


The Human Biology Association



HBA Annual Meeting

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Extreme longevity in Dominica, West Indies: A population study. NT Boaz, GAC Grell, R Nasiiro, and P Ricketts. Ross University School of Medicine, Portsmouth, Commonwealth of Dominica.

Dominica, a largely undeveloped 290 mi² island in the Lesser Antilles, has a population of 72,727 (2001 census). A government program recognizing centenarians, requiring written birth documentation and a personal interview, has resulted in nearly 100% identification of the island's centenarians. Among this cohort was a woman who celebrated on January 27, 2003 what was reputed to be her 128th birthday, which if confirmed would be the world's oldest recorded individual age. In order to assess this case and to investigate extreme longevity on Dominica from a populational perspective, we established the Dominica Centenarian Study in 2001. Goals of the study were to: 1) confirm written documentation of centenarians' birth, 2) assess functionality in activities of daily living (ADL's), 3) gather life and medical history data, 4) measure weight, height, and blood pressure, and 5) assist in the monitoring of any medical or social issues. The study is ongoing, but with two years of data the prevalence of centenarians in Dominica is confirmed at over 3/10,000, among the highest recorded in the world. In the first year of data, modal age was 101 years and 86.4% of the cohort was female. Statistically there are strong associations of extreme longevity with labor-intensive occupations, low body mass index (BMI), life-long health, strong family and social support, natural and high-fiber diet, and low rates of tobacco and alcohol use. Most common medical conditions are complications of past trauma, osteoarthritis, blindness, and urinary incontinence. Diseases of civilization among Dominica centenarians are rare or nonexistent. Environmental, life-style, and dietary factors correlate more strongly with extreme longevity than do genetic factors. Ongoing studies include A-scan biometry measurements of lens thickness (for biological aging) and genetic testing (for assessing relatedness and specific aging-related genes).