



Apolipoprotein E polymorphism in elderly Japanese-Brazilian immigrants does not explain the reduced cardiovascular risk factor incidence

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ABSTRACT. Study of immigrant populations may contribute to a better understanding of the epidemiology of diseases associated with the aging process. We examined the prevalence of cardiovascular risk factors, including apolipoprotein E (ApoE) polymorphism, in elderly subjects who were born in Japan, migrated to South Brazil and have lived in that region for over 40 years, versus a group of elderly, locally born Brazilians living in the same region. These Japanese subjects came to Brazil after World War II (1950-1960) from several Japanese cities, mainly Nagasaki, Kumamoto and Hokkaido. Among 1007

subjects genotyped for ApoE polymorphism, we selected 540 elderly subjects (>60 years old), consisting of 270 Japanese-Brazilians and 270 Brazilians of European ancestry from Rio Grande do Sul State (Gaucha population). The Japanese-Brazilian group had significantly lower prevalences of obesity, type 2 diabetes mellitus, dyslipidemia, and metabolic syndrome than did the Gaucho population group. ApoE polymorphism frequencies were similar in the two groups. The differences in cardiovascular risk factors observed in the two populations cannot be explained by ApoE polymorphism; they could be related to conservation of Japanese lifestyle habits, such as diet.

Key words: Cardiovascular risk; Apolipoprotein E; Longevity; Brazilian-Japanese elderly; Aging; Obesity