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The Bond Briefing

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Ancestral Health: Our Living Gut – part I. **Hints:** Dine in Bright Light for Healthy Food Choices. **Health Policy:** Rehab Units Harm 29% of Patients. **Ancestral Health:** IQ Reason for Mothers-to-be to Eat Fruit. **Recipe:** Sour Cherry Clafoutis. **Briefing:** Fructose Revisited – part II. **News Flashes:** Bad Genes – or Bad Habits? Splenda Promotes Hunger; Sunshine Holidays for Vitamin D; Olive Oil best for Sautéing Fish.

Ancestral Health

Our Living Gut – part I

In all my writings since the late 1990s, I have insisted on the vital part that gut flora plays as a symbiotic organ in human health. The pace of scientific discovery has accelerated remarkably in the last 10 years and many of these advances I have reported in the #BondBriefings. Now I am serializing my update for the next edition of Deadly Harvest.

Back in Victorian times, it was the common wisdom that one should empty the bowels once a day. Instinctively those practical Victorians felt that it is not good to have toxic waste hanging around in the body. But as time wore on into the 1920's those ideas fell out of favor: constipation seemed to be the natural condition!

But anyone who has spent time with tribal societies will be aware that they defecate frequently and copiously. As early as 1939 the American dentist-turned-explorer, Weston Price, MD, observed how such societies enjoyed many health benefits as a result [1].

In the 1970's Dr Denis Burkitt of UK reinforced Price's work with his own observations on African villagers [2]. Burkitt reported that rural Africans passed stool that was up to five times greater by mass, had intestinal transit times that were more than twice as fast, and ate three to seven times more dietary fiber (60–140 g versus 20 g) than their Western counterparts. [3] For the first time the colon's contents were thought of as a living thing: "biomass". > p.4

Hints & Tips

Dine in Bright Light for Healthy Food Choices



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

When we eat out, we instinctively prefer to dine in well-lit restaurants. Now we have a possible reason: diners are 16-24 percent more likely to order healthy food in casual dining restaurants with good lighting levels. [4]

"We feel more alert in brighter rooms and therefore tend to make more healthful, forward-thinking decisions," explains lead author Dipayan Biswas, PhD, University of South Florida.

Furthermore, sales records showed that those in dimly lit rooms actually ordered 39% more calories. Mind you, they claim to enjoy their food more!

Health Policy

Rehab Units Harm 29% Patients

Patients may go to rehabilitation units to recover from a stroke, injury or recent surgery. But often the care makes things worse. [5]

Says a US government report: "29% of patients in rehab facilities suffered a medication error, bedsore, infection or some other type of harm as a result of the care they received." > p.4

Ancestral Health

I.Q. Reason for Mothers-to-be to Eat Fruit.



Mothers who consumed more fruit during pregnancy gave birth to children who performed better on developmental testing at one year of age. [6] So finds Prof. Piush Mandhane MD, of the University of Alberta, Canada.

Pregnant mothers who consumed 6 to 7 servings of fruit per day gave birth to babies who placed 6 to 7 points higher on the IQ scale at 12 months age. Moreover the effect seems to persist right through to adulthood.

The benefits seemed to accrue mostly from carotenes. These are 'terpenes' and are found in many plants from spinach to broccoli to, of course, carrots.

Current USDA recommendation is 3-4 servings of fruit per day - equivalent to two small whole fruits (e.g. apples) per day. Mandhane says that that figure should be at least doubled.

However, with gestational diabetes and fructose overdose in mind, care must be taken not to consume too many sugars.

My View? This last remark chimes with our oft repeated nostrum: focus on low fructose, low glycemic fruits. See **Fructose Revisited – part II**, page 3 and my fruit-fructose tables online: <http://bit.ly/Fruit-fructose>

Recipe Ideas

Sour Cherry Clafoutis
Yield: 8 slices



- ½ cup almond flour (about 2 oz)
- 2 tablespoons coconut flour
- 3 eggs, omega-3
- ½ cup coconut or almond milk
- 5 tablespoons unsweetened shredded coconut
- ½ teaspoon baking powder
- 1 tablespoon vanilla extract
- 3 tablespoons xylitol
- 350 g pitted sour cherries
- olive oil spray

1. Combine all ingredients (except cherries) in a food processor and, using the blade, mix to obtain a smooth dough.
2. Fold in the cherries at the end.
3. Spray a round baking mould (about 9-inch diameter) with the olive oil and fill with the fruit mixture.
4. Bake in a hot oven at 320°F (160°C) for about 40 minutes, or until golden brown. Check for doneness.

Briefing

Fructose Revisited - Part II
[Last month](#) I started to list out the harms done by over-dosing on fructose. The story continues...

- A fructose-rich diet has many harmful consequences:
- It programs pregnant women's fetus for hypertension, insulin resistance and obesity as an adult [7].
 - It predisposes male offspring to autism [8].
 - In rats, fructose sabotages learning and memory [9].
 - Liver damage more than doubled in monkeys over 6 weeks of high fructose intake [10].
 - It is a principal driver of diabetes type 2 in people [11].

- In mice, fructose is more toxic than table sugar – it reduces fitness and survival [12].
- It contributes to weight gain, slows physical activity, and increases body fat [13].
- It leads to uncontrolled growth of cardiomyocytes (heart cells) a factor in heart disease [14].
- It undermines the brain's ability to heal after injury – (in rats) [15].

Prof. Robert Lustig, MD of California University, San Francisco (UCSF) is an outspoken critic of fructose, particularly for children. He explains the problem well in his YouTube video, *'Sugar: the Bitter Truth'* [16]

Finally after this litany of harms let us not forget that fructose is empty calories—the more you consume, the more likely you are to get fat.

Savanna fruits were not sweet and were low in sugars. So fructose was ALWAYS SCARCE in our ancestral diet. That meant that the body's only reflex is to keep eating it for as long as supplies are available. And that is just what the food manufacturers exploit, and why we have to wittingly resist their honeyed words.

So, just as with fat and salt, the body has never had to develop a reflex which says: "Enough!". Now, in the modern world of fructose abundance, we MUST take control of fructose intake for ourselves.

What does this mean? Prof. Lustig says we can make an exception for fruits. However, I believe we need, nevertheless, to be cautious and try to work with low fructose (and low GI) varieties. See my tables online:

Low Fructose	High Fructose
Apple	Apple
Banana	Banana
Blueberry	Blueberry
Cherry	Cherry
Cranberry	Cranberry
Guava	Guava
Jackfruit	Jackfruit
Orange	Orange
Peach	Peach
Pineapple	Pineapple
Raspberries	Raspberries
Strawberries	Strawberries
Watermelon	Watermelon
Xylitol	Xylitol
Yam	Yam

<http://bit.ly/Fruit-fructose>

Other forms of added fructose need to be stripped out of the diet with just the same zeal as for table sugar itself.

Perhaps the worst culprits are carbonated beverages, but they are closely followed by table sugar and High Fructose Corn Syrup (HFCS)

in a huge variety of processed foods.

Be alert – we shouldn't be eating them anyway! [Last month](#) we introduced obesity researcher, Professor George Bray of Louisiana State University. In his words, "Fructose, by any other name, is a health hazard" [17].

News Flashes

Bad Genes - or Bad Habits?

It is commonly said that a disease "runs in the family".

When I hear this, my gorge rises; I counter with: "bad lifestyle habits run in families too!"

Now Professor Chris Haley and team at the University of Edinburgh, Scotland, have studied the question in depth in the prestigious publication, Nature [18]:

He looked at incidents of 12 common lifestyle diseases including high blood pressure, heart disease, and several cancers and neurological diseases.

Haley found that, by focusing uniquely on genes, doctors exaggerate their importance by some 100%. In fact at least half of the risk of getting these diseases is not 'bad genes' but bad habits!

My View? 50% of these diseases are due to bad habits? That's progress in conventional thinking – but certainly not far enough.

This study looked at 'family environment' such as shared living space and common eating habits. It still leaves out many other factors such as physical activity, sleeping patterns and adequate sunshine.

The weaknesses of limiting the study to 'family environment' only are highlighted by the fact that the study found no links with dementia, stroke or Parkinson's disease. This is nonsense; a multitude of studies find that these too, are lifestyle-linked diseases.

So we can be sure that when all aspects of lifestyle are taken into account, the risk of such diseases reduces to virtually zero even if you have some genetic vulnerability.

Nicole often relates how all her family members died at early ages of cancer. She, thanks to the

insights of the Bond Effect, has beaten the 'family curse' and already outlived them by many years – and intends to go on, like the Duracell Bunny, for many years yet.

See: 'Bad' Genes Don't Doom Us: [April 2010](#) [19]; Varicose Veins not Inevitable: [Sept 2011](#) [20]

Splenda Promotes Hunger

A University of Sydney, Australia, study finds that a chronic Splenda (sucralose) diet triggers increased food intake. [21] It does this because there is an imbalance between sweetness and energy intake which activates a 'neuronal starvation response'.

In this very interesting and deeply analytical study, the researchers find the links between sweetness receptors, activation of hunger hormones and the triggering of evolutionary ancient systems, still in our bodies, to do with insulin, octopamine (a neuro-transmitter) and dopamine.

This appears to be in addition to any possible 'cephalic phase insulin response' (CPIR) whereby the brain anticipates the arrival of sugar and so secretes insulin in advance of need.

In addition to increasing hunger, chronic sucralose consumption promoted hyper-activity, insomnia, and glucose intolerance.

My View? The study was done on sucralose (Splenda). However, it would seem that the same remarks would apply to ANY non-nutritive, intense, sweetener (NNIS) like aspartame (Canderel, Equal), and saccharine (Hermesetas, Sweet 'n' Low, Sweetex). It could be possible that it applies to stevia too,

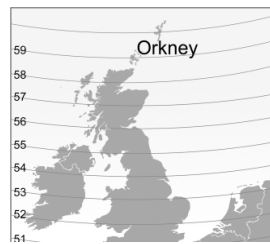
Such drawbacks must be added to those provoked by the havoc that such sweeteners cause in our gut bacteria. See: [Surprise Sweetener Spook, Sept 2014](#) [22].

What about the sugar alcohols? We just don't know. However, xylitol does provide calorific energy so maybe there is much less of an expectation imbalance. Erythritol on the other hand does not provide energy, so it is possible that it provokes similar reactions to NNIS.

However the good thing about sugar alcohols is that they are dietary fibers and so are gut bacteria friendly. See [Our Living Gut - part I](#), page 1.

The practical Paleo solution? We still think that, on balance, sugar alcohols ('polyols') are, in the current state of knowledge, acceptable. Otherwise fall back on honey in strict moderation! See: [Is Honey all right after all? Nov 2014](#) [23]

Sunshine Holidays for Vitamin D



Emily Weiss PhD and colleagues at Edinburgh University, Scotland, suggest that foreign sunshine holidays are important health boosters for 'Orkadians' – inhabitants of the Orkney Islands off the north of the Scottish mainland [24]. The Orkneys are situated at the high latitude of 59°N, about the same as Juneau, Alaska.

Orkadians who take sun-seeking holidays have higher levels of vitamin D in their blood. Farmers also have higher levels of the vitamin. Says Emily Weiss, their outdoor lifestyle, gives them enough sunshine exposure to avoid vitamin D deficiency.

Interestingly, older Orkadians had the best vitamin D status, largely because younger age-groups: a) do not, and are not able to, take foreign holidays in the same way as retirees and,

b) do not work the land outdoors and, rather, lead indoor lifestyles.

Meanwhile, the researchers main interest was to uncover any link between low vitamin D and multiple sclerosis (MS).

Sure enough they found that the sunshine deficient younger age-groups (those under 40) had an increased risk of MS.

Furthermore, during these main child-bearing years, a lack of UV exposure and vitamin D deficiency

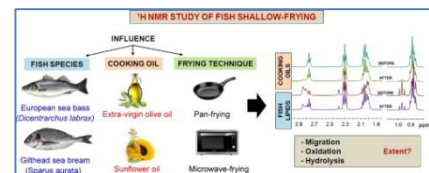
result in significant autoimmune risk for their babies.

Say the researchers, "The importance of foreign holidays in providing adequate UV exposure to UK residents is underappreciated."

My View? That's an understatement! But this is just another study showing how, just with the lifestyle changes in a couple of generations, we have blundered into sunshine starvation and ill health.

I argue that we are tropical creatures at heart and have no business living in such high latitudes – but even so, natural selection brought on the white skin to soak up whatever sunshine there is – and it worked – so long as the inhabitants actually got out into the watery sun!

Olive Oil Best for Sautéing Fish



Enlarge: <http://bit.ly/2a5OCAx>

In "Why it's healthier to cook with lard than sunflower oil", [April 2016](#) [25] I set out in detail the pros and cons of cooking oils and how much one can heat them – I recommend you check out this article.

In confirmation, researchers at Basque Country University, Spain, find that frying fish with olive oil is healthier than sunflower oil. [26] What happens is this: oils from the cooking oil get into the fish and vice versa. The net result with sunflower oil, is that some of the fish's valuable DHA and EPA is supplanted by sunflower's harmful omega-6 oil.

With olive oil a similar loss occurs but the fish only takes up innocuous monounsaturated oil.

A second finding is to do with oxidation. Olive oil resists oxidation well, but (as we have seen in: [Why it's healthier to cook with lard than sunflower oil, April 2016](#)) sunflower oil swiftly degrades into the dreaded aldehydes and AGEs.

For this reason, the researchers find that, if sunflower oil is used, microwaving is a safer form of cooking fish.

Finally, it was found that not all fish react the same way: The fat content of the gilthead sea bream diminished after cooking while the sea bass remained the same.

My View? I wonder what our forager forebears would have made of this! They just yanked a fish out of the lake and, without ceremony, spit-roasted it over an open fire. Even so, it makes sense to make use of this new-found knowledge to weight the dice in our favor.

Continued from Page 1

Rehab Units Harm 29% Patients

Almost half the cases (46%) were due to medication errors and included bleeding from gastric ulcers due to blood thinners, and a loss of consciousness linked to narcotic painkillers.

Sloppy care led to constipation, bedsores, and falls. This resulted in weeks of extra care, loss of independence and even permanent disability.

My View? Does this sound familiar? Yes, only [last month](#), I had: **Medical Error a Leading Cause of Death** [27]

Too bad for those who get sick in a rehab unit and then get sent to a regular hospital for acute treatment – they have to run the gauntlet of medical error twice!

Personally, I do all in my power to live like I say and avoid falling into the clutches of the medical machine!

Continued from Page 1

Our Living Gut - part I

Even so, in 2000, when I wrote about gut health in my book *Natural Eating* [28], conventional medicine still thought of the colon as a

nuisance. If they thought of the colon's contents at all, they called it "excrement" and thought of it as sewage-in-the-making. Our knowledge has come a long way since then, and it reinforces my insistence on how the right biomass is a key element *vital* to good health. Now the evidence is pouring in.

But what is the 'right' biomass? From a medical science point of view there are, in the present state of knowledge, simply too many 'unknown unknowns'. The biomass is in a constant state of flux with thousands of species vying for supremacy and which, according to circumstances, can change loyalties: from being 'good' to 'bad' and vice versa. However, once again, forager studies come to the rescue.

Next Month: Forager Stools



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



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