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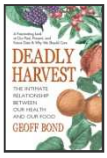
The Bond Effect The Bond Effect The Bond Effect

The Science and Art of Living the Way Nature Intended



The Bond Briefing

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Rational, evidence-based comment for an intelligent general public and for all health professionals. Independent of commercial pressure, we say exactly what we think.

Question of the Month

Telomeres and Antiageing?

Q. *What do you think of the antiageing process promoted by www.tasciences.com? The idea is that they increase cell life by slowing down telomere erosion.*

A. Telomeres protect the ends of chromosomes, like the tags that protect the ends of shoelaces. Each time a cell divides, a little bit of a telomere is lost. Finally, after many divisions, when there is no telomere left, the cell dies.

This is a natural process but various factors speed it up or slow it down. However, it is far from clear what relationship this has, if any, with ageing.

For some cells that divide frequently, like immune cells, the body repairs telomeres with a compound called telomerase.

Telomerase is a double edged sword: it does increase cell life, but it also stops cancer cells from dying, giving them their feared immortality.

T A Sciences (TAS) sells an extract from one of Chinese medicine's fundamental herbs, Astragalus propinquus or "yellow leader" which TAS claims stimulates the body to produce telomerase.

TAS claims they did a study which shows that their product improves the immune system , vision, skin quality, and sexual function.

TAS has posted its study on its website, but it is not independ-ently verified nor is it published in a reputable journal. So we have no way of knowing if all – or any - of it is true. **Cont p. 4**

Human Genetics

Extinct Paleo-Eskimo Revived

Scientists at the University of Copenhagen are the first to reconstruct the genetic blueprint of an extinct human being [1].

They analyzed a tuft of hair that belonged to a man (nicknamed "Inuk") from the Saqqaq culture from north-western Greenland 4,000 years ago.

The reconstruction shows that Inuk, had genes for baldness, dry earwax, brown eyes, dark skin, blood type A+, and shovel-shaped front teeth.

Inuk's ancestors crossed into the New World from Siberia 5,500 years ago. The Native Americans had already arrived from Siberia 6,000 years earlier and left only the inhospitable Arctic regions free for colonizing.

The Saqqaq hunted seals and seabirds and relied on the sea for most of their food. Archaeological remains show they lived in tiny tents in winter.

Said researcher Professor Willerslev: "It's a very hostile environment and I was surprised that people could live up there."

Inuk and his people died out, presumably killed off by today's Eskimos (Inuit) who arrived in a later Siberian migration wave.

Unintended Consequences

Sunscreens Cause Skin Cancer

In spite of 30 years of propaganda promoting the use of sunscreen, sunny countries like Australia are seeing skin cancers rising inexorably.

Some simpletons argue that sun-screen should therefore be slapped on with even more enthusiasm. But, in scientific circles (it's not common knowledge yet), wiser counsels are prevailing. They point out that an INCREASE in sunscreens has only served to INCREASE skin cancers!

The rise in melanoma has been unusually steep in Queensland, Australia, where the medical community most strongly promoted sunscreens. Queensland now has the highest rate of melanoma in the world [2].

What is happening? There are very clear reasons to explain this apparent paradox:

a) Most sunscreens only block UVB rays. These are the ones that burn. Sunscreens do little to protect the skin from the UVA rays which do the cell damage (and age the skin too).

So ironically, sunscreen users overexpose themselves to cancer-causing UVA rays by switching off the 'alarm' – the burning.

b) Sunscreen prevents the sun from making vitamin D in the skin. Studies find that some 70% of the Australian population is now sunshine deficient. Result? A rocketing rise in diseases due to vitamin D deficiency – from osteo-porosis to, yes, cancers, including melanoma! [3] **Cont. p.4**

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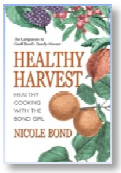
Recipes

No Recipe this month but check out Nicole's cookbook

Healthy Harvest
by **Nicole Bond,**
ISBN: 978-0-9712-8526-2



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Questions

Aspartame Alarm

Q. *What do you make of the email doing the rounds claiming that Aspartame is responsible for an epidemic of cancers, brain disorders and multiple sclerosis?*

A. It's a hoax. The hysterical tone and exclamation marks‼! are enough to raise suspicions‼!

I have debunked the arguments on many occasions, see November 2003 [4]. Also check the article www.tinyurl.com/aspartame-myth on the rumor-busting website www.snopes.com.

Grass-fed vs. Corn-fed Beef

Q. *Is grass-fed beef better than corn-fed beef?*

A. Yes. Corn is no more cow food than it is human food. Just by moving towards a diet that nature intended for cows gives them a better fatty acid profile.

Some ranchers have recognized this and have carved out a niche market for their grass-fed beef. Ted Slanker, whom I will write more about next month, is one: www.texasgrassfedbeef.com.

Compared to corn-fed, his grass-fed beef has a good omega-3 to omega-6 ratio.

Moreover, corn gives cattle bad indigestion and encourages the overgrowth of the dreaded stomach bug, E-coli. See "Corn-fed Cattle Cultivate E-Coli" October 1998 [5]

However, it is possible to go one better than grass-feeding. In a state of nature, cattle are "browsers". That is, their natural food is bushes.

When they feed this way, their fatty acid profile improves considerably. See "How to make good body-fat", page 3.

Vitamin D Supplementation

Q. The *Vitamin D Council, USA, headed by John Cannell MD, gives advice on vitamin D supplementation[6]. What do you think of it?*

A. I can't do better than quote their website:

> How much vitamin D you need varies with age, body weight, percent of body fat, latitude, skin coloration, season of the year, use of sunblock, individual variation in sun exposure, and—probably—how ill you are.
>
> As a general rule, old people need more than young people, big people need more that little people, heavier people need more than skinny people, northern people need more than southern people, dark-skinned people more than fair-skinned people, winter people more than summer people, sunblock lovers need more than sunblock haters, and sun-phobes need more than sun worshipers.

Here you see why I strongly promote (as the Council does), getting your vitamin D from sunshine. Then you don't have to worry about all the above: the body works it out just fine from sunlight.

The Vitamin D Council works hand in glove with another organization that I have quoted approvingly in the past: Dr. William Grant's www.sunarc.org.

So, if you are stuck with supplementation, then the Vitamin D Council's site [6] gives reasonable guidance to steer your way through all those variables – and not overdose by accident too.

See also "Sunscreens Cause Skin Cancer", page 1.

Duck vs. Cornish Game Hen

Q. *Cornish Game Hens are very tasty but seem to be just small chickens.* Deadly Harvest [14] *says that duck is OK. Are frozen ducks OK and are they better than Cornish Game Hens?*

A. Cornish Game Hens are simply young chickens of a particular variety. So, as for any poultry, it is important to choose free-range birds, preferably organic. They will have the "least-bad" fatty acid profile.

Duck, as a rule of thumb, always has a better fatty acid profile than chicken. Where products of animal origin are concerned, frozen is just as good as fresh.

Puberty and Mood Swings

Q. *My daughter, 12, has very bad mood swings (she doesn't have periods yet). The pharmacist recommends evening primrose oil and vitamin B complex. I know your views but I can't always get her to eat right. What do you say?*

A. For a start, evening primrose oil could make the moods worse - it all depends what else is going on in the body - particularly eating high-glycemic foods (all starches and sugars).

Certainly focus on removing omega-6 oils. That is, no sunflower oil, safflower oil, peanut oil, corn oil etc... - they are also present in fast foods, oven ready chips, most processed foods.

Focus on consuming omega-3 - oily fish. Take fish-oil supplements if necessary. Avoid foods with all kinds of additives - and eat up the fruits, salads and vegetables!

Your daughter is coming up to puberty and maybe this is just a phase to grin and bear...

Olives

Q. *Are olives OK, for example in a salad?*

A. The problem with olives is the salt. We use olives in condiment quantities to flavor a salad and in some of our recipes. However, we advise against consuming them in large quantities.

There are some specialist brands of low sodium olives (e.g. in USA, Mario Camacho Foods [7]), so focus on those if you can.

Wild Meat Intake

Q. Deadly Harvest [14] *is a great book, but how much wild meat do you have in your current diet?*

A. Not a lot. It all depends on opportunity. On a visit to Wyoming we ate moose and venison; in Australia it was kangaroo. But even then, one cannot be sure that it hasn't been farmed. In Cyprus, goat is readily available – but that is farmed too.

The point is that it doesn't matter too much to eat wild meat. We focus on the foods of animal origin classed "Green" and "Green-Green" in the table on page 149 of Deadly Harvest, Chapter 6 [8] http://tinyurl.com/Deadly-Harvest-6

Human Heritage

Most Ancient Tribe: DNA Done

This image shows a group of hunters from the "Ju/'hoansi" a tribe of Bushmen in the Namibian bush, Africa. In *Deadly Harvest* [14] I use them as the archetype for the way our forebears lived for eons.

Researchers led by Dr Stephan Schuster at Penn State University USA have now sequenced their entire DNA [9]. This confirms that they are the oldest known lineage of modern man.

We Are What We Eat

How to Make Good Body-fat

As long ago as 1968, Dr Michael Crawford (then of the London Zoo) made ground-breaking research on the body-fat in African animals [10]. He discovered that the kinds of body-fats changed hugely according to what they feed on:

- Wild buffalo living in their natural woodland habitat, feed on low lying bushes. Their body fat had a high percentage (30%) of the two "good" polyunsaturated fats. And omega-6 was within the good ratio of 3 to 1 with omega-3.
- Wild buffalo living in parkland (grassland with only occasional bushes and trees) had much poorer percentages (8%) of polyunsaturated fat.
- African grass-fed farm cattle had only 2% polyunsaturated fat.

(Other studies [11] show that the more a cow is fed corn, the worse is its omega-3 content.)

Moreover, wild giraffes (which feed off treetops) had 39% polyunsaturated fat whilst zoo giraffes (fed on hay) had only 4%.

These differences are found in humans too: American mothers had only 8% polyunsaturated fat in their breast milk, while Japanese breast milk contained 25%.

Even in 1968, the Japanese diet was clearly more human-like than the American one. See "Japanese Longevity and Health", *Deadly Harvest*, Chapter 4 [12], page 92.

Crawford makes the point that, whether it is Africa or Europe, grassland is not the countryside's 'natural' state; on the contrary, it is bushes and trees.

With great foresight, Crawford goes on to suggest that humans, in creating unnatural habitats for farm animals, are upsetting the various body-fat balances and that this will have harmful consequences for humans.

In another 1968 study, Crawford makes the connection between heart disease and the conventional, but unnatural, way we feed farm animals [13].

When I was a young graduate, these studies were a revelation to me. I discovered that we must question our beliefs about what is "normal", and that the truth probably lies in our ancient past.

Crawford has since had an illustrious career in the field of human origins, and the role that fatty acid imbalances have in many diseases. I refer to his findings frequently in *Deadly Harvest* [14].

Myth-Busting

Soy Isoflavones Don't Help Bones

A new study [15] finds that soy isoflavone tablets had **NO** effect on bone loss and osteoporosis in postmenopausal women.

Researcher Dr Lee Alekel of Ohio State University said: "This field of research [that soy helps build bones] has attracted 'believers,' making it difficult to convince them otherwise. People, in general, would like an easy fix. We would all like soy isoflavones to be that magic pill, but this study has found that they are not."

Our View? Just so – where degenerative disease like osteoporosis is concerned, there will never be a "magic bullet". It is due to a variety of lifestyle factors going wrong at the same time.

For the unvarnished truth on bone health see "Osteoporosis", *Deadly Harvest*, Chapter 9 [16], p. 266.

Health Professionals' Corner

Blood Sugar Test

Q. *What blood test would you advise to find out if a patient is consuming too much sugar?*

A. Ask the patient if he is consuming any sugar. If the answer is 'yes', it is too much.

Evolutionary Biology

Apples Promote Friendly Bacteria

Rats eating a diet high in pectin, a component of dietary fiber in apples, had increased amounts of certain bacteria that improve intestinal health [17].

When apples are eaten regularly over a prolonged period, they create a beneficial balance of microorganisms which also produce butyrate, an important fuel for the cells of the intestinal wall.

Our View? This study draws attention to the importance of nourishing "good" colon bacteria.

As for apples, if you eat more than one a day, space them out. Modern varieties are too rich in sugar and fructose. We can still get dietary fiber, including pectin, from the other plant food we eat.

Worthy Idiots

Silly conclusions spoil research.

Fruit & Veg/Cancer

The media recently made much of a study that could find no cancer protection from eating fruit and vegetables [18]. So what's up?

a) The study relied on people remembering what they ate and filling out a food questionnaire. This is notoriously unreliable, and people routinely exaggerate their consumption of "good" foods.

b) Believe it or not, the maximum amount of vegetables consumed (even when exaggerated) was only 5 portions per day.

Although governments urge their peoples to consume "5-a-day" it is still a pitifully small quantity compared to what is needed – Natural Eaters intake some 15 portions per day.

It is not surprising therefore that even 5-a-day is not enough to overcome the damage done by the bad items in the lifestyle.

c) The study did not look at what ELSE was in the lifestyle. Starches, sugars, omega-6 oils, sunlight deficiency (see page 1) and much else promote cancers.

d) The study did not look at other lifestyle factors such as physical activity, stress and sleep.

Cancers break out due to a multitude of factors going wrong at the same time. It is quite pointless to cherry pick one of them (e.g. fruit & vegetables) and hope to find a correlation.

Letters

Fascinating Anthropology-History

"Deadly Harvest is by far the most fascinating book I have ever read on nutrition. I promote it at every opportunity and keep my colleagues apprised of anything new that I learn.

The anthropological/historical information provides the best possible context for appreciating just how far we've drifted from our natural, optimal diet. I thank you for your wonderful work and your commitment to good health."
– *Catherine Miller, USA*

From Page 1

Question of Month

Telomeres and antiageing?

… Furthermore, TAS admits that it hasn't actually measured telomere length – neither before the trial nor after. So even if their Chinese herbs are beneficial, we still do not know why.

But setting that aside, guess what? We don't have to even think about it! Live like nature intended and telomerase activates just fine.

We have a slew of authentic peer-review studies showing that telomerase is increased by:

- -Eating a diet low in refined sugars and rich in fruits, and vegetables [19].
- -Long term [20] and regular physical exercise [21].
- -Plentiful sunshine [22].
- -Good omega-3 intake [23].
- -Good intake of micronutrients including vitamins [24], folate [25], rare earth minerals [26], and many more.

[By the way, we don't hear much about "rare earth minerals" – they are elements such as Ytterbium, Cerium and Yttrium. They are indeed only present in microscopic amounts and yet they play a vital role in maintaining DNA health.]

Does this sound familiar? Indeed, just live like we say and the body will work it out just right – it will manufacture enough telomerase to keep our cells long-lived and not so much that we break out in tumors.

From Page 1

Unintended Consequences

Sunscreen Causes Skin Cancer

…

c) The chemicals in sunscreen penetrate the skin and create mischief, such as disrupt DNA and generate free radicals.

Hence my oft-repeated advice: get enough sunshine, don't use sun-screen and let the appearance of redness warn you that you have had enough.

See also "Vitamin D Supplement-ation", page 2 and articles in October 2005 [27], May 2007 [28], November 2008 [29] and September 2009 [30]

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