



The science & art of living the way nature intended

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Ancestral Lifespan: Queen – a forager's death? **Ancestral Family Tree:** Nobel Prize for Svante Pääbo. **Ancestral Society:** The importance of Elders. **Q&A:** Reversing Day & Night; Daily Physical Activity. **News Shorts:** Racquet Sports best for staying alive; Women Carry Babies best on their backs; Vegetarian Women have 33% higher risk of breaking a hip; Saccharine & Sucralose (Splenda) raise blood sugar. **From the Belly of the Beast:** Half of Cypriot Children Obese. **Spreading the Word:** Margaret Pettit's update. **Letter:** Paleo Baby. **Postponed Viewpoint:** Organizing Society for an Industrialized World.

Ancestral Lifespan

Queen: A Forager's death?



Death Certificate [1] Queen Elizabeth II in 1959 [2]

There was considerable controversy about the Queen's registered "cause of death". It was given as 'Old Age'. You might think that this is perfectly reasonable considering that she was 96 years old and had no obvious degenerative disease like CVD, cancer or dementia.

However, this "cause of death" is a rarity in modern Britain, accounting for only 2% of registrations. Indeed government guidance says 'old age', 'senility' or 'frailty of old age' can be given as sole cause of death only if the doctor who writes the certificate has cared for the deceased over a long period and observed a gradual decline in health that couldn't be attributed to a disease or injury.

Nevertheless, this is exactly how it happened in forager times. In old age, foragers stayed fully functioning until the last days of their lives. That is the famous 'cliff-edge mortality'. Unlike us moderns, most of whom suffer infirmity for many years before the end of their lives, forager infirmity is delayed until the last few days – a phenomenon known as 'compression of morbidity'.

When the time came, there was no identifiable cause – just 'general system failure' >p4

Ancestral Family Tree

Nobel Prize for Svante Pääbo



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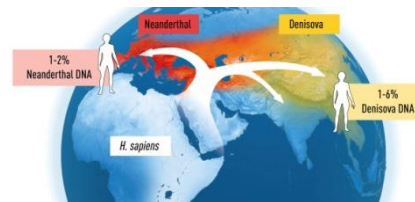
Swede Svante Pääbo is a remarkable scientist who has developed highly advanced methods for analyzing ancient DNA, notably of Neanderthals who migrated out of Africa 800,000 years ago, way before our ancestors did, 70,000 years ago.

Thanks to his work, it seems that west Europeans' DNA contains some 1%-2% of Neanderthal genes. See:

Attractive Neanderthals? [June 2010](#) [4] and, **Neanderthal-Human Sex**

Rarely Produced kids, [April 2012](#) [5].

Pääbo's work also finds that Asians' DNA contains 1%-6% of Denisovan genes – Denisovans were contemporaries of Neanderthals living in south Siberia near the Mongolian border.



Neanderthal/Denisovan migrations

<https://bit.ly/3VY5ooK>

The Nobel committee was so impressed by Pääbo's work that they awarded him the Nobel prize in "Physiology or Medicine". They particularly credit his creation of this new science of 'Paleogenomics'. See full citation: <https://bit.ly/3F8Qgyx> [6]

Ancestral Society

The Importance of Elders

A 'grandparent' generation is rare in mammals, limited to humans, pilot whales, and killer whales. What advantage does an older generation, which doesn't make babies, bring to the evolutionary table?

We reported 20 years ago on the 'Grandmother Hypothesis' advanced by Dr Kristen Hawkes of Utah University: **Grandmothering key to human life-span**, [Feb 1999](#) [7]

Hawkes focused on two benefits provided by the grandmother:

- food provisioning and,
- her childcare which freed up the mother to better forage for the family.



Hadza grannie: food providing and child-caring: <https://bit.ly/3wozRRv>

But food isn't everything. Beyond getting fed, children are also taught and socialized, trained in relevant skills and worldviews. This is where older adults make their biggest contributions.

Indeed, hunter-gatherers over age 50 contribute almost a quarter of this total "indirect fitness" contribution despite accounting for only 11% of the population [8]. So finds a study from evolutionary biologist Michael Gurven at the University of Utah.

>p3

Questions

Reversing Day and Night

Q. *My retired, diabetic husband is mostly inactive, staying awake till 5 a.m. then sleeping an amazing 12 hours - 5 AM to about 5 PM. He lives the life of a night owl!*

I wonder what a Paleo tribesman would say about this? Would a day sleeper even be able to survive in the savanna?

A. Certainly working night shifts is not how nature intended! It would not happen in forager life – it would simply not function. See: **Sleep Patterns and Campfires**, and, **Forager vs Modern Light Exposure**, [March 2005](#) [9].

Moreover we know that even small changes in the sleeping pattern – like the change to Daylight savings time, are detrimental to our body clocks. See: **Sleep Scientists Call to end Daylight Saving Time**, [Sept 2020](#) [10].

It has long been known that people who desynchronize the body-clock – e.g. by regularly working night shifts or crossing time zones (jet lag) – struggle more with obesity, diabetes and other conditions. See: **Morning Sun Keeps off Pounds**, [May 2024](#) [11]; **Night Shift/Colon Cancer**, [July 2003](#) [12].

My View? While it is possible, in today's world, to reverse day and night, it is certainly not a healthy way to be.

Daily Physical Activity

Q. *How deep is your commitment to your daily run, and how far or how long do you run? I would love for you to do an article about your running style, goals, and fears (injuries, loss of motivation).*

Do you believe that you can continue running to the ripe old age of 105? If not, what will take its place?

A. You can start by checking out my articles last year: **How Geoff stays Paleo-fit**, [Feb 2021](#) [13], [March 2021](#) [14].

After that, to respond to your particular questions, I try to run some 3 to four miles on the days

that I don't play badminton or squash. See: **Racquet Sports best for staying alive**, this page.

I have no fear of injuries from running (using "bare-foot" shoes see: **Barefoot Running**, [Aug 2019](#) [15]) but the racquet sports are more testing. Even so, I have no problems with joints, ligaments or muscles. I firmly believe in the motto "Either use it or lose it"!

My physical activity level is probably similar to that of a forager of my age but it is far from that of a keep-fit fanatic. No Iron-man competitions for me!

I certainly hope to reach the age of 105 but I do notice that, as the years go by, my physical performance, as measured by my activity monitor, diminishes. We will keep you posted!

News Shorts

Racquet Sports best for staying alive

All types of physical activity are good but racquet sports like badminton, squash and tennis are best to reduce the chance of dying [16]. These sports are particularly effective at preventing death from cardiovascular issues, dropping risk by 27%. They also dropped risk of death from **ANY** cause by 16%.

Say the researchers: "Racquet sports require synchronized action from many muscles for correct form, and they require hand-eye coordination and intermittent bursts of very high intensity, which improve physical functioning."

My View? Your average forager would be puzzled by these games but, seemingly, they nevertheless, replicate the daily activity pattern of ancestral life. See: **Daily Physical Activity**, this page.

Women carry babies best on their back and anyway better than men

Researchers have looked into the energetic cost of walking over 'challenging' terrain carrying a baby (average weight 10.6 kg, 23 lb) in various positions: on the back, slung on the side and on the front [17].

They find that people carrying their babies on their backs are able to maintain their unloaded walking speed and show the lowest increase in metabolic cost per distance (17.4%).



Women carry the babies for a lower energetic cost than men at all conditions. This, suggest the researchers, is due to the women's wider hips which improve the efficiency of striding.

The researchers also note that all cultures show a preponderance of back-carrying.

My View? The real message here is to **CARRY** your baby and not put him in a stroller! This is vital to generate mother/child bonding, and baby's reassurance and comfort.

In addition, the load carrying is important for the mother's physical health. See: **Importance of Load Carrying**, [Aug 2014](#) [18].

Vegetarian Women have 33% higher risk of breaking a hip
So finds a large on-going study of over 26,000 women in the UK for about 20 years [19].

Opine the researchers: "The increase in risk may arise from meat-free diets tending to have less protein, which helps build muscle mass, and possible deficiencies in vitamins and minerals, such as calcium and vitamin B12, which help strengthen bones."

There was no difference in risk between regular meat eaters and those who ate lesser amounts, or just ate seafood. Vegans (who eat nothing of animal origin – even honey) weren't included in the study.

My View? This is a study which has found a correlation, and the causation suggested by the researchers is rather glib.

Bone health is the result of a vast range of factors including not just

diet but also physical activity, sunlight, and many more.

All we can say is that the way we live seems to work. See 80 year-old Nicole's **Stunning Bone Health**, [Oct 2016](#) [20] and mine: **Geoff – "Bones of an Ox"**, [Oct 2019](#) [21].

See also: **The Secret To Bone Health in Centenarians**, [June 2008](#) [22]; **Some Reassurances About Osteoporosis**, [Deadly Harvest, Chapter 9](#) [23], page 270.

Saccharine & Sucralose (Splenda) raise blood sugar

Researchers found that people who consumed **saccharin** and **sucralose** (Splenda) had significant spikes in blood sugar after glucose tolerance tests [24].

Blood sugar remained stable or even decreased slightly in those who consumed **aspartame** and **stevia**.

The researchers found that all four sweeteners significantly altered the abundance, activity and types of bacteria in the gut and mouth.

Seemingly in the case of aspartame and stevia, the changes are not harmful, at least from the glucose control point of view.

My View? Over the years we have seen many reports of the drawbacks of intense sweeteners: see: **Surprise Sweetener Spook**, [Sept 2014](#) [25]; **Splenda Sweetener Woes**, [Jan 2009](#) [26]. Splenda, Aspartame and Saccharine have all come out badly.

Stevia is the only one to have escaped censure. See: **Stevia: "Natural" Sweetener**, [June 2006](#) [27]. We use it quite liberally until we hear anything to the contrary.

Of course there are other alternatives such as the sugar polyols like xylitol and erythritol, see: **Sugar and sugar alternatives**, [Dec 2014](#) [28]

Continued from Page 1

The Importance of Elders

"Indirect fitness" is where a person sacrifices their own interests in order to invest in the reproduction and survival of their genes in the next generation. This is an "intergenerational transfer of resources" from an older to a younger generation.

Says Gurven: "Much of the huge value of our elders goes untapped. It's time to think seriously about how to reconnect the generations, and harness some of that elder wisdom and expertise."

Indeed, I think of my own grandmother who strongly influenced me in childhood to think about our food and our connection to nature. See the **Acknowledgements** to [Natural Eating II](#), <https://bit.ly/3UmF6L1>

My View? Some time ago I was listening to a BBC program where a panel of the Great and the Good was discussing the parlous state of childcare provision by the government. How could mothers join the workforce when day-care centers were so rare and expensive?

An older lady called into the program and said: "But what about all the grandmothers?"

There was a stony silence of dead air for a few seconds. Then the panel simply moved on to call for more funding for day-care centers!

From the Belly of the Beast

Half of Cypriot Children Obese



<https://bit.ly/3N75R3B>

Half of Cyprus' children aged seven to nine are obese, with the island holding one of the highest childhood obesity rates in the European Union [29].

The obesity rate amongst young children (7-9) climbed from 22% in 2012, to 33% in 2017 and 49% in 2020.

Cyprus also has the most unfit girls and the second lowest rate after Italy for unfit boys.

Say the dietitians: "55% of obese children have an 80% chance of becoming obese teenagers and a 90% chance of becoming obese adults."

My View? Cyprus (my current home) is a Mediterranean island

which traditionally had what is known as a Mediterranean diet on the Cretan model (see **Mediterranean Diet**, [July 1999](#) [30]). It was focused on seafood, salads, vegetables. See: **Kids on Mediterranean Diet less Obese**, [July 2014](#) [31].

So what has happened? Quite simply fast food! Traditional tavernas struggle to make a living while pizza parlours, hamburger joints, and chicken nugget outlets are buzzing. And all this was amplified by lockdown-driven home deliveries.

Spreading the Word

From Margaret Pettit

Further to **Website promoting**

BondPaleo, [June 2022](#) [32],

Margaret has just updated her website, www.foodhealth4life.com, Margaret reports:

"It includes a new section entitled **'Focus and News'**, attached to the **Recipes Area**.

"**The Focus** contains the nutritional value of 'our' conforming foods and matches BondPaleo diets.

"The next Focus update will give information on food to help boost the immune system for the winter season.

"The information is now free to download but, of course, any donation is always welcome."

Letter

From a UK reader

Paleo Baby

"I was shocked and appalled by the item last month concerning the bonkers vegan couple who were starving their children.

"My 24-month-old grandson has so far eaten mainly fruits and vegetables (he's tried egg, salmon and chicken too) and breast milk; he scoffs impressive amounts of avocado, banana, oranges, sweet potatoes, tomatoes, salad leaves, baby sweet corn, carrots, fine green beans, mushrooms, butternut squash, strawberries, grapes, peppers, onions, melon, mangoes etc.

“Result: he is a bonny bouncing baby in perfect health. He cries for more " 'matoes!" where other children may plead for sweets... but he's ready to have a go at anything his mummy and daddy think is suitable.

“Apart from mother's milk he drinks only boiled water.”

My View? Most impressive is the breast feeding at 24 months! Let the mother keep up the habit for as long as possible.

Next most impressive is the huge variety of plant food allied with sensible intakes of protein-rich foods like eggs, seafood and poultry. Keep up the good work and check back in a year or so with a progress report!

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Queen: A forager's death?



where everything shuts down at once. Then we can truly say that people died of 'Old Age'.

See: **Causes of Death and 'Old Age'**, [May 2018](#) [33]. **Medical Error: a Leading Cause of Death**, [May 2016](#) [34].

My View? So if the Queen had a forager's longevity, did she have a forager lifestyle? Seemingly much more than we would expect from a privileged monarch. She ate abstemiously and avoided starches.

For breakfast she enjoyed fruit and, occasionally eggs or kippers (smoked haddock). See: **Old-Fashioned Haddock Breakfast, Deadly Harvest, Chapter 7** [35], page 161.

Lunch would be grilled chicken or pheasant with a salad, or meat (e.g. venison) from the estate with vegetables like spinach and courgettes.

Dinner would be similar with good omega-3 fish like smoked salmon, trout and mackerel, again with a selection of vegetables.

She enjoyed berries for dessert and also some chocolate – which in moderation is a good thing. See: **Flavonol-rich Cocoa Products**, [June 2018](#) [36].

For drinks she enjoyed Assam and Earl Grey tea without milk (laudable). As for alcohol, it was a Dubonnet and gin cocktail before lunch and a glass of champagne with dinner.

As for exercise, she loved to ride horses and made walking with her

corgis around Buckingham Palace part of her daily routine. She would ramble over the moorlands and through woods at Balmoral and Sandringham. See **“Forest Therapy” in: Green-space Deficit Disorders**, [Aug 2018](#) [37].

Clearly, whatever the Queen was doing, it was successful and, on the little evidence we have, it was closer to the forager lifestyle than most Brits are managing.

Postponed Viewpoint

Organising Society for an Industrialised world.

Last month I promised an article on how the latest transition to industrialization has lifted billions from the drudgery and poverty associated with a farming lifestyle. But what happened to allow the industrial revolution to take place? More importantly, how do we organize our multi-million populations to function when our brains are wired for forager bands of 50 people max? See: **Maximum Group Size for Comfort**, [April 2018](#) [38]. So this is a major challenge. Due to other pressing commitments, I have not had the time to devote to this highly complex and nuanced subject. So the article is postponed to [Next month](#).

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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