



CLEAN LABEL CONFERENCE

Sophisticated Solutions for Simplified Labels

October 29-30, 2013 • Hyatt Lodge, Oak Brook, Illinois, USA

2013 Technology Snapshot Presentation

**Clean Label Meat
and Savory Flavors**
By: Innova Flavors

Clean Label Meat and Savory Flavors

Dafne Diez de Medina, PhD
October 30, 2013



Chicken Shwarma Sweet Potato Chips

- Featuring:
 - 0188375 Robust Ultima Ultra Clean Nat Chicken Fl WONF, Rotisserie Type Non-GMO (**salt, natural flavor**)
 - 0189262 Savor Notes Nat Fl Shwarma Spice Type (**High Oleic Acid Sunflower Oil, Natural Flavor**)
- Contains Canola oil, salt, cane sugar, vinegar

Why use flavors?



- Replace flavor character lost during processing
- Supply basic flavor character to fabricated foods
- Contributes culinary cooking process not available in production
- Make finished products more palatable
- Replace basic flavor ingredients
- Replace costly natural ingredients
- Disguise unpleasant notes

Taste



- Flavor: Taste, Aromatics and Mouthfeel
- Taste: detection of stimuli by the taste buds - affected by temperature, viscosity, rate, duration
- Aromatics: the sense of smell as perceived by the olfactory cells in the nasal area
- Mouthfeel: detected in the mouth by tactile nerves & can be influenced by chemical irritants

Meat & Savory Flavor Ingredients

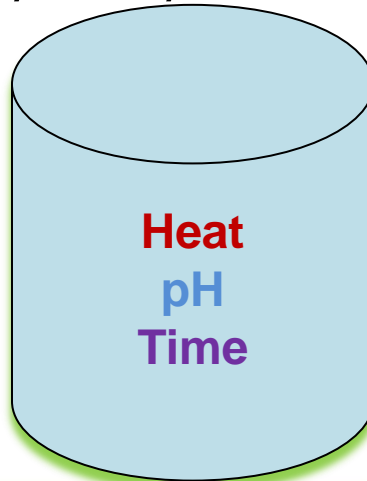


- Hydrolyzed Vegetable & Animal Proteins
- Meat protein & Fats
- Yeast Extracts, Natural Chemicals
- Dairy Products/Enzyme Modified Cheese
- Vegetable, Fruit, Spice & Extractives

Reaction Flavors

- A combination of natural ingredients which are reacted under specific conditions of time, temperature and pH to create a desired concentrated flavor
 - Maillard, degradation, oxidation, caramelization, polymerization, hydrolysis,

- Carbohydrates
- Proteins
- Fats & Oils
- Vitamins



Maillard Reaction



- A Maillard Reaction is based on combining a protein source (amino acids) in the presence of a reducing sugar with the application of heat.
- The result can be a flavor base such as beef, chicken or pork where further flavor development occurs creating a more roast character.

Specialize in the development
and delivery of
customized meat & savory flavors
for a variety of applications



Meat Flavors



- Chicken
- Beef
- Pork
- Turkey
- Lamb

Savory Flavors & Enhancers



- Vegetables
- Chiles
- Herbs
- Seafood
- Alcohol
- Fats & Oils
- Cheese & Dairy

HVPs



- Soy
- Corn
- Wheat
- Yeast

Meat Flavors



- Optimum **flavor impact and economy** when label flexibility exists.



- **Vegetarian** flavors that replicate the taste of beef, poultry, pork and other meats.



- **Clean Label** Flavors with the highest fidelity in meat flavors.
- No MSG, HVP, or I+G.



- Our newest meat flavor the **cleanest label meat flavors.**
- Flavor characteristics inspired from classic culinary cooking techniques
- Only clean label ingredients: no artificial flavors; no preservatives, no MSG, no HVP, no I+G, no AYE, no starches or other carriers

To customers **demanding natural and clean labeled meat & savory flavors**, Innova **UltraClean** delivers the flavor characteristics inspired from **classic culinary cooking techniques** using **all natural and clean ingredients**: *no artificial flavors or colors, no MSG, no HVP, no I+G, no AYE, no preservatives, no starches or other carriers.*

Clean Label Spectrum



Clean Label

UltraClean Label



HVP
MSG
I+G



Carriers
AYE



HVP
MSG
I+G
Carriers
AYE

Our process



Market and Consumer Trends



Culinary Gold Standard



Flavor development



Evaluation



CHICKEN

• Baked • Rotisserie • Roasted • Pan drippings • Dark Meat • Bone in-Skin on

BEEF

• Roasted • Veal •

TURKEY

• White Meat • Roasted •

Impressive taste fidelity and highest quality

UltraClean Label Examples



Code	Name	Ingredient statement
0189358	Ult UC Natural Chicken FI WONF, Roasted Type NON-GMO	Natural Flavor
0188375	Ult UC Natural Chicken Flavor WONF Rotisserie Type NON-GMO	Natural Flavor, Salt
0189362	Ult UC Natural Chicken Flavor WONF Pan Drippings Type	Natural Flavor, Salt, Rendered Chicken Fat
161126	Ult UC Ult Nat UC Beef FI WONF Roasted Type	Beef Flavor (contains Dehydrated Beef Stock, Salt)

Clean Label



SAVORY

- Red Wine • Jalapeno • Butter • Cream • Garlic • Ginger • Sesame • Olive Oil • Lemongrass • Shwarma spice • Parmesan cheese • Shrimp • Onion • Masa Corn • Wok •

Label Examples



Code	Name	Ingredient Statement
0188356	Sav Nat Sesame Fl WONF	Toasted Sesame Oil, Natural Flavor.
1181291	Sav Nat Onion Fl WONF, Fried Type	High Oleic Acid Safflower Oil, Natural Flavor.
0187582	Sav Nat Fl Rroux Type NON-GMO	High Oleic Acid Sunflower Oil, Natural Flavor.
0188988	Sav Nat Garlic Fl	Garlic Powder, Maltodextrin, Gum Arabic, Natural Flavor.
1181261	Sav Nat Shrimp Fl WONF	Yeast Extract, Shrimp Powder, Salt, Maltodextrin, Natural Flavor. Contains Shrimp.
0183086	Sav Nat Ginger Fl WONF	Maltodextrin, Salt, Natural Flavor, Silicon Dioxide (Anti-Caking Agent).

Chicken Shwarma Sweet Potato Chips

- Featuring:
 - 0188375 Robust Ultima Ultra Clean Nat Chicken Fl WONF, Rotisserie Type Non-GMO (**salt, natural flavor**)
 - 0189262 Savor Notes Nat Fl Shwarma Spice Type (**High Oleic Acid Sunflower Oil, Natural Flavor**)
- Contains Canola oil, salt, cane sugar, vinegar

Thank you!

www.innovaflavors.com



THE MEAT FLAVOR EXPERTS

INNOVA[®]

A Griffith Laboratories Company