# How Food Sensitivities Cause Inflammation

#### **Triggering Mechanisms**

- DAMPS
- PAMPS
- Food chemicals
  - Haptens
  - Amines
  - Pharmacologic
- Immune Complexes
  - Small IgG, IgM
  - Tissue-bound
- Lectins



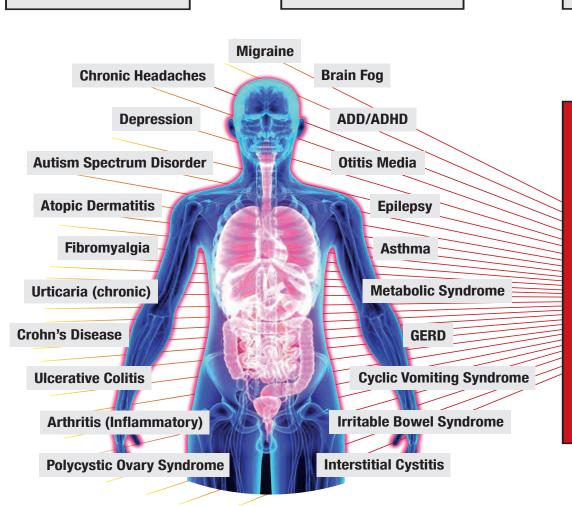
#### **Cellular Activation**

- Lymphocytes
  - Sensitized T-cells
  - T-Cells
  - NK Cells
  - K Cells
- Eosinophils
- Basophils
- Monocytes
- Neutrophils



### **Mediator Release**

- Cytokines
- Interleukins
- Chemokines
- TNFs
- Interferons
- Leukotrienes
- Histamine
- ECP, MPE, Amines
- Prostaglandins
- Others





## Pathophysiologic Effects

- Inflammation
  - Subclinical
  - Clinical
- Tissue damage
- Pain receptor activation
- Smooth muscle contraction
- Edema
- Excess mucous
- Neurological
- Endocrine
- Increased gut permeability

Food and food-chemical sensitivities are a category of complex, non-IgE (non-allergic), non-celiac inflammatory reactions. Sensitivities can involve innate and adaptive immune pathways, multiple triggering mechanisms and multiple classes of white blood cells. Pathogenic reactions ultimately lead to the release of proinflammatory and proalgesic mediators from associated white cells with resulting subclinical and clinical inflammatory effects. The patented Mediator Release Test (MRT®) can help identify sensitivity reactions to foods and food-chemicals.

