

The Neanderthals Ate Their Veggies, Too

By Nick Gier

Sometime after I told a friend that I had become a vegetarian, I saw a new bumper sticker on his truck. It read: “Vegetarian: Old Indian Word for Poor Hunter.” For years I’ve been preparing the following verbal arrows as a reply.

Veggies in the Diet: Sacagawea and the Bushmen

Of course Paleolithic peoples ate lots of meat, but their diet was supplemented with roots, fungi, fruit, and other non-meat items. Sacagawea saved the Lewis & Clark expedition from starvation by providing the men with such nutritious items such as wild licorice, prairie turnips, and wild artichokes. She also knew of a number of medicinal plants, which we now have learned even Neanderthals used.

For 150,000 years the San of Southern Africa, better known as Bushmen, have thrived on the bounty of the Kalahari Desert. A 1960s study measured San food consumption, and only 27 percent consisted of meat, and the rest was 14 percent nuts and 51 percent other plant foods. Some of the tasty items include wild oranges, wild mangoes, two types of berries, sour plums, beans, and melon. I remember a book on the San, which contained a picture of the Mother of All Omelets—an Ostrich egg roasted over a bed of coals.

Neanderthals: Smart and Caring

For years I have been fascinated by the Neanderthals, and I have a small library of books and articles attesting to their intelligence, ingenuity, and perseverance in Ice Age Europe and Central Asia. They lived at the edge of the glaciers for about 300,000 years and their population peaked at about 70,000.

The average *Homo neanderthalis* brain was actually 28 percent larger than we *Homo sapiens*, and their tools were just as sophisticated as our ancestors’ who eventually replaced them. Although claims of Neanderthal culture are contested, they may have buried their dead, and they definitely cared for their physically impaired. Skeletal remains of a Neanderthal male found in Iraq showed signs of healing of major injuries over a life of 40-50 years.

One Cannot Survive on Lean Meat Alone

Early estimates of the Neanderthal diet showed a very high level of protein consumption (90-95 percent), so high that it would lead to intolerable stress on the kidneys. The almost exclusive meat diet of the Inuit has a very high fat content (65 to 75 percent), very different from the lean meat of the megafauna of Northern Europe. Pemmican, a mixture of rendered fat, dried berries, and pulverized dried meat, was the main portable food source for North American Indians.

Biogeologists at the University of Tübingen have done an analysis of the collagen of Neanderthal bones, and they have discovered that the diet of these individuals would have been at least 20 percent plant-based. Karen Hardy and her team at the University of Barcelona analyzed Neanderthal dental plaque and found they had “the ability to select and use certain plants for their nutritional value and for self-medication.”

Dental Plaque Shows Plant Food and Medicine

Another study of dental plaque from two different sites in Belgium and Spain shows a dramatic contrast. The Belgian Neanderthals ate mostly woolly rhinoceroses and wild sheep (still some tubers such as water lily), while their Spanish cousins consumed large amounts of moss, pine nuts, and mushrooms. Were these just “poor hunters,” as my friend’s bumper sticker mocks, or just healthier and smarter Neanderthals?

Even more intriguing was evidence that these clever Spanish Neanderthals used plants for medicinal purposes. One jaw bone indicated that pain from an abscess had been relieved by salicylic acid (aspirin) extracted from the poplar tree. The same individual was also treating diarrhea with a mold that is the source of modern-day penicillin.

Plant Eating Just Opportunistic or Systematic?

Yes, the Neanderthals were smart, but their plant foods consumption may have been more opportunistic than systematic. An author at phys.org explains: “Modern humans seem to have invested more effort in accessing food resources and significantly changed their dietary strategies over a much shorter period of time, which may have given them an advantage over Neanderthals.”

Amanda Henry and her colleagues, however, believe that Iraqi Neanderthals were more systematic in their plant food gathering. They conclude that our “data suggest that Neanderthals were capable of complex food-gathering behaviors that included both hunting of large game animals and the harvesting and processing of plant foods.” The theory that Neanderthals went extinct because they failed to effectively exploit all their food resources is still unproved.

The Proof is in the Poop

Kathy Hardy also led a 2014 study of fossilized fecal matter from El Salt, another Spanish Neanderthal site. The evidence above is only indirect—Neanderthals may have just chewed on plant matter—but this fecal data clinches the theory that our ancient cousins were not exclusively meat eaters. Biomarkers for meat and plants were found in a 2-1 ratio, and a good deal of this plant material was from tubers in addition to above-ground plants. Neanderthals would have had digging sticks in addition to their spears.

Neanderthal Males Were Scrapping Hides

One unusual anatomical feature that distinguishes us from Neanderthals is a dramatically enlarged right bicep. Careful experiments have shown that it would not have been due to spear throwing. (In any case, scientific consensus is that they thrust their 9-foot “pikes” into mammoths instead.) Additional simulations have demonstrated that it was scrapping hides that led to this anomaly. Not only were Neanderthal males eating vegetables, but they did the work that supposedly more evolved humans left to their women.

No Mega Veggies to Match Mega Fauna

One of my favorite *Far Side* cartoons by the ever-zany Gary Larson is entitled “Vegetarians Home from the Hunt.” It shows a gaggle of Paleolithic men carrying a

carrot the size of a truck. Yes, there were many huge animals, but there were no mega vegetables of the sort we buy at the supermarket.

Writing for *National Geographic*, Rebecca Rupp explains: “Ancient tomatoes were the size of berries [as I once observed them on a Galapagos island], and potatoes were no bigger than peanuts. Cucumbers were spiny as sea urchins; lettuce was bitter and prickly. Carrots were scrawny. Beans were naturally laced with cyanide.” These vegetables would have been less nutritious, but still would have provided large amounts of calories. Meat contains methionine and cystine, which neutralizes the cyanide contained in many vegetables.

Neanderthals Boiled Grains as well as Meat

We can imagine that Neanderthal males were great grill masters, but we now have evidence that they also boiled their meat as well. Dental examination of Shanidar Neanderthal teeth done by Amanda Henry, et al. showed evidence of barley that was boiled and not popped or parched. Drawing on this boiled grain and boiled bones, University of Michigan archaeologist John Speth believes that this was done in either hide pouches or birch bark containers. A wild sheep stomach would have, suggests paleoanthropologist John Hawks, would have held a tasty Neanderthal haggis.

As Speth explains: “You can boil in just about anything as long as you take it off the flame pretty quickly,” or a slow boil over coals. He enhances his argument by noting that Neanderthals must have boiled the pitch (in oxygen-free spaces in trees no less) they used to haft their spear tips.

A Neanderthal Thanksgiving Feast

In addition to worshipping animal spirits, a la Jean Auel’s *Clan of the Cave Bear*, Neanderthals surely gave thanks to Mother Earth. So, we can imagine that on an auspicious day of this season, men carved the meat, the women chopped the vegetables, and they dropped them in a birch bark “pot.” They would then have had a hearty stew for a Neanderthal Thanksgiving.

Postscript. I have two concessions to make. First, I do include some fish in my diet, primarily because of its reputation as “brain food,” something that is very important for the intellectual work that I’ve pursued all my adult life. I realize that this is at odds with my pro-life position, which is based on protecting all beings that can feel pain. All that I can do now is to beg forgiveness from all the fish that I’ve eaten.

The second confession is that I would not be here on earth had it not been for my carnivorous ancestors. When early hominids left the trees and moved onto the African savannah, they made some crucial adaptations. They learned to stand upright to view their open environment and to protect themselves, and they started scavenging animal carcasses. They also eventually learned how to cook their food, which would have released more calories and nutrients.

The plant food that our primate ancestors ate raw sustained them, but it required a gorilla, for example, to eat up to 9 hours of a 12-hour tropical day. Most of those calories went to supporting the gorilla body not the brain, which is only a third the size of ours. The savannah

did not provide the abundant leaves and fruit that great apes ingested, so the first hominids could not have possibly survived as vegans.

Meat is a dense source of high quality protein and essential vitamins, and it provided the fuel for a dramatic increase in the genus *homo* brain size, which reached its apex (at least in sheer volume) in the Neanderthals. Carnivores in general have larger brains than omnivores.

Our slightly smaller brain most likely has more neural connections that gave us the creative adaptability to outwit, not necessarily kill off, our Neanderthal cousins. As Rebecca Searles quips: “Meat gave our distant ancestors the brain power that makes higher-level decision-making—like, becoming a vegetarian.”

Nick Gier of Moscow taught philosophy at the University of Idaho for 31 years. He can be reached at ngier006@gmail.com.