ONE of the brightest bits of news on the home front is the fact that the American dietary is showing signs of improvement.

Among the major causes for the advance on the nutritional front has been the so-called "enrichment" program. Through this program, initiated early in 1941 by government officials with the cooperation of science and industry, important nutrients have been restored to the white breads and flours which now supply about 25 per cent of the calories in the American diet. The production and consumption of enriched bread have gradually increased, until today this new protective food is contributing to the American diet significant amounts of precious nutritive elements, which were often lacking in the past.

The Story of Enrichment

At the time of the National Nutrition Conference for Defense in May, 1941, American bakers and millers began to put into effect the government-supported plan for the enrichment of all white breads and flours with vitamins and minerals natural to whole wheat. They added to these popular foods the important vitamins of the vitamin B complex, thiamine and niacin, and the food-mineral iron, which had been reduced in the process of milling the wheat. For many years, bakers had also been adding to their breads another B vitamin, riboflavin, and the food-mineral calcium, through the use of liberal amounts of dry milk solids in the making of the average white loaf.

On August 1, 1942, it was estimated by the American Institute of Baking that more than two-thirds of all white bread and flour in this country was enriched, and that in many of the larger cities 90 per cent or more of the bread was thus "nutritionally modernized." This means that our supply of the staff of life has become stronger at the astounding rate of about seven billion loaves a year. It seems likely that in time most or all of our entire annual production of some eleven billion pounds of bread will be enriched. When that time comes, the average intake of thiamine in the American diet will have been increased by about 64 per cent.

Food Elements Added

Thiamine: Many dietary surveys have indicated that thiamine, or vitamin B₁, has been frequently deficient in the average American diet. This nutrient is essential for proper use by the body of carbohydrates. The vitamin is also necessary for the normal functions of digestion and for the normal functioning of the nervous system. For this reason, thiamine is often popularly called the "morale" vitamin. It has likewise been referred to as the "victory" vitamin and as the "sparkplug" vitamin.

In every pound of enriched white bread there must be not less than 1.0 mg. nor more than 2.0 mg. of thiamine, according to the recommended standards of the Committee on Food and Nutrition (now the Food and Nutrition Board) of the National Research Council. Although federal standards on enriched flour have been promulgated, no federal standards on enriched bread had been issued a year after hearings on this matter were held by the Federal Security Agency in the summer of 1941.

If 40 per cent of the calories in the diet were furnished by enriched white bread, as advocated by leading authorities on nutrition, this bread would supply 100 per cent of the minimum daily requirement for this important vitamin, and about two-thirds of the recommended daily allowance of 1.8 mg. of thiamine.

Niacin: Enriched white bread must contain not less than 4.0 mg. nor more than 8.0 mg. of niacin per pound of baked bread. This vitamin of the B complex prevents and controls the characteristic symptoms of pellagra, the food deficiency disease which is widely prevalent in many of our southern states. This vitamin was formerly known as "nicotinic acid," but the name was officially changed to prevent confusion between it and the nicotine of

tobacco, to which the vitamin bears no resemblance whatever.

Iron: Another valuable constituent of enriched white bread is iron, which must be present in the loaf in quantities ranging from 4.0 mg. to 16.0 mg. per pound. The role of iron in hemoglobin regeneration and the prevention of nutritional anemia is, of course, well known. This mineral is often deficient in the average American diet, which should have at least 12.0 mg. of iron a day, and sometimes more.

Riboflavin and calcium: These are optional ingredients in enriched white bread, as is also vitamin D. They may be added in pure form, but in actual practice riboflavin and calcium are incorporated in bread by the dry milk solids now customarily used by bakers in their white bread formulas. When 6 per cent milk solids, or powdered skimmed milk, are included in bread (on the basis of the flour), the resulting loaf has about 0.6 mg. of riboflavin, which is within the range of this vitamin in the average 100 per cent whole wheat bread. This 6 per cent milk bread will also have about a third of a gram of calcium per pound, or about the same proportion of this mineral as is found in cottage cheese. If vitamin D, the "sunshine" vitamin, is added, it must be present in amounts ranging from 150 to 600 International units per pound.

How Bread Is Enriched

Standard enriched white bread is now produced by several accepted methods.

* Excerpts from a reprint article published in The Trained Nurse and Hospital Review.

**ENRICHED NBC WHITE BREAD**

The foregoing article by Dr. James Tobey emphasizes the importance of enriched white bread in the diet. Now with the "Share the Meat" program and coming restrictions on other foods, enriched white bread becomes even more essential in maintaining a balance of those nutrients most neglected; the B vitamins, and the minerals, calcium and iron. One of the most successful ways to economically extend the flavor of meat is through the addition of enriched white bread. This can be used in meat loaves, pies, patties, balls, casserole and scalloped dishes. Stuffing for fowl, hearts, lamb, veal chops and flank steak commonly call for bread. The following meat extenders were developed in the NABISCO Test Kitchen.

**CREAMED PORK ON TOAST ROUNDS**

6 tablespoons butter
2 tablespoons chopped green pepper
6 tablespoons flour
3 cups milk
1 teaspoon salt
1/2 teaspoon prepared mustard
1/2 teaspoon pepper
1/2 teaspoon onion juice
Dash of paprika
2 cups diced cooked pork
3 hard-cooked eggs, sliced
1 pimento, chopped
6 slices of ENRICHED NBC WHITE BREAD

2 cups soft Enriched NBC Bread Crumbs (4 slices bread)
1 cup top milk or light cream
3 egg yolks, beaten
2 cups cooked peas
1/2 cup diced cooked carrots
left-over chicken or turkey
1 teaspoon minced onion
1/4 teaspoon sage
1/4 teaspoon salt
3 egg whites stiffly beaten

Mix ingredients and shape into round patties about two inches in diameter. Heat three cups chicken broth or meat stock to boiling. Place chicken patties gently in liquid. Simmer them 10 minutes and serve on buttered toast with a sauce made by thickening the broth. Add a few chopped, sauted mushrooms to sauce for added flavor. Serves 4.

CORN AND CHEESE CUPS

1 1/2 cups soft Enriched NBC White Bread Crumbs
1 cup milk
1 cup canned whole kernel corn
1 cup grated American cheese
1 tablespoon melted butter
1/2 teaspoon onion juice
2 teaspoons chopped parsley
1/2 teaspoon salt
1/2 teaspoon pepper
1/4 teaspoon Worcestershire Sauce
3 eggs, separated

Mix well bread crumbs, milk, corn, cheese, butter, onion juice, parsley and seasonings. Add slightly beaten egg yolks. Beat egg whites until stiff and fold into mixture. Pour into greased individual baking dishes. Bake in slow oven (325° F.) 30-40 minutes. Serves 6.

TURKEY CASSEROLE

4 tablespoons butter
2 tablespoons flour
2 cups milk
3 egg yolks, beaten
1 1/2 teaspoons salt
Dash of pepper
1/2 cup bread stuffing
1/2 cup turkey
1/2 lb. of mushrooms, chopped
1/2 cup dry Enriched NBC White Bread crumbs (2 slices)


STUFFED FLANK STEAK

1/2 pound sausage, highly seasoned
2 cups fine ENRICHED WHITE BREAD crumbs
2 tablespoons finely chopped parsley
1/2 cup finely chopped celery
1/4 cup chopped onion
2 pounds flank steak
Garlic bud, grated
2 teaspoons salt
1/4 teaspoon pepper
Flour
1/4 cup shortening

Mix sausage, bread crumbs, parsley, celery and onion. Spread on steak. Roll up as a jelly roll. Tie with string or fasten with skewers. Rub meat with garlic and sprinkle with salt and pepper. Dip in flour and brown on all sides in hot fat. Place in baking dish, cover and bake in slow oven (300° F.) 2 hours or until tender. Serve with tomato sauce. Serves 8.
This delicious Steamed Fruit Pudding is made of wholesome molasses, raisins, apples, wholewheat flour and Enriched NBC White Bread.

STEAMED FRUIT PUDDING

1 cup soft Enriched NBC Bread crumbs  
1/2 cup chopped suet  
1/2 cup seeded raisins, cut  
1/4 cup figs, coarsely cut  
1/2 cup sugar  
1 cup finely chopped apple  
1/2 cup molasses

Mix all ingredients thoroughly. Pour into greased individual baking dishes. Set in pan of hot water and bake in moderate oven (350° F.) for 30 minutes. Serves 4.

BREAD PUDDING

2 cups soft ENRICHED NBC WHITE BREAD cubes  
(4 slices)  
2 cups milk  
2 eggs, separated  
1/2 cup sugar  
1/2 teaspoon salt  
1 teaspoon grated lemon rind  
1/4 cup chopped almonds  
2 tablespoons brown sugar

Soak bread cubes in milk 20 minutes. Then add slightly beaten egg yolks, sugar, salt, lemon rind and almonds. Beat egg whites until stiff and fold into bread mixture. Pour into 6 buttered individual baking dishes. Set them in pan of hot water and bake in slow oven (325° F.) about 1 hour or until knife-blade inserted will come out clean. Serve slightly warm with Jelly Sauce. Serves 6.