HIDDEN DANGERS
in
WHITE BREAD

by James Rorty

One hundred and fifty million Americans buy bleached white bread which dieticians condemn as worthless and unsafe. Yet bread made according to a scientific formula is now available.

Reprint No. 75
Price - .10¢
Here are the unrevealed facts of how the Government permits the baking industry to market nutritionally inferior white bread, containing chemicals which have not been proven safe for foods.

EVERY time you buy a loaf of ordinary white bread you are taking chances—unnecessary chances—with your health.

The chemical used for bleaching the flour that goes into most of the white bread sold by commercial bakeries throughout the U.S. is listed as "toxic" by the Federal Food and Drug Administration. That doesn't mean, necessarily, that it is harmful in the quantities used. It does mean that its harmlessness has never been proved by the long term tests that cautious scientists insist upon.

Furthermore, nutrition experts have determined that this bread is so low in food value that it is absurd to call it the "staff of life." This applies to most of the loaves that are proudly labelled "enriched."

When bleached flour was first introduced into the American staff of life early in this century, reputable millers denounced it as a fraudulent device for selling second and third grade flour as first grade. But since it made an immediate hit with the public, their outcry was silenced.

So was the outcry of Harvey W. Wiley, then chief of the Food and Drug Administration, who won a Supreme Court decision outlawing bleaches. He was forced out of the FDA and the Supreme Court order was by-passed through administrative action.

For nearly 40 years Americans ate bread bleached white with nitrogen trichloride, commonly known as agene. Then, in 1948, a British nutritionist named Lord Mellanby conducted some experiments in which dogs were fed a diet of ordinary white bread in which agene had been used as the bleaching agent.

Lord Mellanby's dogs had fits—running fits with symptoms similar to epilepsy in human beings. So did dogs fed agenized flour by American nutritionists. And so did rats, guinea pigs, rabbits and monkeys.

Although there was no proof that human beings were similarly affected, Dr. Anton J. Carlson, University of Chicago professor of physiology, saw a possible relationship between the fact that Americans had eaten agene bread for 40 years and the increase in insanity during this same period.

After agene was found to cause fits in animals, millers were barred from using it in flour by the Food and Drug Administration. But bleaching wasn't banned and the toxins of the milling and baking industry quickly came up with a new bleach, chlorine dioxide. Its use was approved over the protests of U.S. Army nutrition experts.

Although the FDA lists chlorine dioxide too as being a toxic substance, its use is permitted on the ground that it is "probably safe as normally used." Nutritionists haven't yet had time to study it thoroughly enough to find out whether its use in bread is harmful. About all they know is that it doesn't cause fits in animals.

The author bakes his own bread. It costs only six cents a loaf, is appetizing and nutritious.

Loose Laws to Blame

Lest you be inclined to condemn the Food and Drug Administration as too complacent, remember that present U.S. pure food and drug laws require the FDA to prove that a substance is harmful before it can legally bar manufacturers from using that substance in your food. As one honest but resigned FDA official expressed it to this writer, "we've practically got to produce a corpse before we can claim they're poisoning your food."

The fact that U.S. food and drug laws need overhauling is illustrated by the experience of Clive M. McCay of Cornell University and former President of the American Institute of Nutrition. Convinced that the inferior white bread sold by commercial bakeries was having an adverse effect on the health of millions of Americans, Dr. McCay created what has become known as the "Cornell formula" for a commercial bread which was a creamy white in color, yet made with unbleached flour and enriched naturally, through the addition of wheat germ, soy bean flour and dried milk. He made this formula freely available to bakers, and about one million Americans now eat it regularly. It is served to children under the school lunch program in New York City and in many other cities.

In 1952 the Food and Drug Administration ruled that bread made according to the Cornell formula was too good to come under its ceiling regulations for quality; hence it was not to be sold in interstate commerce as "white bread."

In effect, the FDA not only tolerates the sale of nutritionally inferior bread which contains possibly poisonous chemicals, it protects the bakers of such bread from competition with good bread.

Even if the bread on American tables hasn't been proven to be injurious—remember that no corpses clutching
bleached loaves have as yet been laid on the doorstep of the FDA—it is so lacking in food value that it will not sustain life.

Recently Dr. Estelle Hawley, associate professor of pediatrics and nutrition at Rochester University, carried out a series of experiments in which commercial white bread of the so-called "enriched" variety was fed to one group of rats, while another group was fed on bread made according to Dr. McCay's Cornell formula. Both groups got, in addition to the bread, an amount of margarine corresponding to 10 per cent of the weight of the bread.

The rats that ate the Cornell formula bread thrived, as did their offspring and their descendants to the fourth generation. The rats that ate the ordinary white bread became sickly and stunted, and their children were stunted. All of the rats fed on the commercial white bread died off before the fourth generation.

New Milling Process

Most of the essential minerals and vitamins of the wheat berry are removed from the refined white flour from which the standard American white bread is made. The "enrichment" formula, adopted during the war over the protests of leading American nutritionists, who condemned it as inadequate, replaces only four of these nutrients: thiamin, niacin, riboflavin and iron. At least a score of other elements necessary to health are left out, though they are present in whole wheat flour and in wheat germ.

All bleaches and conditioners impair to some degree the nutritive value of wheat flour, and they are entirely unnecessary for the production of white bread. Recent technical advances have destroyed the last excuse for bleaching. At least one milling process which produces a naturally nutritious white flour that does not turn rancid is available to the milling industry.

Why are they not used? Because they would increase production costs, of course

No other people in the world pay so much for bread and get so little for it. The price of white bread has doubled in the past decade. A report issued by the U. S. Department of Agriculture, written by N. Jasny, said:

"With wheat cheaper than in many countries and bread retailing at a relatively higher figure, little of the consumer's dollar spent for bread goes to the farmer. The lion's share, almost three-fourths, of the retail price goes to the baker. This share includes an allowance for retailing service greater than the total return to the farmer."

Jasny estimated that during the war, home-made bread could be baked for from three to four and a half cents a pound—the cost of the materials—or less if the milling of the flour is done at home. The writer can confirm those figures from personal experience, though my own bread costs slightly more now, due to increased costs since the war.

Several years ago I decided it was foolish to pay more than 20 cents a loaf in the super-market for inferior quality bread—the type that won't keep a rat alive—when I could make nourishing and tastier bread in my own kitchen for one-fourth of the price.

A friend gave me a small kitchen grist mill, and I buy cleaned wheat from a farmer for four cents a pound and mill it myself.

Baking your own bread is much less trouble than you would think. Here is my recipe:

Ingredients: 3 pounds (for 3 loaves) of freshly ground whole wheat flour. 1 package of Fleischman's yeast. 1 tablespoonful of honey. 2 tablespoonfuls of wheat germ or brewers yeast.

Mix the ingredients together in a kitchen bowl with enough water to make a medium batter and stir thoroughly, but do not knead. Put in pans, allow to rise for 30 minutes. Bake in a 350 degree oven for 35 minutes.

The result: an appetizing, nutritious loaf, made without benefit of chemicals of any kind, and costing about six cents a pound.

Even when you add the cost of labor—about half an hour three times a week—home baking is still a profitable household operation as well as one that helps to safeguard the health of the family.

While home baking is on the increase, especially in suburban and farm families, the vast majority of city dwellers will continue to depend on the baker. Must they be condemned indefinitely to eat the tasteless, puffed, chemalyzed bread, so lacking in food value, which the big commercial bakeries insist on foisting onto an unsuspecting public? Not at all. Cooperative bakeries from coast to coast are now marketing bread made according to the Cornell formula, and more than a million people are buying it, even though the Food and Drug Administration prohibits its sale in interstate commerce as "white" bread. It costs a few cents more a loaf, but it's well worth it.

—the end

Reprinted from
THE NATIONAL POLICE GAZETTE
New York, New York
(October 1954 issue)

by
LEE FOUNDATION FOR NUTRITIONAL RESEARCH
Milwaukee, Wisconsin 53201

REPRINT NO. 75

NOTE: LEE Foundation for Nutritional Research is a non-profit, public-service institution, chartered to investigate and disseminate nutritional information. The attached publication is not literature, or labeling for any product, nor shall it be employed as such by anyone. In accordance with the right of freedom of the press guaranteed to the Foundation by the First Amendment of the U.S. Constitution, the attached publication is issued and distributed for informational purposes.