Hormones, feeding, stress and low grade inflammation: its role in the etiology of autoimmune diseases.

Amanda Rodríguez-Manso, Maricarmen González-Costa, Alexander Ariel Padrón-González
Institute of Basic and Preclinical Sciences "Victoria de Girón". University of Medical Sciences of Havana. Cuba

Abstract
Introduction: The etiology of autoimmune diseases is still unknown but different causes arise.
Objective: To describe the role of factors such as hormones, feeding, stress and low grade inflammation in the etiology of autoimmune diseases.

Materials and Methods: A bibliographic review was made using the Google Scholar and articles of free access in the Pubmed and Scielo database from 2015 to February 2019. The search terms were used according to the DeCS and MeSH descriptors.

Development: It is well known that female hormones increase the risk of autoimmune diseases. Recently it has been observed that an imbalance in the neurohormone melatonin can generate autoreactive lymphocytes. Stress can maintain low-grade chronic inflammatory responses that cause tissue damage, initiating or aggravating the clinical manifestations of autoimmunity. An adequate diet allows the guests of the intestinal microbiota to maintain the homeostasis of the immune system. Today, glutamate is used as a flavor enhancer, especially in developed countries. Perhaps it is one of the causes of the higher incidence of autoimmune diseases in these regions.

Conclusions: Autoimmune diseases are more frequent in women. Adequate nutrition allows the gut microbiota not to be altered and to maintain immunological homeostasis. Situations of stress and low-grade inflammatory processes can trigger or exacerbate the clinical manifestations of autoimmunity.

Keywords: Autoimmunity; Hormones; Stress; Feeding; Inflammation