

Refrigeration is a vital tool for almost every food service operator but refrigeration systems have two strikes against them – they are “On” all the time and they consume electricity, a relatively expensive fuel. Also, an operation will typically have several different types of refrigeration systems from walk-ins and reach-ins to ice machines, prep tables, cold drawers, blast chillers, milk coolers and drink machines. This means that even small amounts of energy wasted by poorly maintained refrigeration will add up to substantial costs over time.

Here are some practical tips that will help to keep your refrigeration systems running efficiently:

- Use strip curtains or plastic swing doors on walk-in refrigerators and freezers. These “infiltration barriers” block warm moist air from getting into your boxes while the door is open. Strip curtains used in busy kitchens can reduce compressor runtime significantly and that saves you money! Remember, strip curtains have to cover the entire door opening – that old curtain with the center strips chopped out is wasting your money, so replace it and save!
- Make sure that the your walk-in doors shut all the way – repair or replace broken auto-closers on the doors, lubricate door hinges, and realign sagging doors. Also, don't allow your employees to prop open walk-in doors. While you're at it, be sure to keep the lid down on those ice machines as well!
- Take a look at all the door gaskets on all your refrigerators and replace any gaskets that are torn, cracked, worn out, or just plain missing. (Always use the manufacturer's specified replacement.) A refrigerator door must seal completely to be effective. Remember, you are not trying to keep the cold air in – you are trying to keep that hot humid kitchen air out!
- Most reach-in freezers come with a door heater that is controlled by an easily accessible switch. In most California kitchens, these door heaters can be turned “Off”.
- Airflow is an important part of refrigeration. When the coils are clogged and dirty, the compressor works harder and will fail sooner. So, clean your evaporator coil (the cold one inside the refrigerator) and condenser coil (the hot one outside the refrigerator or on the roof) at least quarterly. If the aluminum fins are frozen or bent/damaged then call a qualified service person and remember – never use a caustic cleaner on these coils!
- Find the time clocks that control your freezer defrost and set them properly. Time clocks might be located on top of or underneath your freezers, on the wall, or on the roof. There is a clock for each freezer. In many areas of California, you can reduce the number of daily defrost cycles from four to three and sometimes even two. Each cycle should be about 15 minutes long. Never defrost between Noon and 6 pm – that's the time when you pay the most for electricity. Also, make sure that the evaporator drain line is heated and insulated so that the defrost condensate has some place to go. Improper defrosting can waste a lot of your money and compromise safe freezer temperatures.
- Let's be honest, the lights in your walk-in are always on – it's just not convenient to turn them off. So, replace the light bulbs in your walk-in refrigerator with Energy Star rated compact fluorescent lamps (CFL). A regular CFL will work fine in your refrigerator but for your freezer you need to get a CFL that is rated for low temperature (it will say so on the box). In California, you'll save about \$50 a year per lamp replaced!

These energy saving tips are offered by the Food Service Technology Center (FSTC), an unbiased food service resource center located in San Ramon, CA and funded by California utility ratepayers under the auspices of the California Public Utilities Commission. For more information on the FSTC and for our schedule of free energy efficiency seminars, please visit our website at www.Fishnick.com.