## THE FOUR PILLARS TO HEALTH & WELLNESS

## EXERCISE + NUTRITION + SPIRITUALITY + HEALTH

## HEALTH

## **Prevention of Diabetes Works**

by Dominic Dizon, MD

Diabetes mellitus now affects 415 million people throughout the world, or 8.5% of the entire population. Type 2 Diabetes is that which is typically adult onset and affected by diet and exercise.



Here in the Central Valley, Fresno county has the highest prevalence of Type 2 Diabetes, with about 10.5% of the population having the burden of disease. When uncontrolled, the condition can lead to microvascular complications such as retinopathy (blindness), neuropathy (leg amputation) and nephropathy (dialysis). However, these complications are not the main reasons for mortality. Deaths typically occur from macrovascular complications such as strokes and heart attacks.

Knowing the high prevalence of the disease and severe complications of having it, what is amazing is that Type 2 Diabetes can be totally preventable.

A study published in the New England Journal of Medicine in 2002 randomly assigned 3,234 nondiabetic persons with elevated fasting and post-load plasma glucose concentrations to placebo, metformin (850 mg twice daily), or a lifestyle-modification program with the goals of at least

a 7 percent weight loss in a year and at least 150 minutes of physical activity per week. The mean age of the participants was 51 years, and the mean body-mass index (the weight in kilograms divided by the square of the height in meters) was 34.0.

The average follow-up was 2.8 years. What they found was that lifestyle intervention reduced the incidence of Type 2 Diabetes by 58 percent and metformin by 31 percent as compared with placebo.

Hence, lifestyle changes and treatment with metformin both reduced the incidence of diabetes in persons at high risk. The lifestyle intervention was more effective than metformin.



These results have now been applied throughout the country in what we call Diabetes Prevention Programs and have been very effective in preventing Type 2 Diabetes.

So remember, the recommendation of a 7 % weight loss in a year and 150 minutes of physical activity a week goes a long way in preventing one of the most prevalent diseases of our time.

Questions? Please contact:

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