



Dr Fadi Aramouni  
Kansas Value Added Foods Lab  
Department of Animal Science &  
Industry  
216 Call Hall  
Manhattan, KS 66506

Thank you for inquiring about our laboratory at Kansas State University. We offer a wide variety of services at the Kansas Value-Added Foods Laboratory, including, but not limited to:

- **Food Product Development from Concept to Commercialization including Feasibility Studies**
- **Process Authority services:** *"...a processing authority is a person who has expert knowledge of thermal processing requirements for low-acid foods packaged in hermetically-sealed containers or has expert knowledge in the acidification and processing of acidified foods..."* as defined by the Institute of Thermal Processing Specialists
- **Nutrition Facts Panel Generation and Ingredients Listing**
- **Chemical and Physical Testing:** *pH (acidity), Brix (percent solids), Aw (water activity), Color analysis, Microbiological testing, Accelerated shelf-life testing*
- **Regulatory Compliance:** *Label review, Nutritional analysis*
- **Sourcing of ingredients and packaging materials**
- **Educational opportunities for food processors such as:** *Short courses, On-site employee training, One-on-one Consultation, GMPs (Good Manufacturing Practices) training, HACCP (Hazard Analysis Critical Control Point)*

For more information about our capabilities, please visit our website (<http://www.ksre.ksu.edu/kvafjl/p.aspx>) which describes the value-added services available at Kansas State Research and Extension, highlighting the Kansas Value-Added Foods Lab. We are able to bring you these services through funding from the Kansas Department of Agriculture.

If you have any questions, please don't hesitate to e-mail ( [kvafjl@ksu.edu](mailto:kvafjl@ksu.edu) ) or call me. I look forward to working with you in the future.

Sincerely,

Fadi M. Aramouni, Ph.D.  
Professor of Food Science  
Phone: 785-532-1668  
Fax: 785-532-3295

## ***KVAFL Fee Structure for Testing Food Products***

| Description                                 | Basic Food Testing & Safety Analysis |                    | Shelf Life               | Microbiological              | Sensory / Consumer        |
|---|--------------------------------------|--------------------|--------------------------|------------------------------|---------------------------|
|   | <i>Canned Products</i>               | <i>Baked Goods</i> |                          |                              |                           |
| pH  | ✓                                    |                    | ✓                        |                              |                           |
| Water Activity                              | ✓                                    | ✓                  | ✓                        |                              |                           |
| Nutrition Facts Panel                       | ✓                                    | ✓                  | ✓                        |                              |                           |
| Ingredient Statement                        | ✓                                    | ✓                  | ✓                        |                              |                           |
| Process Authority Letter                    | ✓                                    |                    |                          |                              |                           |
| Sodium Content Testing                      | ✓                                    | ✓                  | ✓                        |                              |                           |
| Shelf Life                                  |                                      |                    | ✓                        |                              |                           |
| Texture Analysis                            |                                      |                    | ✓                        |                              |                           |
| Microbial Testing: Total Plate Count        |                                      |                    |                          | ✓                            |                           |
| Microbial Testing: Aerobic Plate Count      |                                      |                    |                          | ✓                            |                           |
| Microbial Testing: Yeast and Mold           |                                      |                    |                          | ✓                            |                           |
| Microbial Testing: Coliforms (E. Coli, etc) |                                      |                    |                          | ✓                            |                           |
| Focus Group                                 |                                      |                    |                          |                              | ✓                         |
| Consumer Liking (100 Consumers)             |                                      |                    |                          |                              | ✓                         |
| New Concept/ Product Development            |                                      |                    |                          |                              | ✓                         |
| <b>COST</b>                                 | <b>\$300</b>                         |                    | <b>\$1872</b>            | <b>\$130 for all 4 tests</b> | <b>\$8,000 - \$28,000</b> |
| <b>TEST DURATION</b>                        | <i>4 weeks</i>                       | <i>3 weeks</i>     | <i>Product Dependent</i> | <i>2 weeks</i>               | <i>Product Dependent</i>  |

| WHAT TO SEND | Basic Food Testing & Safety Analysis   |  | Shelf Life  | Microbiological  | Sensory / Consumer   |
|--------------|--|--|---|--|--|
|              | <b>Canned Goods:</b>   | <b>Baked Goods:</b>  |   |  |  |
|              | <ul style="list-style-type: none"> <li>• 6 samples total                             <ul style="list-style-type: none"> <li>○ 3 samples of product</li> <li>○ 3 without acid (no vinegar, citric acid, ascorbic acid, or citrus juice)</li> </ul> </li> <li>• Client &amp; Product Information Sheet</li> <li>• Formula Sheet</li> </ul> | <ul style="list-style-type: none"> <li>• 3 samples of each product</li> <li>• Client &amp; Product Information Sheet</li> <li>• Formula Sheet</li> </ul> | <ul style="list-style-type: none"> <li>• 12 – 24 samples</li> <li>• Client &amp; Product Information Sheet</li> </ul> | <ul style="list-style-type: none"> <li>• 3 sample of each product</li> <li>• Client &amp; Product Information Sheet</li> </ul> | <ul style="list-style-type: none"> <li>• Dependent on testing to be done.</li> </ul> |

**SEND ALL PRODUCTS TO:** DR. FADI ARAMOUNI  
 KANSAS STATE UNIVERSITY  
 ROOM 139 CALL HALL  
 MANHATTAN, KS 66506

**MAKE CHECKS PAYABLE TO:** LMIC

**CONFIDENTIALITY NOTICE:** All formulas, concepts, ideas, and/or other intellectual property of KVAFL clients shall remain confidential, and will not be used by KVAFL employees, or other Kansas State University students, for personal gain unless agreed upon by both parties.

## KVAFL Client & Product Information Sheet

Name: \_\_\_\_\_ Date: \_\_\_\_\_

E-mail: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone (work) \_\_\_\_\_ (home): \_\_\_\_\_

Website \_\_\_\_\_ Fax \_\_\_\_\_

Product(s) \_\_\_\_\_ Anticipated Container Size(s): \_\_\_\_\_

Processing Parameters:

Heat to( indicate temperature): \_\_\_\_\_

Holding time: \_\_\_\_\_

Fill above (indicate temperature): \_\_\_\_\_

Do you invert the container after filling?: (circle one)      **YES**      **NO**

### Testing Needed: (mark all that apply)

- Basic Food Testing** (\$300) *If your product is a sauce, send without vinegar, lemon juice, citric acid or other acidifying agents.*
  - includes pH\*, water activity, Nutrition Facts Panel, Ingredient Statement, Process Authority Letter\*, Sodium Content)  
(\* indicates items **only** included for canned goods)
  
- Shelf Life Testing** (\$1872)
  - pH\*, water activity, Nutrition Facts Panel, Ingredient Statement, Sodium Content, Texture Analysis, Shelf Life Testing up to 6 months (\*Not applicable on all products)
  
- Microbial Testing** (check one or more)
  - Aerobic Plate Count** (\$30)
  - Total Plate Count** (\$30)
  - Yeast & Mold** (\$32)
  - Coliforms (E. Coli, etc)** (\$38)
  
- Sensory / Consumer Testing** (check one or more)
  - Focus Group** (\$1,000)
  - Consumer Test (100 consumers)** (\$2,000)
  - New Concept / Food Product Development**  
(\$5,000 - \$25,000)
  
- Other** (check one or more)
  - pH** (\$24)
  - Water Activity (Aw)** (\$34)
  - Sodium Content** (\$30)
  - Brix** (\$62)
  - Instrumental Color Evaluation** (\$64)
  - Texture Analysis** (\$148)
  - Gluten Free** (\$70)
  - Other:** \_\_\_\_\_

*If you are in need of other services, feel free to call and inquire if it is within our capabilities.*

***KVAFL Formula Sheet***

Please provide the ingredients used to create your product.

| <b>Ingredient</b><br>(e.g. Ketchup) | <b>Household Measurements<br/>and/or Weights</b> | <b>Ingredient Components</b><br>(e.g. INGREDIENTS: TOMATO CONCENTRATE FROM RED RIPE TOMATOES,<br>DISTILLED VINEGAR, HIGH FRUCTOSE CORN SYRUP, CORN SYRUP, SALT, SPICE,<br>ONION POWDER, NATURAL FLAVORING.) |
|-------------------------------------|--|---|
|                                     |  |   |
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|                                     |  |   |
|                                     |  |   |

Providing details, such as the **brand name, spec sheets, and nutrition facts panels** for *each* ingredient expedites the generation of your Nutrition Facts Panel. Use more than one of these sheets if necessary, or provide other documentation.

## **KVAFL Client Checklist**

### **Did you remember to include?**

- Product formulas and ingredient information
- Client & Product Information Sheet with testing needs marked.
- Appropriate amount of samples
- A check for the appropriate amount

*If you have any questions, feel free to e-mail us at [kvaf1@ksu.edu](mailto:kvaf1@ksu.edu). We look forward to working with you!*