Due to the rapid urbanization of the Galápagos Islands, the local population is facing a growing dual burden of overweight and inadequate nutrition. The Galápagos has the highest rate of overweight out of Ecuador’s 24 provinces. Subsequently, type 2 diabetes is another major concern for Galápagos residents, with the issue often going underdiagnosed and undertreated. The goal of this study was to measure the prevalence of impaired glucose metabolism and dyslipidemia on the islands of San Cristóbal and Isabela and compare this data to food security and dietary diversity among Galápagos residents. Running linear and logistic regression models on data collected prior to COVID-19, we found associations between moderate food insecurity and blood glucose (p= 0.058) as well as dietary diversity and blood glucose (p=0.017). Lipid data from Isabela showed higher abnormal triglycerides (42.42%) and HDL levels (69.70%) compared to typical Western countries and lower cholesterol and LDL levels. These blood glucose and lipid measurements provide insight into the overnutrition component of the dual burden in the Galápagos. The associations found between diet diversity, food security, and prediabetes lay the groundwork for further examination of the potential pathways between these factors.