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**THE VALIDITY OF MORPHOLOGICAL FEATURES AND  
OSTEOLOGICAL MARKERS IN RECONSTRUCTING  
HABITUAL ACTIVITIES**

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**ABSTRACT**

Bony morphological features have been used to reflect biomechanical behavioral patterns among archaeological populations. Of most recent ones is the anterior femoral curvature (AFC). It has been proposed as a valid indicator for mobility and differs by subsistence strategy and sex. This study aimed to investigate how AFC and mobility index vary by subsistence strategy and sex.

It showed that degree of AFC decreased significantly from Woodland to the Mississippian period. People of Woodland, who practiced hunting/gathering or horticulture, displayed greater degree of AFC than the agriculturists of the Mississippian. In addition, anterior femoral curvature showed statistical significant difference by sex. Males, who walked and ran more than females, showed greater degree of femoral curvature than females in both periods.

When variation in anterior femoral curvature by continent was tested, it significantly differed between North Americans and South Americans because of strong genetic differences. For that reason, anterior femoral curvature is good indicator for terrestrial logistic mobility (TLM) among homogenous skeletal population, and reflecting genetic differences between differed genetic groups.