

**EPIDEMIOLOGY OF DIETARY AND LIFESTYLE FACTORS AND  
CARDIOVASCULAR DISEASE:  
EXPERIENCES FROM JAPANESE POPULATION-BASED STUDIES**

**Kazumasa YAMAGISHI<sup>1\*</sup>**

*<sup>1</sup> Department of Public Health Medicine, Faculty of Medicine, and Health Services Research and  
Development Center, University of Tsukuba, Japan*

*k-yamagishi@umin.net*

**Abstract**

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Asians have high mortality from stroke (especially from intraparenchymal hemorrhage and lacunar infarction) and low mortality from coronary heart disease, while Caucasians have the opposite trend. This difference in disease profile can be explained by different types of vascular pathology, that is, arteriolosclerosis and atherosclerosis. Lifestyles, especially dietary habits, in Western populations are more likely to cause atherosclerosis-based diseases such as coronary heart disease and large-artery occlusive cerebral infarction (corresponding to atherothrombotic infarction), while traditional diet and lifestyles in East Asia are likely to cause arteriolosclerosis-based disease such as cerebral hemorrhage and infarction at perforator's arteries area.

Another possible explanation of difference in disease profile between the East and West is that the large difference in distribution of diet and lifestyle-related factors of cardiovascular disease, such as obesity, lipid profiles, dietary intake of carbohydrate, saturated fat, n-3 polyunsaturated fat, calcium, and sodium. In this context, several Japanese large cohort studies, including Circulatory Risk in Communities Study (CIRCS), Japan Public Health Center-based Prospective (JPHC) Study, and Japan Collaborative Cohort (JACC) Study for Evaluation of Cancer Risk, have identified dietary and lifestyle factors, some of which are unique for East-Asian populations.

**Keywords**

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*epidemiology, diet, stroke, heart disease, dementia*