Preface

It is a pleasure to highlight some of the findings over the past decade in this third book from the Bogalusa Heart Study. Tribute and appreciation has to be given to the Study subjects, some of whom have participated since 1973. I am overwhelmed with gratitude by the support from the community of Bogalusa and high level of participation that enabled us to obtain perspectives on the evolution of cardiovascular risk from birth through mid-adulthood. This Study is unique in that it remains the only long term study in a biracial (black/white) population beginning in childhood.

Recognition needs to be given to the many investigators and support staff that have helped conduct the study: They have exemplified the highest level of commitment and devotion to make this Study successful. Also funding from the National Heart Lung and Blood Institute (NHLBI), National Institute on Aging (NIA), National Institute on Child Health and Human Development (NICHD) and the American Heart Association (AHA), was crucial, without which the Study could not have been conducted. Such support made it possible to unravel as much about the natural history of the early origin of coronary artery disease, essential hypertension and type II diabetes mellitus, as our team did.

The essence of the many publications of this Study all clearly indicate coronary artery disease, as a prelude to coronary heart disease, primary hypertension, and diabetes, all have their origin in childhood, even with evidence to begin in utero (website: http://tulane.edu/som/cardiohealth/index.cfm). We have noted the importance of a strong family history, that will become more evident as genetic studies evolve. We found risk factors can be developed in early life to diagnose these conditions and show their “silent” burden on the cardiovascular system beginning in childhood. In fact, discussions to follow consider fetal origins of risk factors set the stage for observations beginning in childhood and the need for primordial prevention. The studies of chromosomal telomeres provide some insight into the aging process and impact of environmental stress reflecting black-white contrasts on cardiovascular diseases and the ethnic and gender variations of morbidity and mortality in our population. Understanding such variations provide a background to aid both clinical management and approaches to prevention. A theme throughout the chapters use race and gender contrasts to reflect on different mechanisms and
complexity of factors related to development of cardiovascular diseases beginning from early childhood.

It has been rewarding to me to have founded this program with my colleagues who helped to begin with laboratory and experimental studies related to the complex sugars and connective tissues of arterial wall in atherosclerosis, and to be encouraged by findings from my colleagues in Pathology who earlier found the presence of atherosclerotic lesions in childhood. My interest in cardiovascular disease and the concept of meaningful risk factors related to heart disease in adults by the Framingham Study, set the stage to begin studying children at a population level. Suggestions from my many colleagues have been invaluable.

As a corollary to the Bogalusa Heart Study, effective prevention programs have been developed from the findings based on lifestyles and behavior learned in Bogalusa. Application of health education for children in the general public can help abort or at least delay the cardiovascular maladies so common in our society and world-wide. It is our hope that the potential from prevention beginning in childhood will become recognized as an acceptable and common practice. This is our way to address quality of life from its origin and maybe extend to the end of life.

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