

Diabetes: Complementary/Alternative Medicine

The National Diabetes Data Group of the National Institutes of Health recommends the following criteria for diagnosing diabetes:

- Fasting (overnight): serum glucose (blood sugar) concentration greater than or equal to 140 mg/dl on at least two separate occasions
- Following ingestion of 75 g of glucose: serum glucose concentration greater than or equal to 200 mg/dl at two hours post-ingestion and at least one other sample during the two-hour test
- Classic symptoms of increased thirst, increased hunger, and increased urination

QUICK REVIEW

- Diabetes is divided into two major categories: Type Type II and I.
- Ninety percent of diabetics are Type II and are not dependent upon insulin.
- Although genetic factors appear important in susceptibility to diabetes, environmental factors are required to trigger diabetes.
- Obesity is another significant environmental factor, as ninety percent of diabetics are obese.
- Exposure to a protein in cow's milk (bovine albumin peptide) in infancy may trigger the autoimmune process and subsequent Type I diabetes.
- The trace mineral chromium plays a major role in the sensitivity of cells to insulin.
- To reduce the risk of developing the complications of diabetes, it is important to control against elevations in blood sugar by careful monitoring.
- Dietary modification and treatment is fundamental to the successful treatment of diabetes, whether it is Type I or II.

The treatment of diabetes requires nutritional supplementation, as diabetics have a greatly increased need for many nutrients.

- Since the transport of vitamin C into cells is facilitated by insulin, many diabetics do not have enough intracellular vitamin C.
- Some newly diagnosed Type I diabetics have experienced complete reversal of their diabetes with niacinamide supplementation.
- Vitamin B6 supplementation appears to offer significant protection against the development of diabetic nerve disease.
- Diabetics appear to have an increased requirement for vitamin E, and benefit from high-dose supplementation.
- Onions and garlic have demonstrated blood-sugar-lowering action in several studies and help reduce the risk of cardiovascular disease.
- The oral administration of bitter melon preparations has shown good results in clinical trials in patients with both Type I and Type II diabetes.
- Recent scientific investigation has upheld the effectiveness of *Gymnema sylvestre* in treating both Type I and Type II diabetes.

TREATMENT SUMMARY

Effective treatment of diabetes usually requires the careful integration of a wide range of therapies and a willingness on the part of patients to substantially improve their diet lifestyles. NIDDM usually results from many years of chronic metabolic insult; although it can be treated with the natural metabolic approach presented here, its ultimate resolution will take persistence. Although much of the information presented in this

chapter has focused on NIDDM, it is equally appropriate for the IDDM patient, with the exception that, according to current information, the Type I diabetic will always require insulin.

Blood sugar levels must be monitored carefully, particularly if the diabetic is on insulin or has poorly controlled diabetes. Home glucose monitoring and the HgbA1c, tests are, at this time, the best way to monitor progress. It is important to recognize that, as these natural therapies take effect, insulin requirements and drug dosages will have to be altered. It is helpful to develop a good working relationship with one's doctor.

WARNING: Under no circumstances should a patient be suddenly taken off diabetic drugs, especially insulin.

According to current information, an IDDM patient will never be able to stop taking insulin.

Diet

All simple, processed, and concentrated carbohydrates must be avoided. Complex-carbohydrate, high-fiber foods should be stressed, and fats should be kept to a minimum. Legumes, onions, and garlic are particularly useful.

Nutritional Supplements

Take a high-potency multiple vitamin and mineral supplement, according to the guidelines given in

SUPPLEMENTARY MEASURES.

- Vanidyl Sulfate 250 mcg daily
- Chromium Picnolate 200 mcg daily
- Cinnamon 3 gm with each meal
- Vitamin C: 500-1,000 mg three times per day
- Mixed flavonoids: 1,000-2,000 mg per day
- Vitamin E: 800-1,200 IU per day
- Flaxseed oil: 1 tablespoon per day
- GLA source: 240-480 mg of GLA per day
- Magnesium: 250 mg two to three times per day
- Methylcobalamin (active vitamin B12): 1,000 mcg per day
- Fiber (guar, pectin, or oat bran): 20-30 g per day

Botanical Medicines

If diabetic retinopathy is present: Bilberry (or grape seed) extract: 40-80 mg three times per day
If diabetic neuropathy is present: *Ginkgo biloba* extract (24% ginkgo flavoglycosides): 40--80 mg three times per day
Other botanicals, listed in order of presumed effectiveness:

- *Gymnema sylvestre* extract: 200 mg twice per day
- Bitter melon (*Momordica charantia*): 1-2 oz fresh juice three times per day
- Defatted fenugreek powder: 50 g per day
- Salt bush (*Atriplex halimus*): 3 g per day

Exercise

Regular exercise is vitally important. Exercise at an intensity that elevates heart rate at least 50% for one half hour at least three times per week