More than two decades of scientific research into health and nutrition have elapsed in the interim, but Atkins’ message has remained the same. Carbohydrates are bad. Everything else is good. Eat the hamburger, hold the bun. Eat the steak, hold the French fries. Here is the list of ingredients for one of his breakfast "weight loss" recommendations: scrambled eggs for six. Keep in mind that Atkins is probably the most influential diet doctor in the world.

12 link sausages (be sure they contain no sugar)  
1 3-ounce package cream cheese  
1 tablespoon butter  
3/4 cup cream  
1/4 cup water  
1 teaspoon seasoned salt  
2 teaspoons parsley  
8 eggs, beaten  

Atkins’ Patent Claim centers on the magical weight-loss properties of something called "ketosis." When you eat carbohydrates, your body converts them into glycogen and stores them for ready use. If you are deprived of carbohydrates, however, your body has to turn to its own stores of fat and muscle for energy. Among the intermediate metabolic products of this fat breakdown are ketones, and when you produce lots of ketones, you’re in ketosis. Since an accumulation of these chemicals swiftly becomes toxic, your body works very hard to get rid of them, either through the kidneys, as urine, or through the lungs, by exhaling, so people in ketosis commonly spend a lot of time in the bathroom and have breath that smells like rotten apples. Ketosis can also raise the risk of bone fracture and cardiac arrhythmia and can result in light-headedness, nausea, and the loss of nutrients like potassium and sodium. There is no doubt that you can lose weight while you're in ketosis. Between all that protein and those trips to the bathroom, you'll quickly become dehydrated and drop several pounds just through water loss. The nausea will probably curb your appetite. And if you do what Atkins says, and suddenly cut out virtually all carbohydrates, it will take a little while for your body to compensate for all those lost calories by demanding extra protein and fat. The weight loss isn't permanent, though. After a few weeks your body adjusts, and the weight – and your appetite – comes back.

For Atkins, however, ketosis is as "delightful as sex and sunshine," which is why he wants dieters to cut out carbohydrates almost entirely. (To avoid bad breath he recommends carrying chlorophyll tablets and purse-size aerosol breath fresheners at all times; to avoid other complications, he recommends regular blood tests.) Somehow, he has convinced himself that his kind of ketosis is different from the bad kind of ketosis, and that his ketosis can actually lead to permanent weight loss.
Why he thinks this, however, is a little unclear. In "Dr. Atkins' Diet Revolution" he thought that the key was in the many trips to the bathroom: "Hundreds of calories are sneaked out of your body every day in the form of ketones and a host of other incompletely broken down molecules of fat. You are disposing of these calories not by work or violent exercise – but just by breathing and allowing your kidneys to function. All this is achieved merely by cutting out your carbohydrates." Unfortunately, the year after that original edition of Atkins' book came out, the American Medical Association published a devastating critique of this theory, pointing out, among other things, that ketone losses in the urine and the breath rarely exceed a hundred calories a day–a quantity, the A.M.A. pointed out, "that could not possibly account for the dramatic results claimed for such diets." In "Dr. Atkins' New Diet Revolution," not surprisingly, he's become rather vague on the subject, mysteriously invoking something he calls Fat Mobilizing Substance. Last year, when I interviewed him, he offered a new hypothesis: that ketosis takes more energy than conventional food metabolism does, and that it is "a much less efficient pathway to burn up your calories via stored fat than it is via glucose." But he didn't want to be pinned down. "Nobody has really been able to work out that mechanism as well as I would have liked," he conceded.