CRITICAL EXAMINATION OF BLOOD TYPE DIETS

LOREN CORDAIN, PH.D.
A CRITICAL EXAMINATION OF BLOOD TYPE DIETS

Loren Cordain, Ph.D., Professor Emeritus

THE HISTORY AND CHARACTERIZATION OF BLOOD TYPE DIETS

Blood type diets were first popularized by Peter D'Adamo, a naturopathic physician, in his best selling 1996 book, Eat Right 4 Your Type. The inspiration for Dr. D'Adamo's book came from subjective clinical impressions of his father, James D'Adamo; also a naturopathic physician who first proposed this concept in his book, One Man's Food is Someone Else's Poison 16 years earlier in 1980. As a member of Bastyr College's first graduating class of naturopathic physicians in 1982, Peter became interested in attempting to validate his father's subjective and personal observations from reviews of the scientific and medical literature – thus the fundamental reason for Peter writing his hugely successful diet book.

The underlying premise for Peter's dietary ideas is that ABO blood type is the most important issue in determining healthful diets. He advocates separate diets for people with one of the four most common blood types (A, B, O or AB), and has further subdivided his dietary recommendations into three arbitrary ancestral categories: “African, Caucasian and Asian.” Hence 12 subgroups (4 blood types x 3 ancestral categories) exist – each with differing dietary recommendations. Each blood type diet includes 16 food groups which are divided into three categories: 1) highly beneficial, 2) neutral and 3) avoid. For each of the 12 subgroups differing recommendations exist for the three food categories. If these nutritional recommendations sound somewhat complex to you, I had to re-read them about a dozen times to get the drift myself. Although I don’t want to get ahead of the game, for the observant reader, you may be curious to know how Dr. D'Adamo dreamed up this complex dietary system and if a long trail of experimental human clinical trials exist to support Peter's recommendations? I, too, had to ask myself these same questions.

Before we get into the science or lack thereof of the blood type diet, I’ve got to flesh out a few more of the underlying concepts. Dr. D'Adamo believes that blood group O (“O for Old”) was the earliest human blood type and that all humans at one time maintained this blood group before the subsequent evolutionary appearance of blood types A, B and AB (reference 1, pp. 6-13). Accordingly, Peter believes that people with the O blood type had ancestors who were skillful hunters and whose diets were high in meat and animal proteins. For modern people with the O blood type he advocates a high meat, low carbohydrate “hunter” diet, with virtually no wheat, few grains or legumes and limited dairy products. Do these dietary recommendations ring a bell for you, or sound vaguely familiar? Keep this thought in mind, as it may well explain the lasting popularity of Peter’s first book.

Peter now goes on to explain to us that blood group A (“A is for Agrarian”) “appeared somewhere in Asia or the Middle East between 25,000 and 15,000 B.C.” . . . and “allowed them to better tolerate and absorb cultivated grains and other agricultural products” (reference 1, p. 8). For type A’s, Dr. D'Adamo recommends a mainly vegetarian diet - the diet that he personally follows. However, more importantly he recommends that blood type A’s also avoid wheat and dairy (do these recommendations also sound familiar?) and replace meats with some “highly beneficial” fish and seafood – Hmm, lots of fresh fruits and veggies for
type A’s, little wheat or dairy and fish instead of meat? Keep these recommendations in mind.

Peter next tells us that blood type B, “developed sometime between 10,000 and 15,000 B.C. in the area of the Himalayan highlands – now part of present-day Pakistan and India (reference 1, p. 10). Peter suggests that type B’s have evolved the most varied diet and can include both meats and dairy in their daily menu, but again should avoid wheat. Before we move on to the final blood type (AB) it should be noted that Dr.

D’Adamo generally eschews highly processed foods (chips, pastries, candy, ice cream, snack food, fast food, etc.) for all blood groups – once again, does this not sound like another familiar dietary suggestion?

From Peter’s diagram on page 6 of his book, he indicates that blood type AB appeared first in humans sometime between 500 B.C. and 900 A.D. He characterizes “AB is for Modern” and states “Until ten or twelve centuries ago, there was no Type AB blood.” (reference 1, p. 13). Peter indicates that AB’s are a conglomeration of type A and type B blood types, and consequently their diets should reflect a mixture of the recommendations he makes for these blood groups. AB’s are therefore advised to eat meats, seafood and dairy, and to once again avoid wheat.

THE REALITY AND THE SCIENCE OF BLOOD TYPE DIETS

The reality of Dr. D’Adamo’s book, Eat Right 4 Your Type, is that it has overwhelmingly become one of the sustained, best selling diet books of the past two decades, and continues to sell well on Amazon and other retail outlets – 14 years after its initial release in 1996. Unfortunately, as I will shortly demonstrate, Dr.

D’Adamo’s explanations for the health-promoting effects of his diet have little or nothing to do with ABO blood groups. His claims about the origins of human blood types and the dietary selective pressures which elicited the four common blood types are completely incorrect and have no basis in the current scientific literature. By critically examining the faulty concepts and evidence underlying this book, it becomes almost comical how Peter’s series of errors, incorrect assumptions and conclusions actually ended up with dietary recommendations that may have therapeutic value for about 60% or more of the world’s population. The paradoxical nature of this book (bad science, pretty good dietary recommendations) helps to explain its lasting commercial success.

ACTUAL ORIGINS OF HUMAN BLOOD TYPES

Peter’s suggestion that O is the original human blood type is incorrect. Studies in humans, chimpanzees and bonobos (a specific type of chimpanzee) show that alleles (different versions of genes) coding for the A blood type was actually the most ancient version of the ABO blood group, and was shared prior to the evolutionary split between chimpanzees and hominids five to six million years ago3-5. Hence, Peter’s suggestion that blood type A appeared 15,000 to 25,000 years B.C. in response to dietary changes brought about by the new foods (i.e. grains) of the agricultural revolution is not only incorrect, but off base by about five million years. Now, let’s play a little game of logic and apply the correct data to Peter’s reasoning that “the original ancestral human blood type should be eating a high protein meat based diet.” Since type A is the actual ancestral human blood type (rather than O), if we use Peter’s logic then he - himself a type A - should not be following a vegetarian diet, but rather a high protein meat based diet.

These kinds of games of logic - although fun to play - more importantly underscore the fundamental and incorrect assumptions upon which Peter’s book is based.

The next blood type that appeared in the human lineage was B - which split from A - about 3.5 million years ago3-5, not the recent 10,000 to 15,000 years B.C. origin that Peter has proposed. The O blood type split from A about 2.5 million years ago3-5 and consequently does not represent the oldest blood type as claimed by Peter. The only fact that Peter correctly deduced about the origin of human blood types was that AB was the youngest, but once again he completely missed the correct date, as it was actually about 260,000 years ago3 - not the mere 1,500 years ago that he has proposed.

So Peter has got all of his blood group origins messed up, his dates wrong, and the evolutionary splits incorrect. Why does this matter and how does it affect his dietary theories? To begin with, even if we were to believe in Peter’s underlying assumptions that diets should be prescribed upon blood types, he would have to completely revamp his original recommendations. Type A’s should be eating a high protein, meat- based diet rather than the vegetarian fare he suggests. But
what about type O’s? With the correct evolutionary information, should they now be eating a vegetarian menu? And what about type B’s and type AB’s – what should they now be eating? Most telling of the logical failings of Peter’s blood type diet is the observation that all four of the major blood types had evolved almost 250,000 years before the coming of the Agricultural Revolution 10,000 years ago. Yet Peter would have us convinced that three of the four major blood groups only came into existence slightly before or after the Agricultural Revolution, and as a direct result from dietary selective pressures wrought by Neolithic food introductions.

So, why has Peter’s book become one of the best selling diet books in the past two decades? Because it works – but only for about 44-62% of the people who adopt it. Remember that for blood type O, Peter advocates a high meat, low carbohydrate “hunter” diet; with virtually no wheat, few grains or legumes and limited dairy products. If we look at the frequencies of the four major blood types for the entire world population, blood type O is by far the most frequently occurring version. It is found in 62% of all the world’s people, followed by A (21%), B (16%) and AB (1-3%)6. In the United States, the four blood type frequencies are O (44%), A (42%), B (10%) and AB (4%)7. So you can see that Peter has essentially advocated a diet similar to the Paleo Diet for between 44 and 62% of his readers. Quite simply, Peter’s diet works for about 44 to 62% of the people who adopt it – not because of their blood type, but because it emulates the same diet that natural selection has designed for us all.

For sources see References: Section I

ISHI: AMERICA’S LAST KNOWN HUNTER-GATHERER

Patrick Baker

Imagine being the last of your kind and entering a world that is nothing like the world your grandparents knew. What if you could no longer live in the homeland that had sustained your ancestors for centuries? This is exactly what happened nearly a century ago for a Native American man known to the modern world as “Ishi.”

Ishi (“man” in his native Yana language) was believed to be the last of the Yahi people, and is believed to be the last Native American to have lived the majority of his life outside of American culture as it existed in 1911. Ishi was the name given to the last known hunter-gatherer in America by Alfred Kroeber, an anthropologist at the University of California at Berkeley in 1911.

Dr. Cordain has been researching Ishi intensely for the past six months, having been first introduced to Ishi by his father at about 11 years of age. Dr. Cordain stated that “I now believe I have an answer to Ishi’s final two to three years of existence” in his ancestral home on Deer Creek, located east of present day Los Molinos, California - before his appearance in October, 1911 at a slaughter house in Oroville, California.
Kroeber stumbled into Ishi’s life following his “death walk” from his hunter-gatherer home on Deer Creek to the slaughter house near Oroville. Kroeber wrote of and exploited this Native American’s life and culture before Ishi’s death in 1916 from tuberculosis.

Cordain states that “sleuthing via Google Earth and the early records of Dr. Kroeber in the academic literature has given me insight into the exact location of his final ‘village’ of residence, and how he spent the last two to three years of his life with his paralyzed mother at another location on Deer Creek.” Historically, this site was known only to the long-dead Kroeber and his colleagues. Cordain states that “modern anthropologic and forensic examination of this site would help to clarify and demystify the legend of Ishi.”

Dr. Cordain believes that eventual carbon dating of this site - once verified and reexamined - will reveal the missing two to three years of Ishi’s life before he became known to the world of 20th century America.

Cordain has compiled his information and will contact the appropriate members of the California Anthropological community before deciding how to proceed.

Cordain’s research and writings indicate that a contemporary diet that precisely mimics hunter-gatherer diets is “obviously impossible, as most of us don’t have unlimited access to wild game and plant foods.” However, Cordain’s studies indicate that “our health, well being and mental state improve, and we can emulate Ishi’s personality, psychological state and health” by consuming fresh fruits, vegetables, lean meats and seafood, as documented in his book The Paleo Diet. Dr. Cordain’s dietary recommendations in The Paleo Diet include avoiding processed foods, grains, refined sugars, refined vegetable oils, and salted foods.

Dr. Cordain goes on to say that “Ishi’s story is heart-wrenching, sad, warm, but human above all else. His spirit, optimism and love of life - despite the awful events which sealed his fate - represent a truly remarkable and final tale” of the hunter-gatherer lifestyle as it was once practiced by Native Americans and other indigenous peoples. Unfortunately, much of Ishi’s life will remain undocumented and unknown, and, according to Dr. Cordain, “the available historical, archaeological and forensic evidence about his final days on Deer Creek as America’s last known hunter-gatherer are vaguely understood and highly speculative.”

For many of our readers, the story of Ishi may be unknown, and lost in the fog of a long forgotten history our great-grandparents knew - particularly those among us who lived with Native American inhabitants of this continent, after the American population of European descent had settled in the American West.

For sources see References: Section II

Q & A: DIETARY LECTINS AND RHEUMATOID ARTHRITIS

Q: Could you suggest recent scientific articles on the topic of dietary lectins and rheumatoid arthritis? Many thanks,

Allena

A: Dear Allena,

To my knowledge, there are no recent studies addressing the role of a paleolithic diet and its
implications in rheumatoid arthritis, except from that of Dr. Cordain. On his DVD How to Treat Multiple Sclerosis with Diet, Dr. Cordain thoroughly explains the dietary mechanisms of autoimmunity in MS which are almost the same for all autoimmune diseases, including RA. These include: increased intestinal permeability, increased passage of luminal antigens into peripheral circulation, molecular mimicry and genetic susceptibility (genes encoding for the HLA system), among other factors.

In recent years, new substances have been discovered which might be responsible for increased intestinal permeability - namely saponins - found in legumes, potatoes, soya, quinoa, amaranth, alfalfa sprouts or tomatoes. If you've seen Dr. Cordain's scientific paper entitled “Modulation of immune function by dietary lectins in rheumatoid arthritis”, I am sure you are aware of the role lectins play in autoimmunity.

Adjuvants are used by immunologists in order to boost the immune system and induce immune response. It turns out that certain foods possess bioactive compounds that have adjuvant-like activity. This is the case for tomatoes or quillaja (a foaming agent used in beers and soft drinks). Gliadin is a prolamine found in wheat which has been shown to increase intestinal permeability, and hence the risk of suffering from an autoimmune disease. While several clinical trials conducted have shown promising results, unfortunately they have used a gluten-free diet or vegan diet instead of a whole paleolithic diet, which we think is superior.

In the vegan diets, authors often claim that the benefits cited might be due to the lack of meat, but we think the positive effect relies on the lack of dairy proteins and gluten. Meat has historically been seen as the “bad guy” of inflammation, but the data to support that notion is not sufficiently compelling.

Listed below are some references that may be helpful.

Cordially,

Maelán Fontes, MS Ph.D.


SMOKEY SOUTHERN-STYLE COLLARDS

2 Tb. extra virgin olive oil
1 medium yellow onion, diced
4 garlic cloves, minced
1/2 t. dried thyme
1/2 t. dried basil
4 oz. roasted turkey breast, diced
2 bunches collard greens, coarsely chopped, with stems removed

Heat olive oil in a cast iron skillet over medium flame. Stir in onion and sauté for five to eight minutes, until translucent. Add garlic and continue stirring for two to three minutes.

Increase heat to high and stir for one minute, lightly charring the onions and garlic. Stir in thyme and basil, reducing flame to medium. Add turkey and cook for two minutes.

Toss in collard greens and cook while stirring for two minutes, making sure to mix all ingredients well.

Copyright © 2011. The Paleo Diet Cookbook. All Rights Reserved.
REFERENCES: SECTION I


2. D’Adamo, J. One man’s food—is someone else’s poison. R. Marek Publisher, 1980.


REFERENCES: SECTION II


4. DVD Documentary. The Last Yahi (2002). Linda Hunt (Vocals), Jed Riffe (Director), Pamela Roberts (Director)