

**NUTRI-SPEC**



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**THE NUTRI-SPEC LETTER**

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From:  
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## **T-H-I-O-S-U-L-F-A-T-E**

Dear Doctor,

Not a very interesting title, is it? ----- I'll put it in more familiar terms ...

## **OXY TONIC**

Still doesn't capture your attention? ----- Picture this ...

**CURING DEAFNESS IN CHILDREN  
WITH CANCER --- MADE DEAF  
BY THEIR CHEMOTHERAPY**

Or maybe you'll find this more stimulating to contemplate ...

**EFFECTIVELY PREVENT & TREAT  
SEVERE COVID SYMPTOMS**

Read on ...

Which of your NUTRI-SPEC products confers the greatest empowerment of the immune system? Immuno-Synbiotic X-Flam, Power, or Restore? Or, how about Adapto-Max with its broad array of anti-inflammatories and antioxidants and anti-reductants? Or perhaps Oxy-Max with its high concentration of antioxidants shown to reduce so many of the pro-inflammatories associated with premature aging? Or, could it be Taurine --- for after all, you have on your website a 19 page article highlighting all the ways in which Taurine reduces ...

### **INFLAM-AGING ---**

in the brain, in the heart, in the vasculature, in the liver --- both at the cellular and systemic levels of biological organization.

----- But --- it may be that your most powerful immune system support --- a supplement that also enhances cellular energetics, while also maintaining normal cellular membrane permeability --- is ...

### **OXY TONIC.**

Recall your NUTRI-SPEC Letter from October, 2019 highlighting the truly amazing metabolic benefits of Thiosulfate (Oxy Tonic) --- as demonstrated by its ability to restore hearing in children with cancer who had been made deaf by their chemotherapy. [This beneficial effect on hearing loss was actually first discovered by Revici way back in the 1950's --- as he found both hearing loss and vertigo respond beautifully to your Tissue Acid/Alkaline Balancing approach --- with either Oxy Tonic or Oxy D-Plus --- yielding remarkable benefits on the dualistic symptoms of hearing loss and vertigo.]

You do not need to treat patients with hearing loss or vertigo to appreciate the amazing clinical results you are (or should be) achieving with your Tissue Acid/Alkaline Balancing. All the dualistic symptoms --- including pain, itching, vertigo, high cholesterol, allergies, as well as the Diphasic Immune Response --- respond (sometimes miraculously) to Oxy Tonic or Oxy D-Plus, or to Phos Drops, Proton Plus, Magnesium Chloride, or baking soda.

Today, two years after the pharmaceutical industry discovered the amazing power of Thiosulfate on childhood hearing loss, we have another researcher uncovering the extraordinary metabolic effects (and immune system-supporting effects) of Oxy Tonic ...

Not long ago I received this from a doctor in South Africa:

**“Please will you pass this mail and attachment on to Dr. Schenker.**

**“I have been associated with Heidi Du Preez over the last two years as she worked so hard to finish this work and then had to jump through so many hoops to get it published, but at last it has happened, and I can now pass this on to you, Guy. I have been itching to get it to you since reading the first draft a year ago. From your point of view it ONCE AGAIN just proves how far ahead you have been for so many years. You already created and published the BALANCING PROCEDURE many years ago --- accolades to you!!!!”**

This study by Du Preez advances a quantum leap forward the work of Revici --- and 30 years of NUTRI-SPEC clinical experience. Even I, with nearly 40 years experience using negative valence sulfur for my patients and recommending it to you --- am astonished at how ...

**EVERY BODY SYSTEM AND ORGAN IS CRITICALLY  
UNDER THE INFLUENCE OF THIOSULFATE**

In mid March 2020, Preez determined that sulfation potentially plays a major role in the pathogenesis of COVID-19.

Paraphrasing her work, and adding NUTRI-SPEC interpretation ...

In addition to the medically well-accepted hypothesis of angiotensin-converting enzyme 2 (ACE2) being the main epithelial receptor that is necessary for severe acute respiratory syndrome in coronavirus infection, we hypothesize that the degree of sulfation of heparin sulfate (HS), a glycosaminoglycan (GAG) lining the glycocalyx (GL), is also an important variable that will influence susceptibility to infection. Undersulfation (less than the normal degree of sulfation) or aberrant sulfation of HS may not only increase susceptibility to viral infection, but may also adversely affect the individual's physiological response to the infection.

As a NUTRI-SPEC practitioner with an interest in maintaining Metabolic Balance at the cellular level, you are undoubtedly familiar with the term “GAGs” (Glycosaminoglycans). What Preez is saying is that both the resistance to viral infection and the severity of symptoms from viral infection are largely under control by the most critical GAG --- Heparin Sulfate (HS). Furthermore, the structure and function of HS is almost entirely determined by proper sulfation (with Thiosulfate/Oxy Tonic). ----- As you will read below, Preez goes on to expand her hypothesis to show that the Thiosulfate content of HS is not only critical in defending against viruses, but also is ...

**CRITICAL TO VIRTUALLY EVERY PHYSIOLOGICAL FUNCTION.**

The GL is a dense layer of highly charged proteins and carbohydrate chains that surrounds all cells of all animals. The epithelial GL is the interface between our internal cells with the external environment. If it is compromised, we are vulnerable to the onslaught of viruses, various pathogens, and environmental toxins. The GL is especially pronounced on all epithelial cells, and also lines the surface of arterial endothelial cells, in a mesh-like structure that floats into the lumen of the vessels' vascular system, known as the endothelial GL.

HS is the most prominent and studied GAG, and is a highly negatively charged polysaccharide, which is attached to a membrane or extracellular matrix to form heparin sulfate. HS on the cell surface is involved in developmental, regenerative, infectious, and inflammatory processes --- as a consequence of its interactions with multiple proteins.

These interactions are mediated mainly via HS forming active complexes with the extracellular soluble mediators --- such as growth factors, cytokines, matrix components, enzymes, enzyme inhibitors, and pathogen virulence factors --- thereby regulating tissue distribution, biological availability, and activity of the proteins. These HS-protein interactions, which mainly determine biological function, are largely dependent on the density and position of sulfate groups (Thiosulfate) in the HS structure.

Do you appreciate the magnitude of Preez's comment on HS functions? ----- She is saying that Thiosulfate (Oxy Tonic) largely determines biological function of all cells!!!

Sulfation occurs in all tissues and is defined as the transfer of a sulfate group to different substrates, such as GAGs, proteins, lipids, hormones, and drugs. The control and degree of sulfation of such a wide range of substances indicate that "this pathway is involved in many aspects of life" (= direct quote from Preez).

**THE RATE-LIMITING FACTOR TO SULFATION IS SIMPLY  
THE AVAILABILITY OF INORGANIC SULFATE (OXY TONIC).**

It is therefore important to explore the factors contributing to, and those that deplete, inorganic sulfate, and therefore also affect sulfation of HS.

The intact highly sulfated GL inhibits infection, plus it regulates barrier permeability --- not merely by size and sterical hindrance, but also by its negative electrostatic charge. It should be noted that different cell types and tissues vary in their structure of HS --- and HS structure, degree of sulfation, and the position of sulfate groups can vary between individuals and with age. These differences in HS composition may be a contributing factor to tissue metabolic responsiveness as well as host susceptibility to infection by viruses and other pathogens.

For pathogens to gain access to epithelial and endothelial membranes, they need to first penetrate through the GL. Recent research studies indicate that interactions between sulfated HS and COVID-19 determine viral adherence and infectivity. The GL is the first point of contact for all pathogens that infect --- and so it is not surprising that many viruses exploit HS to facilitate their uptake. It is found that COVID-19 has many more HS-binding domains compared to other viruses, leading to increased infectivity.

**THE DEGREE OF THIOSULFATE ION PRESENCE AND ITS POSITION  
ON HS PLAYS THE BIGGEST ROLE IN DETERMINING VIRAL  
ATTACHMENT AND PENETRATION INTO THE CELL.**

Preez's study presents evidence that under-sulfated HS not only predisposes to COVID-19, but also results in a dysregulated Immune Response and subsequent "cytokine storm", resulting in shedding and degradation of the GL --- leading to adhesion of immune cells, increased vascular permeability, inflammation, oxidative stress and coagulation --- thus increasing the risk of life-threatening organ dysfunction.

**DOCTOR, DO YOU GET IT?!**

What Preez is highlighting here is a fundamental theme of NUTRI-SPEC --- a type of patho-physiology that we have emphasized again and again ---

**THE VICIOUS CYCLE.**

Do you see it? Deficiency of negative valence sulfur (as supplied by your Oxy Tonic) not only decreases resistance to COVID-19 --- but here is the important part --- it causes a subsequent aberrant Immune Response involving the creation of a "cytokine storm" --- the excessive Immune Response that is actually responsible for severe symptoms and death in COVID-19.

--- But the most important component of this pathological response is that the cytokine storm results in shedding and degradation of the GL. The shedding of the GL involves even further loss of thiosulfate --- which, in turn, further dysregulates the Immune Response, and exacerbates the cytokine storm.

So the vicious cycle looks like this ...

deficient Thiosulfate (Oxy Tonic) → COVID-19 infection + dysregulated Immune Response → Cytokine Storm → shedding and breakdown of the already deficient Thiosulfate → further dysregulation of the Immune Response and a perpetuation of the cytokine storm → further depletion of Thiosulfate ...

Now, here is where Preez's study serves as a major "AH HA!" moment for NUTRI-SPEC practitioners. Consider that ...

This study also shows the role that chronic inflammation and under-sulfated HS plays in all the comorbid conditions (tubby tummy, high blood pressure, auto-immune diseases, diabetes, etc) that increase susceptibility to COVID-19.

Do you see how HUGE this is? Deficient sulfation (need for Oxy Tonic) not only predisposes to COVID-19 and severe potentially life-threatening symptoms from that viral penetration --- but also is a causative factor in the comorbid conditions shown to exist in almost all individuals who suffer severe reactions to COVID-19. ----- So here we have another vicious cycle super-imposed on the vicious cycle described above. Your patients who need Oxy Tonic (via The BALANCING PROCEDURE) are not only more vulnerable to viral infection, but also suffer the conditions that, even in the absence of COVID-19, are the leading causes of dis-ease in our culture.

We have asked you countless times --- do you have patients suffering from ...

- tubby tummy
- high blood pressure?
- auto-immune diseases?
- diabetes?
- high cholesterol and/or high triglycerides?
- chronic fatigue?
- depression/anxiety?

Do you see that nearly every condition or symptom that brings patients into your office tells you there is a deficiency of negative valence sulfur (Oxy Tonic)? ----- This is why we emphasize over and over again that your BALANCING PROCEDURE is crucial --- not only in controlling symptoms very quickly, but more importantly, in serving as a continuous Metabolic Spark --- assuring your patients they will ...

### **LIVE STRONGER LONGER.**

Truly, you must "sell" all your patients on the essentiality of supplementing happily-ever with ...

- The perfect balance between Oxy Tonic and/or Electro Tonic and/or Oxy D-Plus
- Activator (or Mighty Mins)
- The most appropriate Immuno-Synbiotic

In these three bulleted items your patients will find scientifically verified resistance to ---

### **INFLAM-AGING.**

There is nothing in their silly health food store remedies that isn't comically impotent in comparison to this simple three-part ...

- anti-inflammatory
- anti-oxidant
- anti-reductant
- immune-enhancing
- microbiota-restoring ...

means to maximize personal power.

So, the simple and affordable life-long plan of ...

### **BALANCING PROCEDURE + ACTIVATOR + IMMUNO-SYMBIOTIC ...**

Is the essential foundation for all your patients.

Thiosulfate? Oxy Tonic? ----- You and all your patients need The BALANCING PROCEDURE. So --- SPECIAL THIS MONTH = 2 Oxy Tonic **FREE** with every 10 you buy.