NOTES ON THE USE OF THE LEE FLOUR MILL

Stone Grinding. The LEE Household Flour Mills were designed to do just one thing—reduce an entire kernel of grain, including germ and bran, to flour. Ordinary mills have never been able to accomplish this feat.

Stone grinding has always been recognized as superior to roller mill grinding, as it insures the retention of the germ, which is eliminated as part of the bran fraction in roller-milled products. In fact, the roller mill came into use simply because it permitted the elimination of the germ, thereby improving the "keeping qualities" of the flour and facilitating a greater radius of distribution at a lower cost—at the expense of its health-building qualities.

In the LEE Household Flour Mills the stone grinding principle has been carried to its highest development and combined with the modern power of electricity making it possible to grind flour rapidly, efficiently and economically.

Electric Powered. All the LEE Household Flour Mills are electric powered since the high speed necessary to produce the extremely fine flour without overheating is available only through the use of an electric motor. The motor is an integral part of the mill itself with the grinding mechanism mounted directly on the motor shaft. These mills, therefore, cannot be adapted for use with any outside source of power.

Grains to be Ground. The LEE Household Flour Mills were intended to be used primarily as wheat grinders. They can, however, be used to grind other dry grains the approximate size of wheat kernels, such as rye and rice. In addition to wheat-sized grain, the deluxe Super Models will also grind larger grains, such as whole kernel corn. Grain smaller than wheat kernel size cannot be ground in these mills since it will feed too rapidly through the automatic feed mechanism and overload the grinding chamber.

Since the grinding element in these mills is stone, they cannot be used for grinding grains, seeds or nuts with a high oil content, such as soy beans, sunflower seeds, sesame seeds, peanuts, almonds, etc. The oil in these grains clogs the grinding stone and overloads the motor, eventually burning it out.

It is also recommended that the grain to be ground in the LEE Mill be extremely dry as high moisture will have much the same effect as oil on the grinding stone. Extra care is especially recommended with grains like rye and rice since they are more hydroscopic than wheat and contain a greater amount of moisture. If the grain seems to be high in moisture content, it may be dried by spreading it out in the sun for several days or by placing it in a very low oven for half an hour before grinding.

Value of Fresh Flour. Freshly ground wheat flour has a flavor not found in flour that has been stored for any length of time. The flavor changes almost day by day as the vitamins and fats become oxidized by contact with air. It is known that the greater part of Vitamin E, for instance, is lost within a week after grinding. The bleaching gas commonly added to both white and whole wheat flour also destroys vitamins as it catalyzes oxidation to artificially age the flour. "Aging" is just a term to denote oxidative changes. As the vitamins in the flour are probably more important nutritionally than the calories left after their destruction, it is obvious that commercial flours have little to offer us.

Much more preservative "bleach" is commonly put into whole wheat flour as we get it because the high vitamin content of whole wheat flour requires more chemical preservative than the white to repel insects.

Form No. L-100 (Over)

Using Whole Grain Flour. With a little experience whole wheat flour may be used for baking cake, pie crust or for any purpose white flour is used. Whole wheat flour requires more moisture; therefore, more water or milk should be used than in white flour recipes. The better flavor will reward you for your trouble in learning how to use it.

Whole wheat bread may be eaten hot without the possibility of colic that may follow the eating of fresh white bread. This is because it cannot form a gas-tight block in the intestinal tract and permit the development of painful gas pressures as may the white flour, since it contains the bran flour which insures its proper dispersion in the intestinal peristalsis, preventing rubbery or doughlike massing.

Rye bread, made from rye produced on good land, is superior to wheat in that it tends to build muscle instead of fat, as demonstrated in animal feeding tests. Wheat fed animals tend to become fat instead of muscular, if on this test during developing ages. Rye flour does not make good pancakes as it has a greater tendency than white flour to form gummy masses.

Baking Powder. Use only those that are free of aluminum salts, if you wish to avoid the danger of aluminum poisoning. Aluminum abstracts phosphorus from foods and creates a possible phosphorus deficiency, destroys lecithin. Dr. Prices, Royal and Rumford are types free of aluminum.

<u>Starches.</u> We might add here that the only starch that has an alkaline ash which balances the acid ash of cereals is arrowroot starch. In all recipes calling for starch, it is interchangeable for corn starch, which has an acid ash, and no calcium. Arrowroot starch also contains calcium. The most critical mineral deficiency of refined foods is calcium deficiency. Arrowroot starch is available in all large cities from bakers supply houses.

Source of Grain. Be sure to get fresh, wholesome grain. Many commercial sources are steam-treated, cyanide-gassed and kiln-dried to kill insects. A sprouting test will help to detect grains unfit for food. If it will not grow, it is not of much value as a "life-supporting" food. To find sources of whole grains suitable for your uses, look in your classified phone directory for feed stores that supply animal feeds or large seed houses.

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Printed in U.S.A.