## **DIET AND DIABETES**

In 1960 in Japan, despite the significant amount of rice consumption, the incidence of diabetes was <1%. The rate rose dramatically to 15% by 2000 with the introduction of a more Western, Standard American Diet (SAD), consisting of more meat, refined foods and fat and less fiber from fruits and vegetables.

There is a pervasive belief that consuming sugar and carbohydrates causes diabetes and that diabetics need to avoid carbs and consume more protein and fat. This is absolutely incorrect and nothing could be farther from the truth. The facts are clear that diets focusing on consuming whole fruits and vegetables, legumes and limited amounts of fats and animal products are the best for avoiding and reversing most forms of diabetes. Even in Type 1 diabetics who must take insulin to survive, their ability to control their disease is much easier with a whole food, plant-based diet.

We have known this for almost 100 years but food industry pressures, misinformation and lack of proper nutritional education in the medical community allows such misconceptions to continue. Below are some examples of studies about how a healthy, low fat, plant-based diet can improve or cure diabetes.

## History of research on diet and diabetes.

1927. British doctor J. Shirley Sweeney published an important study in the *Archives of Internal Medicine* (now called *JAMA Internal Medicine*) showing that only 2 days of a high fat diet induced abnormal blood sugar metabolism in healthy medical students. The same did NOT occur with a high sugar diet (<sup>3</sup>/<sub>4</sub> of a pound of added sugar a day). After 2 weeks of the high fat diet, 70% of the students became frankly diabetic whereas even after 11 weeks on the high sugar diet (basically when his funding for the study ran out), there were no signs of diabetes.

1933. Dr. Israel Rabinowitch from Montreal, Canada showed significant improvement in diabetics within weeks of cutting back on fat in their diets despite not changing or even adding more healthy carbohydrates.

1935. Dr. Harold Himsworth in England showed that by lowering fat consumption to less than 20% of daily calories consumed, blood sugar and other diabetic markers improved. In one group, 24% of insulin dependent type 2 diabetic patients were off their insulin within weeks.

1939. Duke University researcher Dr. Walter Kempner developed Kempner's Rice Diet program. The treatment was a simple therapy of white rice, fruit, juice, and sugar. It was reserved for only the most seriously ill patients. Although low-tech, the benefits of the Rice Diet far exceed those of any drug or surgery prescribed at that time for chronic conditions, including diabetes, coronary artery disease, heart and kidney failure, hypertension, arthritis, and obesity. Todays drugs and procedures are no better.

1955. Dr. Inder Singh from Britain reported in *The Lancet* that within 6 weeks of following a low fat (<11% of calories), high fruit, vegetable and legume diet, 62% of 80 type 2 diabetics on

insulin were able to stop their insulin. Another 18 were able to stop it by 18 weeks. Thats a total of 68 out of 80 patients. 85% of diabetics were able to stop their insulin just by improving their diet.

1983. California lifestyle medicine pioneer Dr. Nathan Pritikin. Within 3-4 days of following a low fat, whole plant food diet, insulin doses needed to be lowered in patients and within 4 weeks of this diet, 74% of the patients were off ALL their meds, both insulin and oral.

1994. Washington, DC physician Dr. Neal Barnard, founder of the Physicians Committee for Responsible Medicine, reported on a study in which 71% of all drugs were able to be discontinued within weeks of starting a whole food, plant-based, low fat diet in a group of type 2 diabetic patients, many of whom were also on insulin.

A Harvard study followed more than 85,000 pre-diabetic patients for 16 years. Of the patients who went on to develop diabetes, 90% of them it was felt to be related to poor lifestyle choices and the #1 risk factor was obesity which alone, increased the risk of going on to develop diabetes by 40x.

As part of the Diabetes Prevention Program (DPP), another Harvard study followed over 3000 patients from 27 centers who were overweight or obese and had prediabetes. They were randomly assigned to one of three groups:

- 1. standard lifestyle recommendations plus the medication metformin (Glucophage).
- 2. standard lifestyle recommendations plus a placebo pill (no medications).
- 3. an intensive program of lifestyle modification including following a whole food, low fat, plant-based diet as well as instructions to walk briskly or do other exercise for 120 minutes per week (less than 20' a day), with the goal of some modest weight loss.

The estimated cumulative incidence of diabetes at three years was 30% for the placebo group (2), 22% for the metformin group (1), but only 14% for lifestyle modification group (3). The incidence of diabetes was 39% lower in the lifestyle modification group than in the metformin group. As a matter of fact, they shut down the study early because it was deemed unethical to keep the subjects in the placebo and metformin-only groups when they could do much better following a more intensive lifestyle modification.