

# Gloria Carter

*Medicine, Health, and Society and Communication of Science and Technology*

[gloria.m.carter@vanderbilt.edu](mailto:gloria.m.carter@vanderbilt.edu)

## **Association Between Food Insecurity and the Worsening of Autoimmune Diseases**

**Introduction:** Food insecurity is defined by the CDC as the inability to access or afford sufficient or nutritious food. People who experience food insecurity often suffer health complications due to the lack of nutritious food options. This review aimed to examine how food insecurity is associated with the management of autoimmune disease by synthesizing evidence from existing studies.

**Methods:** A comprehensive search was conducted in PubMed, Embase via Elsevier, and CINAHL via Ebsco using terms related to food insecurity and autoimmune diseases. Studies were included if they met criteria such as being published between 2020 and 2024, conducted within the United States, and the patient population had pre-existing autoimmune diseases. Two reviewers extracted data independently and analyzed them via narrative synthesis. The autoimmune diseases included in the reviewed studies were type 1 diabetes, celiac disease, and cystic fibrosis.

**Results:** Key findings indicate that those experiencing food insecurity and type 1 diabetes had poor glycemic control, elevated HbA1c levels, and increased risk for severe hypoglycemia and diabetic ketoacidosis. Additionally, patients with both celiac disease and cystic fibrosis experience complications related to diet quality.

**Conclusions:** Findings suggest that it is important to address social factors that directly affect the management of autoimmune diseases. Vulnerable populations, such as those experiencing food insecurity, face both the typical symptoms of their diseases and the additional impact of social determinants of health. Future research should consider how using food insecurity as an indicator or precursor to autoimmune disease complications can improve these patients' quality of life and health status.

