

Little Willy White Bread

Most bread starts out life as a grain of wheat, grows into a stalk of wheat, is milled, combined with other ingredients and baked into a loaf of bread. Rye, oats, barley, millet, buckwheat, rice, corn, many other grains, and even potatoes, can be ground into flour and subsequently made into bread. But the main character of this story, little Willy Whitebread, started life as a grain of wheat.

Little Willy had it rough right from the start. After about 300 years of the white man's farming, the soil in which he was planted was weak and depleted. The farmer was trying hard to build up the soil and bring it back to life with a multitude of chemical fertilizers. He also tried to protect Willy and his neighboring wheat stalks from insects and diseases by spraying them with even more synthetic chemicals. The farmer thought he was doing the right thing. You see, he had been told that these chemicals were the only way he could grow a strong and plentiful crop of wheat.

For about fifty years now his family had farmed that way. It was the way his father had done it and his grandfather before him, although it seemed that they always had to use more and more chemicals in order to keep the wheat growing year after year. Sometimes this bothered the farmer, especially when he listened to those "radicals" who were saying that our food supply is toxic and polluted. He wondered whether those chemicals (like that anhydrous ammonia with its ominous sounding warning label) could have anything to do with the nervous tick he had developed or the skin lesions on his young son or possibly even the fact that he and his wife couldn't seem to have another child. Every year, after spreading the fertilizer, he would have some difficulty breathing but that went away after a while. These things bothered the farmer but he didn't know what he could do about it. He'd heard that those organic farmers weren't making much money and he had a family to support.

At harvest time it seemed that the farmer had done the right thing. Little Willy and the other wheat stalks were tall and beautiful, swaying in the early autumn breeze. The farmer proudly gathered the wheat and sold it to the miller, vowing to ignore those crazy radicals and never again worry himself about fertilizers and pesticides.

What he couldn't see was that this wheat did not contain all the nutrients that its ancestors did many years ago. The soil just didn't have all those rich minerals anymore. Some, like selenium, were entirely gone. And no amount of artificial chemicals piled on top of it could restore it to its former condition. What he also could not see was that some of those chemicals had become a part of Willy and, even if they were only a small part, with people eating about 142 lbs. of wheat flour a year, those chemicals were also bound to become a part of the people who eat the wheat. Nor could he see all the nitrates from the fertilizer that were being washed into the local streams and ponds.

Well, never mind. Willy still contained many nutrients. He was about 70 percent carbohydrate which would give people lots of energy. He was also 12-14 percent protein for body building and repair. He had lots of good fiber in him to help people keep their digestive tracts clean and working well, not to mention the B vitamins, beta carotene and a number of minerals. And he was destined to become a loaf of bread, a

future a young stalk of wheat could be proud of. But somehow Willy did not feel as proud as he should have. He felt a kind of emptiness and a vague anxiety over things to come. He wished he could identify exactly what was bothering him but he could not, so he just looked forward to the day when he would get together with the other kernels of wheat and become a nourishing and delicious loaf of bread.

Willy didn't know about the history of bread-making. He didn't know that this tradition was actually thousands of years old, or that - even in prehistoric times before man had learned to ground wheat into flour - he had eaten un-ground and uncooked grains. He wasn't aware of the drastic changes that the domestication of grains like himself and his cousins, Barley, Rice and Corn had made on the lifestyle of man. Willy didn't know that the earliest types of bread were simply grains ground with a stone, cooked with water, and then dried by a fire or the sun, nor that his soon-to-be relatives, Flatbread, Matzo and Tortilla were still made using this technique. He was totally oblivious to the accidental addition of a fermented beverage (possibly some Egyptian baker having a beer on the job) to a batch of bread dough and the resulting lighter and tastier loaves of bread. Nor was Willy aware of the centuries of development and improvement in bread-making that had gone into the production of bread as we know it today. And Willy was blissfully unaware of the more recent developments that have produced the nutritionally empty loaf of bread that many people of the western world now eat.

Blissful was exactly how Willy felt on that day when he arrived at the mill. He was informed that first he and his fellow kernels would get a kind of bath to separate them from the straw, earth, small rocks and seeds which had made their way into the wheat. That sounded like a good idea. But what a process this turned out to be. They were passed through separators, aspirators, scourers, magnets and washer-stones. Next came a process called tempering in which they were soaked and conditioned in water. This made Willy absorb moisture and his outer layer (the husk or bran) became kind of tough.

Then the grinding started. They were put through corrugated rollers, not once or even twice, but six times. During this process Willy realized that he was losing his husk. It kind of popped off and was whisked away. 'Oh no,' thought Willy, 'there goes all my good fiber and some of my minerals, especially the iron.'

After a while Willy realized that he was losing his middle layer as well. "But, now I will lose most of my B vitamins and vitamin E, lots of high-quality protein and more minerals." By the time the grinding was done all the wheat kernels were a fine powder consisting of just their middle part, the endosperm. Willy felt naked and empty. He was ashamed of his condition and, as he looked around him, he realized that all his fellow kernels were in the same sorry state and feeling just as low.

A jolly mill worker came along and realizing their unhappy state, tried to reassure them. "Don't worry fellas," he told them, "we'll put all that good stuff back into you." But all they added were some synthetic B vitamins and iron. There were still about 20 nutrients that were, for the most part, missing in action.

Next came the bleaching. Willy had heard rumors about this process. "Oh no," he shouted, "not the bleach. This will take out my beta carotene, which could have become Vitamin A for the people who eat me. Please don't take that away from me too."

"Hey, kid, there's nothing we can do about it, " said one sympathetic mill worker. "Since Roman times people have preferred white flour and white bread. And the bakers love it. White flour is easier to work with"

"But, don't they know what's good for them?" pleaded Willy.

"Guess not," were the last words he heard before the benzoyl peroxide hit him. But the peroxide was not alone in its assault. There was potassium bromate to help the flour "mature" as well as calcium carbonate, calcium sulphate, magnesium carbonate, potassium aluminum sulphate, sodium aluminum sulphate, and tricalcium phosphate.

By the time this process was over Willy didn't even know who he was anymore. He didn't think things could get any worse but he didn't know what would ensue before he would actually be baked in the oven and made into a loaf of bread. There were emulsifiers, conditioners and preservatives; In all, about 30 different chemicals would be added to the flour and the dough.

By the time Willy made it to the grocery store shelf he had only one thing to be proud of. At least his wrapper looked good, with its bright red, yellow and blue balloons.