

*corres - Bryant*



UNIVERSITY OF MINNESOTA  
TWIN CITIES

Laboratory of Physiological Hygiene  
School of Public Health  
Stadium Gate 27  
611 Beacon Street S.E.  
Minneapolis, Minnesota 55455

September 9, 1981

Vaughan M. Bryant, Ph.D.  
Texas A & M University  
Department of Anthropology  
Bolton Hall  
College Station, TX 77843

Dear Dr. Bryant:

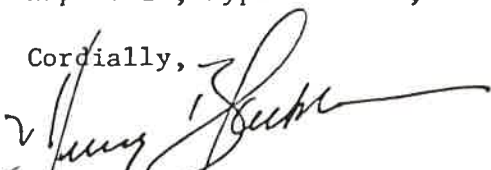
I noted your name on the Pritikin program for next month and the title of your presentation. I have had an amateur interest in this field for several years, and presented a Memorial Lecture to the American College of Cardiology on the general topic several years ago. I have not written it up, and am glad in a sense that I haven't, because of the risk of error and superficiality of an amateur making broad syntheses. I am well aware that many anthropologists and paleontologists are involved in these questions, but it seems that your perspective attempts to synthesize in an attractive and interesting way. I sit with a cross-disciplinary group on the diet issue headed by David Pilbeam and Allan Walker, because of my experience in nutritional epidemiology.

I will not be at the October meeting in Santa Monica, but I would be grateful for a bibliography of your presentations on this topic, and any key references at your fingertips which you consider critical to the diet and physical activity in major evolutionary stages. With the current suggestion that the robust Australopithecines are a highly specialized offshoot and not in direct line to Homo Erectus, it seems their plant diet is not as strongly relevant to modern adaptations.

Another major question I constantly get, since we have only speculations about modern chronic diseases in early (or extant) hunter-gatherers, is the longevity issue. Are the characteristics of survival for reproduction combined with those for longevity? Can we assume the potential for longevity is the same in modern man as in direct forebears of Sapiens and Erectus?

The anthropological observations of the enclosed effort on diet and hypertension surely contain no new information for you, but I send it along to suggest the direction of my thinking on chronic disease in modern affluent man. This is, basically, that the dissonance between affluent, abundant, sedentary cultures and the legacy of evolution as hunter-gatherers is probably responsible for the mass elevation of risk characteristics for chronic disease (obesity, hyperlipidemia, hypertension, etc.).

Cordially,

  
Henry Blackburn, M.D.  
Professor and Director

*sent 9-10-81  
UB*

bpc: Phyllis Pirie -- I would welcome your comments on the attached manuscript.

bpc: Art Leon

*Rome MS.*

HB:ljs

Enclosure

*Rome MS.*

HEALTH SCIENCES

copies - Bryant

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ANTHROPOLOGY PROGRAM  
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October 13, 1981

Dr. Henry Blackburn, M.D.  
School of Public Health  
University of Minnesota  
Minneapolis, Minnesota 55455

*Corresp*

*letter attached*

Dear Dr. Blackburn:

A thousand apologies for my not responding to your nice letter sooner. As an administrator, teacher and researcher there are often too few hours in a day. In any case, I did want to thank you for the letter and the copy of your soon-to-be-published paper. I found the paper very interesting and I totally agree with many of the points you raised. I feel that it is a valid and useful contribution to the study of the present and past diets of man.

Most of my interest in past diets has come from the analysis of human coprolites. I was fortunate to study with Dr. Eric O. Callen who was a pioneer in this field before his death in 1970. Since that time I have continued his research and have remained interested in the subject. By training, I am an archaeologist and botanist and not a nutritionist (although I have been forced into the edges of that field because of my research interests). Most of what I have done to date has been to use the botanical remains from human coprolites to infer items eaten by prehistoric man and how those diets may have changed through time. I have sent you some reprints of this work but they are not fully up to date on some of my recent interests and on the subject of my lecture at the Pritikin Conference. I hope to have a written text of that paper soon and I shall send you a copy.

Like you, I feel that the robust group of Australopithecines was not on the road to modern man. On the other hand, I do believe (as do others) that some of the facial changes in man are a direct result of the types of diet man had to turn to in order to survive. For example, the reduction of the canine teeth, the arch in the jaw, the larger molar teeth with lower crowns and the increase in oral cavity size may well have been initial adaptations needed to survive on a diet which may have included small seeds as a major component. Later, as man's ability to obtain meat increased there was less emphasis on the large molar teeth and robust jaw structure. Then, with the advent of fire, man's foods softened and the need for powerful jaws and large teeth were lessened until we have the end product seen in us today.

Longevity is an issue I often get questions about as well. I feel that the human body was probably initially designed for a life span of under 45 years yet even in prehistoric times the potential for a person living longer was possible and in fact did occur. Many of our modern diseases probably did not occur in the past but others could well have persisted from the very earliest

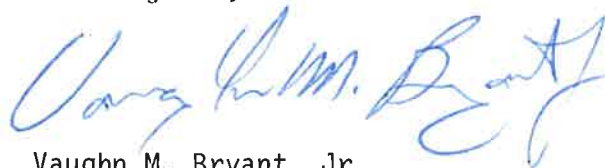
Dr. Henry Blackburn, M.D.  
October 13, 1981  
Page 2

period. Without modern medicine in the past those diseases would have been fatal whereas today they usually are not. More importantly, I think that the rigors of their lifestyle probably tended to wear out their bodies at a faster rate than what occurs today. For example, we know that in many hunting and gathering societies is not uncommon for a woman to bear her first child in her teens and then she may have 10-12 more pregnancies. That must increase her chances of complications and increase the wear and tear on her body. As for the men, accidents, conflict and disease would have lessened their chances of reaching old age. And finally, I feel that if we had to return to a lifestyle similar to that of our ancestors, our life expectancy would drop rapidly to that of theirs.

The main issue in longevity is not the poor diet these early ancestors ate, but the tough life they lived without the aid of modern health practices and medicine. In fact, as I have said for years these early ancestors probably ate diets which were much better for our bodies than the diets we eat today. Today we are able to have "our cake and eat it too", so to speak. We ruin our bodies by eating salt, fats, sugars and too many calories and then turn to the heart bypass or other medical developments when we get into trouble. As I know you also recognize, modern man has an opportunity to have the best of both worlds. If we were to modify some of our current diet practices and still have the benefit of modern medicine, then we might increase our potential for longevity even more. In addition, we would feel better and be free from some of the health problems that plague many of our current older residents.

I'll save the rest for later. In the meantime, thank you again for your interest in my work and I would appreciate any other articles or manuscripts you and your colleagues have written on the topic of diets. There are some of us who are listening to what the medical world is trying to tell us about our current diets and the problems they create.

Best regards,

A handwritten signature in blue ink that reads "Vaughn M. Bryant, Jr." The signature is fluid and cursive, with the first name being the most prominent.

Vaughn M. Bryant, Jr.  
Professor and Head

VMB/mrh



UNIVERSITY OF MINNESOTA  
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Laboratory of Physiological Hygiene  
School of Public Health  
Stadium Gate 27  
611 Beacon Street S.E.  
Minneapolis, Minnesota 55455

*file - Bryant*

October 26, 1981

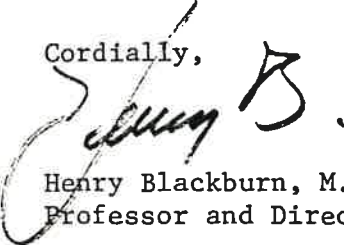
Vaughn M. Bryant, Jr., Ph.D.  
Professor and Head  
Anthropology Program  
Texas A&M University  
College Station, TX 77843

Dear Professor Bryant:

I am terribly grateful for your detailed letter of October 13 and the marvelous reprints. I was quite familiar with your work on human coprolites but stupidly had not connected the name with the excellent work. I had been guided to this by Bill Connor of Seattle several years ago when I was discussing with him his own work on plant versus animal sterol ratios in coprolites of Northwest Indians. I have even taken illegal liberties with your Scientific American article and had the pollens made into slides. I have told your Terra Amata story on many occasions. This is tremendously exciting work.

Many thanks for your comment about longevity, which makes very good sense. I would think we should be able to find something in theories about cell turnover and nucleic acid configurations, as well as in fossil remains to help. Extrapolations from the age of maturation to potential longevity should back up your idea of potential of 45 years existing from very early on. I am a bit hard-put to understand how natural selection could double potential life span unless the potential were there early, with variations being predominantly environmentally determined. Certainly the rapid wear and tear is highly plausible.

Cordially,

  
Henry Blackburn, M.D.  
Professor and Director

HB:lr

enc. *see attached*