## How Climate Affected the Ancient Human Diet

Neanderthals ("Cavemen" – the "initial" humans per current science/anthropology/archeology) were primarily located in Europe and Asia. The Middle East and Mediterranean areas were nice and warm and included the fruits and vegetation in warmer climates. Moving north, into Germany, Poland, Ukraine, parts of Russia, Kazakhstan and Mongolia, would grow different fruits and vegetation with cooler climates. Once the Neanderthals made it north to Scandinavia and Russia, during the Ice Age



especially (and even now!), very fruits or vegetation would have grown in ice and snow, so the main food source would have been meat.

Fish would have been abundant in any array and temperature range. However different fish would be available in each area, with the fattiest fish in the coldest temperatures to carry humans further between meals and to warm their bodies longer.

As mentioned in the last Blog Page, early humans feasted virtually exclusively on leaves and other plant life, fruits from trees, vines and bushes, shrubs, and herbs, comparable to modern-day gorillas and chimpanzees.

The concept of eating meat in warmer climates would not be conducive to the life that these people needed to live. As we explored in the last blog, the ancient human diet was chiefly founded on low-nutrient-dense plant materials because they spent a great deal of their time eating to meet their energy needs. Some examples of these low nutrient dense plant materials would include nutrients like calcium, potassium, dietary fiber and vitamin D – vegetables, like the vitamin and minerals that these plant foods contain.

Foraging included gathering natural plants such as nuts, leafy vegetables, beans, fruits and fungi (like mushrooms). Fruits, vegetables and other plant-based foods like whole grains, nuts, legumes and tea all contain phytonutrients. Phytonutrients aren't crucial for keeping you alive, but when you consume phytonutrients, they may help prevent disease and keep your body running optimally. In addition, fruits contain natural sugars that are carbohydrates that fuel the body. In a fight-or-flight situation, carbohydrates there to burn can make or break you when gathering in new or dangerous territory.

Anyone in the southern United States knows that summer welcomes cool salads, fruit, vegetable trays (with your favorite dip). Even cold pasta salads (with or without tuna or chicken, but cold with mayonnaise) and iced tea are nice a refreshing. Occasionally a barbecue may be enjoyable, but the cold watermelon and iced tea save you in the heat! After consuming all that meat, everyone wants to just sleep to digest all of those calories. Meat is loaded with calories, but the heat is counterintuitive to heat! A calorie is a unit of energy. It is defined as the amount of energy needed to raise the temperature of 1 gram of water by 1 degree Celsius. In the heat, the last thing that you need to do is burn anything, even calories and the calorie content of meat is highly dependent on the cut and resulting fat-to-protein ratio.

However, anyone in the northern United States knows that winter, especially January and February, wants to eat meal more than during the summer. No one wants a salad as a meal in winter where it is cold! The thicker and fattier the meat, the warmer you will be longer, or something like a hot bowl of chili combining meat and carbohydrates will really keep you going when "baby, it's cold outside"!

Meat in the diet hunted, chased down and expended a tremendous deal of energy to pull back a huge bow to kill an animal large enough for several people, maybe for a day or so, takes an incredible about of strength. The number of calories burned in utilizing this amount of energy would take quite a toll on the hunter, or even one of those helping the hunter to capture the large animal. Then the long trek back to skin the animal and the length of time to either cut it into smaller sections to cook faster or to the length of time to cook it longer and one who animal would still take considerable time. Thank goodness it takes plenty of time to digest the food and reenergize the body. What is said is that 3 ounces of red meat takes 72 hours (3 entire days), so hopefully that means that the Neanderthals could take 3 days to have to hunt again, especially in snow and ice.

This still confirms that it only makes sense that if you have to hunt the food down yourself, plant foods are the winner unless there is a period of starvation, like cold, icy winters with no vegetation!

(769 words)