Nutritional Anthropology™: Eating in Harmony with our Genetic Heritage

February 2001

### The Bond Effect

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### NATURAL EATING NATURAL EATING NATURAL EATING



### Members' Newsletter

Anthropology: Termite Dinners. Q of Month: Sweet Stevia. News Flashes: Milk Machines; Genetic Code; Bleeding Time. Food/Disease: Porky Kids and CVD. Quick Fix: SuperVeg Spaghetti. Q&A's: Apricot Kernels, Hominid Origins, Peas and Beans, Face Creams Again, New Food Adaptation, Macrobiotic Diet, FAQ's: Blood Group Diet, Microwave cooking, Sprouted Bread. Hints & Tips: Eating Policing. Events: Radio Shows, Seminars. Resources: Books, Cookbooks, Manuals, Memberships etc.

#### **Nutritional Anthropology**

#### **Termite Dinners**

More than a million years ago termites were a tasty meal for pre-humans previously thought to be vegetarians, scientists said recently. A fresh analysis of bone tools found in South Africa's renowned Sterkfontein caves showed that the insects were a key source of protein and fat for man's ancient cousins.

But is that the case for us today? **See: page 5** 

## News Flash Ozymandias

#### **Genetic Code Highlights**

The initial sequence of the human genetic code has been published in a scientific achievement that will revolutionize science and medicine.

 Between all humans on the planet the maximum DNA difference is only 0.2 %.

It is been known for some years that human beings, in spite of external appearances, are extraordinarily similar to one another – much more than gorillas are to each other for example.

And how do we compare to fruit flies? **See page 5** 

### **Question of the Month**

#### **Sweet Stevia**

**Q.** You suggest aspartame for sweetener. But what about stevia? The South Americans use it to cure diabetes.

**A.** Stevia sweetener is derived from the leaves of the Peruvian stevia shrub. It is a much sweeter compound than table sugar. It does not raise glucose or insulin levels and it has zero calories.

The sweet stevia compounds (diterpene glycosides) have been the subject of a number of studies.

So is it safe? See page 4

#### **News Flash**

#### **Bleeding Time**

20,000 people a year die from non-steroidal anti-inflammatory drugs like aspirin and ibuprofen. Aspirin users are 68% more likely to have intestinal bleeding.

"If aspirin were developed today it would have a difficult time getting approval from the FDA", says Dr Michael Loes Director, Arizona Pain Institute.

Comment: Page 5

#### **News Flash**

#### Milk Machines

#### **Cow Concentration Camps**

What rosy imaginings do those still-unreformed milk drinkers have? That the fluid they are drinking comes from contented cows chewing the cud in a sunny meadow? None of it!

The new USDA rules state that organic milk must come from dairy cattle that have "access" to pasture. Bad enough that those organic cows only get 'access'

But what about ordinary cows – no access at all? See page 4

## Food/Disease Links Porky Kids and CVD

Overweight children as young as 8 years old have a smoldering type of blood inflammation.

They also have abnormally high white blood cell counts showing that the body is reacting to plague build up.

This indicates inflamed arteries and the beginning of heart disease. Such obese children will have a high risk of dying from cardio-vascular diseases in adulthood.

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#### **Quick Fix of the Month**

Eating healthily need not be complicated....

## SuperVeg Spaghetti Serves 2

#### Ingredients:

- 8 oz (225g) whole-wheat angel hair spaghetti
- 1 tablesp. (15ml) olive oil
- 8 oz (225g) zucchini
- 8 oz (225g) broccoli miniflorets (can be frozen)

#### Optional:

 ½ cup (60 ml) salsa or liquid, low-sodium, tomato purée.

#### Method:

Add the spaghetti to a large saucepan of boiling water. Add 1 tsp salt if you have to. Add the olive oil.

Slice the zucchini into thin, straw-size strips.

When the spaghetti is within three minutes of being cooked, add the zucchini and the broccoli to the spaghetti.

Bring to the boil and finish cooking the spaghetti (about three minutes)

#### Optional:

Serve with a sauce of salsa or liquid tomato purée.

#### Comment:

This is a quickly prepared, nourishing meal. It contains a good ratio of vegetables to starch (2 to 1). The spaghetti is a low glycemic starch. Only those who are gluten sensitive need avoid this dish.

#### **Reader's Questions**

We receive many questions from readers. This is a selection.

#### **Apricot Kernels**

- **Q.** What about apricot kernel oil? On the bottle it says saturated fat 1g, polyunsaturated fat 4 g, monounsaturated fat 8g. Can you interpret this? Fats are an enigma to me. I had some apricot oil on hand and remember that Hunzas<sup>1</sup> used it mainly.
- **A.** The apricot tree was an important element in Hunza life and culture. They certainly used every part of the fruit, including sometimes the kernel. However, that was not one of their secrets for health and long life.

Fat labeling laws are quite inadequate, so food labels on their own do not give enough information to make a judgment. Buried in the polyunsaturated fat figure of 4g is the undisclosed fact that 99% of it is BAD omega 6 oil!

Indeed the Hunzas only used apricot kernel oil, extracted only with great difficulty, to fuel their oil lamps! Maybe you can think of a better use for your apricot oil - but don't put it in your body.

What about the kernels themselves? The Hunzas did sometimes eat the kernels but they also admitted to digestive difficulties. This is not surprising. Apricot kernels are rich cyanide and, every year, many over-enthusiastic kernel consumers are admitted hospital with cyanide poisoning.

So with apricots it is best to just eat this great fruit and throw away the stone with its kernel.

As for fats being an enigma, that is quite understandable, given the clamor of vested interests, grinding axes and snake oil merchants wanting to pick your pocket for over-priced and usually worthless nostrums. In the first instance check out the section 'Fats and Oils' starting on page 79 of the Natural Eating book.

#### **Hominid Confusion**

- **Q.** Didn't humans/hominids migrate out of Africa much earlier than 60,00 years ago as you claim? There are sites for early humans going back over 700,000 years in places like Java.
- **A.** This kind of discussion is bedeviled by the imprecise meaning of terms like "early humans" and "human/hominids".

Our species is Homo Sapiens Sapiens. This is the "Modern Human". Another species of similar creature, Homo Erectus, was prevalent in large parts of Europe and Asia. His remains are to be found dating back indeed up to a million years. One well-known variant is the Neanderthal. It is this Homo Erectus that is often misleadingly called "early human".

It is misleading because no human on this planet descended from these European and Asian Homo Erectus creatures. This was lona suspected, but could only be conclusively proved with the advent of DNA analysis. Our species absolutely has

A long-lived and healthy tribe that lives in a high Himalayan valley. (See Book, page 40.)

Neanderthal genes or European or Asian Homo Erectus genes.

Furthermore, this DNA analysis has been able to 'work back up the genealogical tree' to establish that every body on the planet is descended from a group of Modern Humans who lived in eastern Africa just 60,000 years ago<sup>2</sup>. They originated in a group of *African* Homo Erectus.

It is for this reason that we talk about humans still being tropical creatures. Physiological studies on all humans from Eskimos to Yanomamo show that there are no significant genetic adaptations to the cold or other geographical extremes.

All the vicissitudes of glaciations, climate changes and the like that prevailed in 1 million years of European and Asian pre-history are not relevant to our ancestry.

On the contrary, it is what was going on in East Africa that is relevant. This, too, has been studied. extensively lt is knowledge of the feeding opportunities and the mechanics of food acquisition in those times that has enabled scientists like myself to establish the human naturally adapted eating pattern.

#### Has Beans

**Q.** I have always thought of peas as a vegetable, now I am not so sure, I heard they were a type of bean. Is this so?

**A.** Quite so. The food group 'legumes<sup>3</sup>', also known as 'pulses<sup>4</sup>', includes beans, lentils and peas.

Peas have similar, but not identical, advantages and disadvantages as beans and lentils. They are more glycemic, situated in the 'borderline category. They are less gassy. Their cargo of antinutrients is different and slightly less toxic.

Peas are OK to be eaten in moderation. Diabetics and slimmers should consume frugally.

#### Adapting to New Foods

**Q.** Surely, with the advent of new foods, humans will have developed bodies 'adapted' to these new foods?

**A.** Just because a creature tolerates a particular distortion doesn't mean that there is automatically selection pressure to change anything.

Natural Selection (contrary to popular belief) works to keep the status quo. It constantly weeds out mutations. Only when the stress is so extreme that survival of offspring is compromised can Natural Selection operate.

Will humans ever evolve to a naturally adapted diet junk food diet? Only if enough offspring die in childhood. Then those survivors will possess genes 'for' junk food.

Even in the current lamentable state of a dolescent eating habits,

they are not dying off, before themselves having children, to change the human genome in that direction.

#### Face Creams Revisited

**Q.** Last month, you gave us ladies a tough time over vitaminized face creams. Is there nothing to be done?

**A.** Wrinkles and aging skin have some very clear causes that are easy to avoid.

They are:

- · excessive sun exposure,
- smoking
- a micronutrient-poor diet.

No surprises there! These are by far the most powerful drivers of skin aging. Fondly imagining otherwise is just self-delusion.

How to combat skin cell aging? The same way as to combat aging in general – a high micronutrient diet – a Natural Eating one!

There is just one other strategy – hormone replacement therapy. This can sometimes be effective in preventing the catastrophic collapse into deeply lined wrinkles that happens to some menopausal women.

#### **Macrobiotic Diet**

**Q.** What do you think of the macrobiotic diet?

**A.** This suite of diets, loosely based on traditional Japanese cooking, has a rationale that is based on subjective metaphysical<sup>5</sup> criteria rather than on any scientific basis.

It is materialized in a diet that is basically vegan with an emphasis on brown rice and vegetables. It avoids dairy and animal

<sup>&</sup>lt;sup>2</sup> 'Tracing the Genetic History of Modern Man'; Cavalli-Sforza, et al; *The History and Geography of Human Genes*; Princeton University Press, 1994.

<sup>&</sup>lt;sup>3</sup> the fruit or seed of leguminous plants (as peas or beans) used for food

<sup>&</sup>lt;sup>4</sup> the edible seeds of various leguminous crops (as peas, beans, or lentils) - both Webster words well understood in many areas but a complete mystery in others.

<sup>&</sup>lt;sup>5</sup> relating to a reality beyond what is perceptible to the senses. (Webster)

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products. It believes that cooking vegetables is a good thing.

While some people sometimes feel better in the short run, this is not surprising. They are eliminating many foods from the diet (e.g. wheat, dairy, animal fats) that make humans sick in general.

But the emphasis on a starchy grain (rice) is already a major lapse. It cooks its vegetables, which is something we should keep to a minimum. It makes food choices based on transcendental notions of 'yin' and 'yang' which may or may not correspond to the sorts of balances we are trying to achieve with Natural Eating.

The macrobiotic diet is seriously flawed. It certainly does not correspond to the Natural Eating pattern. **Avoid.** 

#### **Common Questions**

Many questions come up over and over again. Here is a succinct summary of some of the ones that have featured in earlier newsletter (referred to in brackets).

#### **Blood Group Diet**

**Q.** What do you think a bout the Blood Group Diet?

**A.** It is based on a fallacy – that blood groups have arisen recently in human evolution. It's not the case – blood groups have been around in our ancestors for millions of years.

Is it worth doing? No. It does nothing to address the serious errors in modern diets. (September 1998)

#### Microwave Cooking

**Q.** What do you think about microwave cooking?

**A.** No problem. If you are going to cook, then a quick burst of microwaves is a lot better than most of the alternatives. (December 1999)

#### **Sprouted Bread**

**Q.** Is sprouted bread better than regular bread?

**A.** Sprouting bread removes most of the wheat gluten. Net result, the glycemic index goes up from 70 to 90. Even if you are gluten intolerant, avoid this bread just like any other. (March 1999)

#### **Hints & Tips**

#### **Eating Policing**

Changing our eating habits is not easy. One of the techniques is to keep detailed daily eating records.

Do not be judgmental about this. This is not the purpose, and you will only discourage yourself. The purpose is *not* to make your feel 'bad' or 'guilty'.

Don't get bogged down in detail. Being consistent in your selfmonitoring is more important than getting the exact weights right.

Think of it as an informationgathering exercise. At the end of the week you can calmly look at the patterns that are in there and then work on the areas that you will change the following week.

# From Page One Milk Machines (cont.)

#### **Organic Food**

So where does or dinary milk come from then? Cows kept in

temperature- and light- controlled sheds – and fed not on grass, but a scientifically developed 'feed' to maximize production. And of course, pumped full of hormones and antibiotics to increase the milk 'yield' yet further.

No. Milk of any source is not for human consumption, but take pity on the poor cows, untimely ripped from their newborn calves, to provide this ghastly liquid for misguided humans.

#### Sweet Stevia (cont.)

However, the US FDA has not yet approved Stevia as a sugar substitute in processed food although it can be sold as a dietary supplement,

Stevia megadoses on rats decreased sperm counts and increased cancers, depression, anxiety, and hyperactivity.

#### Comment:

Japanese manufacturers have used stevia for over 30 years without noticeable ill effect.

Stevia has all the advantages of artificial sweeteners like Aspartame. Clearly, it can be helpful in controlling the blood sugar stress that leads to diabetes.

It is unlikely that megadoseinduced diseases in rats translate into minidose-induced sickness in humans.

If you use stevia sparingly, it is surely no greater a threat to health than other sweeteners. One thing for sure, stevia is far better than sugar.

#### Ozymandias (cont.)

#### **Human Genetic Code**

There must have been a 'bottleneck' in the past (some

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200,000 vears ago) humans were reduced down to just a couple of hundred people.

our common ancestors were found in a small, coherent group that burst out of tropical Africa some 60,000 years ago

• Humans have far fewer genes than expected at 30,000 to 40,000, compared to the roundworm with 18,000 and the fruit fly with 13,000.

It is a humbling thought that the number of genes needed to describe a human is only double that needed to describe roundworm or a fruit fly.

these creatures have to be variously equipped with nerves, digestive systems, enzymes, muscles, hearts, eyes, brains and livers just like a human. It is mostly the form and the volume that are different.

Humans need extra genes to develop complex areas of the brain, like those for language; and being long-lived, we need genes that build our complex cell does not mean that more is repair and immune system.

#### **Termites (cont.)**

Using computer image analysis and sophisticated microscope techniques, scientists Backwell and d'Errico analyzed marks on 1 million year old bone tools.

Early hominids were also smart. They were looking for a long, dagger-shaped bone to dig with -not just any random shape. "That reflects cognitive ability," Backwell said.

Source: Proceedings of the National Academy of Science; January, 2001

#### when Comment:

These findings confirm the ideas of famed ape researchers Jane Goodall and Louis Leakey who in DNA analysis like this tells us that the 1960s predicted that, like chimpanzees. early our ancestors foraged also termites. Indeed even chimpanzees are quite adept at using twigs to probe for termites. So it is not surprising that ancestors did the same at some time in the past.

There is strong evidence that this kind of nutrition was quite important for human evolution. But readers will be happy to know that humans have since lost the ability to digest chitin, the scaly outside of insects - so insects are no longer considered an But when you think about it, essential part of the human det.

> Even so, many cultures still eat insects, such as ants and locusts, on a regular basis.

#### Bleeding Time (cont.)

Aspirin is present in tiny amounts in much of the fruit we eat. It is perhaps an important micronutrient for humans.

Just because a little is good, better.

Much healthier is to Eat Naturally and avoid the need for doses of aspirin in the first place!

#### Porky Kids (cont.)

#### Comment:

It is a tragedy that our children are being condemned to a life of disease and an early death, just because we don't stop them getting fat.

It is such a serious matter that we don't even insist that your children slim down the best way, by Natural Eating.

Just do it – by any means at your disposal!

#### **Upcoming Events**

Contact us for further de tails, toll free 1-888-240-3493 Visit us on the Web!

www.naturaleater.com

#### Radio Talk Shows (USA)

They often come up at short notice. These were known at the time of writing:

Weds, February 21<sup>st</sup> 3.30 pm Marshall Gilbert Show. Station KNWZ, Palm Springs, 970 AM and 1140 AM

Sat, February 24th 10.00 am **Naturally Speaking with Lisa** Ensign. Station KGAM, Palm Springs. 1450 AM.

#### Seminars (USA):

Thursday, March 1<sup>st</sup> at 5.00 -7.00 pm

"Natural Eating"

**Desert Hospital (Stergios** Building), 1150 N. Indian Cyn. Palm Springs. Reservations: 1-888-240 3493

#### Seminars (UK):

Friday, March 30th at 7:00 -9:00 pm

"The Bond Effect - Natural Eating" Ashtead, Surrey, Information and Reservations: 01372 279 617