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Steps to a Brighter Laundry

Michigan State University Extension Service

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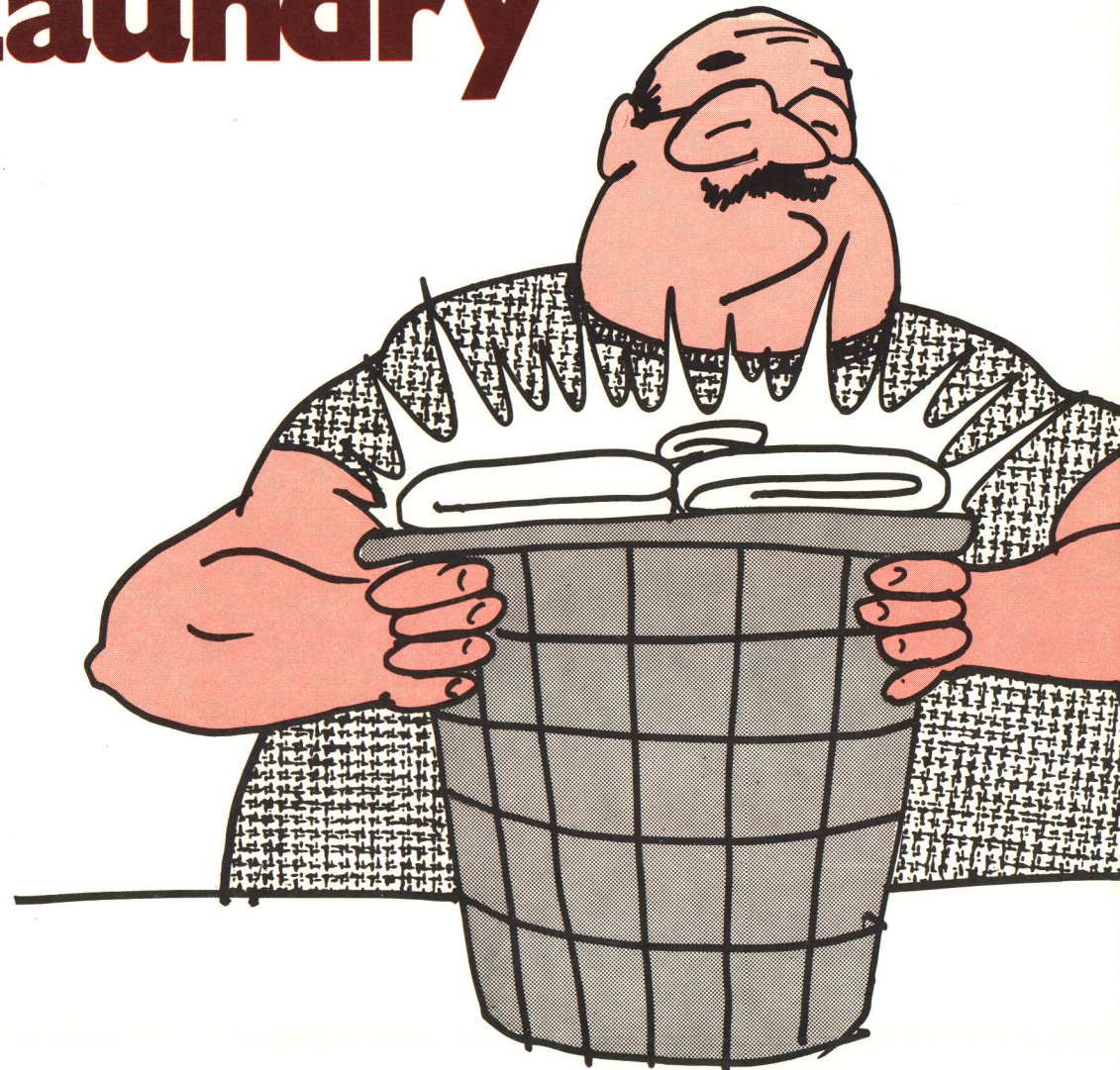
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Steps to a Brighter Laundry



How can you obtain satisfactory laundering results with limited time and energy? Understanding the basics of the laundering process and products can help. Properly laundered clothing and linens look better and last longer and thus help stretch your budget.

Successful laundering requires three forms of energy in the right balance to remove soil from fabrics:

- **Thermal**—heat energy supplied by hot or warm water.
- **Mechanical**—energy supplied by the machine's washing action.
- **Chemical**—energy supplied by the detergent and other laundry additives.

If you reduce the energy in any one of these areas you must increase another energy input to restore balance to the total washing system and to get clothes clean.

It takes more energy to heat water than to operate a washer, so, to cut the energy costs of doing laundry, it makes sense to reduce water temperatures whenever possible. If you do, however, you should increase the amount of detergent and the agitation time. The performance of all laundry products drops as water temperatures drop, and they are almost ineffective below 60°F.

Use hot water for heavily soiled clothing and diapers, or if there is an illness in the family. You may wash other loads in warm (above 100°F), or cold (60° to 80°F) water, if results are satisfactory. Always use cold water to rinse to save energy.

Add most laundry products to the water before adding clothing to make sure they dissolve. If you must add a product later in the cycle, such as

chlorine bleach or a fabric softener, dilute the product in warm water and add to the washer.

Soap or Detergent

Though many people use the terms interchangeably, soap and detergent are different. Soap, made from a fat and alkali, should be used only in very soft water (0 to 3 grains). In hard water, soap combines with water hardness minerals to form a soap curd. This sticky white or yellow residue is deposited on the washer and on clothes and gives them a gray, dingy appearance and a greasy feeling.

Detergents, used since World War II, have the ability to remove soil and hold it in suspension and do not form a curd in hard water. The basic ingredients of detergents are:

- **Surfactant**—improves wetting ability, loosens and removes soil, emulsifies and suspends soils in the wash solution. Various detergents may contain different kinds of surfactants.
- **Builder**—deactivates water hardness minerals. Phosphates are one of the best, but have been reduced or banned by law in some states, including Michigan, to improve lake quality. Other builders, such as sodium carbonate, leave an insoluble residue that can form a gray, dingy build-up and cause clothes to feel harsh and stiff. Some liquid heavy-duty detergents do not contain builders. These contain extra surfactants to increase cleaning power.
- **Anti-redeposition agent**—aids in preventing loosened soil from redepositing onto cleaned fabrics.

- **Corrosion inhibitor**—helps protect washer parts from corrosion.

- **Fluorescent whitening agent**—makes whites appear whiter and colors brighter.

- **Processing aid**—an ingredient that helps keep other ingredients mixed, ensures free-flowing granules and, in liquids, prevents freezing and separating.

- **Colors and perfumes**—these may be added for appeal.

- **Suds control agent**—suppresses suds when necessary, as in tumble-action washers, or stabilizes suds when long-lasting suds is desirable.

- **Other ingredients**—these may include oxygen bleach, borax, enzymes, fabric softener agents, etc. (See Extension Bulletin E-1946, *Confused About Laundry Products?*)

Because Michigan has banned phosphate detergents, you may need to use one or all of the following suggestions to obtain satisfactory results.

- Pretreat stains.
- Use presoaks for some items.
- Use soft water, if possible.
- If water is very hard, add 1/3 to 1/2 cup non-precipitating water softener to the water when you add detergent.
- Always measure and use the proper amount of detergent.
- Dissolve granulated detergents in water before adding to laundry. (NOTE: Heavy duty liquid detergents may give better results in hard water than powder detergents.)
- Use bleach if it won't harm fabrics and colors.
- Use the hottest water that fabrics will tolerate.

Doing the Laundry

The following outlines all the steps involved in doing laundry. If you follow these steps you should obtain the most satisfactory results.

Step 1 Sort laundry into washer loads.

- A. Sort by color.
 - White or white background prints.
 - Color prints and pastels.
 - Medium bright colors.
 - Dark colors.
- B. Sort by construction and fabric.
 - Tough, sturdy wovens.
 - Loose knits or wovens.
 - Finely made garments with delicate trims.
 - Heavy lint producers.
- C. Sort by soil.
 - Heavy or greasy soils for heavy duty washing.
 - Light soils for regular washing.

NOTE: Wash items with heavy or greasy soils separately from light colored items because the light colors may pick up dirt and become dingy.

- D. Sort by size.

Mix large and small items in a load to provide balance. Limit two sheets per load plus small items unless you are using an extra large capacity washer.

Step 2 Prepare clothes for washing.

- A. Close zippers and fasteners to prevent snagging; tie strings to prevent tangling.
- B. Empty pockets, brush dirt and lint out of cuffs.
- C. Remove unwashable belts, trims, ornaments and pins.
- D. Mend rips and tears.
- E. Treat spots, stains and heavily soiled areas. Presoak, if necessary.

Step 3 Choose laundry products.

- A. Follow directions listed on each product's label and always measure.
- B. The amount of laundry products you use depends on several factors. Generally, product labels make recommendations using the following as a guideline. Be sure to adjust the amounts you use if your

loads differ from these guidelines.

Size of load: 5 to 7 lbs

Amount of soil: moderate

Water hardness: 3.6 to 7 grains

Water capacity of washer: 17 gal. for top-loading washers, 8 gal. for front-loading washers

Step 4 Set washer controls.

- A. Select water level to match load size.
- B. Select water temperatures for wash and rinse cycles.
- C. Select washing action.
 - Regular—for most clothing.
 - Delicate—for lingerie, knits, blankets.
 - Perma-press—for permanent press clothes (this action has a cool-down cycle).
- D. Select wash cycle length.
- E. Select spin speed.
- F. Start the washer.

Step 5 Load the washer.

- A. Add laundry products to the washer.
- B. Add clothes. Do not overload the washer so that clothes can move freely for good cleaning action. Don't wind large items around the agitator.
- C. Let washer stop automatically before removing laundry.

Step 6 Dry the laundry.

- A. Shake damp items to loosen and release wrinkles.
- B. Separate items to be line-dried.
- C. Select drying temperature. **NOTE:** Perma-press setting allows a cool-down time to reduce wrinkling.
- D. Select drying time.
- E. Remove clothing immediately after dryer stops.
- F. Clean lint filter after drying each load.

Step 7 Iron (if necessary).

- A. Sort items according to iron heat setting.
- B. Use starch or sizing to add firmness to fabrics, if desired.
- C. Touch-up or iron thoroughly.

Additional Information

For additional information, refer to the following bulletins. They are available from your county Cooperative Extension Service Office or the MSU Bulletin Office, P.O. Box 6640, East Lansing, MI 48823-6640.

E-1946 Confused About Laundry Products? (Price: 50 cents.)

E-1402 Stain Out! Washable Fabrics (Price: 20 cents, single copy free to Michigan residents.)

E-1121 Saving Energy and Doing Laundry (Price: 20 cents, single copy free to Michigan residents.)

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