

Date 10/2/98
Amount 420-5
shelf 81

INV 51946

Coming Clean: Laundry Aids

Leader Resource

Today there are many laundry products available. A major category is soaps and detergents. Because that group is so large, it is a separate program. This program focuses on the other laundry aids that help get clothes clean. We buy these different laundry products for several reasons.

- Different products are used in different laundry processes.
- We hope a product will perform as expected or as advertised.
- We buy products for different reasons such as convenience, economy, or habit.
- We have different needs for laundry products depending on the clothes, soil, equipment, and water we are working with.

Objectives

The proliferation of laundry products can be confusing to the consumer. The purpose of this program is to help you teach others to:

1. Analyze the family laundry situation—including who does the laundry, the primary types of fabrics, the primary types of soil, the water hardness and temperatures, and laundry equipment—in order to determine the types of laundry aids needed.
2. Analyze the purpose and use of laundry aids for various laundry processes. Select products to perform desired processes and meet expectations.

References

Selecting and Using Laundry Aids, EC 1284*, OSU Extension Service

*Publication is available from your county Extension office for members who wish a copy.

Preparation for Teaching

1. Read through the leader guide, the worksheets, and the references on the laundry process and products.
2. Choose one activity in each section appropriate for your group. Consider the size of the group, the interests of the group, and the location where you will be teaching.
3. Collect laundry aids containers in order to provide a variety of types of products and a variety of brands of any single type of product. Ask members to bring laundry aids containers to the meeting.
4. Complete the worksheets at the leader training, in a grocery store, or from product containers you have collected. Be sure to use product containers purchased within the last 6 months or 1 year as products change.

Coming Clean: The Laundry Process

The variables in doing laundry include the person, the fabrics, the soils, the stains, the water, the equipment, and the laundry products. Each of these variables will be discussed, but the primary emphasis will be on the laundry aids used to complement soaps and detergents.

The **person** makes decisions, handles the process, and may set standards of acceptability. Person variables may include age, experience, time available, and physical abilities.

The **fabrics** may vary by type of fiber, fabric construction, color or dye, and finish.

Laundry soils may be grouped into the following four basic groups.

Ardis W. Koester, Extension textiles and clothing specialist emeritus, Oregon State University.



Soils	Examples	Product to Use
1. Water-soluble soils	Salt, sugar, parts of perspiration, some proteins	Water, detergent, enzyme for protein
2. Organic soils—saponifiable (fatty soils that can be broken down by alkalis or detergent builders to form a soap)	Oils; fats; fatty acids from food, skin, and cosmetics	Hot water, detergent, borax, ammonia
3. Solvent soluble organic soils—not saponifiable (cannot be broken down by alkalis)	Mineral oil, car grease, some body oil, skin particles, tar, wax, protein, dyes	Solvent, surfactant in detergents
4. Insoluble, inorganic soils	Mud, clay, smoke, soot, mineral ash, metals	Water, surfactant in detergents

Stains are discoloration that require specific treatment to remove. Stains should be removed before laundering. Laundry soaps and detergents, heated water, and heated drying may set a stain or intensify it.

Water is the basis of laundry. It is the liquid that dissolves or suspends soil. Water quality and quantity are important. The major considerations are hardness (dissolved minerals), cloudiness, iron, and temperature.

Laundry equipment includes the washer and dryer. Washers vary in the way they are loaded (top or front), the cycles available (regular, permanent press, delicate), and the amount of water and clothing they hold. Washers provide the agitation for flexing clothing that allows wetting with water and detergent or soap. The features such as top or front loading, cycle selection, and dispensers affect which laundry products can be selected and how they are used.

Activities for the Laundry Process

1. Ask four or more persons to describe how laundry is done in their family. Include goals for cleanliness, time use, economy, and family relationships related to laundry.
2. On pieces of newsprint, write column headings PERSON, FABRICS, SOIL, WATER, and EQUIPMENT. Have each member write in a row across her or his situation. Discuss differences among people in their goals, procedures, and relationships.

The Laundry Process and Laundry Aids

The major steps in laundry include **sorting**; **pre-treating** greasy and oily soil, protein soil, and heavy soil that are not removed by the laundry process; **removing stains** that may be set by the laundry process; **washing**; and **drying**. In addition, some people choose to **iron** or **press** clothing.

The major laundry aids may be divided into the following categories:

- Prewash agents
- Enzyme presoak agents
- Water softeners
- Sanitizers
- Detergents
- Soaps
- Bluing
- Fabric softeners
- Sizings and starches
- Detergent boosters
- Bleaches

Activities

1. Read the labels on each type of laundry aid and fill in a chart including information about the use, ingredients, amount of product in the container, and cost. The heading for the chart might read like the example below.
2. To learn the difference between chlorine bleach, peroxygen bleach, and hydrogen peroxide

LAUNDRY AID FORM (liquid, spray, etc.) (brand)

USE (amount, how, where, combinations, cautions)

INGREDIENTS

AMOUNT

COST

(non-chlorine liquid), compare the action of the bleaches on wool. Gather the following supplies.

- Chlorine bleach
- Oxygen bleach (powdered)
- Hydrogen peroxide bleach (liquid)
- Four small samples of wool, cut exactly the same size (cut the samples from the same larger piece of dark-colored wool. Set aside one sample to compare with the other samples later.)
- Pint jars and hot water
- Measuring spoons and cups
- Tape and marking pen for labeling pint jars

Mix 2 tablespoons of chlorine bleach and $\frac{1}{2}$ cup hot water in a pint jar. (Handle bleach carefully and do not spill.) Label jar CHLORINE. Add one sample of wool.

Mix 2 tablespoons of oxygen bleach and $\frac{1}{2}$ cup hot water in a pint jar. Label jar with type of OXYGEN BLEACH. Add one sample of wool.

Mix 1 tablespoon of hydrogen peroxide bleach and $\frac{1}{2}$ cup hot water in a pint jar. Label jar HYDROGEN PEROXIDE. Add one sample of wool.

Wait about 1 hour, then observe the wool samples. (This activity is a good introduction to the whole topic of laundry aids. Prepare the samples at the beginning of the program, then continue with the teaching about the different laundry aids.)

Observe the differences in the reaction of the wool to the various bleaches. What changes were noticed among the samples? How do the samples compare with the untreated sample? Did program participants read the entire package labels and anticipate what would happen?

3. To learn the different types of soils removed by prewash products, set up an experiment using the products, fabrics, and sample soils. Gather the following ingredients and supplies.

- Prewash product in aerosol can
- Prewash product in plastic container (same brand as aerosol)
- Enzyme product
- 13 swatches of pastel 100% cotton fabric
- 13 swatches of pastel polyester fabric
- Soils
 - pancake syrup (water-soluble soil)
 - cooking oil (insoluble organic soil)
 - milk (protein soil)
 - mud (insoluble, inorganic soil)
- Permanent marking pen
- Washing machine (or 5-gallon bucket and warm water)

Dryer (or hair dryer)
Laundry detergent

Save one set of the swatches to use for comparison. Label these ORIGINAL along one edge and set them aside.

Write SYRUP on three swatches of cotton and three swatches of polyester. Now soil each of them with a drop of syrup. Separate them into three piles with one cotton and one polyester swatch in each pile. Allow the soil to dry (or hurry it with a hair dryer). The swatches may be prepared a day or two before the program.

Pile 1 (aerosol)	Pile 2 (pump)	Pile 3 (enzyme)
Syrup 1 (1 cotton, 1 polyester)	Syrup 2 (1 cotton, 1 polyester)	Syrup 3 (1 cotton, 1 polyester)

Next write OIL on three more swatches of cotton and three more swatches of polyester. Now soil each of them with a drop of cooking oil. Add these to the three piles so there are four swatches in each. Allow the soil to dry.

Oil 1 (1 cotton, 1 polyester)	Oil 2 (1 cotton, 1 polyester)	Oil 3 (1 cotton, 1 polyester)
-------------------------------------	-------------------------------------	-------------------------------------

Next write MILK on three more swatches of cotton and three more swatches of polyester. Now soil each of them with a drop of milk. Separate and add these to the three piles so there are six swatches in each pile. Allow the soil to dry.

Milk 1 (1 cotton, 1 polyester)	Milk 2 (1 cotton, 1 polyester)	Milk 3 (1 cotton, 1 polyester)
--------------------------------------	--------------------------------------	--------------------------------------

Then write MUD on three more swatches of cotton and three more swatches of polyester. Now soil each of them with a dab of mud. Separate and add these to the three piles so there are eight swatches in each pile. Allow the soil to dry.

Mud 1 (1 cotton, 1 polyester)	Mud 2 (1 cotton, 1 polyester)	Mud 3 (1 cotton, 1 polyester)
-------------------------------------	-------------------------------------	-------------------------------------

Now take one of the three piles and label each of the fabrics with the name of the aerosol prewash product (or a number 1 for the aerosol). Apply the aerosol to the soiled area, following the instructions on the can.

Take the second of the three piles and label each of the fabrics with the name of the liquid prewash product (or a number 2 for the liquid). Apply the prewash product to the soiled area, following the instructions on the container.

Take the last of the three piles and label each of the fabrics with the name of the enzyme product (or a number 3). Mix the enzyme product and water according to directions. Put the soiled samples into the solution to soak for 1/2 hour.

Now wash and dry the samples. If you have access to a washer and dryer, use the small load setting. If you do not have access to a washer and dryer, use a bucket or large bowl to wash and rinse the samples. Dry the samples between layers of terry toweling, then use a hair dryer to complete the drying.

Compare the effectiveness of the various prewash products on the different soils. Which type of pretreatment was most effective on which type of soil. Were there any treatments that were effective on all soils? How do the laundered samples look in comparison to the ORIGINALS?

You can repeat this with different brands of pretreatment products and compare the results.

4. To learn the basis for sorting, use outline shapes of types of clothing and household textiles. Cut the shapes out of scraps of fabric in the various colors if possible. Examples of diagrams might include white items such as sheets, towels, and T-shirts; red towels, red sweatshirt, and red cotton skirt; blue sheets, blue denim jeans, blue and brown socks; pastel polyester blouses, pastel lingerie; white lingerie; etc. Include some diagrams with "smudges" to represent heavy soil and some with attached cotton balls to represent lint.

Discuss the reasons for laundering heavily soiled clothing separately for best cleaning. Also list the reasons for separating lint givers such as terry and chenille and lint catchers such as corduroy and permanent press finishes.

Are there any sorting combinations that should be changed on the basis of either soil or lint? The group may want to make some additional diagrams to solve problems they have.

Many people who wash in coin-operated laundries are more concerned about the number of loads of wash than proper sorting. What might be the consequences of dumping everything together?

(Long range might be that clothes do not stay clean looking, wear out more quickly. Short range might be saving money on washing machines.) Discuss alternatives such as buying only limited colors or care-labeled garments, washing some items by hand at home, waiting until you have a full load of a particular type or color, and washing with a friend to share similar loads.

Next, group the laundry products with the appropriate diagrams to show what products would be used with each load. What laundry aids might you need with whites, with greasy soil, with protein food soil, with bright colors, with fabrics that have static cling? Are there any product combinations such as detergent with enzymes or detergent with fabric softener that are duplicating other laundry aids?

5. On another sheet of butcher paper, list laundry problems such as "ring around the collar," dingy graying laundry, and so on. After reading and completing the laundry aids chart, discuss procedures and products to solve the problem.
6. After reading the labels and filling in the product chart, use different colored pens to group products according to those that meet our expectations for CONVENIENCE, those that are most ECONOMIC, those that are needed for SPECIFIC PROCEDURES, and those that may be purchased out of HABIT.
7. Show the videotape "Gone with the Wash," or the slide set "Diagnosing the Wash," or the slide set "Let's Look at Laundry Products." Descriptions of these audio visual aids and others are available in the *Publications and Teaching Aids Handbook* at your county Extension Office. The teaching aids may be ordered from the appropriate state Extension office by your local county Extension office.

Summary

Laundry aids help us get clothing and household textiles clean. Some of the products do specific tasks in cleaning. Consumers need to read the labels and follow the instructions when using laundry aids.



This publication was produced and distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914. Extension work is a cooperative program of Oregon State University, the U.S. Department of Agriculture, and Oregon counties. Oregon State University Extension Service offers educational programs, activities, and materials—without regard to race, color, religion, sex, sexual orientation, national origin, age, marital status, disability, and disabled veteran or Vietnam-era veteran status—as required by Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, and Section 504 of the Rehabilitation Act of 1973. Oregon State University Extension Service is an Equal Opportunity Employer.

Revised as HE 2-126T November 1991. Reprinted as 4-H 92157L July 1998.