

Title: Syndrome X: The Complete Nutritional Program to Prevent  
and Reverse Insulin Resistance

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PART ONE

# Syndrome X: The Nutritional Disease



## CHAPTER 1

# The Food-Health Connection

**BY THE TIME** Janet Russell of Seattle, Washington, was in her late 30s, her weight had crept up to 245 pounds on her 5'4" frame, and her blood pressure was a dangerously high 145/95. With her total cholesterol at 240, her "good" cholesterol at a measly 20, and her triglycerides topping out at 250, she was a clear candidate for a heart attack. On top of all this, her fasting glucose (blood-sugar) level was a high 130, so she was also on her way to becoming diabetic.

Laboratory tests, of course, often sound abstract and unreal. After all, you can't *feel* your cholesterol, even if it is high, and most people have trouble relating to diabetes. Janet could feel her deteriorating health on a day-to-day basis, however. Walking up the gentle slope toward her house, she'd get completely winded. It wasn't just the weight she was lugging around; it was the hard work her heart and lungs had to do to move her. By the time she'd get to her doorway, her heart rate would be racing, and her lungs would be huffing and puffing.

The weight would also add drag in other ways. The pounds added pressure to her back, making it ache almost all of the time. As a mother who worked outside the home, Janet went through life in pain and feeling perpetually fatigued. To get the energy she needed at home and at work, she would goose herself with several cups of coffee and four 44-ounce bottles of caffeinated cola on a typical day. The rest of her diet was a mess, too. Almost everything she ate was a variation of pasta.

Janet's doctor certainly recognized that his patient was quickly heading for serious heart disease, diabetes, or both, but he saw her health problems as a disconnected group of symptoms, each to be treated separately. He prescribed a hypertensive drug for blood pressure, a stimulant to help her lose weight, and a "statin" drug to lower cholesterol. Janet never started to feel better, though, and the drugs sometimes created unpleasant side effects that left her feeling even worse. As she turned the corner into her 40s, she saw her father (a diabetic) die, her sister die of a weight-complicated disease, and her brother diagnosed as a diabetic. She figured she would soon be next.

At 47—and still no better in health—Janet happened to read a newspaper article describing a condition her doctor had never mentioned: Syndrome X. When reading the symptoms, she immediately recognized herself, but she was a little unsure of trying the diet "prescription" for this condition that was recommended in the article—a moderately high-protein, low-carbohydrate diet. This was the exact opposite of how she thought she should be eating. However, as Janet contemplated the diet and how she looked and felt, she decided to give the diet a try. Though it was difficult at first to break old habits, Janet slowly but surely phased out the pasta, potatoes, and colas she had become accustomed to consuming.

To her surprise, after just a few days, Janet felt more energetic. After a week, she had lost several pounds without much effort. Pleasantly surprised and encouraged, Janet kept with the diet. She knew she had at last found the answer to her problems.

As Janet's health improved, she began taking vitamin and mineral supplements and began to feel even better. After several months, she felt strong enough to take a beginning aerobics class.

Today, at age 52, Janet enjoys the best health of her life. Her weight is down to 145 pounds—a 100-pound difference that came slowly (a few pounds a month) but with relative ease. Her cholesterol is down to a healthy 176, her triglyceride level has dropped to 73, and her protective (HDL) cholesterol is up to 65. Janet has been off her medications for three years, and her blood pressure is a healthy 120/85. She regularly goes to aerobics classes and now can easily walk up the hill to her house. Janet is healthy, and her cardiovascular and diabetes risk profile is better than the average person's.

Janet didn't just reduce her risk of developing heart disease and diabetes. By effectively dealing with Syndrome X (which we describe in more detail in Chapters 2 and 3), she stemmed a downward spiral in her health. In midlife, Janet is feeling younger, not

older. “I feel like a totally new person,” she says. “The difference really is like night and day.”

## THE IMPORTANCE OF DIET

Janet Russell was lucky enough to discover the reason for her health problems—Syndrome X, a set of related health problems, including insulin resistance and one or more other conditions, such as obesity, high blood pressure, high cholesterol, and high triglycerides. Millions of other people, however, still go through life feeling less than their best and, year after year, develop more risk factors for serious diseases. They have no idea that Syndrome X may be the principal cause of their health problems.

What accounts for the emergence of Syndrome X? It is what we now eat. Ironically, it took most of the twentieth century for researchers and physicians to even *start* recognizing that diet is one of the most powerful—and controllable—influences on health and disease. Unbalanced diets are the most common causes of heart disease, cancer, diabetes, and other familiar afflictions. Researchers and physicians are also slowly accepting the fact that Alzheimer’s disease, rheumatoid arthritis, mood and behavioral disorders, and countless other health problems are related to the foods we do or do not eat.

To appreciate the importance of diet, you have to recognize that all of the building blocks of your body—the bricks and mortar of your biology, so to speak—come from food. If you eat high-quality foods, you create a strong foundation for health. In contrast, if you fill yourself up on quick and convenient but poor-quality foods, the foundation of your health weakens and you become more vulnerable to disease.

### ASSESSING YOUR RISK

Short of undergoing a battery of blood tests, how can you determine whether you may have insulin resistance or Syndrome X? The following two sets of questions, while not entirely scientific, can help you assess your individual risk. In the first quiz, answer all of the questions, then add up the total number of “yes” answers. In the second quiz, check “yes” or “no” to each question, then tally up the points assigned to each “yes” answer. Be honest, so that you can accurately assess your risk.

**Diet, Lifestyle, and Risk-Factor Quiz**

1. Do you eat sweets—such as candy, cookies, ice cream, pastries, and doughnuts—three or more times a week?  Yes  No
2. Do you eat fat-free foods—such as fat-free muffins, fat-free fruit yogurt, fat-free cookies, or fat-free breakfast bars—more than three times a week?  Yes  No
3. Do you eat potato chips, pretzels, breakfast bars, granola, or ready-to-eat breakfast cereals more than three times a week?  Yes  No
4. Do you eat meals that emphasize pasta, rice, corn, or potatoes more than a couple times a week?  Yes  No
5. Do you eat burgers, hot dogs, fatty luncheon meats (e.g., bologna, ham, salami, pastrami), bacon, sausage, french fries, and fried chicken more than a couple times a week?  Yes  No
6. Do you eat convenience foods (pizza, fast-food-style Mexican food, sandwiches, or snack foods) more than a couple times a week?  Yes  No
7. Do you drink any regular (nondiet) soft drinks?  Yes  No
8. Do you drink more than a small (six-ounce) glass of fruit juice per day?  Yes  No
9. Do you drink more than three beers—or more than a pint of hard liquor—per week?  Yes  No
10. Do you drink more than four glasses of wine per week?  Yes  No
11. Do you avoid regular structured exercise?  Yes  No
12. Are you physically inactive—in other words, do you avoid walking, taking stairs, doing housework, gardening, playing with your children, and so on?  Yes  No
13. Have you had bad eating habits or been a “couch potato” for many years?  Yes  No
14. Do you have a close relative who had or has heart disease, high blood pressure, adult-onset diabetes, or obesity?  Yes  No

If you answered “yes” to more than three questions, you are at risk of developing insulin resistance and Syndrome X—the more “yes”

answers, the higher your risk. If you answered “yes” to five or more questions, you need to take immediate action to reduce your risk of developing Syndrome X.

**Understanding the questions.** Your risk of developing Syndrome X is influenced primarily by what you eat. By consuming many modern foods, as well as having inadequate physical activity, you increase your risk of developing this syndrome. These foods raise the blood levels of both glucose and insulin, setting in motion changes that lead to insulin resistance and Syndrome X.

### Symptom Quiz

1. Do you often feel tired, particularly after eating lunch or dinner?  Yes (1 point)  No (0 points)
2. Do you have difficulty concentrating?  Yes (1 point)  No (0 points)
3. Would you characterize your thinking as frequently fuzzy or spacey?  Yes (1 point)  No (0 points)
4. Do you often find yourself irritable or angry?  Yes (1 point)  No (0 points)
5. Do you experience frequent cravings for sugar or other carbohydrates such as pasta, bread, and baked goods?  Yes (2 points)  No (0 points)
6. Do you have a tendency to binge on sweets and other carbohydrates?  Yes (1 point)  No (0 points)
7. Do you feel shaky if you don't eat on time or if you don't snack?  Yes (3 points)  No (0 points)
8. Do you tend to gain weight easily and have difficulty losing it?  Yes (3 points)  No (0 points)
9. Are you overweight, even just 10 pounds over your “ideal” weight?  Yes (3 points)  No (0 points)
10. a. If you're a man, do you have a “pot belly,” or a roll, paunch, or “love handles” around your waist?  Yes (5 points)  No (0 points)  
b. If you're a woman, do you carry fat more in the abdominal region or upper body instead of on the hips and thighs?  Yes (5 points)  No (0 points)

11. Do you have high cholesterol levels (above 240 mg/dl), or are you taking medication to control your cholesterol?  
 Yes (3 points)    No (0 points)
12. Do you have high triglycerides (above 160 mg/dl)?  
 Yes (4 points)    No (0 points)
13. Do you have high blood pressure (consistently above 140/90), or are you taking medication to control your blood pressure?  
 Yes (5 points)    No (0 points)
14. Do you feel a need to urinate frequently, or do you often experience unexplained thirst?    Yes (5 points)    No (0 points)
15. Have you been diagnosed with either adult-onset diabetes (also known as Type 2 or non-insulin-dependent diabetes) or coronary heart disease?    Yes (20 points)    No (0 points)

***If your points total between 0 and 3,*** congratulations—you have minimal risk for insulin resistance and Syndrome X. You're probably doing many things right in your diet and lifestyle, but use this book to learn a little more about how to keep yourself healthy. Also, take this quiz periodically to make sure your risk stays low.

***If your points total between 4 and 8,*** you probably have some degree, or at least the beginning stages, of insulin resistance and possibly Syndrome X. It's important to make the simple diet and lifestyle changes we outline in this book to reverse this trend and reduce your risk of disease.

***If your points total between 9 and 19,*** you probably have insulin resistance and very probably Syndrome X. It's time to take action to nip this process in the bud before your health gets any worse.

***If your points total 20 or more,*** you almost assuredly have Syndrome X. It is imperative that you take strong corrective action with your diet, physical activity level, and the use of supplements. Insulin resistance can be reversed, but you must not wait any longer, or you will continue to see your health deteriorate.

***Understanding the questions.*** Insulin resistance results from the body's inability to deal with large quantities of dietary carbohydrates such as sugars, breads, and pastas. Early signs can include fuzzy thinking and feeling tired after meals. Syndrome X consists of a combination of insulin resistance and one or more of the follow-

ing problems: upper-body obesity, abnormal blood fats (high cholesterol and high triglycerides), and high blood pressure. Syndrome X greatly increases the risk of heart disease and diabetes, and it also accelerates the aging process.

## THE DECLINE OF THE DIET

You may rub your full tummy and believe that you're eating reasonably well, but the odds are, you are not. Most people lack an understanding of how the human diet has changed over the past hundred years or so. During this time, with the merging of traditional agriculture and modern technology, radical changes have occurred in the ways our foods are grown, processed, manufactured, prepared, and consumed. These changes have affected the quality of our food—and our health.

Think about a few of these changes, just for a moment. Do you remember the time before fast-food restaurants, such as McDonald's and Burger King, dotted the landscape—or before microwave ovens made your kitchen the equivalent of a fast-food restaurant? Do you remember when pasta was something eaten only in Italian restaurants—and then only as a special treat?

Do you recall a time before people ate “breakfast bars,” a euphemism for sugar-laden breakfast cookies? Do you remember when teenagers drank juice or milk or water instead of cans of cola early in the morning? Can you think back to when you ate home-cooked meals with *fresh* meats and *fresh* vegetables?

It wasn't all that long ago. In the space of little more than a generation, North Americans have adopted major changes in their eating habits. Unfortunately, most of these changes have not been good ones.

Taking a longer view, over the past century, the average person's consumption of refined sugars has increased from several pounds to more than 150 pounds a year. Most of these sugars are added to your food before you buy it. Sugar, in this quantity, wreaks havoc with how your body works and sets the stage for Syndrome X.

Since the mid-1970s, the consumption of refined carbohydrates—pastas, breads, and sweets—has increased by almost 30 percent. This change is partly the result of the popularity of low-fat, high-carbohydrate diets—diets that actually make Syndrome X worse! In addition, dietary fat intake has become totally skewed

and abnormal. Indeed, common cooking oils (such as corn and safflower oil) may be the most refined foods people eat, and they often have undesirable druglike effects on health. All of these changes have negative health consequences because our bodies were not designed to handle these highly refined foods.

Unfortunately, when people hear about health problems that involve glucose and insulin, they tend to think only of diabetes, a disease that is out of mind and out of sight for most people. It turns out that nothing could be further from the truth. Excessively high levels of glucose and insulin are common without full-blown diabetes, and they are culprits in a wide variety of health problems. If we want to stay healthy, Syndrome X should *not* be out of sight, out of mind. In the next chapter, we explain what glucose and insulin do and how excessive levels of them damage our health.