caregivers acknowledged geophagy (or more specifically, eating of clay) were \((N = 16)\) ages 1 to 4 and \((N = 2)\) ages 5 to 12 years. The definition of geophagy used included consumption of clay “on a regular basis over a period of weeks.” U.S. EPA is recommending this 50 g/day value for geophagy. This mean quantity is roughly consistent with a median quantity reported by Geissler et al. (1998) in a survey response study of geophagy in primary school children in Nyanza Province, Kenya (28 g/day, range 8 to 108 g/day; interquartile range 13 to 42 g/day).

Recent studies of pica among pregnant women in various U.S. locations (Corbett et al., 2003; Rainville, 1998; Smulian et al., 1995) suggest that clay geophagy among pregnant women may include children less than 21 years old (Corbett et al., 2003; Smulian et al., 1995). Smulian provides a quantitative estimate of clay consumption of approximately 200–500 g/week, for the very small number of geophagy practitioners \((N = 4)\) in that study’s sample \((N = 125)\). If consumed on a daily basis, this quantity (approximately 30 to 70 g/day) is roughly consistent with the Vermeer and Frate (1979) estimated mean of 50 g/day.

Johns and Duquette (1991) describe use of clays in baking bread made from acorn flour, in a ratio of 1 part clay to 10 or 20 parts acorn flour, by volume, in a Native American population in California, and in Sardinia (~12 grams clay suspended in water added to 100 grams acorn). Either preparation method would add several grams of clay to the final prepared food; daily ingestion of the food would amount to several grams of clay ingested daily.

5.7. REFERENCES FOR CHAPTER 5


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