1927

Cooking Utensils of Today

Zula Dowler

Iowa State College

Follow this and additional works at: http://lib.dr.iastate.edu/homemaker

Part of the Home Economics Commons

Recommended Citation

Dowler, Zula (1927) 'Cooking Utensils of Today,' The Iowa Homemaker: Vol. 7 : No. 4 , Article 6.
Available at: http://lib.dr.iastate.edu/homemaker/vol7/iss4/6

This Article is brought to you for free and open access by the Student Publications at Iowa State University Digital Repository. It has been accepted for inclusion in The Iowa Homemaker by an authorized editor of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.
Pots and pans are a kitchen necessity in every home. Always there is the bride wanting the best and asking many questions when she selects her kitchen utensils. There are always housekeepers, reeling some worn out new and shiny bride wanting the best making selections of pots and pans.

Their questions in making selections of new cooking utensils probably are: Is it convenient to handle? Is it of the right size and shape? Is it easy to clean? Is it efficient? Is it safe as a food receptacle.

Whether it is convenient to handle and whether it is of the right size and shape, each one will decide for herself. The other questions can be answered only after scientific investigation.

Being a safe food receptacle, means that it does not form any poisonous compounds when foods are cooked in it. Much investigation has been done with metals, used for cooking utensils, to make them easier to clean, more durable and free from the undesirable effects on different foods.

For the preparation of food, our grandmothers used the copper kettle and the iron pot, while the housewife of today may choose from the numerous sizes and shapes of utensils made from tin, zinc, enamel, aluminum and glass.

A few years ago, there occurred in London two hundred cases of poisoning which were traced to the eating of apples cooked in galvanized baskets. About the same time a store in the District of Columbia distributed over four thousand galvanized iron buckets as premiums. The Bureau of Chemistry, becoming alarmed, investigated the effect of water, milk, lemonade and orangeade upon the galvanized pails. Each of these foods dissolved some zinc from the pail and the amount of zinc increased with the acidity of the food.

Galvanized iron is iron coated with zinc, which makes it rust proof and a very good material for garbage pails, refrigerator pans and the like, but should not be used in contact with food.

Tin, because it is light and easily heated, is frequently used for cooking, but in more common use is for canned foods. Cans are made from thin sheets of steel which have been coated with tin. If the steel is not entirely covered by tin, the corroding action of the food will form holes in the can, causing the food to spoil.

Acid foods and protein foods especially have a corroding effect upon the tin can. They may either dissolve the tin or discolor it. To prevent this corroding effect we now find cans on the market which are lacquered or enameled lined. If the enameling process is not perfectly done, the action of the food is very great where the tin is exposed. Enamedlined cans are being used for foods that are highly colored and those containing acids. Paper liners are also used in cans, and if these liners do not contain lead they are very satisfactory.

However, some of the leading chemists of today have discovered that tin salts are non-poisonous and do not harm the body. If the food is not otherwise spoiled the blackness of the can, which is iron sulphide, or the standing of the food in the can, after being opened, will have no harmful effect upon it.

The expense of copper, its weight and the care it requires for cleaning makes its use as a household utensil rather limited. Because it is a good conductor of heat, we find it being used in large institutions. Investigators are divided in their opinions concerning the effect on the body of food cooked in copper utensils. Some say that bronze diabetes, a chronic poisoning, is caused from copper, and that copper should not be used in contact with food or drink, especially if it contains acid. That would exclude its use for cooking utensils.

A French investigator reports that copper utensils do not harm the food. That when cooked in copper vessels the copper salts attach themselves to the food in such a manner that they are not dissolved by the stomach or intestines. However, poisoning may result if there is too much acid in the stomach.

Enamel ware has a base of cast iron or steel in which oxides of iron and lead, cobalt and nickel are used to regulate the expansion and contraction of the vessel. Thru the use of these metals, the resistance to acid, alkaline and water has been increased. Lead will be dissolved from a vessel that has not been fired at a high temperature. Enamel ware contain some alum; the loss of glaze, the temperature the length of time the food is in the pan, the amount of abrasion and the quality of the enamel. Several thin coats of enamel applied to a vessel are more desirable than one heavy coat. In comparing the white, gray and blue enamel ware, it was found that the blue is the least resistant to acid; the white and the gray are about equal.

Aluminum utensils are made from a metal found in clay, which is processed and as a molten mass either poured into moulds and allowed to harden or made into large sheets from which the vessels are stamped. From these two processes we have the cast and stamped aluminum ware on the market today.

There are many superstitions concerning the use of aluminum cooking utensils, among which are: "certain foods cooked in aluminum vessels develop poisons;" "Foods permitted to stand in aluminum vessels are poisonous;" "aluminum vessels absorb and retain odors;" aluminum cooking utensils are the cause of the increase of cancer. All of these ideas have been disproved. So far as science has discovered, there is no connection of cancer with the use of aluminum ware.

An editor of a leading medical journal in a comment upon the subject states that it was a pernicious attempt to promote a peculiar view of cancer without the slightest scientific evidence to support it.

Thru investigations made in almost every country the conclusions are: that alkaline foods corrode aluminum vessels; that this corrosion is an iron deposit which is not harmful; that acid dissolves the iron, leaving the surface bright; that foods contain some aluminum; that the body itself contains aluminum; that the products dissolved by the food from aluminum vessels are not harmful to the body.

(Continued on page 19)
men in working out their plans of self-government.

On the ground floor is a large dining room in charge of Miss Florence Walls.

A house mother has been chosen to live in the dormitory, who will act as an advisor and will preside in the dining room.

Due to the limited number this dormitory can accommodate, boys desiring rooms must furnish references.

Cooking Utensils

(aluminum ware will not retain odor if properly cleaned.

Discoloration from the use of alkali, hard water in particular, although not harmful, disturbs the housewife because it is unsightly. It may be removed by cooking acid foods in the vessels, by adding some vinegar to the water in which the vessel is washed, by using steel wool, or prevented by using one-fourth teaspoon of vinegar to one quart of water when cooking the food. The small amount of vinegar used will not impart a flavor to the vegetable. When using aluminum utensils on the steam table, the darkening of the vessel may be prevented by putting several lemon rinds in the water of the steam table.

Housewives need not fear that their aluminum utensil will be dissolved by cooking and cleaning. It has been computed that it would take twenty-six years of constant use, day and night, to dissolve an ordinary aluminum cooking utensil.

Glass is probably one of the later materials used for cooking utensils. It is made by melting special sand with potash or soda, lead or lime. Lime causes glass to be hard and brittle; lead causes it to be brilliant and tough; iron gives the greenish tint which is seen in the cheaper glass.

An English investigator advises against the use of cheap glass, which may contain bubbles that break and splinter when used at a high temperature as for sterilizing or when pouring hot jam or jelly into it. Cheap glass may also contain arsenic, lead and boric acid, which is somewhat soluble in some foods.

In America we have three important kinds of glass: the ordinary glass, consisting of sand, soda and lime, used for bottle or window glass; the lead glass, consisting of sand, lead and potash, used for ornamental articles such as cut glass; the borosilicate glass, containing borax, boric acid or both, used for Pyrex ware and other articles where a low expansion coefficient and a resistance to the dissolving action of water and chemicals is desirable.

The low power of reflecting radiated heat causes a greater absorption of heat by glass than by metal. Thus a food will cook more quickly in a glass dish than in a metal dish. Experiments made on the saving of fuel show...
Helpful Supplies

We have many of the little things that will make your work easier.

Dennison Goods
Mending tape—tags—labels—wax—paper fasteners—crepe paper and party goods.

School Supplies
Filing boxes—cards and indexes—loose leaf note books and fillers—fountain pens—ink and pencils—stationery—type¬writer paper and pads—books—book ends—blotters.
You will be more efficient when properly equipped.

REYNOLDS & IVERSEN
Stationery Supplies

Riekenberg Style Shop

Fur Coats   Cloth Coats   Dresses
Wayne Knit   Hose   Kayser

We have all your needs for sewing class—tapeline, thread, needles, scissors, pincushions, linings, Everfast bias tape.

For your room: Sheets, Blankets, Curtain, Draperies.

THE RIEKENBERG CO.
STYLE SHOP
2514-2516 Lincoln Way     Campus     Ames

that tin used one-half more gas than glass. As heating takes place more rapidly, cooling takes place more slowly in glass than metal. Metal conducts heat about 100 times as fast as glass. Thus food can be kept hot longer in glass than in metal.

Enamel, aluminum and glass ware are the most popular kitchen utensils on the market today, and tin, zinc and copper are being used very little.

From the efficiency studies made at the Teachers College, Columbia University, using different grades of enamel and aluminum ware, we learn that heavy grade enamel ware is the most efficient, the light grade enamel is second, the heavy aluminum ware is third, and the light grade aluminum is fourth.

Although enamel ware is more efficient, it needs to be handled with much care, because the enamel does chip off; acid foods attack the enamel and lessens its durability; certain foods stain the enamel, making it unsightly; the use of abrasives, such as steel wool, injures the enamel and causes it to be more easily attacked by acids.

An aluminum utensil may be used in any method of cooking, baking, stewing, preserving and frying with any kind of food. With the use of soap and steel wool, an aluminum vessel can be kept in good condition.

Glass, which is used only for baking dishes, appears to be more efficient than any metal dish. The initial cost may be greater, but this is over balanced by the saving in serving dishes and their washing, for glass dishes may be used on the table, and by the saving of gas due to the greater efficiency of glass ware in cooking. Steel wool and soap are effective means of cleaning glass ware.

Thus we see the housewife of today has a wide selection of cooking utensils and can choose those best suited to her needs. It is always desirable to purchase from a reliable dealer, and to use the best grade of ware which can be afforded.

Courtesy Service Quality

MALLORY’S LUNCHEONETTE
R. G. MALLORY, PROP.

We deliver to all parts of the campus

Phone 1534   Campustown