

INTERFERING WITH THE FIRES OF LIFE

Eating and breathing are the fundamental requirements of life. But the energy for life also requires combustion: the food we eat must combine with the oxygen we breathe. This combustion takes place inside our cells in tiny structures called mitochondria. And within our mitochondria are even tinier structures called electron transport chains. These are the invisible wires that carry the electrons generated by the digestion of our food to the molecules of oxygen supplied by our lungs and blood. Anything that interferes with these tiny electric currents interferes with life.

Wireless technology, by bombarding our cells with complex, pulsed, modulated electromagnetic fields, plays havoc with these currents of life. The whole process of eating, breathing, digesting, and producing energy -- the process of living -- slows down. We are seeing the consequences everywhere.

Diabetes, Heart Disease and Cancer

When the electron-generating enzymes in our mitochondria cannot keep up with the volume of sugars, fats and proteins being supplied by our digestive system, those components of our diet accumulate in our blood.

The accumulation of sugar in the blood, and its excretion by the kidneys, is called diabetes, a disease that was so rare before 1860 that most doctors never saw a case during their lifetime. Eating sugar, no matter how much, once did not cause diabetes.

The accumulation of fats in the blood, and their deposition in the walls of our arteries, including our coronary arteries, causes heart disease, which was uncommon in 1850 and almost never occurred except in infants and the elderly. Cholesterol, and high-fat diets, once did not cause heart disease. Later, the same changes occurred in zoo animals. Heart disease, for example, did not exist in any animals in the Philadelphia Zoo before 1945. And the first heart attacks ever recorded in zoo animals occurred in 1955. Yet sclerosis of the coronary arteries increased so rapidly that by 1963, over 90 percent of all mammals and 72 percent of all birds that died in the zoo had coronary disease, while 24 percent of the mammals and 10 percent of the birds had had heart attacks. Similar trends were reported from the London Zoo and the Zoo of Antwerp.

When our cells are starved of oxygen because they cannot use all the oxygen we breathe, sometimes they revert to anaerobic (non-oxygen using) metabolism and become cancerous. Cancer, too, was once quite rare. In 1850 it was the 25th most common cause of death in the U.S., behind accidental drowning. Even tobacco smoking, before about 1920, did not cause lung cancer. And during the 1930s and 1940s the rates of both malignant and benign tumors increased dramatically among many families of mammals and birds at the Philadelphia Zoo.

The modern pandemic of obesity is also an electrical disease caused not by overeating and lack of exercise but by the same slowing down of metabolism. Depending on our genetic disposition, our bodies either excrete a large portion of our digested food unused, causing weight loss, or else convert much of the carbohydrates and fats we eat into fatty tissues, causing obesity. Obesity has been steadily increasing, worldwide, not only in humans, but in zoo animals, laboratory animals, pets, farm animals, and wild animals, due to the increase in radiation.

Longevity

Contrary to popular belief, the lengthening of the human life span is not due to modern medicine. It is instead caused by the interference with metabolism that slows down our rate of living. And also contrary to popular belief, this is not a good thing: we are all living slower, sicker, less vital lives. This was observed in 1880 by Dr. George Miller Beard in his book on neurasthenia: "Although [neurasthenia] may tend to prolong life and to protect the system against febrile and inflammatory disease, yet the amount of suffering that [it] cause[s] is enormous." And the same

observation was made by Yasuo Kagawa in 1978 about the remarkable increase in lifespan in Japan: "Extended life expectancy but increased diseases."

This, too, has been occurring in both humans and animals.

The evidence for what I have summarized so far is set out in detail in chapters of my book, <u>The Invisible Rainbow: A History of Electricity and Life</u>: Chapter 11, "Irritable Heart"; Chapter 12, "The Transformation of Diabetes"; Chapter 13, "Cancer and the Starvation of Life"; and Chapter 14, "Suspended Animation."

The rest of this newsletter is devoted to additional evidence that has been brought to my attention only recently.

Normal Body Temperature is Decreasing

Dousing the fires of life by interfering with metabolism might be expected to lower the body's temperature. And it is so.

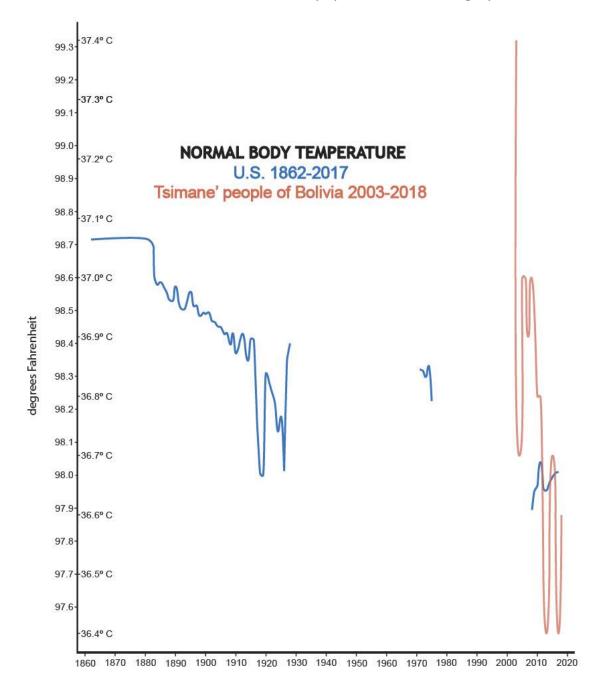
Two weeks ago, Dr. Mark Thompson, a biochemist in the UK, called my attention to a paper published by a group of doctors at the Stanford University School of Medicine. They pointed out that normal body temperature is no longer 37° Celsius (98.6° Fahrenheit), but that it in fact has been steadily declining for close to 150 years. Their paper, published January 7, 2020, is titled "Decreasing human body temperature in the United States since the Industrial Revolution." The data they relied on were hundreds of thousands of temperature measurements taken from three databases: the Union Army Veterans of the Civil War (measurement years 1862-1930); the National Health and Nutrition Examination Survey I (NHANES) (1971-1975); and the Stanford Translational Research Integrated Database Environment (STRIDE) (2007-2017).

Because these scientists could not figure out what could make body temperature drop so steadily, they attributed it to "physiologic evolution" instead of to an environmental factor.

Another study, this time of the Tsimane' people in the Bolivian Amazon, came to my attention a few days ago. It is titled "Rapidly declining body temperature in a tropical human population." Most Tsimane' villages still have no electricity, but in 2004, many of the villagers acquired cell phones, radios, antennas, light bulbs, and solar panels, and in 2009 a 374-kilometer, 115-kilovolt transmission line was completed

through the area. The line runs close to about a 50-kilometer stretch of the Maniqui River, where many of the villages are located. Today there is cell phone service for at least 25 kilometers, and probably farther, in every direction from the only town, San Borja. 16,800 measurements of body temperature were made between 2003 and 2018. During this period of time, normal body temperature plummeted among these people from 37.4° C (99.3° F) to 36.4° C (97.5° F).

I have charted all the data from both these papers on the same graph:



One detail that the Stanford scientists ignored is the sharp drop in body temperature that occurred in the U.S. when it entered World War I in 1917 and that continued through most of the 1920s. This is consistent with the deployment of immensely powerful low frequency radio stations by the United States in order to reach Navy ships overseas during the war, most of which were dismantled or replaced by lower power shortwave stations by the end of the 1920s.

The role of electricity and radio in causing influenza, including the Spanish influenza of 1918, is also explored in my book: Chapter 7, "Acute Electrical Illness"; Chapter 8, "Mystery on the Isle of Wight"; and Chapter 9, "Earth's Electric Envelope."

Cancer is Not a Genetic Disease

Additional evidence that cancer is a metabolic mitochondrial disease has also come to my attention recently. Although modern oncologists are wedded to the idea that cancer is caused by genetic mutations caused by environmental toxins, a rival theory, formulated a century ago by Otto Warburg, holds that cancer is a metabolic disease caused by lack of oxygen, and that carcinogens cause cancer by damaging cellular respiration.

Warburg based his hypothesis on the observation that cancer cells do not require oxygen, and this observation is behind the modern method of diagnosing and staging cancer using positron emission tomography, or PET scanning. Because anaerobic metabolism is inefficient and consumes glucose at a tremendous rate, PET scans can easily find tumors in the body by their more rapid uptake of radioactive glucose.

Now, <u>new research by Thomas Seyfried</u> at Boston College has virtually proven that cancer is not caused by genetic mutations. He reviewed evidence from nuclear transfer experiments done in his own and other laboratories in recent years that prove that it is the mitochondria-containing cytoplasm, and not the DNA-containing nucleus, that determines whether a cell is cancerous or not.

When the nucleus of a cancer cell is combined with the cytoplasm of a normal cell, the resulting fused cell grows normally when implanted into an animal. Conversely, when the nucleus of a normal cell is combined with the cytoplasm of a cancer cell, the fused cell forms a tumor when implanted. It is the mitochondria, and not the DNA, that determines whether a cell is cancerous or not.

"In contrast to the somatic mutation theory," writes Seyfried, "emerging evidence suggests that cancer is a mitochondrial metabolic disease, according to the original theory of Otto Warburg." Cancer, he says, is caused by lack of oxygen, and DNA mutations are a secondary effect of that lack. "It has been my view," he writes, "that the plethora of random somatic mutations seen in tumors of almost every kind arise ultimately as downstream effects of insufficient respiration with compensatory fermentation."

The prevailing, mistaken view of cancer is responsible for the artificial, wrong, and devastating distinction made by scientists, governments, and the World Health Organization between ionizing and non-ionizing radiation. Ionizing radiation is energetic enough to knock electrons off of atoms and create ions, and anything that can ionize your DNA is supposed to be able to cause genetic mutations which is supposed to be the cause of cancer. Therefore, according to the prevailing theory, wavelengths much shorter than light waves (high-energy ultraviolet, X-rays, and gamma rays) are dangerous and wavelengths longer than light waves (infrared, radio waves, and power line radiation) are safe, and can be pulsed, modulated, manipulated, and sent all over the planet with impunity.

Seyfried and his colleagues have virtually proven that this is wrong.

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