This study described the physical growth, bone growth, body composition, metabolic risks, physical activity and food security of 64 Sudanese children living in the US. We measured the bone density, body composition, and Lipids profile and insulin sensitivity. Food security and physical activity was measured through self-report questionnaire and pedometers. Results showed that about 1/3 of children had low bone density. Lean mass was low in 46%, and 32% were obese. Cholesterol, triglycerides and HOMA-IR were elevated in 23.4%, 32.8% and 15.6 % of children, respectively; only 22% of children were physically active and 40% experienced food insecurity.