

USE OF CORN, KAFIR AND COW-
PEAS IN THE HOME.

Rank High in Nutritive Value.—Their Use Means Economy for the Housewife.—How to Cook Them.

THE use of Kafir corn and of cowpeas as food for man might well become more general, according to experts in nutrition of the United States department of agriculture, who have just issued a new bulletin (Farmers' Bulletin No. 559), entitled "Use of Corn, Kafir and Cowpeas in the Home." Ways of preparing these crops and Indian corn for the table, as well as summaries of tests of their nutritive value are given in this pamphlet.

The popular belief that the food value of the different sorts of Indian corn, such as white, yellow, red, blue and black, varies as greatly as their color has not proven to be the case, although they vary somewhat in flavor. The average percentage composition of these various kinds of corn is as follows:

Water, 10.8; fat, 4.3; crude fiber, 1.7; protein (muscle-building elements), 10.0; starch, sugar, etc., 71.5; mineral matter, 1.5. The fuel value per pound is 1795 calories (heat units).

In considering one food with others it is sometimes convenient to know how nearly it comes to being in itself a balanced ration. In the rational diet, it is estimated, corn meal should be combined with foods which have more protein (muscle-building elements) or less fat and carbohydrates (energy-producing elements) than it has itself. Among such foods are milk, most kinds of meat and fish, eggs and cheese. It is the common practice to eat corn-meal mush with milk, to add cheese to corn-meal mush which is to be fried, or to serve corn-meal preparations with meat. Fish balls with corn meal is a dish which approximates the balanced ration. Here is the recipe:

Corn Meal Fish Balls.

2 cupfuls cold white corn-meal mush; 1 cupful shredded codfish; 1 egg; 1 tablespoonful butter.

Pick over the codfish and soak it to remove salt, if necessary. Combine the ingredients and drop by spoonfuls into hot fat. Drain on porous paper. These codfish balls compare very favorably in taste with those

made with potato and are more easily and quickly prepared.

Other recipes for cooking corn meal are given in the Bulletin and it is recommended that as dishes made with corn meal are likely to be more tender than those made with wheat, the use of small amounts of corn meal in the making of such foods as waffles and doughnuts is desirable.

So closely does the composition of corn meal resemble that of other prepared cereals that, pound for pound, they may all be considered to have the same food value. When corn meal or Kafir meal sells for 3 cents a pound, therefore, and some other cereal for 8 cents, the housekeeper may consider that she secures more than twice as much food for her family for a given sum when she selects corn or Kafir meal.

Cowpeas as Food for Man.

Kafir corn and cowpeas are particularly well-suited for use in localities where they will mature crops and both their nutritive value and cheapness, as well as their good flavor and the numerous ways in which they can be used should recommend them to the housewife. Though favorably known as a staple food in the southern states, the cowpea has not come into general use throughout the United States. It is well worth greatly extended use as it is wholesome, nutritious and possesses a peculiar delicate and pleasing flavor. Cowpeas are used on the table in three forms: In the pod, shelled green, and shelled dried. In these three forms they correspond respectively, to string beans, shelled green peas, and dried navy beans, and call for much the same methods of preparation for the table. Among the recipes given for cooking cowpeas are the following:

Sandwich Filling.

The mixture of cooked peas and cheese may be used for a sandwich filling. In fact, cooked cowpeas mashed and freed from the skins by being put through a sieve may form the basis of a large variety of sandwich fillings. The cheese may be omitted and chopped celery or nuts added, or the peas may be mixed with a little butter and a few drops of vinegar or lemon juice. Leaves of lettuce dipped in salad dressing add

to the attractiveness of the sandwiches.

Cowpea Salad.

Mix cold cooked cowpeas with French dressing and serve on lettuce, endive, or water cress. The proportions for the French dressing are: Three tablespoonfuls of salad oil, 1 tablespoonful of vinegar, and one-half teaspoonful of salt. Add a few grains of cayenne pepper.

Baked Cowpeas.

Cook one quart of large white cowpeas slowly in water until they begin to soften. This will require five or six hours. Put them into a bean pot, add one-half pound of salt pork, and one tablespoonful of molasses. Cover with water and bake slowly six or seven hours. It is well to have the pot covered except during the last hour.

Hepping John.

Soak one quart of dried cowpeas over night in water enough to cover. Cook until they are tender, adding more water if necessary. Cook a pint of rice in three pints of water, mix the two, season with two tablespoonfuls of butter and two teaspoons of salt. A little beef or pork may be added to the water in which the peas are cooked.

The bulletin, which is a contribution from the office of experiment stations, may be had on application from the Division of Publications, U. S. Department of Agriculture.

FOUR GOOD RECIPES.

By Mrs. Benign G. Kaib in Farm and Fireside.

Peanut Soup.

Put roasted peanut meats through a meat or nut grinder twice, using the finest cutter. Add half a pint of ground peanuts to a quart of hot milk (peanut butter may be used); add a half teaspoonful of salt, saltspoon of pepper, a small onion grated, a bay leaf and chopped celery tops or a saltspoon of celery seed. Cook this over hot water for 10 minutes, or heat and set in the fireless cooker for half an hour. Moisten one tablespoonful of cornstarch in a quarter cup of cold milk, add to the hot milk and stir until thick and smooth. Strain through a fine sieve and serve with croutons of whole wheat bread.

Nut Croquettes.

Blanch 24 almonds, add one-half pint of pecans or pine nuts, chopped or ground fine; mix with equal quantity of cold cooked hominy or rice; add one-half teaspoonful of salt, a few drops of onion juice, a tablespoonful of chopped parsley and dash of pepper. Mix thoroughly, form into small cones or cylinders, dip in white of egg and bread crumbs, and fry in deep fat or place on buttered pan and run into a hot oven for 10 or 15 minutes. We use the latter method for all croquettes.

Any desired combination of nuts may be used for the croquettes, and mashed potatoes or bread crumbs may be used in place of the rice. With the bread crumbs (for half a pound of nuts) one beaten egg should be mixed.

Stuffed Beets.

To a half cupful of rice thrown into boiling water boiled rapidly and drained add a cupful of chopped pecan meats; season with a teaspoonful of salt and a little pepper; scoop the centers from cooked beets, fill with the rice and nut mixture, stand in baking pan with some water in the bottom and bake for 20 minutes. Chop the beet which has been removed very fine, add it to some cream sauce (made from a tablespoonful of butter, two of flour and cup of milk) and pour around the beets in the dish on which they are to be served.

Peppers (sweet) may also be stuffed with the rice and nut mixture or with nuts and potatoes or bread crumbs prepared in the same way as with forced meat stuffing.

Stuffed Tomatoes.

Mix half a pint of stale bread crumbs, half a cup of chopped nuts, a tablespoonful of grated onion, a level teaspoon of salt, saltspoon of pepper, a tablespoonful of melted butter. Cut the stem ends from six large tomatoes, and remove seeds and centers. Fill the centers with mixture and stand in baking pan. Add a half cupful of water and bake in the oven for about 30 minutes, basting two or three times. Serve with or without a white sauce.

Cold cooked macaroni mixed with white sauce and chopped nuts, with onion juice or other desired seasoning, and baked, makes a delicious dinner or luncheon dish.

White or whole wheat bread or muf-

A FRUIT AND NUT DIET.

IN a recent investigation carried on at Harvard it was found that the diet of nine students who lived at the college commons and, from necessity or choice, endeavored to live cheaply supplied, on an average, 89 grains protein and 3968 calories. In this case the average cost was 39.9 cents per day and at the North Dakota and the Lake Erie colleges 13 and 18 cents, respectively. It will thus be seen that in the California investigations the fruit and nut diet supplied the subjects with amounts of protein and energy which are directly comparable with those obtained by many other persons from a mixed diet, though in general the quantities were smaller than are supplied by the diet of the average family. It should be said that the persons living on a fruit and nut diet apparently maintained their normal health and strength, and it is only fair to conclude that if, for any reason such a course seems desirable it is perfectly possible to select a diet made up of fruits and nuts which, for long periods at any rate, will supply the body with the requisite protein and energy, as was shown by a detailed study of the results of the California experiments. In such a diet nuts were the principal sources of protein and nuts, olives, or the expressed olive oil the chief source of fat, while fruits, fresh and dried, supplied the bulk of the carbohydrates.

As regards cost, it will be seen that there was a considerable range with the fruitarian diet, the amount expended per person per day being in some cases quite low and in others quite high. On the whole, the range did not differ greatly from that observed in many instances on an ordinary mixed diet.

Subjects Crave Vegetables and Cereals.

It would seem from the recorded data that it is more difficult for the subjects to obtain the requisite amount of protein when on a limited diet of one kind of nut combined with fruits than it is when they are unrestricted and eat a variety of both fruits and nuts. In nearly all cases where the diet was limited to combinations of one or two fruits with one kind of nuts the subjects complained of a constant craving for some other food, such as green vegetables or cereals, and in these cases it was found that the coefficients of digestibility were lower than in those tests in which some vegetable or cereal was eaten, which made the diet more appetizing. The addition of a small amount of some cereal food to the diet markedly increased its protein and energy value.

It would be going too far to conclude on the basis of the California investigations that a fruitarian diet in general is equal or superior to the ordinary diet, and indeed the study of this question was not a part of the investigation. Before such a conclusion could be drawn it would be necessary to make investigations extending over a long period of years and with a variety of subjects, and which would take into account resistance to disease and other unfavorable conditions, body development of the health and condition of the offspring of persons living for years on such a diet, and other similar questions. It seems fair to say, however, that at the present time the consensus of opinion of well-informed physiologists is that the ordinary mixed diet is most convenient and satisfactory for the average individual. It is equally clear from the investigations reported that fruits and nuts should not be looked upon simply as food accessories, but should be considered a fairly economical source of nutritive material. It must be remembered, too, that the use of fruits, fresh and preserved, often makes palatable an otherwise rather tasteless meal. Jam with our bread is a reasonable combination, the highly flavored fruit product whetting the appetite for the needed quantity of rather flavorless bread.

USING ALUMINUM COOKING
UTENSILS.

Mrs. John Y. Beatty.

Through some misinformation a few have come to the conclusion that there is danger in using aluminum cooking utensils. Complete and careful tests have been made with pure aluminum utensils, cooking in them foods of all kinds. After the foods were cooked the vessels have been examined carefully and chemical analysis made of the foods. It has been found that there is absolutely no danger except in one case. Cooking soda will take up some of the aluminum and this is injurious somewhat to the health. If you have aluminum utensils, use them, but when you wish to use soda, take one of your granite dishes.

Fins with nuts added is especially appetizing and wholesome.

These are some of the simpler foods which will be found wholesome and palatable and nourishing as well.



Madam—

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