



The science & art of living the way nature intended

The Bond Briefing

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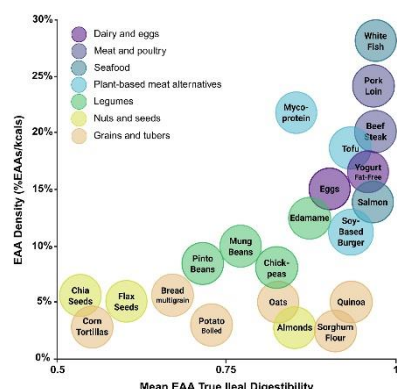


RATIONAL EVIDENCE-BASED COMMENT FOR THE GENERAL PUBLIC & HEALTH PROFESSIONALS. WE SAY EXACTLY WHAT WE THINK

Micromanaging Diet: Protein and essential amino acids. **Health Policy:** Jay Bhattacharya's vision for refocusing the NIH. **Human Mentality:** Savanna-bred brains subverted by Western reductive thought (13). **News Shorts:** What is C15:0 fatty acid? **Quotation:** Peer reviewed science tainted.

Micromanaging Diet

Protein and essential amino acids



Enlarge: <https://bit.ly/43UVYQu>

Chart for various foodstuffs:
Horizontal - % amino acid absorbed.
Vertical - % amino acid per calorie.

The all-embracing term of "protein" is often a source of discussion in dietetic circles including ours, see: **Daily Protein Intake**, [July 2025](#) [1]. However, this ignores a vital feature: proteins are cocktails of some 20 amino acids of which 9 are "essential" that is, we must get them in the diet.

Moreover, these amino acids must be in the right proportions to each other to be useful – particularly for muscle maintenance. A food which contains these ideal proportions is said to be "high quality".

Now, current dietary guidelines, only consider protein "quantity" but not "quality". This can mislead consumers [2,3]. In the United States, for instance, >p2

Health Policy

The Make America Healthy Again (MAHA) movement is shaking up the medico-industrial complex.

Jay Bhattacharya's vision for refocusing the NIH



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Jon Hartley of Stanford University's **Hoover Institute** interviews **The New NIH Director**, [March 2025](#) [4], Jay Bhattacharya, in this YouTube video: <https://bit.ly/4oZIEUt>

In this interview, Jay outlines his five main fields of focus:

1. The lamentable state of health and longevity of the American people. No improvements have been seen in decades.

2. Bullsh*t papers and the replication crisis. Professor John Ioannidis' 2005 paper "**Why most published research findings are false**" has been the most downloaded technical paper from the prestigious journal PLoS Medicine. I spoke about this in: **Population Studies: Finding the Specks of Gold in the Mass of Dross**, [Sept 2018](#) [5].

Jay notes that the >p3

Human Mentality

Savanna-bred brains subverted by Western reductive thought (13)



Continuing insights from psychiatrist & neuroscientist, Dr McGilchrist's (cr [6]) majestic work [7]

[Last month](#), we saw how, in McGilchrist's view, our world, dominated by Left Brain thinking, is impoverished and neutered by the belittling and negation of the Right Brain's rich world of **intuition** and **imagination**. In the words of Joseph Campbell: "Is the system going to flatten you out and deny your humanity...?" [8]

Now for Iain McGilchrist's views on **wonder** and **awe**. He sees them as crucial, profound aspects of human experience that are processed by the Right Brain.

He argues that modern, Western society's over-reliance on the Left Brain's analytical, mechanistic approach cuts out the concept of spirituality, and a relationship with the divine – to a relationship with beauty, goodness and truth. As a result we are uprooted from our natural environment, leading to an unfulfilled, alienated, and disenchanted world. >p4

News Shorts

What is C15:0 fatty acid?

Just when we thought that we had got a good understanding of fatty acids in general, an obscure and hitherto insignificant fatty acid is making the dietetic headlines.

It is "pentadecanoic acid", also known as C15:0 or simply C15. It plays a role in supporting metabolic health and reducing the risk of chronic diseases [9].

It is anti-inflammatory, enhances cardiometabolic health [10], protects the liver [11], reduces diabetes risk [12], and improves cell health and longevity [13].

C15:0 is primarily found in oily fish (like sardines and salmon), cheeses, and in grass-fed ruminant meat (like beef and lamb). But with the rise of plant-based diets, and processed food trends, these sources have become less common in everyday meals. Additionally, industrial farming practices have lowered the natural levels of C15:0 in dairy and ruminant meat.

Given C15:0's potential health benefits and the fact that it must be obtained through food, it is recommended that it be classed as an "essential fatty acid".

Most people need 100 to 300 milligrams of C15:0 daily to reach and maintain healthy blood levels of the fatty acid. These levels can be reached with a minimum daily portion of 4oz (110g) of the C15-rich sources.

My View? These are early days and there is even a suggestion that the body can make some (but not enough) C15 for itself, mainly from gut

bacteria [14]. However, there is no significant plant source.

How did hunter-gatherers manage? They didn't eat cheese, but they probably got enough C15 from freshwater creatures (clams, crabs, fish...), and ruminants like antelope and the occasional giraffe.

We Paleo eaters should be ok with, mainly, seafood sources but also minor sources like eggs and poultry.

Meanwhile, I will have less of a guilty conscience as I finish Yuletide dinner with a nibble of Stilton! (400mg of C15 per 100g of cheese [15])

Having said all that, in my view, the case has yet to be made that C15 is "essential" and until evidence comes to the contrary, we needn't obsess about our C15 intake – and vegans can relax too!

Quotation

Peer-review Science Tainted
With regard to **Bullsh*t papers and the replication crisis**, p 1, I wrote this in [Aug 2017](#) [16]

"I read some 40 scientific press releases a day. The interesting ones I highlight for further study. See:

Synthesizing Torrents of Info, [April 2015](#) [17]. But often, when I try to boil an article down to its essence, I find that it has no meaning at all."

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Protein and essential amino acids

the guidelines stipulate that the protein in an ounce of meat equals the amount of protein in, for example, a cooked egg, a quarter cup of cooked beans, a tablespoon of

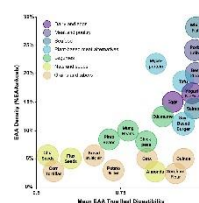
peanut butter, or half an ounce of mixed nuts.

That's not true. "Those equivalencies aren't equivalent," says University of Arkansas metabolism expert Rob Wolfe. "We should pay attention to the **QUALITY** of the protein."

Quality is determined by the amino acid makeup of a given protein and how it gets digested in the body. Work by Wolfe and others shows that animal foods, such as meat, dairy and eggs, typically contain higher quality proteins than plant foods, including legumes, nuts and seeds.

The researchers measured how efficiently each person turned amino acids from the protein source into muscle proteins. Participants in the animal product groups synthesized more proteins than participants in the plant groups [18].

A single egg provides around 25% of the recommended daily allowance for several amino acids, but only 16% of the allowance for the essential amino acid "**histidine**". The body will reject, throw out, excrete, all the amino acids in excess of the histidine. Meanwhile, peanut butter is so deficient in the essential amino acid "**lysine**" that a single tablespoon clocks in with only 4% of recommended allowance. Thus, a person would need to eat roughly **FOUR TIMES AS MUCH** peanut butter to get the same protein benefits found in a single egg. When it comes to legumes, a person would need to eat more than twice the recommended daily intake — for instance, over half a cup of kidney beans instead of the recommended quarter cup — to match an egg's protein benefits.



Says nutritional biochemist Donald Layman of the University of Illinois Urbana-Champaign. "We don't have a protein requirement at all. What we have is a requirement for nine essential amino acids."

My View? When we eat Paleo, with proteins mainly from animals, this issue hardly arises. Indeed over several hours and days, small imbalances even themselves out. This applies also to ovo-lacto-vegetarians. However vegans need to take note and are advised to up their protein intake by 30%. In this they are faced with an interesting dilemma: eat soy (which, rarely for a legume, is a "high-quality" protein source) and take the consequences of soy's antinutrient harms, see: [Legumes, Deadly Harvest, Chapter 5](#) [19], page 130, or go for less harmful, but less effective low quality beans and lentils.

Meanwhile, older people are also recommended to increase their protein intake since they seem to be weaker at metabolising amino acids.

In juggling all these considerations, we have also to concern ourselves with overdosing on acidifying foods, see: **Plant food/Animal food Ratio, Dec 2022** [20].

In conclusion? McGilchrist (page 1) would say this is Left Brain thinking: strip the subject down to its component parts in order to control and manipulate but, in the process, lose vital **CONTEXT** whereas, in reality, the whole is greater than the sum of its parts. See: **Savanna-bred brains subverted by Western reductive thought (part 3), Dec 2024** [21].

So a plague on all these worries! Just eat Paleo and let nature take its course.

Continued from Page 1

Jay Bhattacharya's vision for refocusing the NIH

... incentives for publishing papers are all wrong, encouraging the mass



production of worthless studies, exaggerated claims, and "paper mills" which fraudulently sell authorship slots for fabricated research papers. See **Peer-review Science Tainted**, p 2.

He will refocus NIH on encouraging studies of replication and, for example, the publishing of papers that get rejected because they don't prove anything headline worthy, but even a 'null' result can be useful in its own right.

Researcher's careers are advanced by the sheer number of papers they get published, not on their quality. Jay wants to change that and observes that the discoverers of DNA's structure, Watson & Crick, would have had difficulty getting their 1953 paper published today.

3. New idea stagnation. Jay notes that the rate of new ideas has slowed remarkably in recent years. He aims to free up risk-taking and remove the penalties for failure. In other words, the NIH should be an "innovation accelerator".

4. First do no harm. In this Jay is thinking of the research into pandemic viruses. The practice has been to find dangerous viruses in the wild, genetically alter them (a procedure known as "gain of function") and develop vaccines for them.

He considers it likely that Covid was such an escaped

virus which was being studied in China partly – of all things – with NIH funds. He firmly supports the present government's newly introduced policy of strict regulation of such studies.

5. Freedom of Speech and Academic Freedom. Jay sees the NIH as being an exemplar and catalyst for such a culture shift. Moreover, universities with whom NIH works will have to espouse and practice the values of free speech and academic freedom.

Jay ruefully remembers how, during the Covid epidemic, the Biden administration pressured the social media companies like Twitter and Facebook to black out accounts of vaccine damage, and to delete ideas such as not closing schools, or children not needing facemasks.

For advancing such 'thought-crimes' (now known to be correct) in the Great Barrington Declaration, Jay had his accounts blocked and he nearly got cancelled from his professorship at Stanford University.

Finally, Jay confirmed to the interviewer that from now on NIH will be doing its utmost to avoid experimenting on animals.

My View? There are many squeals coming from the research community who don't like the searchlight coming on the value of their studies.

Nevertheless, over the decades, it is in the nature of large organizations, to become hidebound and prey to parasitical hangers-on, rent-seekers, and mediocrities; and prone to cronyism and group-think.

So good, honest, and competent researchers should

be excited that real innovative talent will be able to flourish whereas in the past it would have been stifled.

Continued from Page 1

Savanna-bred brains subverted by Western thought (13)



... He says: "To destroy people's happiness and confidence, tell them that spirituality is only for the naïve". On the contrary, "Tell them that there is a rich world out there which is outside the reductionist, materialistic experience in modern society." Relish and draw strength from the feeling of wonder and awe when contemplating a sublime work of art, or hearing a transcendent piece of music, or gazing with a wild surmise at the grandeur of the night sky. These feelings are

unquantifiable and unmeasurable, so the Left Brain does its best to ignore and even denigrate them. [As long ago as 1968, Senator Robert Kennedy said of economics: "GDP measures everything, except that which makes life worthwhile."

Economics for Human Thriving, Jan 2022 [22]]

Summarizing: The Right Brain "apprehends" the world as a complex, interconnected, and meaningful whole, in contrast to the Left Brain's focus on isolated, decontextualized fragments and details. The Left Brain's pursuit of certainty and control drives out the "more astute wisdom of the one who is simply awestruck". McGilchrist links awe and wonder to the experience of the sacred, mystery, and the "unknown unknowns" that cannot be easily categorized or fully understood by the left hemisphere. He describes

"worshipful awe" as a true starting point for wisdom, which involves a sense of humility and an openness to a reality greater than oneself.

One needs to "recover a sense of awe and wonder" that was present in the innocence of childhood. Ultimately, embracing wonder and awe is essential for re-enchanting our view of the world, fostering a more integrated, meaningful, and humane way of living rooted in connection, empathy, and an appreciation for beauty, truth, and goodness.

For a McGilchrist YouTube video on the topic see [23].

Afterword: On a prosaic note, awe and wonder are, apparently, good for physical health too, see: **Awe Quenches Inflammation, March 2015** [24]

Next Month: Part (14) and still to come: Truth, Beauty & sense of the Sacred, Consciousness, Ultimate Reality.

Paleo in a Nutshell: Geoff's latest work encapsulates, concisely and easily, current thinking on living the way nature intended. www.paleo-nut-shell.com

email: admin@NaturalEater.com



Paleo Harvest Cookbook: Over 170 delicious, Bond Precept conforming recipes www.paleo-harvest.com



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1 <https://bit.ly/4g1tv04>

2 S. Park *et al.* Metabolic evaluation of the dietary guidelines' ounce equivalents of protein food sources, *J Nutr*, Vol. 151, p. 1,190 May 2021, doi: [10.1093/jn/nxaa401](https://doi.org/10.1093/jn/nxaa401)

3 G. Courtney-Martin. False equivalence or fake news: is a peanut really an egg? *The Journal of Nutrition*, Vol. 151, May 2021, p. 1,055, doi: [10.1093/jn/nxab051](https://doi.org/10.1093/jn/nxab051)

4 <https://bit.ly/3GqAhyO>

5 <https://bit.ly/3BBAoAP>
6 Rebel Wisdom, CC BY 3.0, <https://commons.wikimedia.org/w/index.php?curid=76267498>.

7 The Matter with Things, 2023, ISBN: 978-1-914568-25-1

8 The Power of Myth, ISBN-13 : 978-0307794727

9 Venn-Watson, S., Efficacy of dietary pentadecanoic acid parallels health benefits: could it be essential? *Sci Rep* 10, 8161 (2020). DOI: 10.1038/s41598-020-64960-y

10 Trieu K, Biomarkers of dairy fat intake, incident cardiovascular disease, and all-cause mortality: PLoS Med. 2021 Sep 21;18(9):e1003763. doi: 10.1371/journal.pmed.1003763.

11 Yu Chung Chooi, Effect of an Asian-adapted Mediterranean diet and pentadecanoic acid on fatty liver disease: The AJCN, Vol 119, Iss 3, 2024, pp 788-799, DOI: 10.1016/j.ajcnut.2023.11.013.

12 Fu WC, Pentadecanoic acid promotes basal and insulin-stimulated glucose uptake in C2C12 myotubes. *Food Nutr Res*. 2021 Jan 22;65. doi: 10.29219/fnr.v65.4527.

13 Venn-Watson S, Pentadecanoic Acid (C15:0), shares Cell-Based Activities with Longevity-Enhancing Compounds. *Nutrients*. 2023 Oct 30;15(21):4607. doi: 10.3390/nu15214607.

14 Yang Y, Gut microbe-derived pentadecanoic acid could be a novel health-promoter. *Food Funct*. 2025 Jun 16;16(12):4636-4653. doi: 10.1039/d5fo01278c.

15 <https://bit.ly/43HCgYk>

16 <https://bit.ly/2qUPsqh>

17 <https://bit.ly/1QSj6Sd>

18 J.J. Mathews *et al.* Understanding dietary protein quality: *J Nutr*, July 15, 2025, doi: [10.1016/j.tjnut.2025.07.005](https://doi.org/10.1016/j.tjnut.2025.07.005)

19 <http://bit.ly/DH-5>

20 <https://bit.ly/3JouXeF>

21 <https://bit.ly/4qjAoZ8>

22 <https://bit.ly/3wI9kzo>

23 Why Contemplation & Wonder Are Essential for the Future of Humanity with Iain McGilchrist. <https://bit.ly/3KxmJDV>

24 <https://bit.ly/1A32e70>