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News Release

Saving Starts at Home:

Shedding Light on Purchasing Light Bulbs

Energy efficient lighting saves money. The law requires light bulb manufacturers to provide information for selecting the most energy efficient bulb. For all standard bulbs, including halogen, reflector, and compact fluorescent bulbs, the package must give the following information:

- **Light output:** How much light the bulb produces, measured in lumens. A 60-watt regular incandescent bulb yields about 855 lumens. A 15-watt compact fluorescent bulb yields about 900 lumens.
- **Energy usage:** The total electrical power a bulb uses, measured in watts.
- **Voltage:** If the bulb is *not* 120 volts, the voltage must appear on the label. Most bulbs run on 120 volts. Light output and efficiency decrease when a bulb is used with voltage that is different from the voltage used in the house. Most places in the United States operate on a 120-volt system.
- **Average life in hours:** How long the bulb will last.
- **Number of light bulbs in the package** (if more than one).

Living Room Energy Savers

The local grocery or home store offers a dazzling array of light bulbs. Here's what to know before buying.

Regular incandescent bulbs. Everyday pear-shaped bulbs with a screw-in base, these bulbs use electricity to heat a filament until it glows white hot, producing light. About 90% of the electricity used by incandescent bulbs is lost as heat. These bulbs typically burn for 750 to 1,000 hours—or about three hours a day for a year.

Compact fluorescent bulbs. These bulbs provide as much light as regular incandescent bulbs while using just one-fourth the energy. For example, a 15-watt compact fluorescent bulb gives out the same amount of light as a 60-watt incandescent bulb. Compact fluorescent bulbs last about 10,000 hours—10 times longer than incandescent bulbs.

Incandescent spotlights and floodlights. Known as spotlights or floodlights, these bulbs are used in recessed ceiling fixtures or outdoors. A special coating helps direct and focus the light. They burn for about 2,000 hours.

Halogen bulbs. These bulbs contain a small capsule filled with halogen gas, which emits a bright white light. While standard halogen bulbs use less energy and last longer than standard

incandescent bulbs, DOE cautions that halogen torchieres, frequently used in floor lamps, generate excessive heat, and can create fire hazards. Halogen torchieres also use significant amounts of energy. When possible, DOE recommends using more efficient compact fluorescent lamp bulbs instead. For more information, visit the [DOE Energy Savers website](#).

General service fluorescent bulbs. More energy efficient than incandescent bulbs, general service fluorescent bulbs do not produce heat. They are thin, long tubes often used in kitchens, offices, garages, and basements. They last from 10,000 to 20,000 hours—10 to 20 times longer than incandescent bulbs.

What is needed from a light bulb is the right amount of light, and for the bulb to last a long time. Highly efficient compact fluorescent bulbs may cost more than regular incandescent bulbs, but their efficient use of electricity and long operating life usually offsets the cost. Here's how. Suppose a living room table lamp is on for three hours a day and the local electric utility charges eleven cents per kilowatt-hour. A regular incandescent 60-watt bulb costs less to buy, but needs replacing at least once a year. Compare that to a 15-watt compact fluorescent bulb, which may cost \$5, but may last as long as 10 years. The savings doesn't end there. The compact fluorescent bulb costs about \$1.81 a year to operate, while the standard bulb costs about \$7.23. Some of the benefits of compact fluorescent bulbs include lower operating costs, longer life, and a more efficient use of energy.

For more information on this topic please contact Regional Extension Agent Ruth Brock at the St. Clair County Extension office at (205) 338-9416 or e-mail brockru@aces.edu.

For additional information, visit the Department of Energy's Energy Efficiency and Renewable Energy Network website at www.energysavers.gov or call toll-free 1-877-EERE-INF (1-877-337-3463).

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