

"You can't be too attached to how you think your life is supposed to work and instead trust that all the dots will be connected in the future."

- Steve Jobs

I absolutely love this quote because like pretty much all the quotes I find, it's so true. We all probably have a plan for our lives. But sometimes we're thrown a curve ball and we must adjust how we play the game. The lesson here is that the only person who knows how the dots will connect in the future is God. And while I'm not a religious person by any stretch of the imagination, I truly believe that He has a plan for each of us. We just need to trust that and know he sends us signs to let us know He's there. We must pay attention so we recognize those signs when they're presented. If this is something you'd like to talk about, please contact me.

Yours in health,



Susan Monaco, Certified Health Coach
Health and Wellness by Design
www.healthnwellnessbydesign.com
susan@healthnwellnessbydesign.com

Have You Heard About PQQ?



There are so many different supplements on the market and every single one promises to do something special for you and your body. This makes it really hard to know what to believe. I'm sure that in your quest to be healthy, you've probably tried a number of supplements you've heard about without really knowing what their true benefits were. I read about health all the time and I recently came across a supplement about which I'd never heard. It's called PQQ and I was intrigued enough to do some research to try to figure out whether or not its promises were real. This month, I'm going to share what I learned about this unusual supplement.

PQQ stands for Pyrroloquinoline Quinone. I know, it's a mouthful and I'm not even sure I can pronounce it. But it's the only nutrient that claims to be able to create new "molecular engines" in each of our body's cells. These engines burn Coenzyme Q10 ("CoQ10") and transform it into energy our body can actually use. PQQ is sort of like a generator that kicks in when your house has lost power. It actually gives you energy to help you get you through tough times. PQQ seems to do its best work when paired with CoQ10. More on that later.

Research done on mice shows that those receiving PQQ tested much better than those who didn't. Mice deprived of PQQ can't handle pressure. When presented with stress, their blood sugar skyrocketed and they physically shrunk in size. Researchers actually thought their lungs were going to explode. But the

mice given PQQ gained healthy weight and their blood sugar remained steady. Their breathing was normal. The testing showed that mice given PQQ became healthier when placed under more stress. Can you imagine? How great would it be to thrive rather than deteriorate when faced with stress? In addition, researchers found that mice deprived of PQQ quickly became fatigued and their cells only worked at 33% capacity. The mice given PQQ also showed **three** times more energy than those who weren't.

PQQ seems promising in helping with heart disease. Researchers at the University of California set up three different study groups of mice and induced heart attacks in all three groups. The first group had no PQQ. The second group was given PQQ before the heart attack. The third group was given PQQ after their heart attack. When compared to mice given no PQQ, those that received it before their heart attack had a reduction of severity by 51%. Their heart's cells also had less free radical damage, better blood flow and a steadier heartbeat. That seems to indicate that that PQQ can help keep the heart pumping, even after a heart attack. But these studies were done on mice. The more important question is whether or not it works on people.

To answer that question, I found a double-blind study in which researchers discovered that PQQ lowered bad cholesterol (LDL) by almost 5% when compared to a placebo. While that might not seem like much, they also found that people with the worst cholesterol had the biggest improvement. Their LDL dropped a whopping 15.4%. That's 3 times more of a reduction than those who didn't have super high LDL cholesterol. What this tells me is the higher your cholesterol, the better PQQ works.

Why does it work so well? It turns out that PQQ helps your body's cells make more mitochondria, which are essentially the "molecular engines" living inside your cells. These mitochondria can change the raw energy of CoQ10 into real energy for your body. This is really important because as we age, our levels of mitochondria drop pretty dramatically. As an example, researchers compared the muscle tissue of a 90-year old man to that of a 5-year old boy. Guess what they found? The mitochondria in the old man were 95% damaged! Those in the boy were completely fine. So the bottom line is this: PQQ seems to have the ability to replace the mitochondria you lose as you age.

But PQQ isn't the end-all or the only thing that restores mitochondria. Here are two more options:

1. Exercising at a high intensity (i.e.: interval training)
2. Eating fewer calories – people on a super low calorie diet can grow 35% more mitochondria

Given those other two options, the mitochondrial increase happens much faster when supplementing with PQQ. In fact, mice who consumed PQQ increased the amount of their body's mitochondria by 55% in just only 8 weeks. Additionally, mice with the most mitochondria showed almost no signs of aging. Granted, comparing mice to people is like comparing apples to snakes, and certainly much more research needs to be done. Still, the results are quite staggering.

There are a dozen foods I found that contain PQQ. Natto, a fermented soybean, parsley, green pepper, kiwi, papaya, tofu, spinach, fava beans, carrots, potatoes, cabbage and bananas.

PQQ offers several other benefits. It may have the potential to treat Alzheimer's because it appears to help reduce DNA damage to the brain caused by beta-amyloid plaque. Most people don't know that inflammation is the cause of most disease and this awful plaque causes it to double in cells. When these same cells were given PQQ, inflammation dropped by 51%. Human cells treated with PQQ are healthier than those without it. PQQ has also been found to increase blood flow to the brain by 208%, which is pretty stunning. PQQ may also be helpful to people suffering from type-2 diabetes.

I haven't yet tried PQQ, but I've found a high-quality source that pairs it with the best type of CoQ10 called ubiquinol (which I have taken) and a special form of vitamin E called gamma tocotrienols. This form of vitamin E boosts your body's antioxidants, which reduces free-radical damage. Most CoQ10 on the market is ubiquinone, which must convert itself to ubiquinol, making it much less effective. Once I have the chance to try this supplement, I'll be sure to report back.

Have a wonderful month.