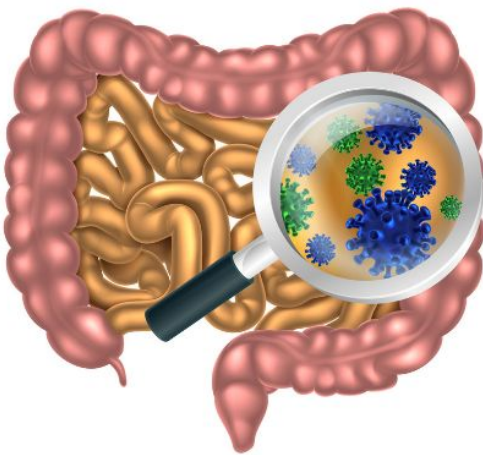


People with the classic symptoms of SIBO but without a positive SIBO breath test are “in my experience”, possibly suffering from symptoms of hydrogen sulfide-type SIBO. It is becoming a very common phenomenon! Our mission is to interpret results with as much information as possible including added protocols below which



can help lower elevated Hydrogen Sulfide (H₂S) levels & symptoms. The protocols listed below are completely safe to incorporate into your daily routine. A high-quality B complex would be very beneficial to purchase as this can lower the levels of the substrate that leads to H₂S down what’s called the trans-sulfuration pathway.

Hydrogen Sulfide (H₂S) is a third gas that is associated with SIBO, unfortunately H₂S cannot be tested at this time, the technology has yet to be designed. H₂S Serves as a gaso-transmitter in the regulation of organ development and the maintenance of homeostasis in the tissue. We need it as humans BUT excessive exposure to H₂S could lead to cellular toxicity and increase the risk of various diseases. H₂S derived from GUT microbes is associated with gastrointestinal disorders such as ulcerative colitis, Crohn's disease and irritable bowel syndrome (IBS).

This gas has shown to have both beneficial and detrimental impacts on the gastrointestinal tract depending on the quantities found in the human microbiome. Gut microbiota intelligently regulates the bioavailability and metabolism of H₂S.

When the human body recognizes that we are low in sulfate, it can adapt and grow more H₂S producing bacteria, since H₂S gas can be used to produce sulfate where it is needed. However, if these bacteria become elevated it can lead to many symptoms of H₂S Toxicity:

Common Symptoms are:

- Gassy (smelly like rotten eggs)
- Fatigue
- Brain Fog
- Anxiety
- Diarrhea or Constipation
- Leaky Gut
- Redness
- Dizziness
- Acne or Rashes
- Itchiness
- Periodontal disease / Halitosis
- Joint Pain



INTOLERANCE TO SULFUR FOODS WILL BECOME PREVALENT!

Foods that are high in H₂S that can excessively worsen symptoms are:

- Eggs
- Garlic
- Kale
- Asparagus
- Onions, leeks, shallots
- Dried Fruits
- Cruciferous vegetables such as broccoli, cauliflower and Brussel sprouts
- Mustard
- Beer and Wine
- Carrageenan
- MSM
- Turmeric and Peanuts

Foods low in sulfur include:

- Rice, potatoes, fish, carrots, celery, mushrooms, squash, zucchini, pumpkin, cucumbers
- Chicken, ginger, small portions of fruit.

It's always good to research other foods that are low in sulfur that best suits your own specific diet.

The following will help with sulfate metabolism:

Epsom salts bath:

- Epsom salt baths allow the body to soak up sulfate in the form of magnesium sulfate. If you are experiencing any issues with sulfur metabolism, the absorption of sulfate through the skin can be a good therapy. This will help the body to reduce H₂S producing bacteria, also great for reducing stress.

Directions: Pour a hot bath, add 4 cups of Epsom salts, continue for 7 days in a row. To help maintain sulfate levels do this a few times per week. Shower afterwards.

Molybdenum:

- Is an essential mineral found in high concentrations in legumes, grains and organ meats. It activates enzymes that help break down harmful sulfites and prevent toxins from building up in the body.

Molybdenum is a cofactor that activates essential enzymes which include:

Sulfite Oxidase > converts sulfite to sulfate, which helps prevent dangerous build ups of sulfite in the body.

Aldehyde Oxidase > breaks down aldehyde which can be toxic to the body, also helps the liver break down alcohol and some drugs, such as those used in some cancer therapy.

Xanthine Oxidase > converts xanthine to uric acid, this reaction helps breakdown nucleotides, the building blocks of DNA when they are no longer needed. This can then be excreted in the urine.

Hydrogen Sulfur Binders Include:

- **Hydroxocobalamin (hydroxy B12).** This particular form of vitamin B12 is able to bind H₂S and render it less biologically toxic. It can be used both intramuscularly and as oral therapy.
- **Bismuth (Pepto-Bismol) short duration use only**
- **Zinc Acetate**

Korean Red Ginseng:

- This form of ginseng has been shown to suppress the activity of the CBS and CSE enzymes, thus reducing production of H₂S internally. This can obviously play an important dual role in those SIBO patients who struggle with fatigue or who manifest other low-adrenal symptoms.

SIBO is becoming more and more widespread in the world we live in today! Impaired Sulfur metabolism could be an expression of that and is no doubt caused by the toxic world we live in! If the human body is not producing the appropriate amounts of sulfate then SIBO will become a reflection of that problem, not to mention many other causes!

SIBO is secondary, start with what could be causing SIBO, and the likelihood of recurrence may disappear!

