Tested Tools

The Tribune Institute
Housekeeping as a Profession

Tested Foods

When the Cook and the Chemist Get Together on Oatmeal

By ANNA STANLEY, *Domestic Scientist, Tribune Institute*

GREAT stress should be put on the fact that all cereals should be thoroughly cooked. In other words, literally "turned inside out," so that the starch cells are properly attacked by the heat. All undercooked starchy food is apt to irritate the alimentary tract and cause indigestion. Most of the rolled oatmeals are pre-steamed, so that they do not require the long cooking that steel cut oatmeal does in order to make it digestible.

However, some epicures insist that long cooking improves the flavor. The highly dextrinized oatmeals (i. e., starch changed to dextrin by heat and so the first step in digestion made) have a more distinctive flavor, a toasted, nutty taste. Salt should always be added to the water before the cereal is cooked, and it is a good plan to use about one level teaspoonful to a cup of oatmeal. There is a noticeable lack of salt in most cooked cereals, so do not be afraid of the salt box. Dress up the oatmeal so that the children will not have to be coaxed to finish it. To say that it will make them big and strong means something, but it doesn't flavor the dish. Burbank has said that if palatability be eliminated from food it is no more than medicine, to be taken because it produces necessary results. So, lest half the joy of living be lost, it is up to the cook when she displays her most wholesome wares to make them palatable. Put a few big, fat, juicy raisins, some luscious dates, or apricots or prunes in the oatmeal when it is almost cooked. Such a dish is rich in iron as well as phosphorus and other minerals, and especially good for pale-faced children. Best of all, it may be eaten without any urging.

But don't think that oatmeal is only for the first meal of the day, because many a luncheon, dinner or afternoon tea would be improved by "oatmeal in combination." If there should be a little leftover cereal from the morning meal hoard it carefully and transfigure it in one of the following ways. Rolled oats are best for these recipes.

Oatmeal Pancakes

Combine two cupsful each of mashed potatoes and milk, one tablespoonful of melted fat, two beaten eggs, three-quarters of a cupful of sifted flour and one-half cupful of cooked oatmeal. One teaspoonful of baking powder and one-half teaspoonful of salt should be sifted with the flour. Beat well and bake on a greased griddle. These are delicious for lunch when sprinkled with grated cheese.

Oatmeal Betty

Mix two cupsful of cooked oatmeal, four apples, cut fine, one-half cupful of raisins, one-half cupful of sugar and one teaspoonful of cinnamon. Bake in a glass dish (preferably) for about thirty minutes. Serve hot or cold with cream.

Baked Apples With Cereal

Pare or not, as preferred, but core the apples. Fill the centers with cooked oatmeal and bake slowly until apples are done. Just before taking out of the oven pour a few teaspoonsful of maple syrup over each apple and the resulting dish will be most delightful. If the oatmeal has any fruit in it, so much the better.

Oatmeal Cheese Croquettes

Mix one cupful of cooked oatmeal with one cupful of boiled rice and two egg yolks, well beaten, two tablespoonsful of grated cheese, one tablespoonful of onion juice and one teaspoonful each of salt and paprika. Shape like cutlets. Roll in crumbs, then egg and crumb again. Corn meal may be used instead of crumbs. Fry in deep fat or toast. Serve with cream or cheese sauce.

Apricot Oatmeal Muffins

Mix and sift one and a half cupsful of white flour with two tablespoonsful of sugar, one-half teaspoonful of salt and four teaspoonsful of baking powder. Add one-quarter cupful of milk, one well beaten egg, one-quarter cupful more of milk, one cupful of cooked oatmeal and, lastly, two tablespoonsful of melted butter and one-half cupful of chopped-up cooked apricots. The canned or cooked dried ones may be used, but be sure that all the liquid is drained off.

Stuffed Green Peppers

Clean four green peppers; parboil. Make a stuffing of the following: Two cupsful of cooked oatmeal, one-half cupful of chopped celery, one cupful of chopped pecans, one-half cupful of cooked tomato, one-half pimento, cut fine, and salt and pepper to taste. Fill shells with mixture and place small piece of butter on top of each. Bake until brown and serve with white sauce.

Fish Flake Pie

Line a baking dish with moist cooked oatmeal. Fill center with fish flakes, seasoned with lemon juice, onion and chopped parsley. Bake in a slow oven until brown. Serve with tomato sauce.

Sausage Oatmeal Sandwiches

Place the cooked cereal in a bread pan to cool and harden. Cut in slices, spread with chopped sausage meat and put another slice on sandwich fashion. Place in oven for about thirty minutes, basting occasionally with the grease that comes from the sausage. This, with apple sauce, makes a splendid cold weather breakfast.

The following are to be made from the raw oatmeal, ground or left whole, as stated in the recipe:

Oatmeal Cinnamon Baking Powder Biscuit

Sift one and one-quarter cupsful of white flour, one and one-half teaspoonsful of baking powder, one-half teaspoonful of salt and two tablespoonsful of sugar together. Add one and one-third cupsful of raw oatmeal, six tablespoonsful of melted shortening and enough water to make a soft dough. Roll out thin on floured board, sprinkle with mixed sugar and cinnamon and roll up, then cut in slices as for pinwheel biscuits. Bake in a greased pan in a moderate oven about twenty minutes.

Oatmeal Bread

Pour two cupsful of boiling water over two cupsful of oatmeal, add three-quarters cupful of molasses, one teaspoonful of salt and one tablespoonful of shortening. Dissolve half a yeast cake in half a cupful of water (lukewarm) and when the first mixture has cooled add the yeast and five cupsful of wheat flour. Let rise over night, put in pans and bake one hour in a slow oven. This makes two medium sized loaves.

Sour Milk Gems

Pour one and one-half cupsful of sour milk over two cupsful of raw oatmeal. Allow to stand over night and in the morning add one tablespoonful of melted butter, one-third cupful of sugar, one beaten egg, one teaspoonful of soda, one teaspoonful of salt and one cupful of wheat flour. Beat well and pour into gem pans and bake in a hot oven about twenty minutes.

Drop Cookies

Mix one and one-half cupsful of mashed potatoes, one-half cupful of shortening, one and one-quarter cupsful of sugar, one and one-quarter cupsful of flour (sifted with two teaspoonsful of baking powder), one-half cupful of milk, one-half cupful of rolled oats, one-half cupful each of chopped nuts, raisins and dates, one teaspoonful each of cinnamon, cloves and nutmeg and one teaspoonful of salt. Drop the mixture by spoonsful on a slightly greased pan. Bake in a moderate oven.

Oatmeal Crackers

Grind two cupsful of uncooked oatmeal in a food chopper. Add to one-quarter cupful of milk one-quarter cupful of molasses, one and one-half tablespoonful of fat, one-quarter teaspoonful of soda and one teaspoonful of salt. Roll out in a thin sheet and cut in squares. Bake for twenty minutes in a moderate oven.

Oatmeal Custard

Heat one pink of milk in a double boiler. Beat the yolks of two eggs and add one-third cupful of sugar. Stir into milk and then add three tablespoonsful of oatmeal and cook until thick like custard. Remove from the fire and fold in the stiffly beaten whites of the eggs. Add vanilla and serve cool. This is especially good for invalids who are just beginning to eat desserts.

Oatmeal Macaroons

Mix two and one-half cupsful of raw oatmeal with two and one-half teaspoonsful of baking powder and three tablespoonsful of butter and one cupful of brown sugar. Beat the yolks and whites separately and add to the batter with one teaspoonful of vanilla, one-half teaspoonful of salt and one cupful of cocoanut. Drop in small bits in a shallow pan, about three inches apart, and bake in a very hot oven until brown. Take from the pan while hot. This makes thirty-six cookies.

Oatmeals—Tried and True—"Tested and Endorsed"

H-O Hornby's Oatmeal, The H-O Company, Buffalo
Crushed Oats, Mother's Oats, Quaker Oats Company, Chicago
Rolled White Oats, Quaker Oats Company, Chicago
Granulated Scotch Oatmeal, Keen, Robinson & Co., London

The Food Testing Laboratory of the Tribune Institute has both a chemical laboratory and an experimental kitchen working to give you the facts reported here. We shall try to give you the important facts about these foods—their nutritive value, their special uses; their prices in relation to their food values; what you get for your money when you buy bulk goods and package goods, and why.

If there are any special foods or classes of foods that you would like to have us study and report on, let us know.

Plainly, some of the points involved are matters of taste, adaptation to individual needs, special preparation, time and trouble in cooking, etc.

Don't stay in your own little food rut. Keep an open mind and don't dismiss a nutritious, economical food from your market list until you have tried to make it popular. The other day we fed a cosmopolitan but conservative woman her first taste of cauliflower with a Hollandaise sauce. She had never tasted it because she thought it would taste as it smelled while cooking! She found she had been missing one of the most delicately flavored combinations known to the menu maker.

It is well not to "crystallize" or be prejudiced even in one's ideas about foods. Let the Tribune Institute tell you the "true inwardness" about any food that you are interested in, its special virtues and purposes and its relative value.

Our chemical laboratory, our kitchen and our staff are at your service. ANNE LEWIS PIERCE, Director.

"YE CANNA beat it"—oatmeal, we mean—if you are considering how much nourishment you can get for your money. Nothing but beans can beat oatmeal as a cheap source of "vegetable meat" (protein) and the oatmeal has, in addition, valuable minerals, including iron, and a larger amount of fat than any other grain (four times as much as wheat and corn, its nearest competitors), more protein than wheat and as much mineral matter. Altogether oatmeal is a "heavy food" and its high fuel value is matched by its chemical composition—which is not always the case. An oil may rank high as fuel (body heat and e[illegible]), but low as a balanced food.

The four oat products analyzed were remarkably uniform in composition and compared favorably with the bulk rolled oats purchased and with the steel cut oats, though the bulk product had an unusual amount of fat, 10 per cent. All had from 7 to 8 per cent of fat, however, and for a grain this is a fine record.

What You Get For Your Money

Bulk oats cost 9 cents for a pound and four ounces, and you may pay from 14 to 18 cents for a package of rolled oats containing the same amount. On the other hand, the package goods have a special flavor, due to the browning and toasting of the grain, and without exception the H-O, the Quakers Oats and the Mothers Oats were preferred by the Tribune Institute staff to the bulk rolled oats on this account, the latter being deemed lacking in flavor and color.

Apart from the question of actual digestion, therefore, the point of edibility is worth considering. A food that is not relished causes no saliva to flow and is not so well digested. Especially is this true of a starch food, whose digestion begins in the mouth and which does not call for mastication.

All of these points must be considered in noting the difference in price between the bulk and the package goods. Every good buyer should know what she is getting for her money. Price must always be compared with quality as well as actual nutrition. In this case, while the bulk oats contain as much nutrition as the package goods, other points must be considered: (1) The sanitary package protects the goods from contamination and decreases the likelihood of worminess, (2) special edibility and digestibility, (3) cost of carton and marketing.

Oatmeal Leads at Breakfast

If you want to see just how the price of your dish of oatmeal at package prices compares with a serving of other breakfast dishes look at this table:

Cost and Calorie Comparisons of Breakfast Dishes

Food	One serving (ounces)	No. calories	Cost (cents)
Package oatmeal cooked (av) ..	4	70	0.6*
Egg (one)	1½	60	6.0
Banana	8½	64	5.0
Milk (one cup).	8	169	5.0
Cream	2	110	5¾

*The bulk oatmeal costs only three-tenths of a cent a service.

Oatmeal costs one-tenth as much as a service of egg, banana, milk or cream and at the same time equals the egg and banana and is half as high as the milk and cream in fuel value. This is a record that is hard to beat—as we said before.

Cooking Oatmeals

The questions of digestion, and time of cooking, and how far the package foods are ready for service, open up a rather controversial field. In the cooking experiments made to prepare the oatmeals for tasting tests we followed directions on the package and cooked the bulk oats according to a standard recipe. Two cupsful of salted boiling water were added to one cupful of the oats; it was boiled vigorously over the flame for one minute and in the double boiler for thirty minutes, with the exception of H-O, which was cooked for twenty minutes. All samples gave one pound of cooked cereal, except H-O, which gave three ounces more and was "nuttier" than the others, owing to the more complete dextrinization of the starch (the first step in digestion of starch, effected in this case by heat).

While the starch is not actually digested or changed, it is affected so that it is ready to be cooked thoroughly in a shorter time. The thirty-minute period gave a perfectly edible product, though longer cooking, even for four hours, is desirable for children and for invalids whose starch digestion is impaired.

Steel Cut and Scotch Kinds

To compare the bulk steel-cut oatmeal, so called (coarser, pinhead oatmeal), with the imported Scotch product, six ounces, or one cupful, of each were cooked for thirty minutes over the direct flame, four cupsful of water (two pounds) being added to the former and four pounds four ounces (4.5 pints) to the latter, according to directions on the can. Both were good, but the Scotch product was pale and more watery, like a porridge, while the bulk meal was brown and distinctive in flavor. The bulk pinhead oatmeal gave two pounds in weight after cooking and the Scotch imported product only one pound seven ounces. In other words, the bulk meal furnished eight portions at a cost of 0.43 cent a serving, and the latter six portions at a cost of 2 cents a portion. Furthermore, the Scotch meal was not so high in protein as the other American oat products examined. The "ease of digestion" claims are based largely on fine grinding. A good product, finely ground and well protected by a tin package, but highly priced, as would be expected in a tinned, imported cereal.

What New York Does Not Know About Oatmeal

One Woman's Point of View

THE following letter is of special interest as representing a view often held by women and the public as to the nutritive and healthful properties of grains. In our opinion, "a fine white oat flour" is a pasty, unattractive affair when made into a porridge, and the idea that coarse, whole grains or rolled grains are "as indigestible as the cartons they come in" is positively wrong. One reason for the prevalence of constipation is the eating of fine foods that lack sufficient roughage.

Some of these points are matters of taste, but our correspondent is confusing her issues, and the rolled oats that she deplored were upheld by the chemist, the cook and the consumers as appetizing, nutritious and wholesome food. The real Scotch oatmeal, it will be noted, the "Keen Robinson," gave a truly white porridge and is finely ground, but highly priced, and any difference in assimilability may well be offset by its lower content of protein. Women have too long demanded "pure white flours." Much bleaching and expense with no gain in wholesomeness have resulted from this cry for over-refined foods. Here is the letter:

In the Institute of to-day's Tribune I see you give a recipe for the making of bannocks, in which you say to use "very fine oatmeal."

Would you kindly tell me where very fine oatmeal can be obtained in New York, or where I can obtain a pure white oat flour. I have hunted all New York for these for years and cannot find them. What is called oatmeal here is really rolled oats, and that is not fit for human consumption, as you can soak them all night and boil them all day and then they are not cooked, and cannot be digested by the human stomach, as any examination of the waste matter of digestion will readily show.

Then you can get Irish oatmeal, which is not oatmeal at all, but only cracked oats, and have all the objectionable features of rolled oats.

Then there are all those prepared oatmeals, so called (really rolled oats), which are supposed to be half cooked when you get them and are about as digestible as the cartons they come in.

But where can you buy a really fine oatmeal, such as the people of Scotland and England use to make porridge, ground so fine that it can be thoroughly cooked, from the raw state, without any soaking, in twenty minutes, and is then easily digested?

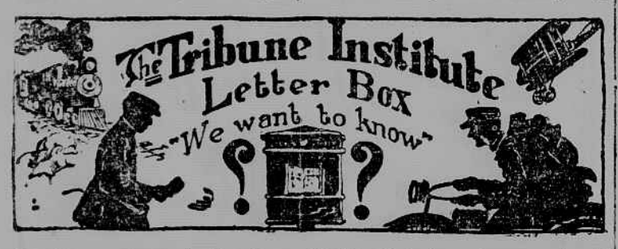
Or where can an oat flour be bought so white that it cannot be told from the best white wheat flour without tasting it?

New York has a lot to learn yet about oatmeal, and while the people are content to use the cattle foods that are sold to them instead they are not likely to get anything better. I hope you will be able to tell me where fine ground oatmeal of the best quality can be obtained, and also where I can buy more white oat flour.

F. F. C.

A food is not wholesome because 100 per cent digested, but is valuable both for the effect on the intestines and for its content of mineral matter. Many dietitians think we would be much better off as to bowel conditions and as to digestion if we did not refine our grains and grind them so finely.

The fine products mentioned above are made more especially for invalids and infants, but the rolled oats and oatmeal of commerce hold their own very well as to wholesomeness and general nutritive qualities. Dr. Wiley, for instance, who is an admitted authority on food, feeds his children entirely on whole wheat ground on his own place, and starch is always made more digestible by longer cooking. Personally we think that the cattle get the best of it when they get all of the bran of the grain, and we pay for a more demineralized and denatured food when we eat the fine white flours exclusively.



(Questions about food values, food preparation, diets, household administration and household equipment will be answered through this column or by mail, if not of general interest or not susceptible of brief treatment.)

Wanted: A Dark, Delicate Gingerbread

I have a great many recipes for gingerbread, but not one that equals a gingerbread which I have eaten in a restaurant. First, it is black; second, rich, and last, it is moist. Will you kindly give me one through The Tribune, or ask some of your numerous housekeepers for one. Thanking you I am, yours truly, Mrs. G. M. T., Way Street, Binghamton, N. Y.

First, you can't make dark gingerbread out of light, thin, characterless molasses, whatever the recipe. Second, the tenderness of texture and moisture depend on the baking and on having a "light hand" with the flour, which should be sifted lightly into the measuring cup leveled off, but not packed down. The batter should be no thicker than for a rich cake—it should only "ribbon" off of the spoon, not "drop." The oven should be medium to slow (300 to 250 degrees).

With these precautions in mind the following recipes for gingerbread are submitted, which we think will meet the specifications:

Gingerbread No. 1

Place in a mixing bowl half a cupful of dark molasses and add two tablespoonsful of liquid shortening, half a cupful of dark brown sugar, two tablespoonsful of cocoa mixed to a paste with warm water, half a teaspoonful of ground cinnamon and a quarter of a teaspoonful each of ground allspice, grated nutmeg and ground ginger. Blend the ingredients thoroughly and then stir in one teaspoonful of baking soda stirred into three-quarters of a cupful of thick sour milk and sufficient sifted flour to form a batter that will "ribbon" from the spoon (about one and two-third cups).

Pour into a shallow greased pan and bake about thirty minutes in a moderate oven. Do not cook in a deep pan or the bottom will scorch before it is cooked through.

Gingerbread No. 2

Melt one-quarter of a cupful of shortening in half a cupful of hot coffee and stir in one level cupful of dark molasses, one-quarter of a teaspoonful of salt, one heaping teaspoonful of ground ginger, one teaspoonful of cinnamon, one-quarter of a teaspoonful of cloves, two tablespoonsful of brown sugar and one-quarter of a teaspoonful of allspice. Dissolve one teaspoonful of baking soda in two tablespoonsful of hot water, stir thoroughly into the mixture and beat in about one and three-quarter cupsful of sifted flour. Bake in a greased pan in a moderate oven.

Heard in Food Circles

Dodging the Bacillus Botulinus

THE ripe olive scare, based on three cases of poisoning of a number of people in Detroit, Mich.; Canton, Ohio, and in New York City, due to the presence of the *Bacillus botulinus*, has abated and the embargo placed by the health commissioner of Pennsylvania on the sale of these goods has been lifted. This for several reasons. An examination of 71 different brands, covering 254 samples, failed to disclose a single case of adulteration. Thirty-nine samples of the brand suspected proved to be harmless. The chemists ate freely of these samples besides analyzing them, thus backing up their opinion in a positive, human way.

A Cosmopolitan Germ

This infection is not confined to ripe olives; it occurs only at rare intervals, but has been found in sausage, string beans and asparagus and in cheese. The sure way to avoid it is to "taste not, handle not, serve not" any food that shows any indication of spoilage.

The Department of Agriculture knows of no case in which unspoiled canned goods contained this botulinus poison. So, since there is no way to detect the occasional can in millions that may contain it, one should discard any canned food that has any unnatural odor, discoloration, swelling of can or other sign of decomposition. Had the victims reported refused the food that had a "queer" odor or taste they would have escaped.

Don't Salvage Spoiled Foods

Both home and commercial products have contained it—no one process or procedure can be blamed. The simple plan of not trying to "salvage" food that is "off color" or strange in odor and appearance spells safety, and it is poor economy even to taste it. The four negroes who died after eating asparagus which the hostess said couldn't be bad since she "put it up herself" didn't know that a germ is no respecter of persons. Its spores may survive boiling for an hour's time, no matter who does the canning. Furthermore, this asparagus "stood around" before canning and was not tightly sealed! This is no test of home canning!

The chemist's opinion is that ripe olives may be eaten with perfect security if you open the can yourself and they smell and look good. Don't even taste suspicious canned goods of any kind, but don't let ignorance make you suspicious of the good can.

Styles in Colored Shells For Eggs

THE "Boston Lady" sent back her eggs because they were white. The "New York Lady" sent back hers because they were brown. A member of the Tribune Coöperative Club said she knew her fresh eggs were storage eggs because the acid had attacked the shell and they were spotted. She was thinking of water-glassed eggs, a method never used in commerce. And the Egg Man threw up his hands and said: "What's the use of being honest with ignorance? I might as well sell them those cold storage white eggs as fresh eggs and make money for myself and happiness for them."

Now, as to the facts as to brown and white eggs. There isn't any difference between them under their skins. They are more closely related than Bridget O'Grady and the Colonel's lady. Hundreds have been analyzed, North and South, white and brown, and if the figures aren't labeled no one can tell which is which. You may have eaten white eggs you liked and brown eggs that you didn't care for, or vice versa, but it was not because of the color of the shell, but because of what the hen ate or how the egg was handled.

Of course, if you are not strong enough to look a brown complected egg in the face in the early morning and are willing to pay extra to have it dressed in white, well and good, but don't imagine that you are getting a better or more delicate egg.

On the contrary, the brown shells are heavier, less porous and protect the egg better than do the white shells—and that is the real purpose of an eggshell! Many women buy clothes the same way—they are all for looks and delicacy and nothing for protection and durability!

If you are prejudiced against brown eggs, get over it, if it means any advantage to your pocketbook.