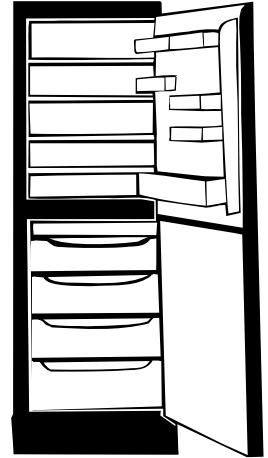


Refrigerator

- Dispose of an unused second refrigerator (check out the Great Refrigerator Roundup Program), or at least unplug it except for special occasions. It is more efficient to operate one larger fridge than two smaller ones, especially if one is an older model.
- Set refrigerator temperature between 1.7 and 3.3°C (35-38°F), freezer compartment at -18°C (0°F) for maximum efficiency and food safety. Turn on "energy saver" switch.
- To check refrigerator temperature, use an outdoor thermometer.
- Don't leave fridge doors open any longer than necessary.
- Organizing items makes it easier to find what's needed quickly.
- Label leftovers for quick retrieval.
- Allow foods to partially cool before placing in refrigerator, but not longer than 30 minutes.
- Cover liquids and wrap foods. Uncovered foods release moisture, making compressor work harder.
- Full refrigerators retain cold better than empty ones. If refrigerator is nearly empty, store water-filled containers inside. However, don't overfill, which interferes with cold air circulation.
- It does not harm a refrigerator to turn it off periodically, if away on a holiday for example.
- Make sure doors seal properly. If needed, it may be possible to repair a seal with glue. If not, the manufacturer or a local hardware store may be able to supply a new seal.
- If seals urgently need replacing, use the opportunity to buy a new, high-efficiency model.
- Check door alignment by lifting door (gently!) If there is play, tighten hinge screws and recheck seals.
- If refrigerator is near a heating vent, in the sun, or next to stove, cover up heating vent, change location or cover window with blind.
- Locate fridge at least 5 to 7 cm (2 to 3 in.) out from wall, so that air can move freely around unit.
- Defrost fridge regularly if it is a manual defrost.
- Vacuuming coils improves efficiency by up to 30% (*California Energy Commission*). Unplug first.
- Clean air intake grill below doors every 3 months. Unplug first.
- Using only minimal energy (under 100 kWh), an inexpensive car fridge temporarily boosts cooling space when needed, and is easily loaned to family or neighbours. Or, use a traditional ice cooler.
- Consider building a basement cold storage room for products such as vegetables and beverages.
- Defrosting frozen food in refrigerators helps keep refrigerator cold.



Microwaves

- Use a microwave when possible for savings of 50- 65% over conventional ovens (*California Energy Commission*). It also saves money on air conditioning in summer.
- Food cooks faster when placed at the edge of the rotary tray, as more microwaves can interact with food there than at the centre.
- To function most efficiently, keep inside microwave surfaces clean.
- Rather than use microwave for defrosting, plan ahead and defrost food in refrigerator, or for a short time at room temperature.
- Use microwave-safe serving dishes to save hot water, which results in one dish to wash instead of two.
- Unplug microwave when not in use. Using a typical microwave oven for less than 7.2 minutes/day, the clock uses more electricity than the oven.
- Typical costs of cooking a casserole, assuming gas is \$.60 a therm, and electricity is \$.08 a kWh. (*Consumer Guide to Home Energy Savings*):

Appliance	Temperature	Time	Energy	Cost
Electric Oven	350	1 hour	2.0 kWh	\$.16
Electric Convection Oven	325	45 min.	1.39 kWh	\$.11
Gas Oven	350	1 hour	.112 therm	\$.07
Electric Frying Pan	420	1 hour	.9 kWh	\$.07
Toaster Oven	425	50 min.	.95 kWh	\$.08
Electric Crockpot	200	7 hours	.7 kWh	\$.06
Microwave Oven	"High"	15min.	.36 kWh	\$.03

Stovetops

- Put a pan on a burner before turning it on. Use smallest pan necessary, matching it to burner size. Use flat-bottomed pans rather than warped or rounded ones.
- Tight fitting lids cook food fastest.
- Invest in the best quality pots and pans. Copper-bottom pans heat up faster than others.
- When boiling, use as little water as needed to do the job.
- Use lowest possible heat setting to keep water boiling, steaming, simmering etc.
- Steaming vegetables instead of boiling them in a whole pot of water uses a lot less energy, (and is far more nutritious).
- Double up - steam vegetables over the pasta water.
- Use reflector foils under electric stove elements to reflect heat. Keep them clean.
- Turn off burners before finished - retained heat continues cooking food for several minutes.
- Pressure cookers cook food using 50 - 75% less energy (*Pembina Institute*).

- ❑ A wood stove can heat water or simmer soups, stews etc. Heat-resistant trivets can elevate pots to regulate cooking. Use common sense with pot selection, especially those with plastic or wooden handles.

Ovens

- ❑ Before heating up food, conventional ovens must heat up about 16 kg of steel. Cook several dishes at the same time, or cook larger portions and reheat them for other meals in a toaster oven or microwave. Reheating food uses less energy than cooking it the first time.
- ❑ If using more than one pan at a time, stagger pans on upper and lower racks to keep air flowing.
- ❑ Baking with ceramic or glass pans allows lowering of oven temperature by about 25° F.
- ❑ Don't open door unnecessarily. Cook by time and temperature or use oven light and look through window.
- ❑ When appropriate, use the broiler. It saves energy and requires no pre-heating.
- ❑ Don't cover oven racks with foil as it reduces heat flow and increases cooking time.
- ❑ Turn oven off a few minutes before food is ready; retained heat will finish cooking food.
- ❑ Self-cleaning ovens tend to be better insulated than regular ovens, thus more efficient.
- ❑ If oven self-cleans, do the self-cleaning just after use, while oven is still hot.
- ❑ Don't preheat oven unless baking desserts or breads.
- ❑ For small quantities, use a microwave, toaster oven, crockpot or electric frying pan.



Kettles

- ❑ Kettles heat water more efficiently than a range-top element or a microwave. Choose one with an automatic shut-off button. Some have water level indicators to make quantities easier to judge.
- ❑ Boil only as much water as needed, and immediately shut it off once boiled.
- ❑ Clean regularly with boiling water and vinegar to remove mineral deposits that reduce efficiency.
- ❑ Don't leave coffee makers on for extended periods - reheat coffee with microwave or use a thermos.

Freezers

- ❑ Unplug the rarely used extra freezer except when needed for holidays and parties.
- ❑ Label and organize foods in freezer to minimize standing with the door open.
- ❑ Check freezer temperature using an outdoor thermometer. Set for -18°C (0°F) for maximum efficiency and food safety.
- ❑ Freezers work best when they are about two thirds full. Top up with water jugs if needed.

- Vacuum dust from back and underside of freezer regularly. Unplug first.
- Freezers should be located in a dry, heated, and insulated area that maintains a steady temperature.
- Locate freezer away from heat sources such as direct sunlight, stove, dishwasher or dryer.
- Locate at least 5 to 7 cm (2 to 3 in.) out from wall, so that air can move freely around unit.
- Check for seal leaks by putting a flashlight inside. Visible light indicates a poor seal.
- Cool food down fully before putting it in freezer.
- Defrost and clean inside of freezer at least once a year. Don't let more than 6 mm of frost build up.
- It does no harm to a freezer to turn it off if you go away on a long holiday.

Dishwashers

Water heating accounts for 60% of energy used by a dishwasher. (Consumer Guide to Home Energy Savings).

- Don't pre-rinse with hot water. Scrape off food and empty liquids. If you must pre-rinse, use cold.
- Use dishwasher only for full loads.
- Use the shortest cycle possible. Use energy-saving wash cycles whenever possible.
- Apply no-heat, air-dry feature. If dishwasher does not have this feature, turn it off after final rinse cycle and open door so that dishes can dry to save 10% of operation costs. (*Ministry of Energy*).
- Check and clean drains and filters regularly to ensure efficient operation.
- Filling up one side of sink with soapy water, the other side with rinse water and not letting faucet run uses half as much water as a dishwasher does (*Energy Commission*).

Other

- Avoid electric can openers, carving knives etc. that have non-electric alternatives.
- Use cold water when running garbage disposals. Cold water congeals grease better and keeps disposals cooler, helping units run more efficiently.

All of the information provided within is for general information purposes only. It is recommended that you consult directly with a qualified professional to seek advice based on your specific circumstances. Neither the Kilowatt Countdown volunteers, nor the Corporation of the Township of South Stormont, its employees, agents or Council members are liable for any inaccurate or misleading information contained herein, nor for any actions taken or not taken in reliance upon such information.

