

The science & art of living the way nature intended

The Bond Briefing

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RATIONAL EVIDENCE-BASED COMMENT FOR THE GENERAL PUBLIC & HEALTH PROFESSIONALS. WE SAY EXACTLY WHAT WE THINK

Today's Food Supply: Steps in the right Direction. Obesity Watch – USA. Ideas for Party Nibbles: Avocado Stuffed Egg. News Flashes: Fatty Fish fight Asthma. From the Labs: Mom's gut bugs- Child Autism; Mediterranean diet fights AMD. Recipe Feedback: New adherents Bake Paleo. Q&A: Diet Coke Mischiefs. Health-span: Poor Outlook for UK Health-spans. News Snippets: Short, Intense Activity Benefits Cell Mitochondria; Obesity is shifting Cancer to young Adults; Exercise Improves Gut Microbes. Ideas for Party Nibbles: Simple Smorgasbord. Health Policy: Life Expectancy is falling in Rich Countries – part II. Nature Trumps Nurture: Genes – Key to academic success. Ideas for Party Nibbles: Cod-liver pâté Paleo Bread. Spreading the Word. Video.

Today's Food Supply

Steps in the Right Direction



Credit: Imogen Vasey Carr #BondBriefing reader Imogen took a photo of this advertisement on the London Underground and thought we would be interested. We are!

The product is made by Swedish company **Oatly** and it is a milk-substitute based on oats.

We particularly like the remark of Oatly marketing director Michael Lee: "The slogan: It's like milk, but made for humans describes the product perfectly, because after all, cow's milk is actually meant for baby cows."

After that piece of Paleo wisdom it is almost churlish to suggest that Oatly could go one step further and make milk substitutes from tree nuts instead of grains!

Obesity Watch - USA

- 75% of today's youth are not fit to serve in the US military due to obesity and/or poor education, drug misuse etc.
- 25% of those who do apply are rejected on obesity grounds.
- Obesity in military personnel and families costs \$1 billion per year.
- 70% of firefighters are overweight or obese.
- Obesity rates have doubled in adults and tripled in children since the 1980s.

Source: https://stateofobesity.org/

Ideas for Party Nibbles

Avocado Stuffed Eggs



Enlarge: http://bit.ly/2M7e1cV

In this issue we bring you photos of a few of the dishes that Nicole prepared during the holiday season as nibbles or as starters. Mostly they are self explanatory.

Here we have hard boiled eggs (omega-3, pasture-fed if possible). The yolks are blended with avocado, stuffed into the whites, and the whole decorated with coriander, chives and paprika.

News Flashes

Fatty Fish fight Asthma

A high quality clinical trial led by La Trobe University, Australia, finds that eating fatty fish such as salmon, trout and sardines, as part of a Mediterranean diet, can reduce asthma symptoms in children [1].

In particular the oily-fish eaters had their bronchial inflammation reduced by 14 units.

My View? This is an encouraging endorsement of the need to eat and live the way nature intended.

The fish-oils provide the wherewithal for the body to make the antiinflammatory hormones that the body requires.

The Mediterranean diet, while not Paleo, still limits dairy, saturated fats, sugar and salt – all known asthmapromoting factors.

From the Labs

Mom's Gut Bugs - Child Autism

In a careful ground-breaking study, albeit on mice, John Lukens PhD at the University of Virginia shed light on the complex relationship between the health of the mother's microbiome and the healthy development of her children.

Says Lukens: "The microbiome can shape the developing brain in multiple ways. It calibrates how the offspring's immune system responds to an infection or injury or stress."

But an unhealthy microbiome in Mom can create neuro-developmental disorders such as autism in the fetus.

The good news: The microbiome can be modified easily, either through diet, or fecal transplant. But modified in what way?

The next big step is to identify features of the microbiome in pregnant mothers that correlate with autism risk and work out what is needed to fix it.

My View? All the evidence points to autism having many causative factors, but the influence of gut bugs is really powerful and could well be a major culprit. See: Make of your gut a Herb Garden, Feb 2009 [2] and Our Living Gut June 2016 [3].

Mediterranean Diet fights Ageing Macular Degeneration (AMD)

This study finds that the closer people adhere to a Mediterranean Diet ("MeDi") the more they cut their risk of going blind from AMD. [4] The closest adherents cut the risk by 41%. AMD is a leading cause of going blind in older age in the West.

My View? Basically this is a weak "population" study. > **3**

Recipe Feedback

New Adherents Bake Paleo



Angel Cataron shares a photo of his wife, Adriana preparing a New Year guilt-free treat of Ugg **Chia Seed Muffins** [5] with (in the dish) a delicious selection of luscious wild berries. See also: **Ugg Paleo Christmas Pudding**. Last month [6].

Questions

Diet Coke Mischiefs



http://bit.ly/2AC40zR

- **Q.** What do you make of this infographic which demonizes diet coke and similar diet sodas?
- **A.** Mixed. It makes many assertions without providing any evidence. Taking its points one by one:
- "Tricks your taste buds" True.
- "Attacks your teeth" not important It is no more than eating the same amount of fruit which would be a much healthier alternative!
- "Can switch on fat storage mode". They don't say this but diet sodas trigger the 'cephalic phase insulin response' (CPIR) whereby the brain anticipates the arrival of sugar and so UNNECESSARILY secretes insulin IN ADVANCE of need. See: June 2016 [7].
- "Can Cause Addiction" The infographic muddles caffeine and aspartame in the same bracket. The reality is that caffeine is indeed a stimulant and, in huge quantities of cola --- more than 3 pints, [1.5 liters] per day it can be a problem: see Caffeine Headaches [8].

As for aspartame, the literature is thin on its role in 'excitatory neuro-transmitters' [9]. Again – 'excessive consumption' can give rise 'in sensitive individuals' to 'neurological and behavioral disturbances'.

"Can deplete nutrients": Well, EXTREME consumption can lead to potassium loss ("hypokalemia") [10] "[Cola] dehydrates rather than hydrates your body." False, studies find no evidence of dehydration [11] "Colas make you hungry". True. See Splenda makes you Hungry June 2016 [12].

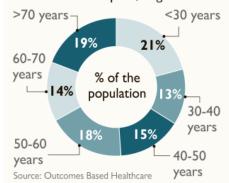
My View? This review misses the TWO BIGGEST mischiefs of colas:

a) Their phosphoric acid content promotes OSTEOPOROSIS through stimulation of parathyroid hormone. See: Keep bone-building hormones balanced, July 1999 [13], Beverages, Deadly Harvest, Chap 5, p 133 [14].
b) The artificial sweeteners wreak havoc with the gut microbiome. See: Artificial Sweeteners Toxic to Good Gut Bugs, Last month.

Bottom line: diet colas are to be avoided, but mainly for reasons outwith those cited in this infographic.

Healthspan

Poor Outlook for UK Health-spans Indicative healthspans, England



Credit: The Times, NHS England, Outcomes Based Healthcare

In "Health Expectancy", p 86, Chap 4, Deadly Harvest, I lay out in some detail the large differences between populations, and as to how long they can expect to live in good shape. The stellar example is given by the Japanese on the island of Kohama where 90% of 80-year-olds are fullyfunctioning human beings without any disability.

But now 20% of people in England cannot expect good health beyond their 30th birthday! So finds research from *Outcomes Based Healthcare* (OBH) using GP and hospital records [15].

By the age of 50, most people will have at least one long-term health condition, such as serious mental illness, asthma or diabetes.

My View? The Kohamans show us the way. In forager times we lived in good shape to the very end – able to walk those 10 miles to the next camp site. See: Cliff-edge Mortality and Compression of Morbidity, Oct 2016 [16].

News Snippets

Short, Intense, Activity Benefits Cell Mitochondria.

Four 30-second sessions of cycling at maximum effort, each separated by 4½ minutes of recovery, improved the function of cell mitochondria, lowering the risk of chronic disease [17]. (Mitochondria provdide power to cells and also control many cell function cycles.) This follows in the wake of many other studies finding that 'Interval Training' is a particularly effective way of getting exercise. See Interval Training Slows Cell Ageing, Feb 2017 [18].

See also: Short, Intense Exercise, $\underline{\text{Dec}}$ 2006 [19]; One Minute per Day, $\underline{\text{Dec}}$ 2005 [20].

My View? This seems to be a biological trick which time-poor people can use to tune up their cardiovascular fitness.

On the other hand it doesn't fit the forager template so maybe there is something missing we don't know about.

Forager physical activity is more moderate in intensity but more regular and prolonged – they are always "upand-doing". See: **Paleo-conforming Physical Activity**, Sept 2018 [21].

Obesity is shifting Cancer to Young Adults

Cancers typically found in the over 50s, are now increasingly found in 20 to 44 year-olds [22]. This age group now has 1 in 10 breast cancers and 1 in 4 thyroid cancers.

The study indentifies how childhood obesity promotes cancer. It causes changes in one's DNA that add up over time. These epigenetic

modifications increase cancer risk and remain long after weight loss.

Obesity over-activates the immune system that produces harmful levels of free-radicals that damage and mutate DNA; it causes hormonal imbalances that help cancers thrive.

In the gut obesity promotes tumorpromoting bacteria; acid reflux in obese individuals increases risk of esophegeal cancer.

My View? I have often opined that childhood obesity is a time bomb that will cripple adult health, and bankrupt health services.

Exercise improves Gut Microbes

Two studies find that exercise changes the gut microbiome independently of diet [23].

Exercise produced a higher proportion of microbes that produce butyrate, a short-chain fatty acid that promotes healthy intestinal cells and reduces inflammation and ulcerative colitis.

How much exercise? The participants, who were all sedentary, did cardiovascular (aerobic) exercise for 30 to 60 minutes, 3 times a week, for 6 weeks. The most dramatic improvements occurred in lean subjects. Obese participants had more modest improvements.

My View? These activity levels are not too challenging and sedentary people should have no bother getting on their bikes and meeting them.

See: Run to Stay Young, <u>Aug 2018</u> [24] Paleo-conforming Physical Activity, <u>Sept 2018</u> [25].

Continued from Page 1

Mediterranean Diet fights Ageing Macular Degeneration (AMD)

- **A)** The food intake was ascertained:
- a) by participants completing a food questionnaire – so intake wasn't recorded continually and/or by independent observers.
- **b)** the questionnaire was only done every 5 years (for 20 years) and so the study relies on participants having accurate memories and in their being truthful.
- c) The study also has to assume that the participants maintained the same eating pattern for the years in-between
- **B)** What was the "MeDi" that the researchers used as a yardstick? They

used a: "9-component scoring system based on intake of vegetables, fruits, legumes, cereals, fish, meat, dairy products, alcohol, and the MonoFat-to-SatFat ratio."

There are many such scoring systems, some more fanciful than others. There is only one true Mediterranean Diet and this is not it. See **Mediterranean Diet: Fact & Fiction**, June 2018 [26].

Nevertheless, this study does add to the evidence piling up that AMD is a disease of malnutrition. See: Macular Degeneration, March 2016 [27]. Also: Antioxidant Deficit/Age-related Macular Degeneration (AMD), Aug 2018 [28].

This study did throw up one very useful finding: that **NONE** of the individual components of MeDi **ON THEIR OWN** -- fish, fruit, vegetables, etc. -- lowered the risk of AMD.

Rather, it was the **ENTIRE PATTERN** of eating a nutrient-rich diet that significantly reduced the risk.

Brilliant! I have been banging on for years saying that all the nutrients have to be working together in harmony like an orchestra. See: **Doc rethinks**Food/Disease Link: Aug 2010 [29].

Eat up your Greens!

As a kicker, another (weak) population study finds that those who consumed the most leafy-green vegetables and beetroot, had a 35% lower risk of developing AMD [30].

It's the Nitrates that do it

Interestingly the researchers find that the link is with the vegetation's natural content of **NITRATES**. As a guide, here are the nitrate contents of common vegetables [31]:

Very High: Celery, cress, chervil, lettuce, red beetroot, spinach, rocket. High: Celeriac, Chinese cabbage, endive, fennel, kohlrabi, leek, parsley Medium: Cabbage, dill, turnip, Savoy cabbage.

Low: Broccoli, carrot, cauliflower, cucumber, pumpkin, chicory.

Very Low: Artichoke, asparagus, broad bean, eggplant, garlic, onion, green bean, mushroom, pea, pepper, potato, summer squash, sweet potato, tomato, watermelon.

Ideas for Party Nibbles

Simple Smorgasbord



http://bit.ly/2Rtna5B

Smoked salmon, smoked mackerel, quails eggs, garnished with cherry tomatoes.

What – salty, smoked products? Well, we **ARE** having a party!

Health Policy

Life Expectancy falling in Rich Countries – Part 2

Continuing from <u>Last Month</u> where we saw that the Western way of life is dysfunctional and that lifespan statistics are misused to dupe us...

... So our lifespan statistics are based on people who were born 80, 90, or even 100 years ago! See: **Spotting the Humbug - part I, July 2010** [32].

But now the truth is coming home to roost: there is something seriously wrong with the way we live in rich countries.

Yes, for sure it is the appalling eating habits driven by cheap, rubbish food, But it is the same system which has given this abundance and prosperity which is also the system driven by the need to squeeze the maximum of efficiency and productivity out of each of us – it treats us mechanically, not as human beings with needs, desires, hopes and ambitions, but as robotic units of production and consumption. It is a philosophy which sees nothing grotesque in encouraging women to become wage-slaves, dumping their toddler's grand-mother into a carehome, whilst giving up their toddlers into the day-care of strangers. See: Babysitting and Caring Grandmothers, Oct 2007 [33] and Childhood, Deadly Harvest, Ch 8, p 218

It is an ideology which doesn't give a damn to how it is harrowing our psyches – no wonder there is a huge increase in mental disorders – and of deaths from alcoholism, drugs – and

"despair" of all things! See: **Procrustean** Bed (Part I) Nature's Misfit with Modern World, Dec 2010 [34]

But it doesn't have to be like this. We are living in the most prosperous societies the world has ever known! We still have the freedom to TAKE CONTROL OF OUR LIVES and live the way nature intended -- Just go out and do it!

Nature Trumps Nurture

Genes: Key to Academic Success Kids are born with much of what they will need to succeed, from the start of elementary school to the last day of high school according to a study from Dr Margherita Malanchini, University of Texas, Austin [35].

"Around two-thirds (66%) of individual differences in school achievement are explained by differences in children's DNA," she says.

Malanchini analyzed test scores from primary through the end of compulsory education of more than 6.000 pairs of

Most students who started off well in primary school continued to do well until graduation.

Genetic factors explained about 70% of this stability, while the twins' "shared environment" contributed to about 25%, and their "non-shared environment", such as different friends or teachers, contributed to the remaining 5%.

My View? This study chimes with identical twin researcher and professor of behavioral genetics, Robert Plomin's findings, last month, How DNA makes us who we are.

This also plays into the question: why are children in the same family so different? The answer is the same: it is nothing to do with the upbringing – it is **Date:** Wednesday May1st 2019 in the genes! [36].

More broadly it reinforces the notion that, instead of trying to be someone we are not, we will be happier accepting nature's blueprint for us.

Ideas for Party Nibbles

Cod Liver Pâté Paleo Bread Tartine



Enlarge: http://bit.ly/2AlmRcJ

Cod liver pâté thinly spread on thinly sliced Ugg Paleo vegan bread (see: Ugg product at http://bit.ly/2Celcua)

Garnished with sliced gherkin, pitted olive halves and cherry tomato halves.

Spreading the Word

EVENTS: http://bit.ly/bond-event Talks to private organizations.

Book Signing

Date: March 7th, 2019 @ 12:30 p.m. At: Square One Publishers stand, ExpoWest, Anaheim, CA

Illustrated Talk

Title: TBA

At: Green Templeton College, Oxford University, UK.

YOUTUBE VIDEOS:

#BondBriefing November 2018: Geoff reads article: Commute through nature. A study finds that those who commute through natural environments are better adjusted and have better mental health than those who commute through concrete jungles. https://youtu.be/IYPKpnGrCjM



Paleo in a Nutshell: Geoff's latest work encapsulates, concisely and easily, current thinking on living the way nature intended. www.paleo-nutshell.com

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