go over these factors in 'Brain Health', *Deadly Harvest*, [Chapter 9](#), page 251 [22].

See also: 'Sunshine is Brain Food', Aug 2010 [23]



Deadly Harvest: Geoff's latest work encapsulates current thinking on lifestyle anthropology. www.deadlyharvest.com



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