The Electric Oil-less Hot-air Fryer: Game Changer or Boat Anchor?

The Goal: Determine the Energy Use and Cooking Performance of a commercial hot-air fryer	The Scope: Lab Testing at the Food Service Technology Center using the ASTM Fryer Test	The Potential: An electric fryer with an overall life-cycle cost that competes with traditional fryers

Project Sponsors:

CALIFORNIA ENERGY COMMISSION

PG&E

EatGood

The Technology: **focused, high-velocity airflow across a rotating basket in a tightly controlled oven chamber**

STEAM CAPTURE · SELF CLEAN · SMART MENU SYSTEM · REFRESH CYCLE · AUTOMATIC EMPTY

Oil-less? **The oven requires no oil, but "fried food" must be par-fried.** Potentially healthier – compared **to** "deep fat" fryers

Unique and flexible:

- **cooks more than fries**
- **can operate ventless**

Established European Tech: **We had one 25 years ago**

AIR FRY TECHNOLOGY

Safety!

no oil fires

no oil burns

no slippery floors

Lab Testing - THE RESULTS & COMPARISON

	Hot-Air	Countertop Deep Fat	Electric Deep Fat	Gas Deep Fat
				
Energy Efficiency (%)	85%	84%	86%	54%
Production Capacity (lb/h)	39 lb/h	31 lb/hr	67 lb/h	67 lb/h
Annual Energy Cost ($)	$2,800	$2,600	$2,900	$1,100
Annual Oil Cost ($)	$0	$2000	$6,700	$6,700
Purchase Price ($)	$14,000	$10,000	$5000	$5,000
10-year Total Cost of Ownership ($)	$42,000	$56,000	$101,000	$83,000

FRONTIER energy

Looks Like a Game Changer!

fishnick.com