



THE  
TUESDAY  
MINUTE

IT'S TIME TO FEEL GOOD AGAIN

## Test Everyone

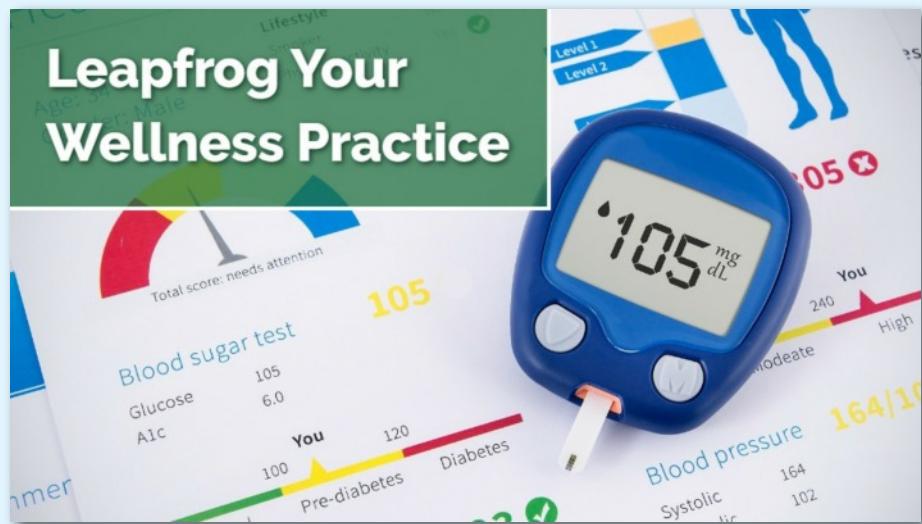
# 55% Now Have Diabetes or Pre-diabetes

THIS WEEK'S TOPIC

“Half of everyone you test will need your help.”

Often physicians tell me they find it difficult to engage their patients in a wellness lifestyle. I have two concepts to share that are a sure way to increase patient compliance. First, it's no surprise that diabetes and pre-diabetes is rampant in the American culture. However, new data shows 55% of adults in California either have diabetes or pre-diabetes. That's 1 out of 2 people.

UCLA Center for Health Policy released a report on March 10, 2016 summarizing a study with over 40,000 households that included 40,240 adults, drawn from every county in the state. Cutoffs associated with pre-diabetes were applied to hemoglobin A1c (HbA1c) 5.7 or above. HbA1c, is formed in the blood when glucose attaches to hemoglobin. It represents a 3 month average of glucose. They also used fasting plasma glucose values of 100 or above. First of all, glucose of 100 is much too high. I would like to see A1c much lower as well. But these conservative numbers are the ones used by the American Diabetes Association. But even with



fasting glucose values of 100 or above, 46% of all adults have pre-diabetes, and 9% have been diagnosed with diabetes. Sadly, about 90% of people with pre-diabetes are unaware of their condition.

According to the statistics by the UCLA study, 70% of those with pre-diabetes develop diabetes in their lifetime. Let's do the math. The study says 46% or 13 million Californian adults have pre-diabetes. Multiply 13 million times 70% and we have a staggering 9.1 million people with diabetes in their future. Currently, California has 2.5 million diabetics.

If our health care system is bankrupt now, what happens

when we multiply the cost of the diabetic treatment and complications by 264%? It's like a tsunami of diabetic costs, not to mention the pain and suffering associated with this condition.

Just as alarming, is the number of young adults with pre-diabetes: 33% of adults ages 18-39 compared to 60% in those ages 55-69. In other words, 1 out of 3 adults ages 18-39 have prediabetes, 6 out of 10 adults over 55 have prediabetes. These are huge numbers.

After having lived in California over 35 years ago, I remember a surprising number of people who

embraced a wellness lifestyle. So, if these numbers are true for California, imagine how much higher they must be in other parts of the country. What these numbers tell me is the importance of testing everyone that walks in your door, regardless of their initial complaint.

The numbers and percentages the study quotes are based on blood sugars over 100. My goal is to get people down to 85.

See the link on this page to a video we did on the Kaiser Study. In this study, they showed that for every mg/dl over 84, patients had a 6% chance of developing diabetes when followed over a 10 year period. The study was based on 46,578 patients participating in the conventional health care system.

What patients don't know is that in type 2 diabetics there is a progressive deterioration in beta-cell function. One study showed that islet function was about 50% of normal at the time diabetes was diagnosed. So, by watching and waiting as fasting glucose levels increase, 50% of one's pancreas is deteriorating. The reason for the reduction of beta-cell mass is "accelerated apoptosis," (cell death). The major factors for progressive loss of beta-cell function and mass are glucotoxicity, lipotoxicity, proinflammatory cytokines, leptin, and islet cell amyloid.

So, an in-office blood spot or sending the patient out to get their blood drawn is the first way to motivate them.

The second way to increase compliance comes from a calculation I learned from Dr. Carlos Viana, a speaker at the IAACN symposium in 2010. His presentation was "Targeting and Solving Complex Insulin Resistance Based Illness." Here is his calculation: multiply fasting insulin by fasting glucose and then divide that number by 405. If that calculation is greater than 1.8, it signifies insulin resistance. Insulin resistance doesn't mean a patient has diabetes yet, but they are walking on the edge of what I call the "diabetic cliff." Showing objective data and explaining the "diabetic cliff analogy" will help you motivate your patients to engage in the detective work needed to find out why a patient may have blood sugar dysregulation. I say detective work because sometimes blood sugar is caused by food sensitivities, toxins, excess carbohydrates, mitochondrial impairment, lack of exercise, and basic nutrient deficiencies like chromium, magnesium, or thiamine.

You can see a link on suggestions to manage blood sugar and other tests to monitor underlying causes of blood sugar dysregulation. But the lesson for today is assume diabetes or insulin resistance unless proven otherwise. So many of our patients are operating at less than their physical and mental capacity, here's one way to get them on board for change.

Thanks for watching, and please remember to check the link to the right for therapeutic ideas. I'll see you next Tuesday.