Sugar Is Slow Suicide

By Dr. David Williams

It's hard to believe, but summer is almost gone--again. Once again, my plans for taking a relaxing summer vacation somehow didn't materialize. On the positive side, however, I've uncovered several remarkable remedies that you will soon be able to enjoy.

Currently, I am finishing up my investigations on two very special products that can knock out flu and cold symptoms in a matter of hours. One formula comes from Israel and the other is a special formulation from Australia. Never before have they been used together, and the results I've been seeing are nothing short of miraculous.

One of the benefits of commuting and working in two different parts of the world (the U.S. and Australia) is the fact that the seasons are exactly opposite. While you have been enjoying nice warm summer weather for the last several months, I've been able to test both of these cold and flu products in Australia where their winter season is in full swing. Early this fall, I will have all the exciting details on these remedies--just in time to help prevent the problems with colds or flu that will surely surface this coming winter.

To illustrate a point, the Australian product alone contains about a dozen different herbs, most of which have been used by the Aborigines. Like most of the remedies I investigate and report on, it hasn't been an overnight "discovery." I've now spent over three years on just this one remedy. It has taken that long to transform the ancient wisdom and anecdotal stories of several Aboriginal medicine doctors into a simple formula you can use in the comfort of your own home. During that time I can't tell you how many dozens of so-called cures I've investigated, sometimes for months at a time, that have proved to be worthless.

There was the foul-smelling, leaking jar covered with duct tape that was shipped to me from Peru. It was supposed to cure cancer. And there were the crudely made tablets from the interior of Mexico that could cure diabetes. I tracked down dozens of supposed cures all over Australia, with no results, plus a tea from China that promoted weight loss and another from India that cured hepatitis. The list goes on and on.

For every remedy that actually works, there are probably a hundred that fail the test. And even when I do finally find a natural remedy that works, chances are it's not being made commercially or it's not available in the United States. A good example is Joint Advantage, the herbal arthritis and pain formula I've been writing about for almost two years now. Some of the Aboriginal herbs in that product had never before been imported to the United States--or even outside of Australia, for that matter. The same is true for this new cold and flu product.

Rainforest Rxs Are Not So Easy

After over 15 years of scouring the jungles and most remote parts of the world in search of valid cures, I can tell you it's not an easy task. Drug companies are just now starting to realize this. A few years ago, there was a lot of publicity about how drug companies were starting to look to the rainforests and traditional medicine men for new breakthrough drugs.

Not surprisingly, little has materialized from these efforts. The "breakthrough" products the companies hoped for are not coming fast enough to satisfy profit-

hungry shareholders. As a result, pharmaceutical companies are rapidly beefing up their marketing efforts to compensate for their inability to introduce new drugs. And make no mistake; the pharmaceutical giants are some of the most savvy and well-financed marketers on the planet. Their latest efforts are focused on ways to treat blood sugar and diabetes problems. And millions of people in this country are starting to suffer needlessly because of their efforts. I don't want you to fall into this trap.

Sugar Isn't as Sweet as It Seems

When you consider that the average American intake of *added* (non-naturally occurring) sugar is 20.5 teaspoons per day, it's obvious that Americans have a serious sweet tooth. That rate of sugar consumption adds up to 68.5 pounds per person, per year, and is suspected to be even higher. (*USDA CSFII Survey*) If sugar is such a serious health concern, as so many of us have been saying for so long, a rate of consumption like that is nothing short of slow suicide.

For decades "health nuts," including yours truly, have been warning about the dangers of increased sugars and/or refined carbohydrates in the diet. Let me tell you, it has been a real uphill battle trying to convince the public that consuming too much sugar could eventually lead to diabetes--especially when conventional medicine kept asserting that sugar is totally harmless. Even today, as diabetes reaches epidemic proportions in this country, most doctors continue to preach that dietary sugar has no connection to behavior problems, mood swings, depression, or the increased incidence of adult onset diabetes.

Our FDA says that the only problem sugar causes is dental cavities. And with the support of the American Dietetic Association, the Sugar Association has stuck to the position that at only 15 calories per teaspoon, sugar is a healthy, low-calorie sweetener that is no different than any other carbohydrate. Nothing could be further from the truth. In fact, decades of research supports the fact that a "sweet tooth" will invariably lead to a lifetime of poor health and a premature death.

In fact, even if sugar weren't so harmful on its own merits, people who consume the highest amounts of sugar also tend to take in the lowest amounts of many important nutrients. Vitamins A, C, B12, and folate, as well as calcium, phosphorus, magnesium, zinc, and iron are typically lacking in the diets of those who eat lots of sugar. These deficiencies arise from the fact that high-sugar diets tend to be higher in calories, but lower in important fruits, vegetables, and meats than healthy diets. (*Agricultural Research, June 2000, 17*.)

The bigger problem, however, is that sugar causes harm at an even more fundamental level. To understand why, you have to understand a little about how your body works.

The Gears Behind the Clockwork

The carbohydrates we eat are converted by the body into a simple sugar called glucose. This glucose, or "blood sugar," enters the bloodstream to be transported throughout the body. Blood sugar is the primary energy source used by the brain, the nervous system, and the muscles. To be utilized, the blood sugar must get from the blood- stream into the nerve and muscle cells. This is where insulin comes into the picture. As I'm sure many of you recall from high school biology, insulin is the pancreatic hormone that opens up the cell walls so blood sugar can enter. It is the key to the whole energy process.

Insulin is secreted in two phases. A surge of insulin is initially released immediately following a meal, or when sugar or sweetness is detected in the mouth and digestive system. A second round of insulin is released shortly after a meal and continues to be released gradually for several hours.

For insulin to work properly, it must be present in sufficient quantities, and the cells in your body must be "sensitive" to its effects. When cells don't react to the effects of insulin by allowing sugar to enter through their cell walls, a condition called *insulin resistance* exists. Insulin resistance isn't fully understood at this point. However, we do know that *insulin resistance is often directly related to obesity*. This is especially true when a person has a fat build-up in the waist or abdominal area.

Studies have shown that obese, non-diabetic individuals can reduce their levels of circulating insulin simply by losing weight. This reduction in the amount of insulin occurs without any changes in blood sugar levels. In other words, by losing weight, one can often overcome insulin resistance. This is true because, with less fat to complicate the picture, existing insulin levels become more effective at lowering blood sugar levels.

On the flip side of the coin, excess abdominal fat and fat that has accumulated around the liver increase the amount of circulating free fatty acids in the blood. As these fatty acids break down, they increase toxicity levels. In turn, increased toxicity has been shown to do two things: First, it inhibits the production of insulin; and second, it makes muscle cells less sensitive to the insulin that is available. Muscle tissue is crucial in helping to balance blood sugar levels. Under normal circumstances, over 80 percent of the blood sugar released immediately following a meal is taken up by muscle cells.

A Wrench in the Works

It should be obvious from this simple biology review that the regulation of insulin is a very important part of staying healthy and alive. Unfortunately, an increasing percentage of the American population cannot maintain this balance. And when their insulin and blood sugar regulation capabilities get seriously out of whack, their condition is referred to as diabetes.

There are two types of diabetes. Type I diabetes, often referred to as Juvenile Diabetes since it occurs early in life, involves the complete failure of the body to produce any insulin. Type I diabetes is also referred to as insulin-dependent diabetes because insulin injections are required to provide adequate levels of this hormone. It accounts for only about 5 percent to 10 percent of all diabetes. I suspect that the use of the term "juvenile" in reference to this disease will shortly be changed since younger and younger children are now developing type II diabetes.

Type II has historically been referred to as adult-onset diabetes or non-insulin dependent diabetes. It is the most common form of diabetes, affecting 90 percent to 95 percent of all diabetics. It develops over a longer period of time and is generally diagnosed in adulthood, hence the name.

Type II begins with the insulin resistance I described earlier, where it takes higher and higher amounts of insulin for the cells to open up and let blood sugar in. This resistance generally continues undetected for years, since the pancreas is usually able to compensate by producing ever-increasing amounts of insulin. After a time, however, the quality of the insulin lessens. Eventually, the pancreatic cells start losing their ability to produce insulin. When the insulin levels drop to the point where they can't reduce blood sugar levels to normal, the individual is diagnosed as having diabetes.

The recently published UK Prospective Diabetes Study (UKPDS) suggests that before most patients are actually diagnosed with type II diabetes, the pancreas has lost its ability to properly control post-meal blood sugar levels for over 8 years and insulin resistance has been present for up to 12 years. Until recently, the earliest Type II diabetes was seen in those in their 40s or older. That has changed, however.

In the last few years, an alarming number of children has been diagnosed with type II diabetes. Type II is appearing more frequently in pre-pubescent children, and has even been documented in children as young as four years old. (*American Diabetes Foundation*)

Getting Worse Slowly Is Not the Same Thing as Getting Better

Most doctors fail to tell their patients that, even if they use the best conventional therapies available, type II diabetes will only get progressively worse. If your doctor has led you to believe that taking your prescription medication will either fix your diabetes or keep it from getting worse, you've been terribly misinformed. When you look at the current treatment programs, this shouldn't come as any surprise.

The whole idea in treating diabetes is to bring fluctuating blood sugar levels back to normal as quickly as possible. This must be done immediately after eating and then gradually continue for several hours, as food is being digested. In non-diabetic individuals, this process occurs very smoothly because the body constantly adjusts its secretion of insulin depending on the levels of blood sugar. The body uses a feedback system to monitor and adjust insulin levels. Therein lies part of the dilemma with the use of supplemental insulin--and other hormones, for that matter. Supplemental hormones flood the body and essentially shut off the feedback system. In an effort to compensate for this problem there have been two basic forms of drugs used to treat type II diabetes.

The older class of drugs, called sulfonylureas, are longer-lasting agents (Diabenese, for example), which stimulate the production of insulin from the pancreas.

The newer drugs do several things, like 1) block the liver from producing extra glucose (or blood sugar), 2) increase insulin sensitivity, and 3) reduce the absorption of glucose in the intestinal tract.

Unfortunately, without a feedback system in place to determine the exact dosage needed for each meal, using either of these drug types is a shotgun approach at best. When too little insulin is released, blood sugar levels rise, causing the formation of triglycerides and fat storage. When there's too much insulin, blood sugar levels begin to fall (hypoglycemia), triggering a feeling of hunger and the constant need to eat, which also causes weight gain and fat storage.

Hypoglycemia is a term for low blood sugar. Diabetes is high blood sugar, or hyperglycemia. Hypoglycemia from too much insulin can be a very serious problem with diabetics. Almost 2 percent of diabetics die as a result of hypoglycemia. Thousands more (15 percent to 20 percent) experience the problem during treatment and 60 percent of those require hospitalization for 12 to 72 hours in an attempt to get the problem stabilized. Five percent of those die. Hypoglycemia is particularly a problem in diabetics who: 1) are over 60 years of age; 2) have cardiovascular or kidney problems; 3) practice inconsistent eating habits; and 4) take other medications.

These problems explain why diabetics treated with oral medications such as those I've described generally have a weight gain of anywhere from 6 to 12 pounds or

more. And, as I explained earlier, this weight gain and the extra deposits of fat become part of the vicious cycle that causes diabetes to progressively worsen.

Additionally, the roller-coaster effect from constantly fluctuating blood sugar levels contributes to increased blood fats, high blood pressure, increased stickiness of the blood and clot formation, heart failure, poly-cystic ovary disease, nerve pain and degeneration, and damage to the small blood vessels, especially those in the eyes, the kidneys, and the lower limbs.

Before you place complete trust in your medication to take care of your diabetes problem, take a look at this list of complications linked directly to progressing diabetes. It comes from the American Diabetes Foundation.

Diabetes is now:

- the leading cause of blindness in people age 20 to 74
- the leading cause of kidney failure
- the leading cause of amputation of the lower limb
- responsible for 50 percent to 60 percent of the impotence problems in males over the age of 50
- responsible for severe nerve damage in 60 percent to 70 percent of all diabetics
- the major cause of stroke in the United States
- known to increase the risk of heart disease by 2 to 4 times over normal. (In the UKPDS study I mentioned earlier, researchers found that even when intensive efforts were made to control blood sugar levels in diabetics, the risk of developing heart problems was not affected. *Diabetics without any previous history of heart attack had the same high heart-attack risk as non-diabetics with a previous heart attack*.)

Diabetes is one of those diseases that can make the treating doctor look like an absolute genius. After placing a patient on diabetic medication, the doctor can predict with uncanny accuracy the chain of health problems that will begin to develop like clockwork in the upcoming years. Keep in mind, the chain of events will happen even if you comply perfectly with the therapy. In essence, the doctors can predict the progressive decline--but do nothing to prevent it.

An Epidemic in the Making

The increasing incidence of diabetes creates a perfect marketing target for pharmaceutical companies. Just look at the facts--and the trends.

Diabetes is a growing epidemic in this country, with no end in sight. Adult-onset diabetes has increased between 600 percent and 1,000 percent in the last 60 years. It is currently increasing at a rate of 6 percent a year, and that rate is expected to accelerate.

Currently, one in every five American kids is obese. And since obesity is directly linked to diabetes, the target population for diabetic pharmaceuticals now extends clear down to four-year-olds. Yes, diabetes is a pharmaceutical company's dream come true.

As I said before, pharmaceutical companies are the best marketers in the world--but don't get caught up in believing that they have the magic bullet for diabetes. That would be a fatal mistake. Diabetes is a disease in which you have to address several underlying factors.

Muscle Up to Help Control Blood Sugar

First and foremost, the most important factor is to get your weight down. In almost every case of type II diabetes, the body can control blood sugar fluctuations naturally when the obesity problem is taken care of. Obviously, this will require both changes in the diet and at least moderate amounts of exercise.

Exercise provides you with four important benefits. It

- increases lean body tissue
- burns fat
- increases the sensitivity of insulin, enabling the pancreas to produce less, and
- raises the metabolic rate.

Whatever exercise you choose, it needs to be done for at least 30 minutes, three times weekly. Brisk walking, jogging, swimming, and bicycling are all good programs. If possible, I would also highly recommend that you add weightlifting to the exercise program. I'm not implying that you need to strive for the Arnold Schwarzenegger look. But even a very limited amount of weight training has been shown to increase muscle mass, which routinely begins to decline between the ages of 40 and 50.

An important benefit of muscle tissue is that, unlike fat tissue, it constantly uses energy. The more muscle tissue you have, the higher your metabolic rate will be. While you burn a certain amount of calories during exercise, more importantly, your muscle tissue continues to burn calories for hours after the exercise is discontinued.

When you consider that muscle tissue is responsible for 80 percent of the blood sugar uptake following a meal, every little bit of extra muscle helps. Professional body-builders are keenly aware of the muscle/blood sugar connection. They understand that to build the maximum amount of muscle tissue, insulin and blood sugar levels must be carefully regulated. They accomplish this by eating several smaller meals throughout the day and restricting or eliminating refined carbohydrates (sugar) from their diets. By eating foods higher in protein and complex carbohydrates in small amounts six or more times a day, they minimize their need for insulin. Diabetics should follow a similar routine.

The French Have Us Confused

In an effort to lose weight, people in this country have become obsessed with trying to eliminate fat from their diet. Unfortunately, that obsession is misguided. Fat elimination isn't the total solution.

There's been a lot written about what has been called the "French Paradox." Researchers have been trying for years to figure out why, despite their diet, the French have significantly less heart problems and other diseases associated with dietary excess and aging than Americans. The French are healthier and live longer, even though they smoke more, eat four times more butter, three times more cheese, and two times more animal fat than Americans. If you look at the recommended dietary guidelines suggested in this country, the French appear to be doing everything wrong.

The truth of the matter, however, is that when you follow the guidelines promoted by our American Heart Association, the American Medical Association, the food industry, and other "authorities" in this country, you're almost certain to suffer and/or die from heart disease, cancer, or diabetes.

Part of the French people's protection appears to come from their increased consumption of wine, particularly red wine. Wine, as you know, contains several potent antioxidants that have been shown to protect the heart and blood vessels. But a closer look at the French diet reveals some other very important differences.

The French eat fewer snack foods and more vegetables, whole grains, other complex carbohydrates, and fish. They consume only half as much milk as Americans do, and most of that is not pasteurized and homogenized like it is in this country.

One of the biggest differences, however, is that the French eat only one eighteenth of the amount of sugar that Americans eat.

Additionally, they eat only about half the amount of fruit that we do, which would give them a lower consumption of the fruit sugar fructose.

Based on these findings, I can't help but believe that the dramatic difference in sugar consumption is responsible for much of the so-called French Paradox.

How to Eat When Your Diet's Too Sweet

As I've said many times in the past, the best way to prevent a disease is to eat as if you have the disease. The diet for a diabetic is essentially a diet for anyone concerned about their long-term health and survival. Several points to remember include:

1. Split the food you eat into several *smaller* meals throughout the day. If you normally eat a sandwich at noon, split it and eat half at your normal lunchtime and the other half in the middle of the afternoon. You should also eat something mid-morning and mid-afternoon. Other "snacks" at these times might be a cup of vegetable soup, a handful of nuts, several spirulina tablets, half of cup of cottage cheese, raw vegetable slices, or half an avocado.
2. Don't skip meals, especially breakfast. Skipping meals signals your body that you are going into a starvation mode. Your body will automatically reduce your metabolic rate.
3. Avoid artificial sweeteners. The sweet taste in your mouth triggers the release of insulin, even though there might not be any sugar that needs to be dealt with. Candies and gum trigger the same reaction.
4. Avoid soft drinks and <u>all</u> fruit juices, regardless of whether they have been sweetened naturally or with sugar.

Supplements Provide the Edge

In addition to diet changes and exercise, certain nutritional supplements can help stabilize blood sugar levels, improve insulin sensitivity and help rebuild and/or repair the pancreas. I have yet to find a product on the market that properly addresses either diabetes or less advanced blood sugar problems, so, unfortunately, most of these supplements will have to be taken individually.

(Incidentally, because of the widespread nature of the blood sugar problems I've described, and the current lack of a product to deal with them, I'm working on a diabetes/blood sugar supplement that can be used in conjunction with Daily Advantage. Unlike anything on the market, it will contain several important nutrients (those that I'll discuss below), in addition to a supporting combination of international herbs and glandular compounds. Hopefully, this product will be available in the next few months. However, due to its uniqueness, I'm having some difficulty in sourcing large enough quantities of some of the components. That's another interesting story maybe I can share with you another time.)

In discussing the necessary herbs and nutrients for dealing with diabetes and blood sugar problems, it's difficult to recommend exact dosages. Daily dosages will vary from one individual to another, depending on the severity of the problem. If you have diabetes or blood sugar problems that have necessitated the use of medication, don't stop your medication abruptly or on your own. Also, don't make any changes to your nutritional or dietary program before discussing them with your doctor, so he or she can help monitor the situation.

The foundation for dealing with blood sugar problems is a good multivitamin/mineral. On top of that foundation, the following foods and supplements have been proven to be helpful.

- **Onions and garlic** (These should be eaten liberally, both raw and cooked.)
- **Brewer's yeast** (for minerals and B-vitamins), 1 to 3 tablespoons daily (I think the KAL brand brewer's yeast flakes are the best tasting and easiest to take.)
- **Gymnema Sylvestre** (400 milligrams daily)
- **Vanadium** (as vanadyl sulfate, 7.5 mg two to three times daily)
- **Turmeric** (1/4 teaspoon 3 or 4 times a day)
- **Blueberry leaves** (*Vaccinium myrtillus*) 1 gram per day (See the Health Hint on page 7 for a fellow subscriber's advice on this herb.)
- **Ginger root, cinnamon, fenugreek seed powder, nutmeg** and **bay leaf** have also been found to help reduce the need for insulin. (I personally add a teaspoon or so of one of these to my morning protein shakes to help stabilize blood sugar levels.)

  You'll find all of these in health food or grocery stores. The gymnema sylvestre and vanadyl sulfate are also available from Mountain Home Nutritionals at 800-888-1415, code C719E, or **Error! Hyperlink reference not valid.**.

Also, be sure to to check the activity of your thyroid gland. You can do this by taking your basal body temperature. I have give instructions for this procedure many times in the past. A good place to review them, as well as read up on the thyroid, is the November 1999 issue of *ALTERNATIVES*. The thyroid gland is often underactive in people with diabetes, and almost always so in cases of obesity. The refined nature of the American diet tends to suppress thyroid function. The Standard American Diet (SAD) is loaded with foods that combine simple carbohydrates with fats. This combination is found in most fried foods, candy, cookies, cakes, sweet rolls, etc. When simple sugars and heated fats are consumed together, not only will you experience dramatic increases in blood fats, but also fat storage, weight gain, and a decreased metabolic rate.

Drugs Won't Solve the Problem

Over the last decade or so, the public has been lured into a false sense of security when it comes to diabetes. The pharmaceutical companies and conventional medicine have promoted the idea that diabetes is a "controllable" problem. Most people now think that diabetes is something about as serious as high blood pressure. Simply by taking a few pills each day, everyone can go on their merry way without any additional consequences. Don't you believe it. Although the general public will never realize it, the pharmaceutical companies will conduct one of the biggest marketing scams of all time over the next five or ten years.

Millions of younger and younger individuals in this country will begin to develop diabetes. In fact, thanks to things like soft drinks, or "liquid candy," it's already happening. The average teenage boy now drinks 3.5 twelve-ounce sodas a day (one out of ten drinks 7 cans a day). Each of these sodas has the equivalent of 10

teaspoons of sugar. Girls in the same age group drink an average of 2.5 cans a day. Overall, each American drinks over 54 gallons of soda per year. And sodas are just one source of sugar.

Statistics show that average yearly consumption of total (not just added) sugar in this country is now over 152 pounds per person. Over 16 percent of our calories now come from refined sugar and that doesn't include the sugar which naturally occurs in things like milk, fruit juice, fruit, etc.

The handwriting is on the wall. Diabetes is going to be a huge problem in the years to come. And by downplaying its seriousness and marketing a magic pill instead of lifestyle changes, the drug companies are going to make billions. Meanwhile, the average person on the street won't have a clue that there was a connection between his morning soda and sweet roll and his heart attack until it's way too late.

The Cure for Slow Suicide Is Fast Change

Earlier in this century, most of the deaths from diabetes resulted from comas triggered by elevated blood sugar levels that couldn't be controlled. Today, due to the discovery of insulin, deaths from diabetic coma are more rare. Today death from diabetes is usually more subtle.

Uncontrolled blood sugar levels interfere with fat metabolism. As blood sugar levels rise unabated, the body converts these sugars into fatty compounds called triglycerides. Triglycerides slow the blood flow in the smaller arteries and arterioles by making the blood thicker and stickier. As the oxygen-carrying blood fails to reach various parts of the body in time, the damage begins to mount. The areas supplied by the smallest blood vessels begin to suffer first. The vision deteriorates. Strokes occur. Kidneys begin to fail. Cardiovascular disease becomes evident. Numbness, tingling and pain begins to occur in the lower extremities followed by the necessary amputation of the toes, feet or lower limbs.

Diabetes is a slow, quiet, progressive disease. It's not something that will go away on its own, and you must understand that it can't be cured using conventional medications. To prevent or treat the disease, you have to make some changes in both your diet and lifestyle. The half-dozen or so I've spelled out in this issue will do the trick--if you start them soon enough. If the nutrition "authorities" adopted these simple guidelines today, diabetes could be prevented, reversed, and/or eliminated. Best of all, it doesn't require some rare, outrageously expensive magic bullet or treatment program to stop diabetes. Lifestyle and diet changes are a cure we can all afford.