

Diabetes and Glutathione Status

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Diabetes affects 10-25 million North Americans most, as yet, undiagnosed. It is, of course, an insulin disorder that impairs the body's ability to metabolize sugar. Although this problem is dealt with by providing insulin or drugs to lower blood sugar, diabetic individuals exhibit other related medical problems. One of the main complications of this illness is damage to the circulatory system (both large and small vessels) leading to atherosclerosis (plaque build-up in vessel walls), heart disease, high blood pressure, stroke, renal failure, neuropathy (nerve damage), blindness and gangrene. The other main complication of diabetes is an impaired immune system, as a result of which diabetics are more likely to succumb to infections (another reason why they are at risk for gangrene).

It is well documented that diabetic individuals have an increased level of oxidative stress and free radical formation in their tissues. By the same token, their blood and tissues are marked by critically low glutathione levels. A reasonable assumption is that the increased oxidative stress depletes the tissues of glutathione, the latter being the major intracellular antioxidant responsible for neutralizing the free radicals.

There is good evidence that a weakened glutathione antioxidant system is responsible, at least in part, for the observed cardiovascular disease seen in diabetics and a role for supplementation with antioxidants has been proposed, for example by Giugliano et al. and Dominguez et al. as well as others. Similarly, the impaired immune function seen in diabetics could be due, at least in part, to glutathione deficiency. (The importance of glutathione for the immune system is discussed in the article entitled 'The Immune System: Role of Glutathione').

Thus, there is a clear indication for using Immunocal in diabetic individuals to raise intracellular glutathione levels and thereby ameliorate the major complications that accompany this illness.

References.

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