

# Red Meat Is Not a Health Risk

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✓ Fact Checked

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## STORY AT-A-GLANCE

- › In an "unprecedented effort," researchers from the University of Washington analyzed decades of research on unprocessed red meat and found weak evidence that it is associated with six common health problems
- › Uma Valeti is the cofounder of Memphis Meats, which is now Upside Foods. The company focuses on cultivated meat grown from cells extracted from an animal; the company has not produced a single product but is valued at \$1 billion
- › Investors in Upside Foods include Bill Gates and some of the largest companies in traditional meat production, who likely hope to be in on the ground floor of the industry that is designed to put them out of business
- › While it may seem that the current push for fake food is incredibly shortsighted as it requires large amounts of electricity and uses animal serum to grow the cells, it makes more sense when you consider that it gives the elite greater control over the food supply, and therefore the population

Scientists from the University of Washington's Institute for Health Metrics and Evaluation (IHME) published a systematic review of the literature in *Nature Medicine*<sup>1</sup> in which they found weak evidence of any association between unprocessed red meat and several health conditions, including hemorrhagic and ischemic stroke.<sup>2</sup>

For decades, red meat has been vilified as being unhealthy, cancer-promoting and artery-clogging, but in 2019, a paper<sup>3</sup> from Dalhousie University in Canada demonstrated that if there were health benefits from eating less beef, they were minimal. The New

York Times wrote, “The new analyses are among the largest such evaluations ever attempted and may influence future dietary recommendations.”<sup>4</sup>

The researchers concluded that there was “low to very low” evidence that red meat triggered health problems. The publication date was November 19, 2019. Yet, the prerelease triggered a response before the publication date<sup>5</sup> from organizations like the American Heart Association and the American Cancer Society.

They came out against the paper stating it not only contradicted years of findings, but the data collected from over 4 million participants could “erode public trust in scientific research.” Also interesting is that the researchers did not differentiate between participants who ate CAFO beef or pastured, organically raised beef. Concerns raised around the study include the challenge CAFO production has on climate change and environmental pollution.<sup>6</sup>

It is crucial to note there are viable means of producing beef and poultry using regenerative farming and animal husbandry strategies that are not only humane but also protect the environment from the CO2 emission created by CAFO production and plant-based “meat” products.

As I have reported before, a Carbon Footprint Evaluation report<sup>7</sup> for White Oak Pastures – an organic, grass fed livestock operation – shows that when you include enteric emissions, manure emissions, soil carbon capture, vegetation carbon, miscellaneous farm activities, slaughter and transport, and the total net carbon emissions, this type of beef production has a negative 3.5 kilos of carbon emissions per kilo of fresh meat.

This means an integrated, holistic system of regenerative farming is six times more carbon efficient than the average CAFO.<sup>8</sup> The same cannot be said for GE soy, which is the basis for plant-based “meat” products. Data show GE soybean and corn farms are a primary source of water<sup>9</sup> and air pollution.<sup>10</sup>

## **Decades of Data Show No Evidence Red Meat Is a Health Risk**

Three years later, in what the Big Think<sup>11</sup> calls an “unprecedented effort,” scientists from the University of Washington analyzed decades of research on red meat and used a rating system that ultimately dispelled concerns. In a press release from the university, they summarized the study saying:<sup>12</sup>

*“We found weak evidence of association between unprocessed red meat consumption and colorectal cancer, breast cancer, type 2 diabetes and ischemic heart disease. Moreover, we found no evidence of an association between unprocessed red meat and ischemic stroke or hemorrhagic stroke.”*

The researchers used statistical analysis to evaluate relationships between six health outcomes and the consumption of unprocessed red meat. The researchers also wrote that there is weak evidence that unprocessed red meat is associated with an increased risk of disease and mortality.<sup>13</sup>

The researchers also used a burden of proof risk function statistical analysis to evaluate evidence of risk between pairs of factors. The function translates to a star rating system that was developed by IHME<sup>14</sup> using over 30 years of data quantifying risk factors:

- One-star rating indicate that there may be no true association between the behavior or condition and the health outcome.
- Two stars indicate a zero to 15% change in the likelihood of a health outcome.
- Three stars indicate at least a 15 to 50% change.
- Four stars indicate at least a 50 to 85% change.
- Five stars indicate a more than 85% change.

Based on these star rating categories, the researchers believe that unprocessed red meat paired against colorectal cancer, breast cancer, Type 2 diabetes and ischemic heart disease are two-star pairs.<sup>15</sup> When unprocessed red meat was paired against ischemic and hemorrhagic stroke, the analysis showed they were one-star pairs.

In other words, based on their data analysis, there was no true association between eating red meat and ischemic or hemorrhagic stroke and the likelihood of the other four

health conditions being associated with eating unprocessed red meat was 15% or less. In a commentary about the study, Dr. Steven Novella, a Yale neurologist, theorized the risk of a high meat diet may lie in not eating enough vegetables. He wrote:<sup>16</sup>

*"The evidence for a direct vascular or health risk from eating meat regularly is very low, to the point that there is probably no risk. There is, however, more evidence for a health risk from eating too few vegetables."*

## **'No Kill' Meat Unethical and Not Slaughter-Free**

Uma Valeti<sup>17</sup> is a cardiologist and the cofounder of Upside Foods, which cultivates meat "directly from animal cells to satisfy our cravings, our conscience, and our heart."<sup>18</sup> Cultivated meat is grown from cells extracted from an animal through a needle biopsy.

These cells are then fed nutrients so they can grow into slabs of meat.<sup>19</sup> After biologists, engineers, and biochemists spent years experimenting with the concept, they are now waiting for approval from the Food and Drug Administration to start selling these cultivated meat products to consumers.

NPR reporter Allison Aubrey toured Upside Foods' 70,000-square-foot facility and signed a waiver before tasting a piece of chicken, a product that is not legal to sell yet in the U.S. She wrote:<sup>20</sup>

*"My first reaction: "It's delicious." (Isn't everything in wine-butter sauce?) And the texture was chewy, closely replicating the texture of chicken breast (minus bones, and tough bits or gristle.) "It tastes like chicken," I said, to which Valeti quickly replied, "It is chicken!""*

However, while the product may resemble chicken meat and the industry boasts that it is produced humanely, cultivating meat has relied on fetal bovine serum (FBS) as a growth medium. This serum is a blend of growth-inducing proteins usually made from the blood of animals.<sup>21</sup>

But it isn't just any blood. FBS is harvested from the hearts of unborn calves when pregnant cows are taken to slaughter. A paper published in 2002 describes it as “commonly harvested by means of a cardiac puncture without any form of anesthesia. Fetuses are probably exposed to pain and/or discomfort so the current practice of fetal blood harvesting is inhumane.”<sup>22</sup>

A 2017 paper<sup>23</sup> described the challenges of scaling the growth of cultivated meat using FBS and discussed the growth medium under investigation:

*“Most recently, releasates of activated human donor thrombocytes (human platelet lysates) have been shown to be one of the most promising serum alternatives when chemically defined media are not yet an option.*

*Additionally, new developments in cell-based assay techniques, advanced organ-on-chip and microphysiological systems are covered in this report. Chemically-defined serum-free media are shown to be the ultimate goal for the majority of culture systems.”*

In other words, the industry recognized the unsustainability of using serum from calves in an industry that claims to produce meat without slaughter and moved to human donor thrombocytes with the goal of creating a nonbiological, serum-free medium in the lab. At the close of 2021, Upside Foods announced they had achieved an animal component-free cell feed for the cultivated meat industry.<sup>24</sup>

They achieved this with the help of biotech and pharmaceutical scientists. Upside Foods is not the only cultivated meat manufacturer waiting for FDA approval. SCiFi Foods,<sup>25</sup> based in San Leandro, California, also uses FBS, but they claim it is only used in research and development and not in the production of their commercial products.

SCiFi burgers are not just beef cells but are also combined with plant-based ingredients. Good Meat is a third alternative, which is already delivering cultured meat in Singapore.<sup>26</sup>

## **Cultured Meat Costly to Produce and Raises CO2 Emissions**

On another note, the production of cultured meat raises CO2 emissions in the environment as large amounts of electricity are required to maintain the stainless-steel tanks in which the meat cells are grown.

Additionally, it is costly to produce these chicken and beef planks. Bruce Friedrich of the Good Food Institute tracks investment trends and is a lobbyist. He spoke to NPR,<sup>27</sup> saying that until the price becomes competitive, it's likely that the products will have only a niche market.

The evidence is clear. There is a push to control the food supply and ensure that many people are unable to access real food. Cultured meat products have moved from harvesting cells from animals and using inhumanely acquired FBS as a growth medium to creating a “chemically-defined, serum-free” growth medium.

How long will it be before scientists get rid of the animals altogether and create meat cells in the lab? After all, scientists are also working on meat grown from human cells harvested from the inside of your cheek.<sup>28</sup> How much further will they push these sinister plans?

## **More Potential Problems With Cultured Meat**

Cultured meat is different from the ultraprocessed synthetic plant-based beef products produced by Beyond Meat, Impossible Foods and other companies. While researchers have tracked the many health dangers of ultraprocessed foods, the short-term and long-term problems associated with cultured meat have yet to be analyzed.

When you consider how quickly mRNA shots were brought to market and distributed to the population with little concern about the long-term health effects, it should come as no surprise that the industry and the FDA don't appear to be concerned about the long-term effects of eating meat products grown in large vats bathed in chemically defined growth medium.

This might be because experts estimate the industry will be worth trillions of dollars. Upside Foods was formally called Memphis Meat.<sup>29</sup> Along the way Valeti changed the

name and won over investors including Bill Gates. The company, which has not produced a single product, is now valued at more than \$1 billion.

Upside Foods has attracted other investors like Tyson and Cargill, which are some of the largest companies in traditional meat production, that likely hope to be on the ground floor of an industry designed to put them out of business.

Industrializing the global food system with fake foods and fake meat will ultimately threaten mankind's survival. Elitists are pushing for fake foods in the name of sustainability and going green, while it is clear that it is a key driver in a destructive environmental cycle.

While it may seem that the current push for fake food is incredibly shortsighted, it makes more sense when you consider that it gives the elite greater control over the food supply, and therefore the population. In 2021, the Friedman School of Nutrition Science and Policy's Food Compass<sup>30</sup> was unveiled and called "a new tool to help consumers, food companies, restaurants, and cafeterias choose and produce healthier foods and officials to make sound public nutrition policy."<sup>31</sup>

However, it's apparent that the ranking tool has some serious problems. Case in point: Frosted Mini Wheats scores three times higher than ground beef (87 out of 100, compared to 26), as illustrated in a graph posted on Twitter by independent journalist Nina Teicholz.<sup>32</sup> It is unimaginable that ultraprocessed food would score higher than whole food.

Yet, it offers an excuse for people to eat poorly and rely on high-cost pharmaceutical drugs for their health. Evidence<sup>33</sup> continues to demonstrate that people eating the highest amount of ultraprocessed foods are likely to die sooner of cardiovascular disease, ischemic heart disease and have a higher rate of all-cause mortality.

Once living animals are eliminated and replaced with patented alternatives private companies will effectively control the food supply in its entirety, and they will be the ones profiting from it. By controlling the food supply, private corporations can ultimately

control countries and entire populations. If we allow this trend to continue, biotech companies will eventually push farmers and ranchers out of the equation.

Looking down the road, it's easy to see that patented foods threaten food security — they don't strengthen it. When you shop for meat, look for a local organic farmer or Demeter (biodynamic) and American Grassfed Association (AGA) certified meats. These accreditations designate foods produced under high-quality, sustainable and environmentally sound practices.

## Sources and References

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- <sup>3</sup> [Annals of Internal Medicine, 2019; doi.org/10.7326/M19-1621](#)
- <sup>4</sup> [The New York Times, September 30, 2019](#)
- <sup>5, 6</sup> [Big Think, October 1, 2019](#)
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- <sup>8</sup> [Savory Institute responds to Impossible Burger's attack on regenerative agriculture](#)
- <sup>9</sup> [National Geographic, December 7, 2017](#)
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- <sup>14</sup> [IHME, October 10, 2022, New star rating system published in Nature Medicine helps people make informed decisions about diet and healthy habits](#)
- <sup>16</sup> [Neurologica, October 11, 2022](#)
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- <sup>32</sup> [Twitter Nina Teicholz July 17, 2022](#)
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