

Long ago if you wanted to keep your food cold, you used blocks of ice in an ice box. Today, this technology has changed and improved vastly. Big freezers, small freezers, chest freezers, and upright freezers are all now available for your home.

Types available

There are three types of freezers available:

- Chest freezers with manual defrost (low energy use). A chest freezer has a chest-like design with a door on the top. They are available in a variety of sizes, and large, bulky items can be easily stored in larger chest freezers.
- Upright freezers with manual defrost (high energy use). Upright freezers have refrigerator-style shelves and pull-out baskets to make it easy to organize. Though an upright takes up less floor space than a chest freezer of equal size, it also uses more energy.
- Upright freezers with automatic defrost (very high energy use).

Chest freezers, on average, are 30 per cent more efficient than a similar sized upright freezer. This is because they generally have better insulation, and because less cold air is lost when the door is opened (cold air sinks, and the cold food in the freezer helps to hold the cold air in). These savings can greatly add up over the expected 30 year life of a freezer!

Purchasing tips

- Ask your retailer about ENERGY STAR® qualified models. ENERGY STAR qualified standard-size freezers must exceed minimum Government of Canada energy efficiency standards by at least 10 per cent;

- Check the EnerGuide label to see how much energy will be consumed to operate the model, and compare with other similar models;
- Purchase the right sized freezer for your needs. Generally, the bigger the freezer, the bigger the appetite for energy;
- Models with manual defrost use half the energy of automatic defrost models, but must be defrosted periodically in order to realize these savings. Frost should never be allowed to build up more than one-quarter of an inch.

The second price tag

When you buy an appliance there are actually two price tags. The first is the cost of the appliance. The second price tag is what you will pay to operate the appliance during its lifetime. You will pay these operating costs every month on your energy bill. The less energy an appliance uses, the more you can save.

Calculating the second price tag is easy. Simply multiply the appliance's estimated annual energy consumption (the large number on the EnerGuide label) by the cost of electricity – which is on your utility bill – to quickly estimate the appliance's operating cost for one year or over the life of the appliance (estimated at 30 years for freezers).

Below is an example of a second price tag calculation for two new ENERGY STAR qualified freezers. Purchasing the most energy efficient freezer to meet your needs will help you save over the long run!

Freezer type	ENERGY STAR qualified?	Type of defrost	Size (cubic feet)	Energy use per year (kWh)	Life of freezer (years)	Second price tag* (per year)	Second price tag* (over 30 years)
Upright freezer	Yes	Automatic	13.7	559	30	\$32.37	\$971.10
Chest freezer	Yes	Manual	14.8	354	30	\$21.24	\$637.20

*The estimated cost to run each appliance is based on average annual energy consumption and Manitoba Hydro's electricity rates effective August 1, 2007





A 7.2 cu. ft. chest freezer

Safety

- Place the freezer away from any flammables, such as gasoline.
- Never use an extension cord with a freezer.
- Make sure to place your freezer somewhere that will be able to support its weight when full.

Disposing of the old freezer

After you've bought a new freezer, you will likely need to dispose of your old freezer. You should choose an environmentally friendly option to do this. Check with your local municipality to find out what programs exist and how appliances are collected. Be sure to ask if chlorofluorocarbons (CFCs), the gases that are used for cooling, are removed before appliances are crushed for recycling. If not recovered properly, CFCs escape and damage the atmosphere's ozone layer.

Energy saving tips

- Be sure to read your new appliance's owner's manual; it's full of hints to help you operate your freezer at optimum efficiency;
- Make sure your freezer's rubber door seals are clean and tight - they should hold a slip of paper snugly. If paper slips out easily, replace the seals;
- Vacuum dust from the back and underside of your freezer regularly;
- Never leave the lid / door open, and always be sure that it is closed tightly;
- Don't open the lid more often than necessary, especially in hot, humid weather;
- Arrange the contents so that you can find what you are looking for quickly;
- Place the freezer away from direct sunlight, heat sources such as a range or vent, or in a warm, unventilated room, and make sure your freezer is at least 5 to 7 cm (2 to 3 inches) out from the wall so that air can move freely around the unit;
- Let hot foods cool to room temperature before placing them into the freezer;
- Don't overload the freezer - this forces the compressor to run longer;
- Wrap foods properly and wipe containers dry before placing them in the freezer to cut back on the amount of frost buildup inside the freezer;
- Never line shelves or baskets with foil, paper towels, or anything else - this lining disrupts the cold air circulation, making the freezer less efficient;
- If the freezer isn't going to be used for several months, remove all food and unplug it. Clean and dry the inside, and then leave the door open slightly (be sure that the open door is secured so that a child cannot climb inside or so that the door cannot completely close);
- Defrost the freezer when the frost layer inside becomes 1/4 inches thick.

For information about Manitoba Hydro's Power Smart programs:

Telephone: 480-5900
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www.hydro.mb.ca

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