

The Tuesday Minute

Nutritional information.... one byte at a time

This Week's Topic

Is This The Greatest Medical Discovery In 100 Years

The chance that you'll discover the fountain of youth is "unlikely", but how about the next best thing? I'm talking about an anti-aging enzyme. The research looks better and better.

The CBS news show, 60 minutes did a full blown "in depth story" on the research. I was reminded as I watched . . . this is big stuff! It's so significant that Dr. Mark Houston, an internationally known lecturer, says the discovery of a class of enzymes called sirtuins is the greatest medical breakthrough in the last 100 years.

Dr. Houston says and I quote, "I think for the first time we not only have the ability to modify the aging process, but also the quality of aging. We now have the ability to expand human life, but also to make that life a higher quality by reducing all the medical diseases people typically get when they get older."

Sirtuins are a class of enzymes. As the activities of sirtuins are increased, so do the benefits. Sirtuins are universal regulators of aging in virtually all living organisms and represent a prime target for new anti-aging drugs. "It's looking like these sirtuins serve as guardians of the cell," said Harvard Medical School researcher David Sinclair. "These enzymes allow cells to survive damage and delay cell death."

Some of the roles sirtuins play in animals are: gene silencing, DNA repair, increased lifespan,

increased cell survival, increases in energy metabolism, and positive response to stressors. Needless to say, the pharmaceutical race is on to make the most potent drug that will enhance sirtuin function. In fact, one company just bought out Dr. Sinclair's lab for $\frac{3}{4}$ of a billion dollars. In today's economy nobody pays that kind of money unless the data is solid.

Fortunately for us, one of the best compounds to naturally increase sirtuin activity, as many of you know, is found in red wine. The compound accredited to this increased activity is resveratrol. In studies, yeast treated with resveratrol survived 60 percent longer. Resveratrol was then shown to extend the lifespan of worms and flies by nearly 30 percent and fish by almost 60 percent. In fact, an animal study was recently released that showed an amazing 31% increase in lifespan just using resveratrol.

You can click the link on the web page for an article on the study. Take a look at the three mouse livers. You can see treating mice with resveratrol while they were on a high-calorie diet even prevented many liver abnormalities.

Another study at the Institute of Genetics and Molecular and Cellular Biology in Illkirch, France, provided resveratrol to mice and looked at their endurance. The resveratrol mice were able to run twice as far as the control mice in the same time period, weight gain was controlled,

and diabetes was prevented. Long life, more endurance, weight control, disease prevention...can you see why the pharmaceutical companies will want to synthesize it and patent it?

To give you an idea of the resveratrol in red wine: 1 liter of high quality Pinot Noir wine has about 5 mg of resveratrol. We don't know the exact dose that is optimal for humans at this time; however, the animal studies were done using a dose of 22 mg per kilogram. So if we add a zero on our weight that gives us an idea of the amount we need. A 160 pound person would take 1600 mg per day, which would be about 300 bottles of wine per day.

Let's look at some other data about resveratrol and its clinical benefits. From a cardiovascular perspective, it reduces LDL cholesterol and triglycerides, inhibits arterial plaque, prevents blood clots, normalizes blood pressure and helps to regulate blood sugar. It also enhances the bodies' antioxidant pool, specifically glutathione.

From an immunological perspective, resveratrol inhibits viral, fungal, and bacterial growth. Resveratrol has anti-cancer properties, anti-inflammatory benefits, and prevents bone loss. See the link on the web page for a summary of over 50 benefits of resveratrol and the references.

Here is an important point however, and one that you should be aware of with your patients: there are 2 forms of resveratrol, a cis form and a trans form. The trans form is the biologically active form. This is yet another example of how we are at the mercy of the manufacturer and their suppliers. Manufacturers' can in good conscience order trans-resveratrol with the in-

tention of using only the purest ingredients; but unless they have the ability to verify their raw material, there's no guarantee they have the correct form. It's like roulette, resveratrol roulette.

Biotics in-house phyto-chemical lab assures that the product, in this case trans-resveratrol, is in fact the correct form and then goes the extra step to make sure it is biologically active. If it's not active before it goes into the capsule, it won't be active once it is encapsulated.

Most of you are aware of the essential of manufacturing: things like doing bacterial counts, heavy metal testing, and plant identification; however, Biotics goes far beyond what is required in the industry as they develop what could be called a BioPrint for each botanical ingredient used in any of their formulas. This BioPrint is like a finger print and is so unique they can often tell what part of the world the plant comes from. Unless what's listed on the label is biologically active, you won't know if it will work for your patient or even if it's in the bottle to begin with.

You get the point. Biotics Research Corporation delivers consistent, authentic products for your patients...every time. Biotics has recently released a form of trans-resveratrol (ResveraSirt HP) in a 250 mg capsule to allow physicians to titrate the dose for specific cases. I encourage you to get the information on resveratrol. Try it with your patients. Try it yourself. The benefits are impressive!

Thanks for taking the time to check in. I'll see you next Tuesday.