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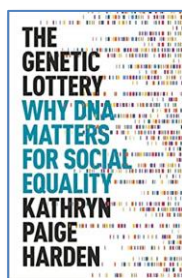
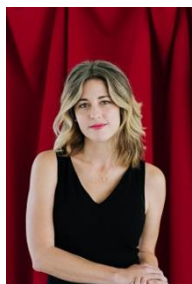


RATIONAL EVIDENCE-BASED COMMENT FOR THE GENERAL PUBLIC & HEALTH PROFESSIONALS. WE SAY EXACTLY WHAT WE THINK

Our Genetic Heritage: Book Review – the Genetic Lottery. Part I. **Q of Month:** Winter, Sunshine Starvation & Vitamin D Supplements. **News Shorts:** Antibiotics in early life affect baby's brain development. **Q&A:** Is Venison OK? Sunlight in Winter. **News Shorts:** Mom's Gut-bugs Influence Fetus' Immune Development; Waning Moon Disturbs Men's Sleep; Latest Links- Vitamin D Deficiency & Disease; Omega-3 helps beat Bipolar. **Human Behavior:** Workplace – Gender Differences; Kinship Triggers Altruistic Behavior. **Hints:** 7,000 Steps a day "Good Enough"; Inflammation caused by Obesity promotes Hair-loss.

Our Genetic Heritage

Book Review - The Genetic Lottery, Part I:



Three years ago, [Oct 2018](#) [1], I reviewed Robert Plomin's book: "Blueprint: How DNA makes us who we are". Plomin is a leading authority on, and professor of, behavioural genetics at King's College, London. He describes how a great many features of our personality (for example, grit, perseverance, IQ, conscientiousness, narcissism, neuroticism, extroversion) are determined by our DNA. More precisely, these features are the result of a myriad of small influences coming from thousands of genes – a phenomenon called 'polygenicity'. Not surprisingly, this knowledge is deeply unpopular with social scientists and progressive intellectuals who want us to believe that inequality is the result of a plethora of injustices in the way society is structured. They therefore promote a swathe of measures to 'deconstruct' such biases. In comes another authority of behavioural genetics, **Kathryn Paige Harden**. She is professor of clinical psychology and director of the Developmental Behavior Genetics Lab at the University of Texas, Austin, USA. > [Page 3](#)

Question of Month

Winter, Sunshine Starvation & Vitamin D Supplements

Q. You say that, in high latitudes (like UK at 53°N to 58°N) one can think of taking vitamin D3 supplements during the winter months. It seems the recommended intake for most adults is 10 to 20 micrograms (400–800 IU) per day. What do you make of this brand?

<https://bit.ly/D-Drops-One>

A. In my view the official Vitamin D3 dosage recommendations are anyway, pitched too low (see [2] and **Vitamin D Targets too low:** [June 2011](#) [3]) so in winter in UK, when the winter sun doesn't make vitamin D, it is good to attend to getting the vitamin some other way – either in a tanning salon, (see: **Sunbeds OK after all,** [Feb 2018](#) [4]) or in the diet. (See: **Vitamin D: from Sun or Food?** [Nov 2011](#) [5]).

You can do this by consuming, on a daily basis, such D-rich foods as eggs, and oily fish like sardines, salmon, herring, mackerel, and so forth.

There is some evidence that such dietary sources are more effective than artificial supplements.

However, when needs must, supplementation is certainly an option and the product you have found looks good. See: **Latest Links: Vitamin D Deficiency & Disease**, p.2 and **Vitamin D Supplement View.** [Nov 2010](#) [6]

As for dosage, you can aim at some 40mcg per day. Don't do much more since it is easy to overdose and undo the good work. See: **Overdose on Vitamin D,** [July 2020](#) [7]. > [page 4](#)

News Shorts

Antibiotics in early life affect baby's brain development

To my surprise we learn that, in the United States, the average child, before the age of 2, receives 3 courses of antibiotics.

Now a study finds that even very low dose penicillin can interfere with the proper development of the infant brain [8].

The researchers suggest that early life exposure to antibiotics is a factor in the meteoric rise in ADHD, autism, and learning disabilities.

What they found is that the antibiotics killed off good gut bugs causing 'dysbiosis'. The bad gut bugs which are left generate chemicals which alter, via the "gut-brain axis", gene expression in the brain's frontal cortex and the amygdala.

There is also the possibility that some of the altered gene expression was caused by penicillin acting directly on the brain's DNA.

My View? In my view it is scandalous that these truly 'miracle' drugs are used so indiscriminately. See **Antibiotic Resistance,** [March 2003](#) [9].

In the early days antibiotics were only used in life-or-death situations where they worked wonders. In my view they should be preserved for such situations.

On a matter of detail, antibiotics have form on cell damage. See: **Antibiotics Damage Cells,** [Aug 2013](#) [10].

See also: **Mom's Gut Bugs Influence Fetus' Immune Development,** p 2

Questions

Is Venison OK?

Q. *I made some venison burgers as I wanted to try something new and surprised myself by how much I enjoyed them! I know that venison is game but is it something we should ration, say once a month?*

A. Mostly the venison we get commercially is actually from deer that are being farmed. Even so, their meat is lean, good quality and Paleo conforming. This is in contrast to those mammal meats which have millennia of non-Paleo breeding, like pork, lamb and, to a lesser extent, beef.

As far as we can tell, mammal meat like venison was a common part of our ancestral diet. Nevertheless, it does have some downsides when eaten in large quantities. See: **Red Meat Inflammation Molecule, Jan 2015** [11]; **Red Meat Intake Generates Heart Disease Molecule 'TMAO'. May 2019** [12].

My View? Mammal meat like venison is a normal part of the human diet. However it has its downsides, so limit its consumption to, say, three or four times a week.

Sunlight in Winter

Q. *I live in London, UK. At this time of the year I wake up and drive to work in the dark, and then it's dark when I come home! I do go for a quick walk at lunch and I also sit right next to a massive window, so on sunny days I'm getting lots of sunshine, is this enough?*

A. Not really. In London you are living at a high latitude (54° N) where the sunshine in winter does **NOT** trigger production of vitamin D3.

On the other hand, the window sunlight is doing important work in regulating your body clock. So welcome that. Note that, even in summer, window sunlight does not produce much vitamin D.

If you are getting good sunshine during the summer, then this can generate enough vitamin D to last through the winter since it is stored in body fat for several months. Even so, it might be advisable to boost dietary intake in winter.

See: **Winter, Sunshine Starvation & Vitamin D Supplements**, page 1.

For the amount of sunshine we should be trying to get see: **Vitamin D Quandaries; Dec 2016**, [13].

See too: **Forager vs Modern Light Exposure May 2018** [14]; **Sunshine is Human Food; Oct 2003** [15]

News Shorts

Mom's Gut Bugs Influence Fetus' Immune Development

Prof. Kathy McCoy of the Snyder Institute of Chronic diseases at the University of Calgary, Canada, finds that 'dysbiosis' in a pregnant mother's gut microbiome undermines the maturation of her fetus's immune system and, thereby, encourages allergic reactions [16].

Kathy suggests that pregnant moms should eat plenty of high fiber food and avoid unnecessary antibiotic treatment.

My View? As we lament regularly, the research cannot identify exactly what is the nature of this 'dysbiosis' and what to do about it.

So we revert to the habitual paradigm: live like nature intended (like we say) and you stack the deck of cards in your fetus's favour.

See: **Antibiotics in early life affect baby's brain development, p 2**

Waxing Moon Disturbs Men's Sleep



<https://bit.ly/3l24CGm>

Careful research from Sweden finds that men's sleep is more disturbed during the moon's waxing phase [17].

My View? This is a big mystery. It seems from various studies that the moon has some kind of effect on mood. This is understandable in the forager context where they slept in the open air and where the moon's ghostly light was a nightly presence.

However, how can this moon have an influence when we are holed up in our bedrooms?

See also: **Moonstruck Sleep, Aug 2013** [18]; **Breast Cancer & Dim Night Light, Aug 2014** [19]; **Book Review Part III (Stonewyld), Feb 2020** [20].

Latest Links: Vitamin D Deficiency & Disease

Vitamin D is a vital ingredient in a huge range of biochemical processes. Without it many systems fail. Notably the immune system is depressed.

Young People's Colon Cancer

Colon cancer has been rising in young people and now researchers have fingered one reason: low levels of vitamin D in the bloodstream [21].

They found that those who had a dietary intake of greater than 450 IU were 49% less likely to develop colon cancer than those who had a dietary intake of less than 300 IU.

My View? The researchers admit that they only looked at dietary intake and did not consider sunshine exposure.

Even so, the message stays the same: get sunshine whenever you can, get vitamin D in food or supplements when you must.

Vitamin D good for Covid 19

Early studies are finding that people who live in sunny regions with high levels of UVB radiation (which produces vitamin D in the skin) were much less likely to suffer hospitalization and death from Covid 19 [22].

My View? Yet one more confirmation of the vital necessity of sunshine in our lives and that, starved of it, our immune system malfunctions.

See: **Winter, Sunshine Starvation & Vitamin D Supplements**, p 1, and **Sunlight in Winter**, p 2

Omega-3 helps beat Bipolar

Yet again we have a paper showing how our modern diets are starved of omega-3 fatty acids with the consequence that we suffer unnecessary ailments. In this case it is to do with mood, specifically bipolar disorder [23].

In this experiment, laudably and unusually, the researchers realized

that they not only needed to increase omega-3 intake, they had to drastically **REDUCE** intake of the inflammatory fatty acid omega-6.

Bottom line: **INCREASED** intake of omega-3 (e.g. oily fish, rapeseed [canola]) and drastically **REDUCED** omega-6 (e.g. sunflower, corn oil etc) substantially reduces bipolar disorder.

Human Behaviour

Workplace: Gender Differences

In: 'The Modern Workplace for Men and Women', *Deadly Harvest*, Chapter 8, p.204, I talk about how, in our vast history as hunter-gatherers, men and women worked in separate eco-systems and that evolution had programmed each sex separately so that each sex operated most efficiently in their particular eco-system.



<https://bit.ly/30MUUAq>

I was intrigued to hear veteran feminist Camille Paglia supporting this view in her 102 minute interview with evolutionary psychologist and public intellectual, Jordan Peterson.

I have extracted a 6 minute clip here: <https://bit.ly/30NLXHk>. To give a taster, here are a couple of Paglia quotes:

[In earlier times] "women had joy working with each other... Each gender had its own hierarchy, its own values, and its own way of talking, and the sexes rarely intersected."

"All the problems of today come from women's emancipation... Now upper middle-class women are unhappy, and don't know why – they blame men – 'men must change' – 'men must become more like women' – No! That's the wrong way to go!..."

The full-length interview is here: <https://youtu.be/v-hlVnmUdXM>.

See also: **The Stress of Jobs for the Boys**, [Nov 2009](#) [24]; **Stress of Jobs for the Girls**, [Feb 2012](#) [25].

Kinship triggers Altruistic Behavior

A decade ago scientists discovered that lab rats will rescue a fellow rat in distress, but not a rat they consider an outsider.

Now research pinpoints the brain regions that drive rats to prioritize their kin in times of crisis. Importantly it also finds that humans share the same neural bias [26].

The researchers say: "The group identity of the distressed rat dramatically influences the neural response and decision to help, revealing the biological mechanism of in-group bias".

Moreover, say the researchers, other mammals share the same empathy and reward regions in the brain, implying that we have similar biases toward our in-group when it comes to helping others.

"Crucially, empathy alone doesn't predict helping behavior. So, if you want to motivate people to help others who are suffering, you have to increase their feeling of **BELONGING** and group membership, and work toward a common **IDENTITY**."

My View? As I say in *Belonging (Stonewylde Novels)*, [March 2020](#) [27].

This "belonging" is a vital feature of forager life. You knew who were your "people" – and they accepted you. If you didn't "belong" anywhere, you died. The consequences today are not quite so dire.

Nevertheless, it is a need deeply buried in our psyches. Not knowing who you are, or where you come from, is a source of great psychological distress for modern peoples – who, perhaps without realizing it, feel rootless, aimless and worthless.

See also: **In-Group, Out-Group**, *Deadly Harvest*, Chapter 8, page 197 [28].

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Book Review – The Genetic Lottery, Part I:



Her research fully endorses Plomin's findings but, in her book "The Genetic Lottery: Why DNA matters for social equality" [29], she goes further:

- "The widespread tendency to ignore the existence of genetic differences between people has hobbled scientific progress in psychology, education, and other branches of the social sciences."
- We have no control over the DNA we inherit: it is the chance admixture of genes from our mothers and fathers. That is why siblings can have quite different personalities, physiques, and health outcomes – one from the other.
- Nevertheless, our environment and life experiences (our 'phenotype') can work on our genes to either aggravate or ameliorate our predispositions.
- That well-intentioned efforts to improve people's lives, without taking into account genetics, fail to make any difference at all, and often make things worse.

"Most taxpayers would be surprised and rightly angry – to learn that vast expenditures of their dollars are invested programs that either do not work... or are, at best, of unproven or unstudied effectiveness."

e) We live in a 'meritocratic' society where, on the whole, people with the best talents and skills rise to the top. However, says Paige, they are just the **LUCKY** beneficiaries of the "lottery of life". In this regard they – and we – should recognise that, to be 'equitable', they should use a bit of their good fortune to give a leg-up to those less fortunate in the lottery of life.

Next month [30]: **Part II** – Levelling up the genetic lottery and what would a forager say?

Hints & Tips

7,000 Steps per day "Good enough"

Taking 7,000 steps (about 3 miles) a day during middle age can keep people's arteries healthy and reduce their risk of death during the next decade by up to 70% compared to their sedentary peers [31].

The findings suggest that this lower number (7,000) is good enough compared to the common recommendation of 10,000 steps per day. The findings held for both black and white men and women.

My View? Recent investigations by Prof. Herman Pontzer [see 32] find that Hadza men log 19,000 steps each day hunting, and gathering wild honey, while women log 12,000 steps collecting wild tubers and berries, often with a child on their backs in a sling [33].

This is considerably more than 7,000 steps per day. Nevertheless many studies like the one above suggest that the lower figure is good enough.

Whilst the 7,000 steps worked equally with men and women, note that, in a state of nature, women did many fewer steps than men.

We first met Pontzer in: **Hadza Forager Energy Expenditure same as Westerners**, [Sept 2012](#) [34] where he found that, in spite of the Hadza's increased physical activity, their bodies only consumed the same amount of calories as westerners.

The reason, surprisingly, is that westerners' bodies are spending a lot of energy on producing **INFLAMMATION**. See: **Inflammation caused by Obesity promotes Hair-loss**, p 4

Pontzer has also written an interesting paper: **Hunter-gatherers as models in public health**. [35] **Inflammation caused by Obesity promotes Hair-loss**

Obesity, especially provoked by a high fat diet, promotes inflammation and such inflammation suppresses rebirth of the all-important stem cells in the hair follicles [36]. The effect is stronger in older people.

The researchers also point out that a high sugar intake (high glycemic diet) is also inflammatory and has a similar effect.

My View? It's our old nemesis of widespread chronic inflammation which is a leading factor in all the so-called non-communicable diseases like cancer, CVD, arthritis,

diabetes, obesity, Alzheimer's and many more. See my review of the book: **Stopping Inflammation** by Nancy Appleton <https://amzn.to/3xg9ZXo> [37].

Of course, living the Paleo way, avoids the body from going into chronic inflammation. See: **Paleo Diet Reduces Inflammation**, [Oct 2017](#) [38].

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Winter, Sunshine Starvation & Vitamin D Supplement

As a general point, note that, first, vitamin D is a powerful hormone, and second, sunshine does not form vitamin D directly in the skin. On the contrary, it forms innocuous **PRECURSORS** in the skin and the body decides whether or not it needs to turn them into vitamin D or to store any excess safely, and healthily, in the body-fat.

For that reason, sunshine is by far the best way to get this vitamin since the body sorts out the ideal dosage for itself.

As an example of the perils of sunshine starvation, see: **Rickets Girl wore Sun-factor 50**, [Nov 2011](#) [39] and **Latest Links: Vitamin D Deficiency & Disease**, page 2.

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