**Appendix E –** Meta-analysis of published hair keratin in the Andes

We evaluated published articles or book chapters with hair keratin data listed by a prior review (Lamb, 2016) or found in our review, resulting in 16 total publications (Aufderheide, et al., 1994, Bonilla, et al., 2016, Fernández, et al., 1999, Horn, et al., 2009, Knudson, et al., 2007, Knudson, et al., 2012, Knudson, et al., 2015, Macko, et al., 1999, Panzer, et al., 2014, Turner, et al., 2013, Tykot, et al., 2011, Webb, et al., 2013, Webb, et al., 2015, White, et al., 2009, Williams and Katzenberg, 2012, Wilson, et al., 2007).

We excluded publications that only reported averaged rather than raw data per serial section or per individual (Macko, et al., 1999, Wilson, et al., 2007). Because the goal of this paper is to examine short-term dietary changes relative to landscapes, we excluded unprovenienced mummies (Horn, et al., 2009, Panzer, et al., 2014). Intra-lifetime data from hair keratin and corresponding bone collagen were not available in Bonilla et al. (2016) and Aufderheide et al. (1994) due to the short length of hair—only the most proximal section was examined—so we also excluded these. Webb and colleagues (2013a) published only mean values per individual, but because they included paired bone collagen data, we included their hair-bone offset data. Several Inca *capacochas* (child sacrifices) have been recovered from the tops of glacial peaks—but because these children consumed special foods during the last months prior to their sacrifice (Fernández, et al., 1999, Wilson, et al., 2007), they do not represent the late-life lived experience of most people and were therefore excluded from this study. We did not document raw keratin data from highland sites as of December 1, 2020, other than the excluded *capacocha* data. Finally, because serial hair keratin data existed for Knudson et al.’s (2015) study, we excluded 15 overlapping values from non-serially sampled hair, and instead reported averaged serial values.

We standardized age categories between publications as follows: Child (0-15), teen (15-18), young adult (20-35), middle adult (35-50), old adult (50+) or adult. Time periods were standardized a EH (Early Horizon, *ca.* 900 – 200 BCE), EIP (Early Intermediate Period, *ca.* 200 BCE – 600 CE), MH (Middle Horizon, *ca.* 600 – 1100 CE), LIP (Late Intermediate Period, *ca.* 1100 – 1450 CE) or LH (Late Horizon, *ca.* 1400 – 1532 CE). No analysis was conducted by time period, so these categories are only provided for context.

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