

is for the purpose of keeping the powdered sugar from hardening and forming lumps.

At Flynn's Dairy the students had a chance to see just how a large commercial dairy is run. Several Ames graduates, employed in the plant, assisted in conducting the class through the plant and explained the processes. He explained that a capable field man is employed by the firm to inspect the sources of supply and to see that the cows producing the milk are healthy and housed in clean quarters.

The milk which comes into this dairy is transported to the plant receiving room in the shortest possible time. There it is weighed by automatic scales, tested for acidity, and that which complies with the test is strained through sterilized cheese cloth into huge, jacketed, glass-lined steel tanks. A cooling medium, circulating around the milk, rapidly lowers its temperature to the proper level. The milk is pumped from

these tanks to the clarifiers, which remove any sediment. That portion used for cottage cheese is put through the separators, which recover the cream, and the skim milk is sent to the cheese vats.

From the clarifiers the market milk flows by gravity to the pasteurizers. After being heated for a specific length of time it enters the cooling coils and is quickly chilled to thirty-eight degrees. Milk is conducted directly from the pasteurizers to an equalizing tank, and from there to the bottling machines, which automatically fill and cap the bottles. They are then carried on automatic conveyors to the refrigerator storage room. In this room which is insulated with eight inches of cork could be seen twenty-five thousand bottles of milk ready for the next morning's delivery.

The washing and sterilization of empty milk bottles proved to be an interesting process. They are washed mechanically first in hot soda water, then rinsed twice in clear hot water then sterilized with

live steam and placed inverted in specially designed crates, so that all possibility of contamination is eliminated. Every bottle has four separate inspections.

Perhaps the most interesting of the processes noted in this dairy was the homogenizing process in ice cream making. The "mix" is passed through a powerful machine which breaks up the butter globules and imparts to the finished product a velvety smoothness. From the homogenizing and mixing vats the "mix" flows to the freezers, which are located in a specially designed room entirely separate and distinct from the milk department. Every process in this dairy is in charge of college graduates who are experts in hygiene and sanitation.

At the Boston market the proprietor explained, in considerable detail to the class, the different kinds of fish in his large display room and told where he purchased each variety. Among them were five grades of oysters, live lobsters,

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A Simple System of Household Accounting

By GENEVIEVE McKIM BARKER

DO you run from the word "budget" like most housewives?

Do you lose sleep over percentages and accounts as your children do? Most of us do. But at the practice house at Iowa State College, the home economics students keep accurate accounts of household expenditures and follow budgets, without realizing that such words as "budget" and "account" exist.

Miss Alma Reimenschneider, manager of the practice house, says that it takes only a few minutes each evening to do the practice house bookkeeping. It is no tedious task of chasing a penny thru pages of figures to make the books balance, if simple forms of accounting and budgeting are used—and no housewife would want to use a complicated accounting or budgeting system. The principal thing is for each housewife to work out her own system and to make it as simple as possible.

Before the practice house manager made out her food budget, she kept accounts for several months in order to decide just how much should be spent for food each day. It would be foolish for a housekeeper to set aside arbitrarily a certain percent of the family income for food without considering her own family or its conditions and whims. For instance, we all know that when a woman does her own sewing, cooking and caring for the house, she does not spend as much money for these things as if she hired them done, and she can then apportion more money for other things.

A butterfly fun-loving neighbor may say, "Oh! yes, Mrs. Thrifty can have things because she is such a good manager. If only I had a business head." The fact of the matter is that Mrs. Thrifty manages her work and the money takes care of itself. Her percentage of income spent for food and clothing is probably lower than Mrs. Hire-it-done, altho she lives in the same neighborhood and her husband receives the same income. Therefore the budget in the two families would necessarily have to be made to suit the family conditions.

So in planning the food budget, the



practice house manager finally decided that 60 cents a day could be spent for food each day for each person. The buyer at the house knows this and plans the meals accordingly. Since students live at the practice house only temporarily, there are no clothing or other similar expenses. Besides the food, however, there are the monthly bills for heat, light, water, etc.

To keep track of all the accounts, two small books are kept. The system of accounting used in these books could well be copied in any real household. One book is an income book in which an account of everything that "comes in" is recorded for each month. The other is an expense book, in the front of which are the daily expense sheets which have these headings:

Cereal Products; Eggs; Fats; Fruits; Meats; Milk; Vegetables; Miscellaneous.

Each night all the receipts are posted under the proper headings. In the back of this book is the monthly expense sheet which has these headings:

Gas; House; Supplies; Ice; Water; Telephone; Light. These expenses are posted as the bills come in and are totalled for each month. All that must be done to make the books balance is to subtract the expenses from the income and the remainder is the amount saved on house money. Files for the receipts and bills are used so that these may be kept in accessible places. An accurate checking system is one of the biggest aids which any housekeeper can have in keeping accurate household accounts, Miss Reimenschneider says. Then too, the housewife who keeps her check stubs and

uses them in place of receipts has cut the difficulty of keeping accounts several percent. Another way in which the practice house accounting system is simplified is by the buying of supplies in large quantities.

For the account book in the ordinary household, where there are such expenses as clothing, rent, etc., Miss Reimenschneider suggests, besides the page for food expenses, that other pages be devoted to:

Rent; Clothing; Saving; Gifts; Operating Expenses; Waste.

After keeping accounts of all these items for several months each housewife will have enough material on hand to enable her to make a monthly or even a yearly budget, and plan just what percentage of money is to go for each of these things.

When the housewife has decided how much of the income it will be necessary to allow for actual household expenses then she can decide on the amount that is to be saved, subtract that amount from the income and apportion the rest among the other headings. If the savings are left until the last, they are apt to have only a very slight consideration.

Notice, also the column or page headed "Waste," (not waist, altho it might be). Often one buys a blouse or even a dress because it is a bargain or because a saleswoman has talked one into it, which is never worn after it is purchased. If this waist or dress is put in the waste column when the buyer finds that it belongs there, it will be easy to realize the way the money "slips thru one's fingers," moreover it will be easier to hang on to it the next time.

There is one more thing which is just as necessary to a good accounting system as a well kept account book and that is frequent family consultations. Unhappiness caused by the fact that some members of the family have no share in the handling as well as the spending of the money, is common in many homes. Often no one but the father has any idea of how much money the family really has, or can afford, to spend. No housewife

can keep accounts which are worth while without forming some sort of a business partnership with her husband and the other members of the family.

There are very few men who would not be more than willing to cooperate in making and following a household budget, or in making it possible for the housewife to have a checking account of her own. Do they not run their own businesses by a budget system? Few men now-

adays refuse to believe that a woman is not a producer and that when she broils a steak, makes a dress or decorates a room she is not increasing the value of these things and does not deserve money for the services rendered. The trouble comes when the housewife tries to make out her budgeting system without considering or consulting the wishes of the husband or the other members of the family or when she tries to follow an

accounting plan which is so complicated that she utterly fails.

No ordinary household needs a more complicated system than the one which is used at the practice house. The housewife who follows some such plan—who keeps track of expenditures and then decides what ought to be spent to get the most out of the family income, will really have mastered that much maligned thing—the budget. Would you believe it?

For Those Who Have Difficulties in Home Dyeing

By GRACE McILRATH



"DYEING AS A household practice, is almost as much abused as is dieting," said Miss E. Phillips, expert dyer for the North American dyeing corporation in a lecture before a group of home demonstration agents not long ago.

And isn't there some truth in the remark?

When we go down town on a shopping trip and meet an old friend who is slender and pink and sylphlike, don't we look at our own robust reflection in a nearby shop window and rush home to diet? When we go to club and see the next door neighbor wearing a stunning new dark blue crepe de chine frock, don't we recall the miraculous assertions of a recent dyeing advertisement, think of our old Copenhagen blue crepe hanging in the closet 'still as good as new,' and rush home to dye-it?

Then, just as in our dieting program we alternately stuff and starve ourselves for a few days and finally succeed in losing a quarter of a pound in weight and in ruining our perfectly good digestions, don't we stir a little dye in some water, souse our faded frock in the mixture and finish by ruining the dress and losing our faith in the probabilities of successful home dyeing.

According to Miss Phillips, home dyeing is only worth while when the dyer has time to spend on the work and has an intelligent knowledge of dyeing processes.

There is something about the miracle of making something new out of something old that makes most women rush thru the dyeing process to "see what it is going to look like" without reading instructions carefully, or following those which she does read.

"In the first place," Miss Phillips said, "be sure that the garment which is to be dyed is worth dyeing. A satisfactory piece of dyeing involves some little time and expense, and cracked silk or badly stained material may not be worth working with. A woman visiting a large dye factory, happened to mention to the manager, the fact that she had, not long before, ruined a dress by trying to dye it. After questioning her briefly the manager told her that she had not prepared the material properly before dyeing it and started to explain what should have

An expert dyer who answers the hundreds of letters of inquiry which come into the office of a large dyeing corporation, says that there are five questions which he asks any woman who has had failure with a home dyeing problem.

1. Was the material really worth dyeing?
2. Did you read the directions before you started and follow them accurately?
3. Did you strain the dissolved dye into the dyebath?
4. Did you use a container large enough so that the material was completely submerged in dye?
5. Did you rinse the material thoroly?

been done. "Oh!" the visitor replied, "the dress wasn't worth all that trouble." "Then it wasn't worth dyeing," said the manager.

We will take it for granted then, that the material to be dyed is really of some little value. The first thing to do is to select a good dye. A good commercially fast dye may be had in powder, soap or flake form. Which form to use is merely a matter of personal preference. A good dye properly applied should stand the tests of washing, light and perspiration. Then too, certain dyes will not color all kinds of fibers equally well. A fast, direct cotton dye will not be readily absorbed by wool or silk. The companies which put out strictly cotton dyes also manufacture acid dyes for wool or silk. There are dyes, however, which dye all kinds of fibers alike. The advantage of using such dyes is that they will color evenly any goods which is part wool and part silk or part wool and part cotton.

Read the directions on the envelope, then, and see if the dye which you are selecting is the right one to use. After selecting the dye, prepare the garment for the dye bath.

To avoid light streaks, remove all trimming. Take out all stains but do not use a stain remover which will remove the color for the spot will show after the garment is dyed. The home dyer must always remember that every part of a piece of goods will absorb an equal amount of dye and streaked and spotted goods will be streaked and spotted when dyed.

For this reason, if a garment is at all faded or streaked the old color must be partially boiled off. Before doing this, weigh the material to be dyed in order

to judge the amount of dye which will be required in the dye bath. Boil streaked cotton and silk in soap and water from 10 to 15 minutes. As soon as the water becomes discolored, pour it off and add fresh water. Continue, until most of the old color has been boiled out or until the former color has been spread evenly. Boil wool in ammonia and water (about 1 tablespoon of ammonia to a gallon of water). Do not boil rapidly or for a very long time as too much heat might injure the fiber. When the goods has been thoroly rinsed it is ready to go into the dye bath. Read the directions on the package to find out just how much dye to use in making the bath.

To dye white materials, ordinarily, a cake of dye to a pound of goods is necessary. The amount of dye called for in the directions on the package is always based on white material. For "top dyeing," that is where the goods to be dyed is a colored goods, this quantity of dye will not be the correct one. The old color in a garment has the same effect in dyeing as if that color were added to the new dye bath. A tan or a faded brown material will not require as much dye to make it dark brown in color as would white goods. Suggestions of amounts of dye to use in dyeing colored garments are sometimes given on the package. Otherwise the woman who dyes must use her own discretion. She may avoid mistakes by dyeing a sample of the cloth before she puts the whole garment in the dyebath.

In making the bath it is well to keep in mind a few simple facts in regard to the dyeing of colored goods. For instance, too much black dye will produce an ugly bronzed shade of black. Navy blue does not bronze as quickly as black. Sun-burned wool garments are hard to dye and will take only dark blue, dark brown or black. It is always easier to dye colored goods in some color order. For instance, tan takes a dark brown color better than it would take a dark blue. Also, grey would be easier to color black than green. Under any circumstances, the color used in dyeing must always be darker than the original material. One complimentary color dyed over another will give the basic color. That is, to dye a yellow scarf green, use blue dye. Any knowledge of colors which a housewife may have will be of use in dyeing.

Make the dye bath according to the directions on the package. Usually about one cake of dye is used in two cupfuls of hot water. Stir until the dye is thoroly dissolved. The tiniest speck of undissolved dye will make a spot on the goods. Powdered dye is apt to float around on top of the water, so it is well

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