



Gas Equipment Delivers Better Consistency

Improve your food quality with today's gas cooking technologies

by Tom Stroozas - CFE, RCGC, CFSP

When the subject of “hedonics” comes up in a discussion about food, one may ask how it applies. Or even better, what is this “hedonics” stuff all about anyway? So I guess a brief explanation is in order.

About This “Hedonics” Stuff

A number of years ago, I was meeting with a large QSR national account to discuss test protocols to evaluate their signature products when one of their operations folks mentioned the importance of evaluating the “hedonics”. It immediately became apparent that this was an important characteristic which needed inclusion within the test protocols.

Since no one likes to admit their ignorance, I was quick to agree with the merits of incorporating the “hedonics” into the overall evaluation process. I just found myself agreeing to something that, one...I didn't understand and, two...didn't know anything about! This unexpected lesson in terminology set me on a course to discover the importance of the “subjective quality of the food”, which many refer to as “hedonics”.

As a result, I have promoted hedonics test protocols throughout the industry as an effective means to establish the true textbook and subjective quality of food. This terminology has gone on to define the traits of signature menu items within a restaurant chain in order for them to deliver product consistency from coast-to-coast. Let's face it, when you walk into an Uncle Vinnie's in Syracuse you expect to get the identical food quality you get from an Uncle Vinnie's in Portland. And cooking with natural gas is an important ingredient when it comes to delivering the best in the hedonics arena and keeping your customers coming back for more time

and time again.

How Gas Appliances Enhance Quality

Two popular appliance categories that are designed to deliver consistent and preferred product quality are gas fryers and gas ovens. A vast variety of branded gas fryers on the market are equipped with rapid recovery characteristics that enable an operator to produce a more consistent product from batch-to-batch than ever before. These quick recovery (and sometimes virtually “instant recovery”) fryer systems mean that your fried food items, from chicken to French fries and everything in between, are cooked to your specified characteristics day in and day out. It is this reliability that national chains look for to ensure that their customers get the same product no matter where or when they purchase products.

Today's high-tech quick recovery gas fryers deliver more consistent quality with less product waste, reduced oil consumption (drag-out) and improved production. And yes, they are real misers when it comes to energy use, saving you additional dollars on operating costs.

When it comes to baking, natural gas convection ovens have the inherent ability to produce baked products with a higher moisture factor. This is due to the fact that one of the by-products of gas combustion is water vapor, which results in a moister cooking environment. This hidden benefit is especially important when cooking pastries and biscuits – by imparting a higher moisture level in the finished product you can achieve a longer “shelf life”, especially if you are holding items under heat lamps for a period of time. And longer shelf life equates to less product waste, higher profits, and of course,

better quality.

In numerous tests with high-volume chain operators, biscuit products were evaluated with both gas and electric ovens. The biscuits baked in gas ovens achieved a 50% longer shelf life. After 30 minutes under a holding station, they retained a much higher level of moisture, enabling them to be sold to customers without compromising quality. On the other hand, biscuits baked in a comparable electric oven developed a hard and undesirable surface (due to the drier cooking environment) after 15 minutes, resulting in waste and unsellable product.

And then there are those highly productive gas combination ovens that incorporate several gas cooking technologies into a single efficient footprint: conventional baking, convective baking and steam baking. Many of today's high-tech gas combis incorporate simple push button computerized controls that can be programmed for many different types of food items which helps ensure more consistent hedonics, batch-to-batch. Inch for inch and pound for pound, a gas combination oven is one of the more innovative products available and can reduce your cooking appliance line-up by many square feet due to its versatility and speed of producing high quality finished products for virtually any menu.

Preferred Characteristics & Test Protocols

To measure and ultimately evaluate the preferred characteristics of products produced during a fryer evaluation, the Hedonics Evaluation Sheets (shown on next page) were used. In this situation, we were evaluating the quality of fried chicken, paying particular attention to the appearance of the crust, an important factor when it comes to desirable visual appeal for customers. In addition the meat of the finished product was evaluated for moistness, tenderness and overall flavor. When this methodology was used for the test protocol, it was easy to compare the attributes of the various brands of fryers included in this evaluation to determine which fryer produced the preferred product quality as determined by the restaurant operator.

This operator favored Fryer A's cooking attributes as it provided a more golden colored crust and less fat rendering of the skin which made for better flavor and improved fryer oil life.

Preferred characteristics may also be a good benchmark when comparing products cooked in different types of equipment. For example, operators

who place an emphasis on healthier items may want to compare the quality of French fries prepared in a gas oven versus fries produced in a deep fat fryer. Many French fry products manufactured for the foodservice market are designed to be baked as they contain a small amount of oil impregnated into them to help produce a more golden and "deep-fried taste" when baked using combi oven or even conventional oven technology. Evaluating the quality of fries cooked using two different methods and two different types of equipment can enable the operator to offer healthy options for their customers.

Pizza Anyone?

Probably one of the most popular food items on many foodservice menus is that infamous pizza pie. Cooking appliance manufacturers have answered this demand by producing a plethora of gas-fired pizza ovens in a wide variety of sizes and designs. Whether one selects a stone-hearth style, a gas conveyor model, or a conventional deck type, natural gas pizza ovens consistently produce finished products that operators can serve with confidence. And once an operator develops a recipe for the product hedonics of preference, he can produce an endless stream of pizza that is certain to keep customers returning for that signature gas-baked fare.

As an example, today's gas conveyor ovens are designed to maximize efficiency, production and footprint. Their unique heating system provides consistent results and more cooking capacity. A solid curtain of hot air envelops the food as it moves through the cooking compartment, resulting in maximum heat transfer and more even results. As the heated air is forced over and under the product, it strips away the cold boundary layer and actually penetrates the product being cooked. As the product passes through the cook zone, the high and low points of the product are cooked evenly because of this directed airflow.

The efficiency of gas conveyor oven design delivers the heat to the food not to your kitchen, resulting in a cooler, quieter kitchen environment, and potentially reduced HVAC costs. With many units incorporating double insulation and advanced airflow, more of the heat is recycled to the cooking cavity. Conveyor ovens also help produce better hedonics – setting the speed of the conveyor eliminates the chance of the product being under- or overcooked.

The variety of natural gas cooking technologies

can live up to your expectations today and help your business grow tomorrow; and with better product consistency and quality!

To learn more about improving the quality of your food with gas cooking appliances or how GFEN can assist you in the evaluation process, log onto the Gas Foodservice Equipment Network at www.gfen.com.



HEDONICS EVALUATION SHEET FOR FRYERS

DATE: 7-27-10 FILE NAME: CHIX - FRESH BATCH SIZE: 5-DEEP
 FUEL: NG FRYER MODEL: XXXXX BRAND: B

Instructions: Independently assess the product. From sample to sample, use the same piece each time to determine your ratings. Use rating point "3" as the mid-point. Rating point "5" is not necessarily the "ideal".

CRUST		IDEAL DESCRIPTION	RATINGS					
			1	2	3	4	5	
Color	More golden than brown	Brown		✓				Golden
Texture	Cornflaky, but not lumpy	Smooth		✓				Rough
Bite	Crispy like Cornflakes	Crunchy			✓			Crispy
Greasiness	Mostly dry surface, no visible wet areas	Oily			✓			Dry
Fat Rendering	Breast 80%, & Thigh 70% of skin area rendered.	None			✓			All

MEAT		IDEAL DESCRIPTION	RATINGS					
			1	2	3	4	5	
Moistness	Juices flow between muscle segments	Dry			✓			Juicy
Tenderness	Soft not chewy	Tough			✓			Soft
Overall Flavor	Flavor to the bone	Tasteless			✓			Delicious

PIECE TESTED: _____

PRODUCT INTERNAL TEMPERATURE: BREAST 170
 WING 185
 LEG 170
 THIGH 165

Fryer B produced a darker crust with more fat rendering of the skin.

HEDONICS EVALUATION SHEET FOR FRYERS

DATE: 7-27-10 FILE NAME: CHIX - FRESH BATCH SIZE: 5 DEEP
 FUEL: NG FRYER MODEL: XXXXX BRAND: A

Instructions: Independently assess the product. From sample to sample, use the same piece each time to determine your ratings. Use rating point "3" as the mid-point. Rating point "5" is not necessarily the "ideal".

CRUST		IDEAL DESCRIPTION	RATINGS					
			1	2	3	4	5	
Color	More golden than brown	Brown				✓		Golden
Texture	Cornflaky, but not lumpy	Smooth				✓		Rough
Bite	Crispy like Cornflakes	Crunchy			✓			Crispy
Greasiness	Mostly dry surface, no visible wet areas	Oily			✓			Dry
Fat Rendering	Breast 80%, & Thigh 70% of skin area rendered.	None		✓				All

MEAT		IDEAL DESCRIPTION	RATINGS					
			1	2	3	4	5	
Moistness	Juices flow between muscle segments	Dry			✓			Juicy
Tenderness	Soft not chewy	Tough			✓			Soft
Overall Flavor	Flavor to the bone	Tasteless			✓			Delicious

PIECE TESTED: _____

PRODUCT INTERNAL TEMPERATURE: BREAST 168
 WING 180
 LEG 170
 THIGH 166

Fryer A produced the preferred color and crust with less fat rendering of the skin.