



Numerous research studies have suggested that the adverse effects of glyphosate may contribute to the development of certain diseases. These studies have linked glyphosate to a range of neurological conditions, including **Alzheimer's and Parkinson's** diseases. Additionally, there are associations with mental health issues such as **depression, anxiety, and autism**, as well as **chronic kidney disease**, endocrine disorders, and transgenerational health problems. **Endocrine disruption** is another critical issue, as glyphosate may interfere with hormonal functions, leading to a range of health complications. Glyphosate's influence on the gut microbiome has attracted significant attention from healthcare providers, primarily because of the negative health consequences it can cause.

## HOW GLYPHOSATE AFFECTS THE GUT

### Microbiome Disruption

Glyphosate targets the shikimate pathway, which exists in plants and many beneficial gut bacteria, therefore, it can:

- Inhibit beneficial bacteria (like Lactobacillus and Bifidobacteria)
- Allow harmful bacteria (like Clostridium or Salmonella) to thrive
- Lead to dysbiosis (an imbalance in the gut microbiota)

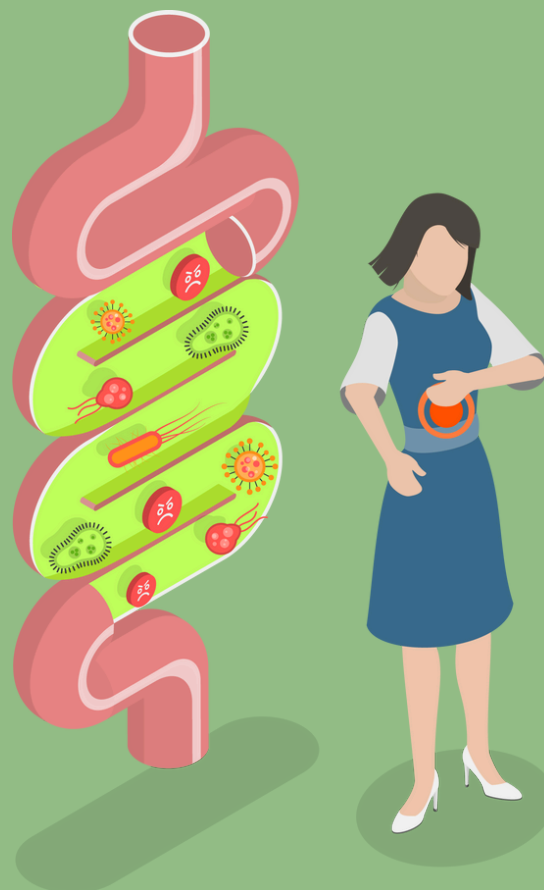
### Potential Inflammatory Effects

Some studies suggest that this bacterial imbalance may contribute to low-grade inflammation, which has been linked to:

- IBS (Irritable Bowel Syndrome)
- Leaky gut (increased intestinal permeability)
- Autoimmune disorders

### Indirect Effects on Nutrient Absorption

Glyphosate is also a chelator, meaning it binds to minerals like magnesium, calcium, and zinc—possibly impairing the gut's ability to absorb these essential nutrients.



## GLYPHOSATE EXPOSURE CAN ALSO AFFECT/CAUSE:

- Thyroid function
- Reproductive health and fertility
- Estrogen and testosterone levels
- Hormonal imbalances in children
- Digestive issues (bloating, gas, constipation)
- Leaky gut syndrome
- Weakened immunity
- Brain inflammation
- Increased oxidative stress
- Increased Cancer Risk
- Fatty liver disease
- Impaired detoxification
- Chronic inflammation
- Food sensitivities and allergies

### DIRTY Dozen



Strawberries



Nectarines



Spinach



Apples



Kale



Bell/hot peppers



Grapes



Cherries



Peaches



Blueberries



Pears



Green Beans

Nearly 75% of non-organic fresh produce sold in the U.S. contains residues of potentially harmful pesticides and herbicides—including glyphosate. To help consumers make informed choices, EWG.org publishes an annual list of the "**Clean Fifteen**" and "**Dirty Dozen**," highlighting the fruits and vegetables with the least and most harmful residues. It's a helpful guide for choosing the cleanest, chemical-free produce.

#### WHY TEST FOR GLYPHOSATE EXPOSURE?

Glyphosate doesn't always cause immediate symptoms, but it can silently accumulate in the body.

**KBMO's Glyphosate Exposure Test** can:

- **Reveal your current glyphosate burden**
- **Identify dietary or environmental sources of exposure**
- **Serve as a baseline for detox or lifestyle changes**

### CLEAN 15



Avocados



Mangoes



Watermelon



Sweetcorn



Sweet Peas  
(frozen)



Honeydew  
Melon



Pineapple



Carrots



Papaya



Onions



Cabbage



Mushrooms



Kiwi



Asparagus



Sweet  
Potatoes

Our easy, at-home urine glyphosate collection kits are now available. The test can provide a valuable snapshot of your exposure level, especially when dealing with chronic health concerns or striving to optimize your wellness.

TIP: This test can be ordered with our Metabolic Insights Panel (MIP) and the Food Inflammation Test (FIT) to get a better glimpse of the effects glyphosate is causing and how your body is processing this chemical