

## THE NUTRI-SPEC LETTER

Volume 21 Number 8

From: Guy R. Schenker, D.C. August, 2010

# YOUR NEW TOY

Dear Doctor,

At the close of your June NUTRI-SPEC Letter, you were advised, "Use **Electro Tonic** wisely --- remaining ever cognizant of NUTRI-SPEC principles --- and ...

### YOU SHOULD HAVE A LOT OF FUN ...

with this supplement. --- Yes --- you <u>are</u> having a lot of fun with your new toy. Some of you are having so much fun that you have stretched your experimentation with Electro Tonic beyond the bounds of NUTRI-SPEC principles.

Is it any wonder?

You have patients who felt and looked like a deflated balloon who, after Electro Tonic, are fully pumped up and bursting with power.

You have athletes who are shattering their personal bests in races from 5K to marathon, in cycling competition, in triathlons, and, in the weight room.

As you and your patients get caught up in the excitement of the seemingly miraculous responses to Electro Tonic, you have flooded NUTRI-SPEC with questions on how to most effectively use it. You have asked:

"What are my limits with this stuff? How much can I take? How much can I give my patients?"

"How exactly should athletes take Electro Tonic to maximize performance?"

"What about timing? What is the best time to take it for general well-being? Before meals? After meals? Early in the day? Late in the day? Should athletes take it before, during, or after competition, or all three?"

"Can I use Electro Tonic as a sweetener? Can I use it to sweeten my tea? Can patients use it in place of sugar, or in place of artificial sweeteners?"

"Is Electro Tonic okay for diabetics?"

In this Letter we will address all those questions --- giving you as many specifics as we can on how to "pump up" as many patients as possible with your electrifying Electro Tonic. We begin our discussion by helping you understand just why there are almost no limits to what you can achieve with this magnificent supplement.

We devoted the entire last issue of this Letter to defining for you the term ...

#### ADAPTOGEN.

We looked at our old familiar NUTRI-SPEC equation:

## Adaptative Capacity = Metabolic Balance + Vital Reserves

We defined an adaptogen as any nutrient that increases Vital Reserves, and thus Adaptative Capacity, by <u>non-specific</u> means. In other words, it increases Adaptative Capacity by some mechanism other than improving Metabolic Balance. Most vitamins, minerals, trace minerals, and amino acids do not qualify as adaptogens because they have specific metabolic effects. Calcium is a nutrient that illustrates the point quite well in that it affects virtually all the NUTRI-SPEC metabolic balance systems. --- Calcium will generally help an Electrolyte Insufficiency, Anaerobic, Glucogenic, or Parasympathetic Imbalance, while exacerbating an Electrolyte Stress, Dysaerobic, Ketogenic, or Sympathetic Imbalance. Calcium, therefore, can be a powerful supplement, but definitely does <u>not</u> qualify as an adaptogen. The same applies to all other minerals, trace minerals, vitamins, and amino acids.

In discussing the concept of adaptogens, we invoked the principles put forth by Hans Selye in his general adaptative stress syndrome (GASS). An adaptogen should help a person equally well whether he is in the over-stimulated adaptative phase of the GASS, or, whether he is vacillating between over-stimulation and fatigue, or whether he has collapsed into the exhaustion phase of the GASS. The herbalists coined the term adaptogen in promoting the drugs they advocate. But we made the point in last month's Letter, that the herbal drugs yield no lasting increase in Vital Reserves. They therefore yield no meaningful lasting increase in Adaptative Capacity. In other words, they do not improve physiology, they merely stimulate physiological activities.

It should be clear to you after reading several NUTRI-SPEC Letters on Electro Tonic, and after some of the sensational clinical experiences you have had, that Electro Tonic truly qualifies as an adaptogen. It affects 3 different sets of energetic metabolic pathways, while having a multitude of beneficial influences on fluid dynamics, all at the same time it offers protection against the catabolic affects of free fatty acids. It provides all these benefits by normalizing, not by stimulating physiology.

We gave concrete evidence of the truly universal, non-specific benefits of Electro Tonic supplementation by describing a challenge we did with 19 subjects, giving them glycerol (the main ingredient in Electro Tonic) while checking their urine surface tension pre and post glycerol challenge. We reported last month that 20 minutes after ingesting 40 drops of glycerol, 7 of the 19 patients had their surface tension go down, 7 had their surface tension go up, and 5 patients had their surface tension change not at all.

But by merely looking at glycerol's overall failure to change the surface tension of the group as a whole, the exciting, amazing, earth-shattering results were hidden. It turned out that all the patients who had low surface tension to begin with had their surface tension elevated by glycerol, while those who had elevated surface tension on the pretest had their surface tension drop in response to glycerol.

#### WOW!

Realizing that urine surface tension is the absolute best indicator of oxidative metabolism efficiency --- distinguishing those who are suffering the catabolic damage of excess oxidation from those who are deficient in normal oxidative metabolism --- how much more evidence do you need that Electro Tonic is a one-of-a-kind, too good to be true adaptogen?

But whether or not you need further evidence of Electro Tonic's adaptogenic power, you are going to get it ...

You see, urine surface tension is not the only NUTRI-SPEC test parameter we evaluated with a glycerol challenge. Just consider these results:

We don't call it <u>Electro</u> Tonic for nothing. Its effect on Electrolyte Imbalances is incredible. One of our most reliable clinical indicators of Electrolyte Stress or Electrolyte Insufficiency is an exaggerated orthostatic pulse response. What happens to the second pulse, the one taken during the act of standing, 20 minutes after supplementation with glycerol? Out of 16 patients tested, there were 6 with normal P2 on the pretest. Of those 6 with normal P2, glycerol caused the P2 to go down in 2 patients and affected it not at all in 4 patients. It thus had no demonstrable effect on patients with healthy fluid dynamics.

But what happened to those who showed an Electrolyte Imbalance as suggested by an elevated P2? Of those 10 patients, Electro Tonic caused the P2 to go up in 1, to go down in 8, and stay the same in 1. In other words, Electro Tonic brought the P2 under control in almost all those who needed help with fluid dynamics, but had no adverse affect on those who did not need it.

The same results were obtained when looking at P3 and P4 on orthostatic challenge. In those with normal P3, glycerol challenge caused the P3 to go up in 2 patients, down in 4 patients, and stay the same in 1; but in those with elevated P3, glycerol caused the P3 to go up in 0 patients, down in 6 patients, and stay the same in 1 patient. Similarly, when looking at P4: of 5 patients with normal P4, 2 showed an increase in response to glycerol, 2 showed a decrease, and 1 showed no response; however, in those with an initially elevated P4, the P4 in response to glycerol went up in 1 patient, down in 8 patients, and stayed the same in 1. Clearly, glycerol is used by the body (as opposed to acting upon the body) to whatever extent it is needed.

Low diastolic blood pressure: Consider 15 patients in whom diastolic blood pressure was checked before and after a glycerol challenge. As a group, there was a slight increase in diastolic blood pressure 20 minutes after ingesting 40 drops of glycerol. In those who had either normal or elevated diastolic blood pressure on the pretest, there were about an equal number of those whose diastolic blood pressure increased as decreased. But, in the 5 patients for whom diastolic blood pressure was initially low, 4 out of the 5 showed an average increase of diastolic blood pressure of 6.

Elevated urine pH: In the 10 of 19 patients who had low urine pH, about an equal number showed a slight increase or decrease in response

to glycerol challenge. But in the 9 who had elevated urine pH, only 1 increased further, 6 decreased to or near normal, and 2 stayed the same.

Low urine specific gravity: Among 19 patients, the 9 with elevated specific gravity showed a response to glycerol challenge such that 3 increased, 2 decreased, and 4 stayed the same; but, in the 10 with low specific gravity, 6 increased an average of 8, while only 2 decreased slightly, and 2 stayed the same. This increase in low specific gravity occurred even though the glycerol was taken in a cup of water (which would have had a lowering affect on specific gravity).

These clinical challenges with glycerol demonstrate that glycerol has <u>no specific</u> biochemical effect, but has beneficial physiological consequences depending on if and how the body needs to use it. Electro Tonic is ---

#### THE ULTIMATE ADAPTOGEN.

Think of it this way --- taking Electro Tonic does not <u>do</u> anything, it gives <u>you</u> the ability to do things. Think of it as increasing your performance capacity --- increasing your personal power --- Electro Tonic will make you all that you can be.

Does that mean you should be sipping Electro Tonic all day long? Absolutely not. Its ability to empower is utilized only when we must rise to meet extraordinary physical or mental demands. It is not a stimulant. Electro Tonic will <u>not</u> give pep to the guy dragging through his day in a sleep-deprived, carbohydrate-saturated stupor. But --- supplement with Electro Tonic any time you know you are going to be challenged, and you will experience quite gratifying results.

Now --- you are prepared to receive answers to your specific questions. First, is Electro Tonic okay for diabetics? Good question. Those of you who have your mind tuned into the biochemistry picked up on glycerol's ability to enhance energy metabolism by 3 different mechanisms --- one of which is to increase gluconeogenesis. Will gluconeogenesis elevate the blood sugar of a diabetic? I will say (with conviction, but still with some reservation) that it will not. Electro Tonic definitely gives a person the <u>capacity</u> for gluconeogenesis, but does not stimulate gluconeogenesis. If you need to produce sugar (as in a challenging physical or mental event) you will, but you will not be stimulated to do so.

Actually, the literature points out that glycerol is used in livestock in cases of ketosis. In that sense, it should actually be beneficial for your diabetics. Your Type I diabetics (who are often Sympathetic and always

autoimmune) tend to go into a keto-acidosis; your Type II diabetics (generally Ketogenic) tend to go into a keto-alkalosis. [The only reason we must speak with just a bit of reservation, is that we do not have the dozens and dozens of diabetics to use as test subjects for glycerol supplementation. All we can do is make inferences from reading the scientific literature, and all the evidence indicates that Electro Tonic should be beneficial for diabetics.]

Can you and your patients use Electro Tonic as a sweetener? Hmm --- I never even considered that possibility. Certainly as a sweetener it is a far better alternative than the deadly artificial sweeteners. Compared to sucrose, glycerol is 60% as sweet, and does not increase or decrease blood sugar, nor does it feed the bacteria that cause dental plaque and cavities. It is definitely, however, not a low-calorie sweetener, as it actually has more calories than sugar (--- though this small caloric difference is not at all significant).

How will Electro Tonic supplementation work best for you and your patients? Obviously, it works extremely well when the need is indicated by your NUTRI-SPEC QRG analysis and it is supplemented according to your QRG protocols. In other words, we know that when patients take Electro Tonic in water accompanied by the indicated electrolytes, and drink half of their Electrolyte Tonic before breakfast and the rest throughout the day, the benefits are measureable.

What about the rest of us who have no QRG-indicated need? Let me wave the yellow caution flag here because I am not speaking from experience on hundreds or even dozens of test subjects, but I suspect that Electro Tonic is best taken sporadically --- only in anticipation of extraordinary physical or mental demand. Athletes, for example, should take 2 tablespoons in 24 ounces of water in the hour before competition or training, then drink more at the same concentration (if necessary) during the athletic event.

# In summary:

- Use Electro Tonic as indicated by your NUTRI-SPEC analysis.
- Give Electro Tonic to all your atheletes and anyone who works out regularly.
- Give Electro Tonic to anyone who routinely engages in high intensity physically demanding or mentally taxing work.
- Play and have fun!