

## Economy in the Kitchen

Save Energy

In many aspects of our living, our daily functioning is made possible by habits we follow. If we had to think about how to brush our teeth, how to tie our shoes, how to put on a jacket—we wouldn't get started in the morning. We can do all those things almost automatically—without thinking—so they get done smoothly and quickly.

Those same habits, though, can be ruinous when the monthly fuel bills arrive because the inexpensive fuels of the past have led us into very wasteful habits, particularly in the kitchen. To achieve important economies doesn't necessarily mean drastic change in the style of living, but it certainly does mean programming yourself with a new set of habit patterns.

Another truth: Because using the kitchen is an everyday event for all the members of the household—and the kitchen may be the place where much of the shared life takes place—the development of new habits in the kitchen may raise the family consciousness about energy uses in general, and so spill over into other aspects of fuel saving.



Just one example may serve to illustrate. After a meal, we all know it is sensible to put leftover foods in the refrigerator. We all know if they are left out on the kitchen counter overnight, or even for several hours, they'll turn bad and need to be thrown away. There are two ways to use the refrigerator, though.

One way is to take the foods from the table and the pans from the stove—and probably in several trips—stack them in the refrigerator for later use. This way your refrigerator will be gasping for breath and laboring hard to keep its cool, what with hot foods, hot pans and hot dishes to chill, and the door opening and closing several times.

Another way is to put the leftovers in storage containers and let them sit on the counter for a half-hour or so until they cool a little. Then, all in one operation, they can be placed in the refrigerator for storage and later use.

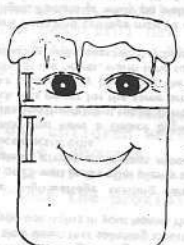
There isn't much difference between those two methods. It's really no more than exchanging an old set of habits for a new set. Considering, though, that the process takes place in your kitchen several hundred

times a year, if it saved you no more than a penny a meal (and it will save more than that), you're looking at a saving of almost \$11 a year just in the way the refrigerator is used after mealtime. Eleven dollars here, 75 cents there, three dollars the other place; they all add up to making a significant difference, just by changing habits.

### Cool Cash Savings

There's money to be saved in your refrigerator. You may be spending more than you need to just by running your refrigerator at a cooler setting than is required. Put an ordinary household thermometer in the refrigerator for a half-hour or so. If it registers colder than 4°C, change to a warmer setting and check it again.

While you're at it, check the door gaskets all the way around by closing the door on a dollar bill. If the bill slips out easily at any place, you're wasting money. You may be able to correct the problem by putting paper strips or thin cardboard behind the gasket where you spot the leak, or by adjusting the latch. If those don't do it, a new



gasket is a good investment and isn't hard to install. Opening and closing the refrigerator door is what makes extra dividends for the electric power company. Here are some thoughts:

When you stand with the refrigerator door open, thinking about what you'd like to have, you're running up the cost of that snack. Do your best to imagine what's inside before you open the door, and then go directly to it. Try to teach your children this habit, too.

Help yourself and your family by putting a checklist on the refrigerator door, rostering what's inside and also crossing off what's been eaten. That's the snack menu, and it can save many a door opening.

Get organized before meals so that everything needed can be taken out and placed at the ready on the kitchen counter with just one opening of the refrigerator door. Don't forget the catsup.

After coming home from the store, empty all the shopping bags on the counter, put all the items that need refrigeration in one place, then open the refrigerator door.

After dinner, think about storing the leftovers in the way outlined at the beginning of this chapter, with particular attention to the business of covered containers. This is particularly important with frost-free models, where moisture is drawn from the foods to condense on the refrigerating coils causing the defrost cycle to operate more often. If you don't have covered refrigerator containers, put the leftovers in cereal bowls and cover with a plate.

Convenient plastic containers can be bought in many stores, but you can also save peanut butter jars, cottage cheese containers, and similar packages with lids that can be cleaned to use for storage.

That frost-free feature certainly is a convenience, but a standard refrigerator that must be defrosted by hand a few times a year will use 36 percent less electricity. Also remember when you're buying your next refrigerator that if you really do want the frost-free convenience, look for a model with a power saver switch. It turns off the defrost heater when humidity is low in the winter and may cut operating costs by as much as 16 percent.

When choosing where your refrigerator is placed, keep it away from heat producers like ovens and dishwashers. An outside wall is a fair idea, particularly if it's a north wall that will tend to be cool both summer and winter.

And try for four inches of air space around the refrigerator, to let the motor heat escape readily. If it's been running hot, you could save as much as \$3.54 a month. A refrigerator operates most efficiently when it's full.

### Freezers Can Be Expensive

For openers, a freezer will likely be one of your most expensive electrical appliances to operate.

Keep your freezer as full as possible. The bulk of the foods will retain the cold better than empty air, making for more economical operation.

Transfer big items like meats, roasts, and turkeys from the freezer or frozen food compartment to the refrigerator a day in advance. That way they will thaw gradually and help to cool the refrigerator while they're doing it.

Recommended temperature for frozen foods is 10°F. Put a household thermometer in your freezer and check the temperature. If it's colder than necessary, change the control setting and check again.

Putting your frozen foods in well-marked containers, and keeping the frozen supplies in easily recognized categories will make everything easier to find, and therefore mean less time that the door is open while you are searching for something.

A freezer inventory is a good idea. It can be a sheet or small notebook on the wall or on a shelf near the appliance. Menu planning can be done from the inventory, which should include a locator chart so each item can be found easily. Again, less time with the door open.

### Don't Forget the Oven

Whether it's gas or electric, the oven in a conventional stove is an energy glutton. The problem is compounded if the oven has a pre-heating feature, and gets even worse if it's the self-cleaning variety.

After baking in the winter, leave the oven door open until the oven is cool. No sense wasting that heat. Conversely, in the summer try to schedule some of the baking for the cool of the evening, with obvious advantages.

### Heat in the Kitchen

The heating units in electric appliances continue to radiate after being turned off. With a little practice you can learn to turn off the heat a few minutes early and finish with the leftover heat.

A pressure cooker uses much less fuel than a conventional pan. When preparing boiled potatoes, for instance, a pressure cooker will use 30 percent less energy doing the job in half the time.

Check the electrical appliances used in your kitchen. Individually the electric carving knife, electric can opener, electric mixer, electric peanut butter maker, electric sealer for plastic bags, electric sandwich grill, electric crepe maker, electric waffle iron, and the like don't use a lot of power, but taken together they're a considerable drain over the year. There are easy, handy alternatives for all those things that use less power, or no power at all.

### It's Dish-Washing Time

Yes, it's necessary to talk about washing dishes. The experts disagree on how hot the water should be in the household supply. Some say if you have an automatic dishwasher your water heater should be set at 65°C. Perhaps it should, if you have a need for something as proaching sterilization. Otherwise, even with a dish washer, 50°C should be plenty hot enough. You can test it with a candy thermometer.

Is that temperature important? You bet. Heating water is the second greatest consumer of energy in the home, amounting to as much as 20 percent of the total domestic energy bill. Water being heated to more than 50°C will need to be cooled again for almost all purposes, which is wasteful. Turn down the heater thermostat.

Utensils that are used regularly for non-staining jobs like heating tea water and boiling eggs don't need to be washed. They can just be turned over in a sink rack and left to dry for the next use.

### WAYS TO CUT HOT WATER COSTS

Locate the water heater as near as possible to the places where hot water is used. Water cools as it makes a long trip through pipes.

Insulate the hot water pipes so they will retain more heat, particularly on those long runs of pipe.

Insulate the hot water pipes that travel through unheated areas and cold cellars. These are where insulating will be easiest. Both pipe insulation and wrap-around insulation can be bought at most hardware stores and is simple to install.

If you have an electric water heater, check with the power company about an off-peak meter. This means your heater will operate at times when the company has power to spare, and you can buy at a lower rate.

USE TWO SINKS. As a restaurant dishwasher years ago (I was working my way through college), I used two sinks: one for washing and one for rinsing. The rinsed dishes then went into a rack to air-dry. That's still the best and most economical way to do it if you don't have a double sink. Then a dishwasher. The only way to wash dishes.

Light-colored shades or slatted blinds drawn across a sunny window will reflect the sun warmth right back out doors again. During the daylight hours, keep the sunny windows in the clear to let that sun warmth in.

Sunshine is not only a source of warmth, but also, of course, a source of light at the same time. Flicking on the light switches in the daytime may be a habit you can break just by rearranging the furniture.

Next time you're ready to repaint or repaper a room, think about how the room is used before you choose the colors. Light colors in a room will bounce the daylight around, making it a pleasant and cheerful place without extra illumination. This is a much less important factor in bedrooms, which are used primarily at night.

In fact, in rooms used solely for sleeping the only advantage windows have is for a little ventilation. Winter time solar heat just isn't available when the room is in use, so let the windows be small, or heavily draped.

Window light in the kitchen is a tough problem, because you want a lot of storage, rather than windows, on those outside walls. Even more important, then, are the light colors for those kitchen walls.

One of the concepts in use in complete solar energy systems is the heat collector. This is often a bed of sand or rocks under a house, or a large mass of water, in which sun heat can be stored. You can take advantage of this concept by having solid objects standing in the sunlight to store warmth that will be radiated after the sun goes down.

One good heat collector is a window sill row of flower pots, or an indoor windowbox. The earth in pots or box will store warmth during the day with the double advantage of helping the plants to grow and warming the room at night.

Daytime reading and working areas can be placed where window light will be sufficient on all but the darkest, overcast days. Specifically, consider the location of the sewing machine, the chair with the magazine rack, the playtable for the children, the workbench, as well as more obvious items like the artist's easel and the author's typewriter.

A light mist of water sprayed on the ashes in stove or fireplace before you remove them will minimize the "fly ash" spreading around the room. Recycle one of the "spritz" bottles to turn the trick, after it is emptied of its window cleaner, deodorant, or kitchen spray.

### Yesterday's Ideas for Today

-courtesy '547 EASY WAYS TO SAVE ENERGY. Here are some of the old-timers' ideas for keeping warm. If you find you're already using some of them, don't feel you're an old-timer. Instead, look upon yourself as more modern than the rest.

Consider the humble footstool. Its real purpose was to get your feet up off the floor, where the coolest drafts were swirling around. Place a footstool at each comfortable chair in the living room and you might be able to turn down the thermostat by several degrees.

Keeping your ankles warm contributes greatly to keeping your whole self comfortable. That was the idea behind gaiters, spats, and other ankle-warmers. Try heavy socks for each member of the family to wear in the evening. The kind with leather feet will last longer. Just those warm socks may let you notch down the thermostat a degree or two.



Maybe you don't need ceiling lights at all. Lighting the individual places where people are reading or working will be less expensive than lighting a whole room.

In former times, folks carried their lights with them as they traveled from room to room in the evening, instead of having the whole house lighted. The traveling light was most often a candle in a holder with a handle, or perhaps an oil lamp.

When your back is warm, you're likely to feel warmer all over. That's probably why the vest and the sleeveless sweater were invented. If you buy or make one of these, be sure it's long enough in back to keep you covered when you bend over or lift your arms.

Another traditional body-warmer is the friendly afghan. Originally this was a small rug from Afghanistan, and later the term came to be applied to many different designs of small blankets knitted or crocheted at home. Each well-equipped home had at least one afghan, draped over the end of the couch in the living room. It wasn't just a decoration. It was used for keeping the legs warm.

You may have noticed that many of the old four-poster beds were perched on long, sturdy legs rather high off the floor. Well, the closer you get to the ceiling, the warmer it is. There was a practical purpose in that design.

Three or four blankets get terribly heavy during the night. One alternative is the electric blanket, but it keeps the meter running. The old-timers counted on the down-filled comforter to keep them warm. It's a winner.

A cousin to the man's necktie and the woman's fashionable scarf—both relatively useless items of apparel—is that snugly old item, the shawl. Girls knitted pearl—for their beaux, grandmothers cooched them for their grandchildren; almost everybody wore them, both indoors and out. They were a most handy way to put on a little extra warmth around the neck and shoulders; less cumbersome than a jacket, less likely to muss the hair than a sweater. They were often made of light wool yarns in neutral colors such as grey, tan, and light blue that would harmonize with almost anything. A favorite shawl was a lifetime treasure. Usually wider and lighter in weight than what we would call a scarf, the shawl deserves a revival.

Another old-time favorite was the bed-warmer—a covered, shallow brass pan with a long handle. Hot coals from the fire were put in the pan, then it was passed between the sheets just before bedtime. Delightful. The brass bed-warmer also worked for roasting chestnuts, and later generations have used it for making popcorn.

### GRANDMA UNDERSTOOD

My grandmother's house had two power lines for awhile when I was young, so winter warmth was dark green. Each had neighborly achieved old-style. Each of us modestly as the primary function, kids had a good-sized round stone as a personal possession. (You could use a brick.) Each reflect out unwanted heat, the night our stones were heated in dark shades in winter to let in heat. The lace curtains were just then my mother would wrap each one in soft flannel and put it in the foot of the bed. Nothing quite like that warm, flannel-wrapped stone to greet your toes as you push down through the "cool" sheets.

### BED-WARMERS



### Using the Bathroom -courtesy '547 EASY

The invention of the single-action mixer faucet was a convenience breakthrough, but also a serious economy hazard. With that single-spout faucet you can get just the water temperature you want and not let it run. Terrible. It would be better if you still had two separate faucets as your grandmother did. Then you'd need to stopper the sink and mix the right temperature in the bowl. Do it. You'll save money.

That not only applies to that first face-washing to get the sleep out of your eyes, but also the male shaving chores, every time through on end washing, rinsing out the lingerie, and every bathroom sink, say, five times a day, just filling the sink instead of letting the water run might save as much as forty gallons a day in hot water. That's enough for two full loads through the washing machine, or three quick showers.

That quick shower takes about half as much hot water as a tub bath. Call soaking in the tub an occasional luxury, and the quick shower a frequent sanitary necessity.

When you take a tub bath, don't drain the water when you're through. Let the heat from the water radiate into the room until the water is cool. This, incidentally, is the basic principle of some of the solar heating systems. You might even stopper the tub when you take a shower, and let that hot water radiate its heat before it goes down the drain.

Be sure you turn off the faucet all the way when you're finished using sink or tub. If it still drips, ouch! One drop per second from a hot water faucet is 200 gallons a month, 2,400 gallons a year. An average water heater holds 40 gallons, so you can figure how much extra you're spending with the dripping faucet. Fix it.

### Cold Water for Your Laundry?

It's time to tackle the laundry.

Consider the cold water detergents. Only clothes that are very greasy need water as warm as 27°C to get clean. Your washing machine probably has settings for cold, warm, and hot water. Use the cold for ordinary washing, the warm for very dirty clothes, the hot not at all. Your wash-and-wear clothes made with synthetic fibers will be just as clean and considerably less wrinkled if you use cold water for washing. And by using cold water washing techniques you'll save \$5-\$10 a month in hot water costs. With today's detergents, cold water rinsing is fully effective, and the rinse cycles are probably half of the water you use in washing.

Running your washing machine for just a few items? Wasteful. Perhaps it's because some of the necessary items in the household are in short supply, so you're washing more often than you need to. Stock up at least a week's supply of the commonplace, most-used items like socks and underwear. It's cheaper to have enough for each person so use of the washing machine can be less frequent.

A larger supply of the frequently washed clothes will also allow better use of the different washing cycles with full loads. Lightweight items such as underclothes, handkerchiefs, blouses, and pillowcases can take a shorter cy-