

Quantum Biology 6: Bipedalism

Readers Summary

1. What is one aspect of our body that separates us from all other mammals?
2. Is our two legs still forcing us to evolve?
3. How does it affect modern spine disease?
4. How is it directly tied to water?
5. How can you use it to regain your health?

'For any quadruped to get up on its hind legs in order to run is an insane thing to do. It's plain ridiculous.' – Owen Lovejoy

Today, we are going to talk about the one thing that really separates humans from all other mammals. We began to walk upright before we developed a big brain. It was our first defining evolutionary change from chimp to human. The reasons why our legs grew first is generally credited to our big brain needing a larger birth canal and causing changes in the genitourinary system. There is one big problem with this theory; We grew legs long before we developed a large complex brain. The brain did not drive bipedalism. What did? Could it have been the water we drank?

Many modern evolutionary biologists take upright walking for granted because they can do it easily so it appears a natural progression of evolutionary progress. Not even Darwin could explain this evolutionary jump. There has never been another change like it in the biologic record.

It might seem a poor topic for some because many people have found it easy to explain in their own mind; After all, bipedalism did not strike the early evolutionists as a "difficult thing" to explain. When Darwin wrote 'The Descent of Man' he did not even bother to list it in his index. Fact

checks that. It is true. He chooses to completely ignore it, because he could not explain it, and just thought going from all fours to two feet was natural for us! The sequence of events seemed clear enough at that time.

Apart from massive changes in the pelvic skeleton and lower extremities, the muscular anatomy of the legs also had to be completely be remodeled. Walking and standing, plus the strenuous maneuver of rising to an erect posture from sitting or squatting, made heavy demands on the muscles of the legs and buttocks which consequently grew in size and strength. The mass of each leg in our species now constitutes **one-sixth of the entire body weight** when it is in proportion to overall weight. The newly developed large buttock muscle, called the gluteus maximus, needed a new point of anchorage on the pelvis and femur of the skeleton, so a special extension of the pelvic flange evolved to accommodate it rather quickly.

Consider this excerpt from Brain Gut 3 to refresh your memory of just what happened:

“Radical Idea #3: The leaky gut allowed us to sense our environment and it stimulated **two simultaneous epigenetic** alterations but for different reasons. The first was the development of a **rigid foot and ankle** because climbing trees in the cold and wet of a dwindling Pliocene forest is dangerous to primate’s health. It makes climbing difficult and dangerous. Moreover, with a dwindling forest in the Pliocene, their food supply became constricted in the trees, while the Rift was raised 3500 feet. That meant that a terrestrial diet was selected for because climbing was harder in the cold and wet conditions and their food source diminished. How do we know this is true? The geology of the Rift zone is a key.

Think about this analogy. Have you ever seen a quarterback trying to throw a football in a torrential downpour? It is very difficult to control the wet skinned leather on a football in a cold wet environment. It also is hard for apes to climb in cold wet weather in many zoos in the US. This is

also observed in the wild in many species as well. The apes avoid dangerous climbing in these conditions according to zookeepers I spoke with. You are scoffing at me now with that football analogy, and I agree. But it does open your mind to the cause that might explain why our foot design was the first alterations before we began walking upright. What is the other point here most miss? *Our ancestors went from the forest to the sea at elevation. This means the light frequencies changed at the same time our water changed. DHA levels also increased. As we become upright we had to change the speed of the SCN clock in our head to make this transition. Why? The laws of physics required that. How did we change the metabolic rate of the TCA cycle of the mitochondria in that location of the brain?*

What if I told you that the lower limb, and specifically the foot and ankle, would be the first to adapt to a chronically cold and wet environment in the primate body plan? Colder water at a higher latitude also has a different isotopic footprint. What if I told you that today's Western Mountain gorillas have more human feet because they spend more time on the ground because their environment is colder wetter environments even today? Their big toe anatomy approximates a more human position than their warmer dryer cousins in East Africa (tree dwellers) who have a midfoot that is highly flexible for quadruped walking and a great toe that is away from the rest of its foot and is opposable for grasping for climbing. This reason has never been put forth in the paleoanthropology literature as the main reason for bipedalism, as far as I know. Feet are rarely talked about within this "group of experts" because the fossil record is horrendous in quality and quantity when it comes to foot bones of transitional apes. But what we know, is that Ardi and Lucy, who were transitional apes, were upright first before they encephalized. No one disputes this any longer. The bone collectors still have no answers for why this happened. Neither did Mr. Darwin in his time. I think I might have

stumbled into the answer. In the cold and wet environment, this means they had to have more stable ankles and knee joints to walk. Want to see some proof of this speculation? Watch this video on gorilla foot and ankle anatomy.

I believe the reason apes became bipedal is that they lost the forests rapidly and the climate rapidly changed to a cold wet environment at a higher altitude in the matter of a few months to years because of the plate tectonics of the region they lived in. This altered the light they got and the magnetic flux the ATPase felt.

Moreover, it was a costly biologic option for us to assimilate, and we are still "paying the installments" of that condition of existence. I make my living as a spine surgeon because this epigenetic change is still in a massive state of transition. This is the reason back pain is the number one disability in our species today. The mammalian spine evolved over a hundred million years and reached a high degree of efficiency, on the assumption that mammals are creatures with one leg at each corner of that spine, and that they walk with their spine in a horizontal plane with reference to the ground. Under those conditions, the blueprint is one that would command the admiration of an engineer. The vertebral column is designed on cantilever principles, as a single shallow arch supported by two pairs of movable pillars; the weight of the internal organs is vertically suspended from the arch and evenly distributed along the length of it. Every mammal that uses this scaffold resembles a walking bridge blueprint via fractal design. Our distant ancestors, 4-6 million years ago, suddenly departed from this time-honored mode of locomotion and converted themselves into walking towers, with a very high center of gravity and a much more narrow base than chimps. The change did not come from our nucleic acids. Might it come from proteins in our body plan?

Today's human spine that I operate upon, has dramatically changed from our nearest ancestor. The human skeleton has

undergone a major overhaul to accommodate walking on two legs. The single arch of the common mammalian spinal column has been completely abandoned in us. Ironically, the only vestige of our past is still found in infants. Human babies are still born with it, but they lose it soon after birth in favor of a perfectly straight spine. It will be straighter as an infant and early toddler than it will ever be again. As soon as they gain control over their cerebellum and cortico-spinal tracts learn to sit up, a forward curve develops near the top of the cervical spine. This lordotic curve is maintained in adults even today. In surgery, my goal is to reestablish that curve when it is lost for many biomechanical reasons.

Our lumbar vertebrae have grown larger in the medial and lateral dimension and in a rostral-caudal dimension to be able to sustain the unprecedented apical pressure our species now have to bear because of walking erect. Our lumbar discs and ligaments also expanded and had to **hydrate massively** to help share the loads. It happened so quickly in evolutionary timescales that the annulus around the disc today in modern humans is still only made up of a patchwork of fibers that do not even form a complete web to contain the disc well. This implies that optimal hydration of the disc imperative for erect walking painlessly.

This was made possible by many of the hormones made in the pelvis and retroperitoneal space and water from the feet. The pelvic girdle has been moved into a different coronal plane, and the iliac blades on each side of it have spread apart and flattened into a saucer-like shape to hold the main weight of the intestines. These adaptations helped the bipedal mammal from developing a giant prolapse of their gut when it went from a horizontal plane to gravity to a vertical plane to gravity. It also makes a lot of sense why the gut would shorten in humans, as well, compared to other primates. The smaller gut would be a great mechanical advantage to a bipedal creature who was trying to recreate their spine. In fact, it

appears embryologic gut rotation maneuvers might be directly tied in a quantum fashion to the changes in the developing spine. How did these changes in the basic mammalian body plan begin? We are primates that evolved around the East African Rift Zone. Re-read Brain Gut 3 and Brain Gut 4 to review the details again.

We are designed to walk in seawater absorb it via glands in our feet and excrete the excess salt. Seawater does not equal the water we drink. On the way up to our feet and legs, this water is designed to become coherent in nerves, fascia, and in our lumbar discs to hydrate all the carbon nanotubes to facilitate energy transfer. This is huge in the spinal discs and annulus for a big reason. Discs and the annulus do not have any blood supply so this means they can't energy/info transfer like other tissues can. It means they rely on water superconduction solely for excellent physiologic function. It is also why back pain is the number one disability in modern humans. Many doctors have wondered why discs do not have a blood supply. It's because water is the ticket to understanding the difference. This is why they do not have a blood supply. They rely 100% on coherent water for energy. Without it, you get a modern man. This is how I make my living. People just do not understand how our body REALLY works. Modern life just blocks you from your real truths.

'I would be perfectly all right, doctor if it wasn't for my back.' – Said by many humans in my clinic

If you read Darwin's original texts, and you should, you will see when he did mention bipedalism he used some "unusual white out techniques" found in grammar. For example, he choose to use a double negative, when he said, "I can see no reason why it should not have been advantageous to the progenitors of man to have become more and more erect and bipedal." Today, Darwin would have seen a great reason to question this, if he had

still been alive when the fossils of Lucy and her companions came to light in the 20th century.

They had very small brain cases and brains, and even at sites where their bones were fairly thick on the ground, there was not the slightest trace of evidence of tool making or weapon wielding in the archaeological record. Lucy's discovery reversed all previous assumptions of the evolutionists about the sequence of events for hominid evolution. This means that maybe genes were not the progenitor of bipedalism either.

Every last bit of it was dead wrong, as I laid out, in serious detail in Brain Gut 3 and Brain Gut 4. It became clear that bipedalism did not emerge in the wake of other human-like advancements, to enable them to function better. Bipedalism came first for a reason!! I also believe after you listen to the May 2013 webinar (Sex Rx) you will begin to understand why it really happened.

I don't believe it should have been as much of a surprise as it was. It was over half a century since Raymond Dart had inferred from his Taung baby's skull that it must have belonged to a bipedal species, it was over thirty years since his claims had in general terms were accepted. It made sense to me that bipedalism would have been our first big move out of the forest because we were surrounded by water. Standing taller would have been a big early requirement when you can't dive into the water for food because you had no way to protect your airway from drowning. The airway of other primates and humans is quite different. It allows us to speak now, but the real first changes were made to allow us to dive into the water to find more DHA and iodine laden shellfish to alter proteins in us. Being a taller chimp made a lot of common sense in this light. The water we drank was not the same as the water we swam in and that one small detail likely affect our HOX genes in the mammalian body plan to sprout us legs.

Time to learn about glands

Apocrine glands are highly adaptable in the mammalian clade. Humans use them quite differently than most other mammals, however. For example, the milk glands of mammals are simply highly modified apocrine glands. In virtually all sweating mammals, with the exception of man, the so-called "sweat glands" are modified apocrine glands. This is not true at all of us. We evolved a new gland. In primate apocrine glands, The oily or waxy component has been diluted to a thin, watery emulsion, the consistency of skimmed milk by the action of progesterone and oxytocin. The glands are found all over our body in association with the hair follicles in our skin, and they respond to a rise in temperature by exuding this fluid onto the surface of the skin. They play a huge role in our sexual behavior as you will soon learn in the May 2013 webinar.

There is something that makes apocrine special in our species. In apocrine sweating, there is efficient control not only of the amount of fluid loss but also the loss of salt. (called sodium chloride). These glands are tied to females olfactory receptors via quantum tunneling (protons) for a very specific reason. (May Webinar alert)

Humans have adapted for this function by evolving another kind of skin gland called the eccrine gland. Guess where eccrine glands show up in humans? In their feet. This is why modern humans have created socks. It is because unlike any other primate, our feet sweat. Chimps and gorillas do not have sweaty feet, but we do. In fact the human disease, cystic fibrosis is diagnosed by assaying the foot sweat of infants for its sodium chloride content.

Many still believe we seemed to have evolved foot eccrine originally to prevent our feet from slipping on rocks in the water. In the course of primate evolution, some eccrine glands

began to appear scattered at random aspects over the body surface. In small species of primates, they are comparatively few eccrine glands and many believe them to be 'ectopic' glands. This implies they are just misfits in migrations as the animal develops by simply occurring by chance in the 'wrong' place. I don't believe this. I think they are related to hydrogen chemistry. In larger monkeys, there are more of them everywhere. This implies there is a fractal plan in action. This is a big clue that eccrines and apocrine are important to longer legs and bipedalism.

By the time we move from the smaller monkeys to the African apes, they are as common as apocrine glands, or slightly more so, in a proportion of about 52 to 48 percent. In humans, the eccrines have made a **quantum leap** from chimps, to something nearer 99 to 1 percent. Why do you think that might be?

Humans need massive amounts of *water* to fuel the power needed in the DHA semiconductors of their massive brains and they had to use that power to fuel the changes in our skeleton and discs somehow quite quickly. Water was our jet fuel to longer legs. The water at the Rift zone *was different*.

Humans first used the eccrine glands in their feet to absorb water for water superconduction and facilitate the removal of NaCl. This is why our sweat is salty, and by removing the sea's minerals, it acts to make homemade reverse osmosis water for free. When the water becomes relatively mineral free, the amount of low-density component rises and this allows the water absorbed more likely to become coherent when the environment is resonating with the Schumann resonance. This is precisely what the environment looked like where humans came from. Please go back and re-read Brain gut 4 right now. When that water became coherent in the interfacial spaces of the epineurium of the peripheral nervous system we gained the power to lengthen our legs to go further our in the water. Then our gut shrank, and our lymphatic system exploded in complexity to deal with all the new viral infections because

our epigenetics had changed from forest to sea. (See Brain Gut 2).

V. E. Sokolov, declared in the 1980's that: 'Eccrine sweating is a human characteristic as unique as speech or bipedalism.' I think he was spot on the money with this quote. This is how quantum biology works in humans. Something in water did it. To understand the biology of the eccrine glands of humans is to understand how we powered our first semiconductors in our small legs that became bigger ones. The eccrine glands in our feet act as a giant desalination plant. It helps us absorb water from the sea so we have a constant source of **low-density water** in order to preload our collagen semiconductors (Positive semiconductor) body wide. This process started with our feet. Bipedalism is the change chimps got to get to us. What was the evolutionary process? Review Brain Gut 4 carefully, then read this:

Where standing and thriving on two legs might have come from?

1. Our nearest ancestor species was fertile enough that if all offspring survived to reproduce the population would grow (fact).
2. Despite periodic fluctuations, populations remain roughly the same size (fact).
3. Resources such as food are limited and are relatively stable over time (fact).
4. A struggle for survival ensues (inference).
5. Individuals in a population vary significantly from one another (fact).
6. Much of this variation is inheritable as traits based upon conditions of existence called epigenetics (fact).
7. Individuals less suited to the environment (forest chimps landlocked by the sea) are less likely to survive and less likely to reproduce; individuals more suited to

the environment are more likely to survive and more likely to reproduce and leave their inheritable traits to future generations, which produces the process of natural selection (inference).

8. This slowly effected process results in populations changing to adapt to their environments, and ultimately, these variations accumulate over time to form new species (chimps to human progression inference).

So let us take a more modern look at our eccrine glands and how we regard them. Sweating generally is not a subject that gets you into much scientific trouble unless, perhaps, you are being interrogated for some reason. Even a slight dampness of the palms increases the proton **superconductivity** of your skin, and it may be registered and recorded by a polygraph – the so-called ‘lie detector’. Here again, we see the effect of water on conductivity. Your feet also do this for conduction as we walk and also because we can absorb energy from the ground and sea and get rid of the excess salt. This is why grounding is critical to humans. We are designed to take advantage of it, yet modern life has blocked that huge benefit. It acts like two desalination plants in our feet that we use a turn on and turn off switch to deal with water and salt since we evolved around a saltwater basin. It also acts to increase our conductivity as we move across the landscape we find ourselves in regardless of the food supply. This makes sense when you have a huge Ferrari engine in your skull.

Eccrine glands from a biochemist standpoint might be described as “**inefficient**” in four ways: (1) it is slow to start; (2) it is wasteful of water; (3) it is wasteful of salt; (4) it is slow to respond to danger signals when the body’s resources of water and salt are getting low. An enlightened scientist who understands how this system fits into the whole organism as a method of semiconduction for the transfer of energy, however, might think differently about this “**inefficiency**”. I don’t believe our eccrine glands are a deficiency in our

construction. Rather, I think they have a very special role to play in our evolution from the forest.

One scientist beliefs show you what dogmatism looks like when you suffer from evolutionary myopia. R. W. Newman, summed up his beliefs on what our species predicament is to him in a memorable sentence: 'Man suffers from a unique trio of conditions: hypotrichosis corpus, hyperhidrosis and polydipsia' – which is to say we have a subnormal supply of body hair, a supernormal output of sweat, and are under the necessity of drinking much and often.

Why do we have this trifecta of “imperfections”?

He was correct in his observations but clueless about why we are designed this way. So why are we designed this way you ask? Here is what I think are the real reasons behind our adaptations: Having less hair allows us to collect more photons from the sun to control electrons and protons inside of us. Sweating allows us to get rid of excess NaCl from seawater as we swam and ate from, and drinking via our foot eccrines to refill our water superconductors to power our massive energy hog in our brain made from the oysters were foraged for in estuary and the ocean coast.

As our blood volume goes down due to artificial blue light and increased non-native EMF exposure, the platelet counts go up, serotonin rises (makes platelets sticky) and the plasma cholesterol rises because we are **dehydrated**. We see these alterations in older aging people now, and new adopters of the paleo diet, and in business travelers who fly a lot. As humans lose water and salt, our BP rises, our cholesterol rises and you can clot more easily because your zeta potential is lowered (loss of electrons) because you consume more of your Vitamin K2 and CoEnZ Q10 in your plasma because you can not use water as a proton superconductor efficiently.

How humans tap water using sweat:

'Sweating is an enigma that seems to amount to a major biological blunder: it depletes the body not only of water but also of sodium and other essential electrolytes that are carried off with the water.' – William Montagna

Hold this thought and then realize that an NFL football player in the prime of his life recently died of heatstroke during NFL training camp. His name was Korey Stringer. Now think about what Montagna said and what happened to Stringer and think how they are tied together biologically.

Let me give you a hint. **Sweating appeared at a relatively late stage of mammalian evolution.** Eutherian mammals exploded after the K-T event. For 100's to thousands of years, early mammals lived in a freezing cold world that was blocked from the photoelectric effect of the sun, yet they still made enough ATP and survived from the tremendous amount of earthing they did while nesting underground. When the sun came back, they gained an amazing new resource of energy in photons and electrons. Since they already could survive in a more harsh landscape without the sun, they used their new source of energy for a new adaptation. They began to be able to uncouple their inner mitochondrial membranes from ATP production to make free heat from the excess electrons and photons. They evolved uncoupling proteins. This allowed them to generate tremendous internal body heat compared to their ancestors. Early mammals gained warm bloodedness from this adaptation. Uncoupling proteins are controlled by two main hormones. Free T3 and leptin. I spoke about this long ago in the leptin series. Free T3 did something else to the mammal. It was the driving force along with water to cause differential growth in the hind legs over the front legs.

Korey Stringer was leptin resistant when he showed up to Minnesota Viking training camp and he began to exercise in hot

temperatures. Because of this, he was unable to uncouple his mitochondria and blow off his excess calories when his exercise called for it. So what happened? His body temp rose and rose and he died of heat stroke. He arrived at the hospital with a body temp of 107 degrees and he was 360 lbs and out of shape. The NFL made it mandatory that "water" be available to all players after this tragedy but that does not come close to solving the problem. They look to breed and draft men who are massively enlarged, who become leptin resistant in their younger years, and they wonder why NFL players die on average at age 58? I don't. It is all about mammalian evolution.

The takeaway

Uncoupling proteins further evolved, and made this necessary when photoelectric effect came back we had to get rid of excess energy. (Idea from my book, The Epi-Paleo Prescription)

This is where the K-T event and then cold thermogenesis began to marry the concept of phase transitions in water and quantum physics and begin to touch the human evolutionary story as time elapsed in the mammalian clade. Moreover, I believe it also directly ties into why we walk on two feet.

Summary

Why we became bipedal is one of the more fascinating things in evolutionary biology that remains a modern mystery. Here in QB 6, I lay out how "I think" it happened using a quantized template and evolutionary evidence we have collected in the last 30 years. The key point for you reading this is to realize in this blog you have the last ten blogs coming together to paint a new reality for how you might work and help you understand why you may still be struggling. The further you stray from your evolutionary design the more inflammation you collect, the worse your hormone panel looks,

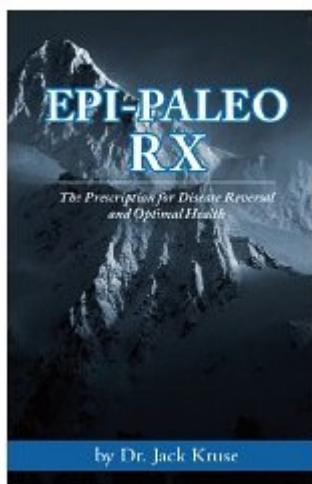
and you begin to need a pill for every ill. You might have to consider spending more money in the doctor's office than at the grocery store to buy foods without any labeling as your body falls apart at age 35 for what you think is no good reason. It is time for you to look into your own mirror and see just how disconnected you really are from your own owners manual. Today, begin to refuse to walk carefully through life only to arrive safely at death's door. When you know better you simply do better. A mile of worries won't take you as far as one millimeter of action to take control of your thinking about health.

Leave a Comment

More Support: Webinars by Dr. Kruse

- The Sex Prescription (May 2013)

Your Shopping List for this Post



The Epi-Paleo
Prescription

- [View All Recommended Products from the Quantum Biology](#)

Series

- View The Epi-Paleo Store

Additional Resources

- Brain Gut 2: Viral Marketing
- Brain Gut 3: Look In The Past To See Your Prologue
- Brain Gut 4: What was Homo's Solution?
- Quantum Biology 1: The Zero Entropy System
- Quantum Biology 5: Coherent Water
- Why is Oprah Still Obese? Leptin Part 3
- Cold Thermogenesis Protocol

Cites

- The Origin of Species (1859), Charles Darwin
- The Living Stream: A Restatement of Evolution Theory and its Relationship to the Spirit of Man. Harper and Row, 1965. , Alister Hardy
- Man's Place among the Mammals, Wood Jones
- The Open Sea. Its Natural History (Part I) The World of Plankton. New Naturalist #34, Collins, 1956.
- The Open Sea. Its Natural History (Part II) Fish & Fisheries. New Naturalist #37, Collins, 1959.
- The Aquatic Ape, 1982, Stein & Day Pub
<http://en.wikipedia.org/wiki/Special:BookSources/0285625098>
- The Naked Darwinist, 2008, Eildon Press
<http://en.wikipedia.org/wiki/Special:BookSources/0952562030>