



# The Bond Briefing

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**Question of Month:** America's First People. **Human Behavior:** Childhood – Forager-indulgent or Modern Discipline? Part I. **Food Ideas:** Bread Recipe Variants (Supplement). **Human Condition:** What do Foragers Die of? **Event:** Geoff Lecture Nov 5. **Recipe:** Greene Taboulé. **Q&A:** Sweetener Xylitol Natural; Forager Longevity; Heating Various Omega-3 Oils; Jicama OK; Varicose Veins not Inevitable; Carob Update; Sprouted Buckwheat Groats; Wheatgrass Juice. **Human Biology:** Distance Runners Drink too Much. **Supplement:** Coconut Flour Bread; Three Flour Bread; Basic Almond Flour Bread.

## Question of Month

### America's First People



Image Credit: The Discovery Channel

**Q.** *Deadly Harvest*, [Chapter 1](#), suggests that the Americas were populated from Asia. What about new studies suggesting that the first peoples came from Europe?

**A.** This is the 'Solutrean Hypothesis', notably championed by Dennis Stanford, Smithsonian Institution, USA, and Bruce Bradley, Exeter University, UK [1].

Some 15,000 year-old stone tools, that appear to pre-date the Asian invasion, have been found in USA that bear a remarkable resemblance to sophisticated tools made by Europeans, the 'Solutrean' people, some 18,000 years ago.

At that time, the Earth was in the grip of the last ice age. Vast ice sheets a mile thick (image above) covered much of Europe and North America.

Sea levels were **420 feet** (130m) **LOWER** than they are today. So that, crucially, Europe and North America were connected by a continuous sheet of ice across the North Atlantic.

Moreover, the lower sea levels meant that coastlines were some 200 miles further out than they are now. The Solutreans, located in the Alaska-like conditions of southern France... **Cont p. 2**

## Human Behavior

### Childhood: Forager Indulgent or Modern Discipline? Part I

In this article, I am going to talk about two contrasting practices for bringing up children. The seemingly undisciplined and lax forager way of doing things, and the modern way: controlling and disciplined, backed up by punishment.

For the latter, I will draw on a remarkable paper by Dr Benjamin Abelow, USA, where he posits their origins in the ancient civilizations of the Mediterranean and Near East [2]. Their ideology was to: "suppress [child] willfulness and inculcate obedience by physical punishment and coercion".

In 'An Indulgent Upbringing', *Deadly Harvest*, [Chapter 8](#), I describe how the San Bushmen take a very relaxed attitude to disciplining children.

In practice, forager care for infants comes not only from genetic parents but also from other group members: siblings, grandparents, uncles, aunts and older members of the community.

These are known as 'alloparents', a topic that American anthropologist Sarah Hrdy explored in her lecture to HBES [3], and to which I will return at a later date.

In Patricia Draper's 1960's studies of the Bushmen she describes how the alloparents will be keeping an eye open for the children as they play in and around the campsite, but will only leap into action if a child wanders out of sight or earshot [4].

**Cont p. 4**

## Food Ideas

### Bread Recipe Variants



Nicole has been experimenting with various alternatives for bread recipes. We have included them in a Supplement, **pp 5,6**.

## The Human Condition

### What do Foragers Die of?

If foragers don't get heart disease, cancer, stroke, lung disease, Alzheimer's, and diabetes (chief causes of death in USA) what **DOES** carry them off? Prof. Nicolas Blurton Jones, UCLA, USA, finds causes of adult death in the Hadza are: Viral diarrhea, falling from baobab trees, murder, accidental poisoning, snakebite, and old age [5].

See forager longevity, page 2.

## Imminent Event

**Geoff's Lecture: Lifestyle Changes for Health and Beauty: Darwinian Insights.**

Saturday **November 5, 2011**  
9:30 a.m. - 10:00 a.m.

**At:** The Body Conference, Nov 5 & 6, 2011, The Royal Society of Medicine, London

**Target Audience:** Aesthetic medicine professionals (CME OK)

**Info:** [www.bodyconference.co.uk](http://www.bodyconference.co.uk)

## Recipe

### Greene Taboulé (Tabbouleh)

**Yield: 6 servings**

*Nicole created this dish for vegetarian Richard Greene, communication specialist and environmental activist of Los Angeles, when he stayed with us recently in Cyprus.*

Taboulé is a Middle Eastern dish based on couscous or bulgur, which are both forms of wheat.

Here we replace the wheat with white cabbage which, after treatment in the food processor, has a similar grainy texture.

#### Vinaigrette:

1 tablespoon Dijon mustard

4 tablespoons canola oil

4 tablespoons lemon juice

salt and pepper to taste

6 tablespoons raisins

1 medium onion (about 4 ounces), quartered

1½ lb. (about 20 ounces) white cabbage, cut into large chunks

3 green onions, cut into large pieces

2 green bell peppers (about 10 ounces), seeded and quartered

2 sticks celery (about 2 ounces), cut into large pieces

1 small field cucumber (about 2 ounces), cut into pieces

5 gloves garlic

Leaves of 4 sprigs fresh mint

4 sprigs fresh parsley

1 tomato (3-4 ounces), chopped finely by hand

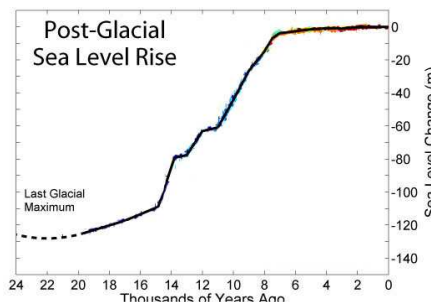
1. Place the vinaigrette ingredients in a medium-size mixing bowl and, with an electric mixer, blend until creamy. Salt and pepper to taste.
2. Add the raisins and. Set aside.
3. Combine the onion, cabbage, green onion, bell peppers, celery, cucumber, garlic, mint and parsley in a food processor and, using the blade, mix to obtain a coarse consistency.
4. Chop the tomato finely by hand and add to the taboulé mixture.

5. Mix in the vinaigrette by hand and place the dish in your fridge for a few hours (best when prepared the day before).

*This taboulé is humming with a wonderful orchestra of micro-nutrients. Eat as much as you like!*

## From Page 1 Question of the Month

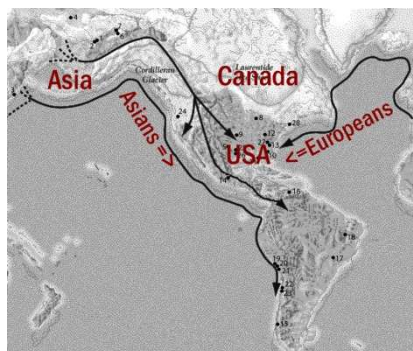
### America's First People (Cont.)



*Sea levels have been rising for 20,000 years.*

... must have lived rather like traditional Eskimos.

Stanford and Bradley suggest that some Solutreans, perhaps on seal-hunting expeditions along the edge of the pack-ice, found their way to the American coast.



*Asian invasion routes on the left. European route on the right*

The trip would be shorter than today, since the European and American coastlines were 400 miles closer to each other. The Discovery Channel did a fascinating 2005 docudrama, '[Ice-Age Columbus](#)' which imagined the voyage, the ice, the dangers, and the strange animals. Stanford and Bradley personally give their scientific arguments. The whole film is available in episodes on YouTube. [Episode 1](#).

**Next Month:** How strong is the evidence?; Indian DNA, Viking settlements; Earth's climate swings.

## Questions

### Sweetener Xylitol Natural

**Q.** *Is the low G.I. sweetener Xylitol an artificial chemical?*

**A.** No. Xylitol is a 'sugar alcohol' ['Sweet Tipple', [Jan 2000](#)] which occurs naturally in most kind of plants. Today it is extracted mainly from corn (maize).

See also: 'Alternative Sweetener: Xylitol', [Jan 2010](#).

### Forager Longevity

**Q.** *Did our ancestors, once they survived through infancy, injury and infectious diseases, make it into their 80s and 90s?*

**A.** Yes. The evidence is as follows

1. We have the same genome as people 60,000 years ago. If we have the genetic potential to live into our "80's and 90's" (as you say), so did they back then.

It's a sobering thought that the way people trash their bodies today, they likely don't achieve their genetic potential by ten or more years.

2. The human species only survived thanks to a grandmother generation. That is still the case with present-day foragers. Women last give birth in their late forties and then have a generation (at least 25 years) of mothering and grandmothering.

See Childhood, page 1

Frank Marlowe ([June 2011](#)) finds that Hadza grandmothers make another vital contribution: they provide **MORE FOOD** to the band than any other age category [6].

3. Studies of present day foragers (and those in recent recorded history) find that a good percentage live into their "80's and 90's" – and without the benefit of sustained medical intervention!

Of course, foragers are exposed to "nature, red in tooth and claw" and death can strike at any time compared to our cocooned existence. So the forager population age profile is more pyramid shaped as your original question hinted.

See also lifespan in history, [Deadly Harvest p 86](#) onwards.

**Green Smoothies - too Easy?**

**Q.** *What about green smoothies with leafy greens: spinach, kale, lettuce, herbs, ginger etc. plus some fruit for flavor? It seems an easy way to increase one's intake of raw foliage.*

**A.** Well yes, it is easy – perhaps too easy! I have always argued that we have mouths, teeth, saliva and jaws for chewing and that things go wrong if we bypass nature's mechanisms.

See 'Juicing – What are Teeth For?' [May 2004](#), and ref 7.

That was even before I knew about paleo-dentists' conclusions that lack of chewing has much to do with weak jaws, crooked teeth and poor jaw muscles.

See: 'Your Jaws are What You Chew', [Aug 2011](#).

So my view is that juicing, even of low glycemic plants, is not ideal and should only be indulged in when patients cannot, for some reason, chew or swallow solids.

**Heating Various Omega-3 Oils**

**Q.** *Does cooking ground up flax meal damage the good fats (omega-3s)? I'm a bit confused as the good fats are OK when oily fish is cooked. Could flax meal be good in baked goods?*

**A.** The omega-3 in flax is alpha-linolenic acid (ALA), which is fragile to heat. Flax oil is sold in darkened bottles and kept refrigerated for that reason. And indeed, flax meal too is vulnerable to heat [8].

Worse, flax meal contains compounds called 'cyanogenic glucosides' and 'diglucosides'. They are harmless until heated: whereupon they release the poison cyanide.

In contrast, the omega-3's in fish are EPA and DHA which are heat resistant.

**Jicama (Yambean) OK**

**Q.** *Is jicama a conforming food?*

**A.** Yes. It is a tuber, originally from S America, with properties akin to the turnip.

50% of the solids are dietary fiber, including inulin [inulin? See ref 9]. It also has high levels of vitamin C.

**Varicose Veins not Inevitable**

**Q.** *My family has a history of varicose veins – is there anything I can do to avoid them?*

**A.** Yes. Bad habits run in families too! And we can be sure that varicose veins are a phenomenon of lifestyle.

Peoples who live the forager lifestyle, or who simply live in third world rural communities, have a vanishingly low incidence of varicose veins. A 1967 study of San Bushmen found not a single case of varicose veins [4].

So what causes them? After studying all the evidence, colonial surgeon Denis Burkitt writing in the British Medical Journal in 1972 came to the conclusion that the chief culprit was a 'fiber-depleted' diet [10].

This leads to constipation, to 'straining at stool', and to the transmission of raised abdominal pressure to the veins of the legs. Burkitt also sees that squatting to relieve oneself (as one does in a state of nature) is also helpful. Indeed, the benefits of the squat position have strong evidential support [11].

All this knowledge goes back a long way and it is bewildering that so few studies have been carried out since then. There must be more money to be made in surgery and elastic support hose!

So the moral is: eat plenty of plant food, rich in dietary fiber, just like our forager forebears did for eons.

See also 'Jicama (Yambean) OK', earlier.

**Carob Update**

**Q.** *What are your views about carob?*

**A.** I first wrote about carob in [Jan 2002](#). Since then we have some more insights.

Carob flour is 40% dietary fiber, which is good. (See 'Varicose Veins not Inevitable', earlier.)

On the other hand it is 50% sugars, which is not good.

Does the dietary fiber dampen the sugars' glycemic reaction? Certainly, but we don't know by

how much - no one has established a GI for carob flour.

But more protection comes from another, previously unsuspected, factor: carob is rich in a chemical called 'pinitol'. Pinitol **DEPRESSES** blood sugar spikes [12].

So, all in all, carob probably has a safe glycemic reaction.

Carob is also rich in polyphenol antioxidants [13] and these, combined with the high dietary fiber content, make carob good at lowering cholesterol levels [14].

**Bottom Line:** Until we hear evidence to the contrary, carob appears to be a useful conforming food.

**Sprouted Buckwheat Groats**

**Q.** *What is your take on sprouted (germinated) buckwheat groats? It makes a good porridge.*

**A.** Buckwheat is what is known as a 'pseudo-grain'. It is not from the grass family like cereals, but nevertheless has similar proportions of starch, protein, dietary fiber, minerals, vitamins and fats [15].

Buckwheat is a good source of polyphenol micronutrients [16]. Boiled groats have a glycemic index of around 45 [17] which is borderline and slightly better than porridge oats.

Sprouting the groats has the effect of converting some of the starch into sugars (which is no help) and of reducing the plant poisons (which is a help) [18].

**Bottom Line:** Buckwheat groats are marginally better than rolled oats and sprouting does help slightly. But they are not a miracle substitute for cereals either!

**Wheatgrass Juice**

**Q.** *What do you think of wheat grass juice? I heard our ancestors chewed the grass which is supposedly highly nutritious and spat out the indigestible pulp.*

I wrote about wheatgrass juice in [May 2004](#) and I don't have much to add. You are better off eating conforming plant food [19].

As for our ancestors chewing it, that just didn't happen. Wheat didn't exist in our ancestral homeland.

## Human Biology

### Distance Runners Drink too Much

In [last month's](#) 'When it's OK to Drink a Gallon' I undertook to report on a study into water overdosing by distance runners. This is not new. Already in [July 2009](#) I reported on Dr Almond's investigation into the deaths from water intoxication of Boston Marathon runners [20].

Overconsumption of water drains sodium out of the body fluids leading to a deadly state of 'hyponatremia'

In recent years, there have been 12 documented and 8 suspected runners' deaths from hyponatremia.

But a new survey found that 37% of runners drink according to a preset schedule and 9% drink as much as possible [21].

Say the researchers, "Many athletes hold unscientific views regarding the benefits of different hydration practices. 58% say they drink sports drinks because the drinks have electrolytes that prevent low blood sodium. In fact, the main cause of low

sodium is drinking too much water or sports drinks."

**Our View?** The official authority, *The International Marathon Medical Directors Association*, says it for us:

"Drink only when thirsty."

See also:

[Gallon of Water Kills Mom](#), [Sept 2010](#); [Water Intake for Child Athletes in Hot Weather](#), [July 2009](#); [Water Intoxication Kills](#), [July 2005](#)

From Page 1  
Human Behavior

### Childhood upbringing

Otherwise, the environment is quite safe. The main dangers are the spears and poisoned arrows, which the Bushmen take care to store out of reach. The children play in a carefree environment. Children are never physically punished or spoken sharply to.

Frank Marlowe makes similar remarks about the Hadza [6]. In one year he records only one child spanking, and that by a stepfather whose wife had had the child from an extra-marital affair.

See 'Evolutionary Origins of Stepfather Violence', [Nov 2008](#).

In addition Marlowe did observe women using a switch on grizzling 3 to 5 year olds who were struggling to keep up on a 6-hour march to change camp. Nevertheless Marlowe concludes: "By American standards, Hadza do very little disciplining or training."

My own late 1960s observations of Fulani herders and Hausa gardeners support a similar conclusion.

Halfway around the world, evangelical missionary Daniel Everett observed the same indulgence in the Pirahã, a remote band of Indians buried deep in the Amazon rain forest [22]. Unbelievably he took his young family with him to live among the Pirahãs.

One day Everett felt he had to cane his young daughter, Shannon, for some misdeed...

[Next Month](#): Do the Pirahã come to Shannon's rescue? Wherefrom our ideas of child punishment?

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- Page 196: Parenting Style, 7 Mouth Flora in Evolutionary Perspective; *Briefing* Oct 2008.

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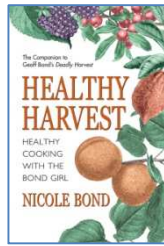
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## Nicole's Bread Variants

[www.healthy-harvest-recipes.com](http://www.healthy-harvest-recipes.com)



### A Word about Coconut Flour

Recently, I have been experimenting with coconut flour, and it makes some great recipes. It is lighter than almond flour, which makes it perfect for cakes, muffins and breads. Further, it is gluten free, high in fiber, low in carbohydrates and has a low glycemic index.

Coconut flour is different to other flours: a little goes a long way. Coconut flour is like a sponge, it sops up moisture. I experimented by making breads for every taste. Have a go for yourself!

$\frac{3}{4}$  cup coconut flour = 1 ounce.

### A Word about Baking Powder

With all recipes using baking powder, set the dough to one side for 15 minutes to allow the baking powder to 'work' and allow the dough to rise.

## Three Flour Bread

Yield: Approx 15-20 slices (depending on thickness)



*This is a robust nutty bread. Experiment too, with the ingredients.*

5 eggs, large, omega-3

$1\frac{1}{2}$  cup almond meal (about 5 ounces)

$\frac{1}{4}$  cup chia seed meal (about 1 ounce) - or flax seed meal

2 tablespoons coconut flour

4 tablespoons olive oil

1 tablespoon red wine vinegar

$\frac{1}{2}$  teaspoon salt

$1\frac{1}{2}$  teaspoon baking powder

$\frac{1}{2}$  teaspoon xanthan gum

olive oil spray

1. Combine all the ingredients in a food processor and, using the blade, mix them to obtain a smooth consistency.
2. Spray a loaf mold (about 7.5 x 4 x 3-inches) with the olive oil and fill with the mixture.
3. Bake in a hot oven (350°F - 175°C) for about 30 minutes. Check the center for doneness.
4. Allow the bread to cool down before de-molding.

### **Coconut Flour Bread**

**Yield: Approx 15-20 slices (depending on thickness)**



*This is a basic bread, very easy to make and has a very satisfactory taste.*

6 eggs, large, omega-3  
 $\frac{3}{4}$  cup coconut flour (about 3 ounces)  
6 tablespoons olive oil  
 $\frac{1}{2}$  teaspoon salt  
1 teaspoon baking powder  
olive oil spray

1. Combine all the ingredients in a food processor and, using the blade, mix them to obtain a smooth consistency.
2. Spray a loaf mold (about 7.5 x 4 x 3-inches) with the olive oil and fill with the mixture.
3. Bake in a hot oven (350°F - 175°C) for about 40 minutes. Check the center for doneness.
4. Allow the bread to cool down before de-molding.

### **Basic Almond Flour Bread**

**Yield: Approx 15-20 slices (depending on thickness)**



*This is a basic bread which uses readily available ingredients. It is very easy to make and has a very satisfactory taste and toasting quality.*

5 eggs, large, omega-3  
 $2\frac{1}{4}$  cup almond meal (about 9 ounces)  
4 tablespoons olive oil  
1 tablespoon red wine vinegar  
 $1\frac{1}{2}$  teaspoon salt  
 $1\frac{1}{2}$  teaspoon baking powder  
 $\frac{1}{2}$  teaspoon xanthan gum  
olive oil spray

1. Combine all the ingredients in a food processor and, using the blade, mix them to obtain a smooth consistency.
2. Spray a loaf mold (about 7.5 x 4 x 3-inches) with the olive oil and fill with the mixture.
3. Bake in a hot oven (350°F - 175°C) for about 30 minutes. Check the center for doneness. Allow the bread to cool down before de-molding.