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Evolution of the Human Diet: What We Can Learn From Hunters and Gatherers

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Evolution of the Human Diet: What We Can Learn From Hunters and Gatherers



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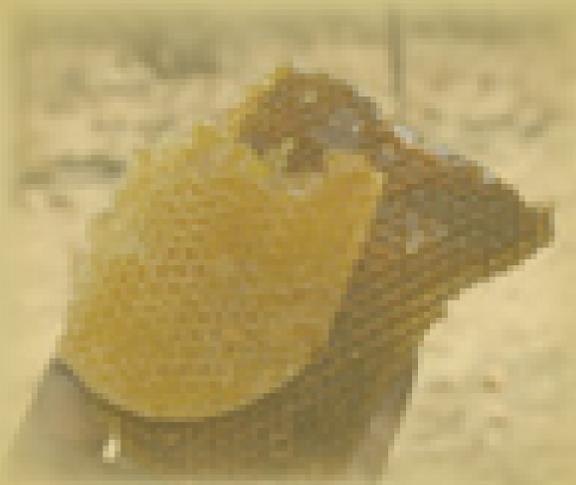


LITERATURE REVIEW

Biological indicators, such as changes in dentition, gut reduction, and a larger brain (Aiello and Wheeler 1995), demonstrate that our diet has changed throughout human evolution and has assisted in our evolutionary trajectory. Archaeological evidence suggests that the earliest signs of meat consumption date to around 2.5 million years ago coinciding with biological changes. Among the biological indicators and archaeological evidence, ethnographic data also shows that the diet of ancestral hominids was one of omnivory and supports the hypothesis that the hunter-gatherer diet was highly variable (Marlowe 2010; Gremillion 2011).

STUDY POPULATION: THE HADZA

The Hadza are a hunter-gatherer population who live in Northern Tanzania, East Africa. This population is ideal for studying the evolution of the human diet because they live a lifestyle that has characterized our species for 99% of human history (Marlowe 2010), they live in an environment similar to early members of our genus *Homo*, and they may target similar foods.

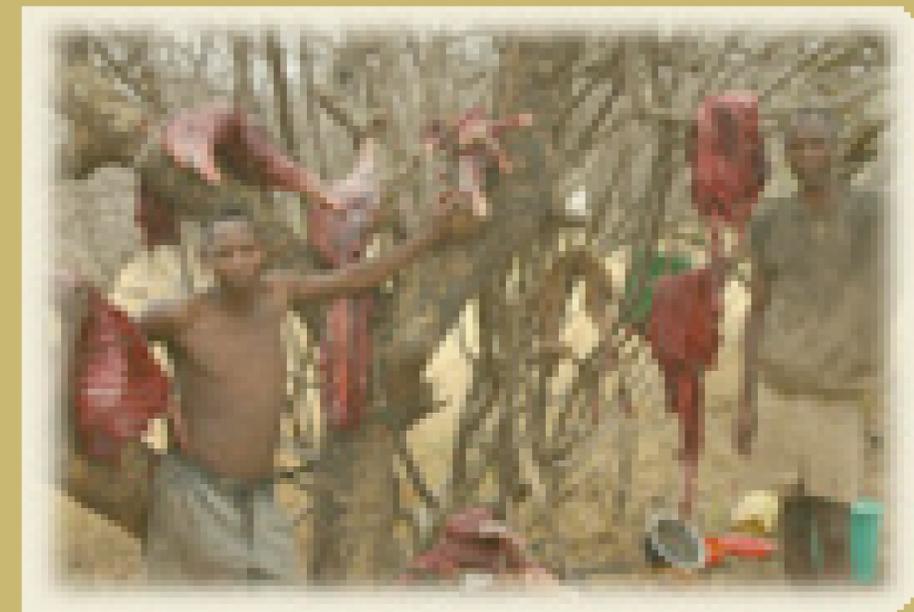


METHODOLOGY

Behavioral data on food collection was collected by Dr. Alyssa Crittenden in Tanzania, amongst the Hadza, between 2001-2005. All foods collected and returning to camp were weighed in a hanging spring scale and dried in the field for preparation of laboratory analysis. All foods were then analyzed, using standard analytical nutritional methods in the Nutritional Ecology Laboratory at Harvard University (Crittenden 2009).

CONCLUSION

The data suggest that the Hadza diet varies from season to season, based on availability of resources. In addition, the majority of the Hadza diet is plant based, although significant amounts of meat are consumed throughout the year – particularly during the dry season. Based on these findings, we can safely infer the Paleolithic diet was omnivorous, variable and likely highly seasonal (Crittenden 2009).



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ABSTRACT

The study of hunter-gatherer populations around the world can greatly inform our understanding of the evolution of the human diet. Ethnographic research of modern hunter-gatherers has been used to infer the possible food consumption and acquisition patterns of our ancestors. Hunter-gatherers provide the information necessary for the understanding of the past human diet, due to these populations living similar lifestyles in similar environments, therefore procuring similar foods.

The Hadza, a group of nomadic hunters and gatherers living in Tanzania, East Africa, are one of the primary populations that nutritional anthropologists study to infer what possible foods our ancestors acquired and consumed. My project explores the diet composition of the Hadza, in combination with reviews of previous research, to provide a broader perspective on the possibilities that shaped early hominid dietary patterns.

INTRODUCTION

There are many hypotheses on how the human diet has evolved. Some scholars claim that meat eating, tuber and honey consumption, and/or cooking are responsible for this evolution. By turning to the exploration of the diets of hunters and gatherers, we may learn more about the diet of our early ancestors.