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**Metabolic acidosis-induced insulin resistance and cardiovascular risk.**

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Microalbuminuria has been conclusively established as an independent cardiovascular risk factor, and there is evidence of an association between insulin resistance and microalbuminuria, the former preceding the latter in prospective studies. It has been demonstrated that even the slightest degree of metabolic acidosis produces insulin resistance in healthy humans. Many recent epidemiological studies link metabolic acidosis indicators with insulin resistance and systemic hypertension. The strongly acidogenic diet consumed in developed countries produces a lifetime acidotic state, exacerbated by excess body weight and aging, which may result in insulin resistance, metabolic syndrome, and type 2 diabetes, contributing to cardiovascular risk, along with genetic causes, lack of physical exercise, and other factors. Elevated fruits and vegetables consumption has been associated with lower diabetes incidence. Diseases featuring severe atheromatosis and elevated cardiovascular risk, such as diabetes mellitus and chronic kidney failure, are typically characterized by a chronic state of metabolic acidosis. Diabetic patients consume particularly acidogenic diets, and deficiency of insulin action generates ketone bodies, creating a baseline state of metabolic acidosis worsened by inadequate metabolic control, which creates a vicious circle by inducing insulin resistance. Even very slight levels of chronic kidney insufficiency are associated with increased cardiovascular risk, which may be explained at least in part by deficient acid excretory capacity of the kidney and consequent metabolic acidosis-induced insulin resistance.