Leaflet 2-5-52 Lee Foundation Milwaukee.

A Catechism on Flour.

1. Why is flour bleached?

For three important reasons.

- a. To artificially age the flour. That means to quickly destroy enzymes and vitamins that otherwise requires months of storage.
- b. To deceive the buyer of flour, the bleach makes the same snow-white flour from any kind of wheat, it may be moldy and musty, if polished before grinding, the dirty gray flour becomes indistinguishable from flour made from the finest wheat. The miller can buy any grade of wheat, sell only first quality (?) flour - as far as color will detect. (1)
- c. To kill bugs that otherwise might infest the flour. It is impossible to keep flour in most climates outside of cold storage unless it is treated with bleach poison.
- 2. Why is it desirable for the miller to age the flour?

If not aged, the variable amount of enzymes and vitamins in flour renders it very tricky to bake into bread. The baker will get a big loaf one day and a flat one the next with the same formula. He refuses to use such flour if he can get aged flour. If flour is to be uniform, it must be always fresh ground, or always old.

3. How fast are the vitamins lost in flour after grinding?

Oxidization begins at once. Bleaches are all oxidizing agents. The most easily oxidizable vitamins, like the vitamin E, are all lost within days. If wheat germ is to be used as a source of vitamin E, the oil is commonly pressed out within 24 hours, or the quality is seriously impaired. The drying (oxidization) of the oil (like linseed oil paint) is the destructive process. To prevent this, wheat germ oil is dispensed in sealed gelatin perles if used for therapeutic or nutritional purposes. Wheat germ as commercially available has little or none of this vitamin. It does, however supply a valuable quota of the B complex vitamins.

4. Is commercial whole wheat flour nutritionally superior to commercial white flour?

No. It appears to be loaded with several times as much of the bleach poison to keep out bugs, which are far more attracted otherwise to the whole wheat flour. Test animals fed such flour (or bread) die much sooner than if fed straight white flour (or bread). (2)

Does the "enrichment" of flour add to its nutritional value?

No, to judge by the only standard it is possible to use — the comparison in feeding tests on human subjects and animals. In all such tests we find on record, the result showed either no improvement, or a definite adverse effect from the synthetic "enriching" agents. (3) (4)

Why, then, is flour "enriched"?

Apparently to deceive the buyer, like the bleaching of musty, gray flour. Both seem cruel and criminal impositions on the public.

7. Why does not the Federal Food & Drug law protect us against this kind of fraud, that robs us of our health and life?

> Dr. Harvey W. Wiley has given us the answer to that question. He claims that, as the first head of enforcement of the Federal law, he was forced out of office when he tried to protect the public. He said in his book "The History of a Crime Against the Pure Food Law" (1929) that the law violators had taken possession of the Food & Drug enforcement staff, and were using their power to protect the law violators, instead of protecting the public.

What is the effect upon public health of the use of such a flour? (5)

When test animals are deprived of only one of the many vitamins lost in flour by bleach oxidation, or the natural or artificial "aging", 13 out of 28 dropped dead within 3 years, from the effect of the deficiency on their heart muscel. Since heart disease is the leading cause of death in this country, it is not unreasonable to attribute this situation to the adulteration of flour. (6)

- References: 1. Reprint #1, Lee Foundation, Milwaukee, Wis. Free on request.
 - 2. A.A.A.N.News. p. 31, Jan., Feb., Mar. 1949. Reprint on request from Lee Foundation.
 - Agnes Fay Morgan, Science Mar. 14, 1941. Reprint on request, Lee Foundation.
 - 4. British Med. Assn., Reprint on Synthetic Vs. Natural Vitamins. Free on request, Lee Foundation.
 - 5. See chapter on Vitamin E in "Vitamins in Medicine" Grune & Stratton, N.Y.
 - 6. Annals of the N.Y. Academy of Sciences v. 52, Art. 3. P.P. 256-259 (1949)