

HABITUAL SUBSISTENCE PRACTICES AMONG PREHISTORIC ANDEAN POPULATIONS: FISHERS AND FARMERS

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ABSTRACT

This research tested the hypothesis that it is possible to differentiate fishers from farmers using muscle marker patterns. Muscle markers are imprints (tuberosities, grooves, and/or bony projections) left on the skeleton by the performance of habitual and/or strenuous activities. It is assumed that populations engaged in different forms of subsistence will express characteristic muscle marker patterns. This hypothesis was tested by analyzing a series of 60 variables collected from 145 (70 male and 75 female) individuals representing known South American fishers and farmers. Results show 23 male and 21 female variables reducible to 6 male and 7 female factors capable of discriminating ~76% of fishers from farmers. These signatures can be interpreted as reflecting differences in upper and lower body muscular development. Fishers possess greater upper body (bilateral) development, while farmers exhibit greater lower body development. These results are encouraging and suggest that the analysis of muscle markers has the potential to contribute to our understanding of prehistoric lifeways as an interpretive tool capable of supporting, modifying, or refuting interpretations attained using other approaches.