How to reverse Prediabetes

More than 86 million Americans are estimated to have prediabetes, a condition in which blood glucose levels are slightly elevated above normal yet do not reach levels indicative of diabetes. If untreated, 37% of those diagnosed with prediabetes may go on to develop type 2 diabetes within four years. While diabetes is clearly a problem of its own, the overriding public health concern is the number of comorbidities that often occur as a result of either not preventing diabetes or not treating it early if it develops. The most commonly associated diseases include CVD, hypertension, dyslipidemia, kidney disease, nephropathy, nonalcoholic fatty liver disease, obesity, and even cancer.

Diagnosis

The goals of prediabetes assessment and diagnosis are to catch patients early, on the path toward diabetes and prevent disease development, and avoid the associated comorbidities, which are often the most harmful and costly conditions. To that end, the glucose ranges are set lower than those defining the criteria for type 2 diabetes. The World Health Organization (WHO) defines prediabetes as IFG between 110 and 125 mg/dL or impaired glucose tolerance (IGT) of 140 to 200 mg/dL after a 75 g oral glucose load. The American Diabetes Association (ADA) uses IFG of 100 to 125 mg/dL, HbA1c of 5.7% to 6.4%, or the IGT as defined by the WHO as diagnostic criteria for prediabetes.

Health Risks

As with any disease, there are risks to health if prediabetes is left untreated. If blood sugar irregularities are corrected early, the risk of lasting permanent damage is reduced. If diagnosed and treated, many cases of prediabetes can be reversed. However, if left untreated, there are long-term health risks associated with prediabetes, beyond the overt risk of diabetes itself. Patients with prediabetes can develop the beginning phases of neuropathy, which can lead to blood flow problems in the eyes, kidneys, blood vessels, heart, and extremities. This can lead to the initiation of common diseases associated with diabetes, such as chronic kidney disease, stroke, heart disease, retinopathy, and neuropathy in the hands and feet. Elevated blood glucose also is associated with a weakened immune system, poor wound

Health Risks

healing, and an increased risk of hypertension. Greater cancer risk has also been reported.

Nutraceuticals formula for diabetes managemen

Chromium yeast: Chromium is an essential mineral thought to be necessary for glucose metabolism and lipid homeostasis. Any chromium deficiency will result in impaired glucose tolerance and elevated blood glucose level. Findings from the current study demonstrate that consumption of chromium is associated with a statistically significant decreases in levels of fasting blood glucose, HbA1C, triglyceride, and increase in HDL cholesterol. Generally, supplementation at doses of approximately 200 mcg/d has been found to be beneficial for people with impaired glucose tolerance. However, people with more overt impairments in glucose tolerance and diabetes usually require more than 200 mcg/d.

Bitter melon extract: Bitter melon is used primarily as an alternative therapy for diabetes. Components of bitter melon extract appear to have structural similarities to insulin. Some evidence indicates that bitter melon may decrease hepatic gluconeogenesis, and increase hepatic glycogen synthesis. Bitter melon also increases insulin secretion of the pancreas, decreases intestinal glucose uptake, and increases uptake and utilization of glucose in peripheral tissues.

Antioxidant of vitamins & minerals: The cumulative effects of diabetes are system-wide, as they cause both vascular and neurological damages. Oxidative stress is believed to play a critical role in the complications of diabetes. The increased levels of oxidative stress markers and decreased level of antioxidants have been documented in people with diabetes. Research shows that antioxidant nutrients such as vitamin C, E and zinc are able to reduce oxidative damages caused by free radicals and thus decrease the risk of complications like retinopathy, nephropathy, diabetic cataract, and neuropathy. They also improve endothelial function and retinal blood flow and reduce atherosclerosis. Therefore, people with diabetes may also have greater antioxidant requirements to counteract any excessive production of free radicals.

Bilberry: Bilberry has beneficial effects in microvascular abnormalities of diabetes, particularly for retinopathy. Its anthocyanosides are the most important constituent that plays a critical role in the prevention of diabetic cataract.

Evening primrose oil: Evening primrose concentrate has shown to have potential therapeutic effects in the prevention of diabetic microvascular complications and might aid in stabilizing neural transmissions in diabetes.