The **Total Toxin Test** is a comprehensive diagnostic tool that evaluates exposure to various toxins, including **heavy metals**, **mycotoxins**, and **environmental toxins**. For children with **autism spectrum disorder (ASD)**, certain markers within this test are particularly relevant due to their potential impact on neurological development and function.

## 1. Heavy Metals

Heavy metals can adversely affect neurological development and cognitive function. Key markers to consider:

- **Lead**: Associated with cognitive impairments and behavioral issues.
- **Mercury**: Linked to developmental delays and neurological symptoms.
- **Arsenic**: Exposure may lead to neurotoxicity and learning difficulties.
- **Cadmium**: Can cause oxidative stress, affecting brain function.

## 2. Mycotoxins

Mycotoxins are toxic compounds produced by mold, which can have neurotoxic effects. Relevant markers include:

- **Ochratoxin A**: Known to impair cognitive function and may exacerbate ASD symptoms.
- **Aflatoxins (B1, B2, G1, G2, M1)**: Can affect brain function and development.
- **Gliotoxin**: Associated with immune suppression and potential neurotoxicity.
- **Citrinin**: May cause oxidative stress, impacting neurological health.
- **Fumonisins (B1, B2, B3)**: Linked to neurodevelopmental issues.

## 3. Environmental Toxins

Exposure to environmental chemicals can influence neurological health. Important markers are:

- **Organophosphates**: Pesticides that can disrupt neurotransmitter function, potentially leading to behavioral changes.
- **Phthalates**: Plasticizers that may interfere with endocrine function, affecting brain development.
- **Polychlorinated Biphenyls (PCBs)**: Industrial chemicals linked to cognitive deficits and behavioral issues.
- **Volatile Organic Compounds (VOCs)**: Solvents that can impact central nervous system function.

Identifying elevated levels of these toxins can guide targeted interventions, such as dietary modifications, environmental changes, and detoxification strategies, to support children with ASD.