

Public Abstract

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Department:Anthropology

Degree:MA

Title:DIETARY ANALYSIS OF ARCHAEOLOGICAL HAIR SAMPLES FROM PERU

The purpose of this research project was to determine if the effects of diet are distinguishable from diagenesis through trace element analysis on hair samples from ancient inhabitants of Peru. Factors were identified that defined patterns derived primarily from meat sources, vegetable and grain sources, salt sources, or diagenesis. Factor analysis identified two dietary components which varied as predicted from archaeological analyses of diet by site. The factor score means varied significantly by location, location by sex for the meat sources intersection, and by vegetable and grain sources. Factor score means also varied significantly by sex and location by sex for the sources of salt. Age at the time of death was significantly correlated with meat sources. Because sex and age varied across pooled samples from locations and two of the five factors covaried with age at the time of death, the concentrations of trace elements found in these samples cannot primarily result from diagenesis. Log (Ba/Sr) means varied significantly for location and for sex by location where marine resources were available either through trade or directly where there was strong marine component in their diets. Further confirmation of a nondiagenic source for the elements were their different patterns across the longitudinal length of the hair.