

# Natural gas fryers



Gwen Frederick, Pub 500

Gas fryer technologies include high efficiency and infrared burners. Some fryers offer computerized control devices for temperature and time, automatic basket lifts and optional automatic filter systems.

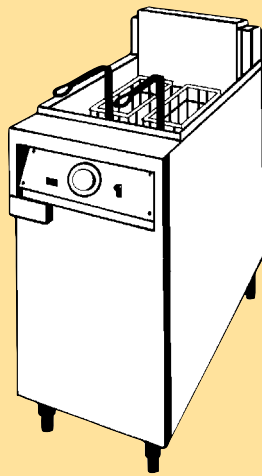
## Types of gas fryers

Natural gas technology offers three fryer options:

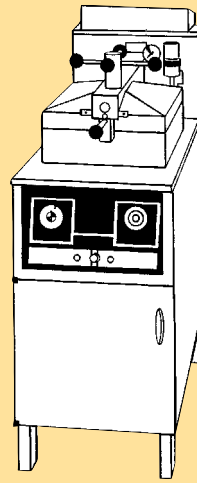
- 1. General purpose fryer.** In a general purpose fryer, the frypot is heated by burners that either run through tubes in the frypot, or by burners under an open-pot design. Some models use baffle systems or infrared burners for greater efficiency. High-efficiency fryers save energy costs and produce better product due to faster recovery time. When temperatures recover quickly, less shortening is absorbed in the product. Baskets of food are submerged in shortening which is heated to temperatures between 300 F to 350 F. Foods are often coated with batter or breaded. A cold zone allows crumbs from breaded products to drop below the cooking area, slowing the breakdown of the shortening. Similarly designed natural gas units heat water (using a lower temperature) for water bath cooking to prepare pasta, bagels and similar products. For a copy of our pasta cooker fact sheet, contact the Foodservice Learning Center at the number listed on back.
- 2. Pressure fryer.** A pressure fryer has an airtight frypot that traps steam from food and increases the pressure inside the frypot. In a pressure fryer, the temperature increases 3 F for each pound of pressure. In an open fryer, food never heats higher than 212 F internally, regardless of shortening temperature. The pressure fryers are designed for volume production and include a cold zone. Because of the pressure, they can operate at lower temperatures.
- 3. Specialty fryer.** Specialty fryers provide a shallower frypot than general purpose and pressure fryers, with a larger surface area for cooking foods that need to float on the surface of the shortening, such as chicken, fish and doughnuts.

## Tips for best results

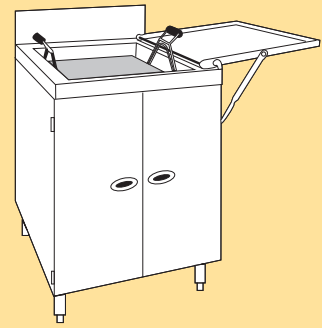
- Before lighting burners, fill frypot with liquid shortening or pack solid shortening around tubes or in frypot to recommended levels.
- Melt shortening completely using low temperatures; many fryers have a melt cycle for this purpose.
- Bring shortening to proper cooking temperature before frying. This avoids absorption of excess fat by foods.
- Follow manufacturer's instructions for preheating. Preheat time is usually between five to 10 minutes.
- Frying temperatures should range between 325 F and 350 F. Shortening breaks down rapidly at temperatures above 360 F.
- During slow periods, turn off fryers which are no longer needed.
- Remove accumulated food crumbs from fryer with a small screen or strainer. Skim off floating particles between batches.
- Remove excess moisture from fresh food before frying.
- To slow breakdown of shortening, avoid frying salted foods, and never salt or coat (i.e. breading, flouring, etc.) food directly over the fryer.
- Cover frypot when not in use to prevent oxidation and contamination of shortening.
- Filter shortening regularly, according to manufacturer's instructions. This will help avoid transfer of flavors from one food to another and prolong the life of the shortening.
- Use filter paper with diatomaceous earth powder to absorb impurities in shortening and increase its life.
- Automatic filter systems are the best option for increased life of shortening, ease of cleaning and quality of product.



**General purpose fryer**



**Pressure fryer**



**Specialty fryer**

- Food quality deteriorates when shortening breaks down. Indications of breakdown include smoking and darkened color of shortening. Appropriately discard shortening that has broken down.
- Fill baskets 1/2 to 2/3 of capacity, never overloading baskets. Lower baskets slowly and carefully into fryer.

### Care of a gas fryer

- Drain fryer daily or more often if necessary; filter shortening in a commercial filter and reuse.
- Clean fryer unit thoroughly when gummy deposits appear in the kettle.
- Wash the fryer with fryer cleaning compound. Rinse thoroughly with clear water and 1/2 cup vinegar; rinse with clear water as recommended by the manufacturer. Dry with a cloth, not burner heat.

For more information,  
call 1-877-OPT-4GAS

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