January 2006

The Bond Effect Newsletter

vol 9.01

NATURAL EATING NATURAL EATING NATURAL EATING

The Science and Art of feeding ourselves the way Nature intended

The Science of the feeding pattern that is right for the human species;

The Art of applying this knowledge in today's world

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Monthly Private Subscription Newsletter – Annually: Hard Copy \$59.00 - Electronic \$18.00

We are independent of commercial pressure and say exactly what we think.

Human Values: Gift-Giving. Human Zoo: Lightness of Being. Savanna Lifestyle: Night Light and Cancers. Chuckle. Recipes: Cinnamon and Apple Tart. Q & A: Inflammation and Anemia. Fascinating and Important: Healthy Colon Briefing (5). Medical Politics: Big Pharma Disease Mongering. Buyer Beware: GMO Omega-6 for Trans-fat. Mind-Body Connection: Marital Squabbles Harm Health. Food Honesty: Glycemic Index Labels; FDA Nixes Tomato Cancer Claim. Human Heritage: Origins of Warf are (4). Evolutionary Psychology: Glass Walls of the Mind.

Human Universal Values

Gift-Giving

A Yardstick for Relationships Anthropologists and other researchers have studied the huge range of different cultures around the world. From these studies they have teased out the characteristics that are common to all human cultures; they call them "Human Universal Values¹". In other words, they are features that are hard-wired into human behavior; they are not affected by cultural conditioning. Gift-giving is one such Universal.

The San bushmen are no exception. They give, receive and exchange gifts in a way which has strict unspoken rules: a gift must never be refused, even if the recipient does n't want to be beholden to the donor; and a gift must always be returned – never the same object, but one of equal value. The reciprocal gift should be made only after a 'decent' interval².

If this sounds familiar, so it is. Ethnologists Sophie Chevalier and Anne Monjaret study the psychology of gift giving³. They find that we are frequently stressed by the gesture of gift-giving. Anxiety arises because of the expectation that each gift, however freely-given or unnecessary, must be responded to at some point.

The primary purpose of our giftgiving is to affirm, or cut, social ties. An offering expresses our feelings succinctly without having to get into discussion. People calculate how to match the value of their gifts with the value of their relationships. In the process they have to reevaluate their friendships and rank them: "an emotional stressor by any measure." **Continued: page 4**

The Human Zoo Lightness of Being



Last month we looked at the mismatch between modern living conditions and our savanna-bred natures. It makes us subtly uncomfortable, even neurotic – like caged zoo animals.

Our ancestors needed to be attentive to signals about time and weather. So much so, that sensitivity to these signals is in our genes. Without these signals we are missing something and feel deprived. These signals include changes in daylight (color, shadows, brightness, sun angle); and in temperature and touch associated with direct sun, wind, and humidity. For instance, the smell of the air, the color of the clouds and wind speed as predictors of an imminent storm.

Although these sensory perceptions evolved for survival purposes, they continue to be a critical part of peoples' responses to buildings. Studies by architect Judith Heerwagen found⁴ that workers valued the variability in light and color over the day and seasons. In windowless spaces, workers disliked the loss of information about time and weather.

The room in the above photograph is underground. The architects have recreated these varying visual sensations by using fiber optic lighting that changes color over the course of the day.

Savanna Lifestyle

Night Light and Cancers

There are many areas where modern life is a mismatch with our evolved s avanna life. (see Human Zoo, left) One of these is the prevalence of light at night.

Cancer epidemiologist Dr Richard Stevens is investigating a possible connection between night light and breast cancer⁵. For instance nightshift workers are more likely to develop breast cancer and blind women are less likely.

The theory is that prolonged exposure to light at night disrupts the body's circadian rhythms -- our biological clocks that regulate sleep and wakefulness. Light exposure at night reduces melatonin levels – and melatonin is also a powerful cancer cell fighter. "Mankind has only been exposed to these light sources for 150 years", says Stevens.

Researchers speculate that night light-induced low melatonin is connected to the 50% jump in childhood leukemia in the last 50 years. Italian researchers studied⁶ children who used to watch television for 3 hours a night. For one week, their parents denied them access to TV, computers and video games, and reduced their exposure to artificial light generally. The children's melatonin levels improved 30%

Our View? We must be careful of finding causes where there are only associations. Nevertheless, it would be surprising if the dramatic change in night light patterns does not have repercussions in unexpected areas.

Chuckle Life is a sexually transmitted condition !

Recipes

Cinnamon and Apple Upside-Down Tart

Ingredients:

- 2 medium apples (approx. 1 lb.), quartered and sliced
- 2 teasp. fructose
- 1 teasp. ground cinnamon
- 1 teasp. lemon juice

Dough:

- 2 eggs, omega-3 rich, free-range
- 2 teasp. fructose
- 2 tsp. (10 ml) vanilla extract
- 1 tsp. ground cinnamon
- 3 T. (45 ml) olive oil
- 1 T. (15 ml) dark flavored rum
- 5 oz (145 g) almond powder

Method:

In a bowl mix the sliced apples with the fructose, cinnamon and lemon juice. Set aside for 10 minutes to marinate.

Layer the apples in concentric circles in a round, oiled 10" diameter baking dish. Bake at $350^{\circ}F$ ($180^{\circ}C$) for approx. 10-15 minutes, depending on the thickness of the apple slices (the fruit should start to soften).

Meanwhile, in a mixing bowl, beat the eggs with the fructose, the vanilla extract, the cinnamon, the olive oil and the rum. Fold in the almond powder and mix well.

Cover the part-cooked apples with this 'dough'.

Bake at 350°F (180°C) for approx. 20-25 minutes or until the 'dough' is golden brown.

Turn out the tart, so that the apple slices appear on the top.

Comment:

Makes a good teatime dish or even at breakfast instead of Danish pastry. It is a fully conforming dish but it is nutrient dense -- so limit yourself to just one slice!

The fruit, being cooked, there should not be a digestive difficulty even at the end of a meal.

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Questions

Inflammation and anemia

From Dr Elber Camacho, director of the Cancer Centre, Desert Regional Medical Center, Palm Springs, California

Q. I went to a very interesting presentation about anemia in the elderly. In the report it was stated that it was unclear why hemoglobin levels decrease with age. One of the proposed explanations is an inflammatory process causing increase in the inflammatory molecule interleukin-6. This in turn undermines red blood cell production. Can this inflammation be connected to diet?

A. Indeed. In a study⁷ made in 2002 on old people, the researchers found that some were hale and some were frail. The frail ones had high levels of inflammation produced, amongst other things by interleukin-6. This had reduced their red blood cell count compared to the old people who were healthy.

It is certain that a discordant lifestyle, notably nutrition, can initiate inflammation at times and places when it is inappropriate. Some of them are well documented. Omega-6 oils (examples: corn oil, sunflower oil, peanut oil), when they dominate over omega-3 oils, over-produce hormones that promote inflammation. Overproduction of insulin is another Underconsumption example. of plant-food antioxidants is yet another. Finally, a graphic example is abdominal fat. That beer belly is not just sitting there as a dead weight. It is a living, throbbing organ that produces all kinds of inflammatory chemicals including interleukin-6⁸.

We return to our recurring theme: in a chaotic system like the body's biochemistry, it is very difficult to second-guess everything that is going on. That is why we need to step back to the big picture. Notably get our lifestyle right, then the body will sort these matters out for itself.

Fascinating and Important

Healthy Colon Briefing (5) Extracted from Geoff Bond's forthcoming book, working title: The Bond Effect, to be published this summer by Square One Publis hers, New York.

This month we look at sulfur-containing foods, how they feed bad bacteria and lead to nasty bowel diseases.

Do you ever worry about why sometimes the contents of your bowels smell like sewage sludge? Research by the English gut researchers, Max Pitcher and John Cummings, shows⁹ that this is due to the abnormal presence of certain alien, harmful bacteria known as "sulfur-reducing" bacteria. They flourish on sulfur containing foods which are mainly animal proteins.

These alien bacteria work away creating the gas "hydrogen sulfide". It is the compound that gives rotten eggs their overpowering smell. To humans, hydrogen sulfide is as toxic as cyanide; in water it rapidly becomes corrosive sulfuric acid. Not surprisingly, the gut does not like this treatment.

Pitcher and Cummings find¹⁰ that ulcerative colitis, a serious inflammatory bowel disease is directly linked to the dominating presence of sulfurreducing bacteria in the colon. Worse, the toxic sulfides released by these bacteria promote cancerous changes in gut cells by damaging their DNA.

All this helps to explain why heavy meat eaters are more vulnerable to colon cancer. Proteins from plants usually do not contain sulfur.

Apart from animal protein there is another major source of sulfur in the western diet: the food preservative collectively known as "sulfur dioxide". Sulfur, in many forms, is found everywhere in processed food. It is present in packaged salads, jams, hamburgers, sausages, instant soup, beer and wine.

People who eat a lot of processed foods not only promote sulfur bacteria in their gut, they also raise their sensitivity to allergic reactions.

Next month: Lessons from the San on colon health.

Medical Politics

Selling sickness Big Pharma and Disease Mongering

"A lot of money can be made from healthy people who believe they are sick. Pharmaceutical companies sponsor diseases and promote them to prescribers [doctors] and consumers."

Are these the words of some anticapitalist firebrand? No, it is the introduction to an article in the doctors

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own, prestigious, British Medical Journal¹¹. It goes on to say:

"Some forms of "medicalization" may now be better described as "disease mongering"—extending the boundaries of treatable illness to expand markets for new products.

The article explains how the pharmaceutical industry has four strategies:

- Find a benign normal symptom and persuade doctors that it is a discrete disease with a name.

- Make people anxious about it and seek medical treatment.

- Make out that the "disease" is widespread so that doctors will see it in every patient.

- Get at the health professionals who draw up the medication guidelines. Shower them with fees, foreign holidays and consultancy contracts.

Pseudo-treatments described are for: baldness, osteoporosis, erectile dysfunction, personal or social problems and irritable bowel syndrome. We could add cholesterol treatment as another flagrant example.

Here is an example of how it works. The pharma-giant, Roche, in a 1997 massive publicity campaign, announced that they had a cure for a hitherto undiagnosed psychiatric disorder suffered by one million Australians: "social phobia". However, Roche had a cure: their antidepressant Aurorix. So for what grave medical condition were 1 million Australians to take Aurorix every day? ... Shyness!

Our View? Doctors are intelligent, good people. Nonetheless, they are intensely busy and inundated with information. They just cannot keep up. They have to rely on the biased advice of drugs sales men and self-serving research carried out by the drugs companies themselves.

Our main mission is to show people how they can minimize their risk of getting a real disease. Now we have to be on our guard against being medicated for phantom diseases.

Buyer Beware

GMO Omega-6 for Trans-fat According to the Institute of Medicine, there is no safe level of transfat in the diet. Now, under new labeling regulations, manufacturers are obliged to divulge the amount of transfat in their foods.

Under this pressure, Kellogg are replacing transfats in many products. They include Keebler Cookies, Eggo Waffles, Cheez-it Crackers and Nutri-Grain breakfast bars.

This sounds like a good move. So what substitute have they chosen? Unbelievably they have taken soybean oil, genetically modified it, and removed all its good omega-3 oils.

So don't be duped. The substitution is a step in the right direction but only in the sense that it is slightly less unhealthy.

We can take consolation in the thought that we don't consume Kellogg fake food anyway – do we?

Mind-Body Connection

Marital Squabbles Harm Health Spouses engaged in hostile relationships have stress levels that significantly impede wound-healing capacity¹². "Wound-healing is far more sensitive to even minor stresses than we ever assumed", says study author Dr. Janice Kiecolt-Glaser.

Healing rates were 65% faster in supportive couples compared to highly hostile couples. They had much higher levels of the inflammation chemical, "interleukin-6" (see Inflammation and Anemia, page 2). A spike in interleukin-6 levels outside the healing area does not aid the recovery process. Instead it is a health threat linked to depression, heart disease, osteoporosis, arthritis, type 2 diabetes and cancer. In addition, hostile couples had lower levels of the cancer-fighting molecule, tumor-necrosis factor.

The study team noted that because at-home spousal battles are most probably longer and nastier than the study sessions, the findings are likely to underestimate the full negative impact of hostility.

How does this chime with our savanna-bred natures? In forager societies – or for that matter in most societies outside western middle class ones -- married couples are thrown together far less. Their roles are distinct and they each take responsibility for their actions. The occasions for joint agreement are few.

Food Honesty Glycemic Index Labels

Little by little we are finding out more about the food that supermarkets sell. The UK's Tesco chain is now labeling

foods with their Glycemic Index (GI). This is a move to be welcomed.

However, Tesco was clearly nervous of condemning out of hand the vast majority of its products. Tesco has set the bracket of "Low Glycemic Index" far too generously: a GI of 55 and below. (We set the bar at 30 and below). Medium is a GI of 56 to 69 (we say 31 to 60) and High GI is 70 and above (we say 61 and above).

Our View? Any food that has a glycemic index to be labeled, should not be consumed anyway.

FDA nixes Tomato Cancer Claim In an amusing instance of trying to square the circle, the Food and Drug Administration (FDA) has come up with a Delphic pronouncement. They are trying to please commercial interests at the same time as safeguarding the public good.

The FDA has ruled that companies can tell consumers that eating as little as one-half cup of tomatoes weekly reduces the risk of prostate cancer. But at the same time, the companies must tell shoppers that the FDA does not believe the science behind the claim. These are the words: "Very limited and preliminary scientific research suggests that eating one-half to one cup of tomatoes and/or sauce per week may reduce the risk of prostate cancer. FDA concludes that there is little scientific evidence to support the claim".

Our View? Making health claims for this or that food is a terrible slippery slope. Fortunately, consumers don't buy food with a "maybe" message. But watch out for the food industry returning to the charge.

Human Heritage

Origins of Warfare (4)

Extracted from Geoff Bond's forthcoming book, working title: The Bond Effect, to be published this summer by Square One Publis hers, New York.

In December we saw how several species war on other groups of their own kind.

The fact that there are indeed other species that seek to exterminate

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their own kind, albeit from an outgroup, forces us to recognize the possibility that this trait is, in some way, evolutionarily advantageous.

Several researchers have considered the problem. Richard Wrangham, professor of anthropology at Harvard University says that evolution favored humans and chimps who warred because, "This makes grisly sense in terms of natural selection¹³".

A number of intertwined factors are at work. One of these is a special form of natural selection called "sexual selection". Females find themselves strongly attracted to mate with males who have a particular quality. They feel this as "sex appeal". Over the generations, males who have more of this sex appeal than their rivals, pass on their genes for more of that quality. It is a process that can run away with itself. Peahens are strongly attracted to the most luxuriant peacocks' tails. Peacocks' tails have become absurdly extravagant and burdensome.

In the human species, females find sex appeal in "status". They are strongly attracted to high status males. Successful warriors, the ones that survive, enjoy high status amongst other males. High status males have more matings -- so they generate more offspring. The genes sitting in successful warriors become more common. Genes sitting in wimps don't get into the next generation in the same numbers. We are all descended, on average, from males who were better-than-average murderous warriors.

Next month: A second mechanism promoting murderous warfare.

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Evolutionary Psychology

Glass Walls of the Mind

It is a human trait that we tend to take things as they are presented to us. We also tend to see things as our preconceived ideas suppose them to be. Psychologists call it "premature cognitive commitment"

This process creates artificial barriers in our minds. We can visualize it by thinking of experiments on fish separated by glass barriers in a tank. At first the fish will swim to the glass. Eventually, however, when the experimenters remove the glass, the fish still stay on their respective sides of the tank.

The fish have developed premature cognitive commitments that keep them trapped on "their" side of the tank.

Just like the fish in these experiments, most of us remain trapped by our premature cognitive commitments. These hold us back from accepting new ideas and situations. For example, we are all easily influenced by authority figures such as doctors and priests. Sometimes we need to question them.

We all have a number of premature cognitive commitments created in childhood: beliefs about reality that shape the way we see and judge things. This phenomenon is one of the hardest to overcome for those of us who are teaching revolutionary concepts – like Natural Eating. Sometimes we need to recognize where we have an imaginary glass barrier and take the courage to swim through it.

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Human Universal Values

Measuring up to Gift-Giving

Receiving a gift can be just as stressful. The mere thought that we did not buy, or worse, cannot afford, a gift of at least the same value can make us so anxious that we can barely stand it.

Every exchange of gifts reinforces a vicious circle from which it is difficult to escape. In some cases people feel so overwhelmed that they drop out. They are prepared to sacrifice the relationship if necessary for the relief of stepping off the treadmill.

Long after we get a present, it typically means more to us than do other objects, even if we find it useless and tasteless. The last thing we want is to rob a loved one of the feeling that his choice gave us pleasure.

The authors say that we should not underestimate the significance of gifts because the act forms one basis for our social connections.

But we will leave the last word with a Bushman called Demi. In an interview with ethnographer Lorna Marshall in 1960, he said "The worst thing is not giving gifts. If people do not like each other, but one gives a gift, then the other must accept; this brings peace between them. We give to one another always. We give what we have. This is the way we live together¹⁴."

Upcoming Private Events

Over the next few months, Geoff will be speaking to private audiences in London, Paris and Cyprus. Those attending can contact us for more details.

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