RENDERING WITH PET FOOD
Scope of Perspective

- Standardized Vernacular

- Importance of Rendered

- Rendering's Value
  - The Analyte’s Role
  - Customer participation

- A Renderer Relationship with Pet Food
  - Fruits & Maintenance

- Summation
Standardizing the Vernacular

- **What is Rendering…**
  - A culmination of thermal and mechanical insults where conditions of time, temperature, or pressure are sufficient to remove water, kill bacteria, and separate oils
  - We recycle, refresh, and distribute nutrients that are highly nutritious and well qualified…quickly
**What is Pet Food…**

- A commercial feed that contains animal or plant based ingredients formulated and processed to meet the nutritional needs of dogs and cats.
Importance of Rendering

- Why Rendering...
  - 50 billion-plus pounds of raw materials annually
  - Not enough real-estate if non-existent
  - Safely concentrates valuable nutrients

[Image: Rendering is Recycling]

[Image: Rendered Products are Safe]

[Website: www.nationalrenderers.org] Infographic Brochure
Importance of Rendering

- **Value of Rendering…**
  - Environmental
    - original recyclers
  - Nutrition — concentrated energy, protein, minerals
  - 20 billions pounds of highly qualified ingredients for livestock and pet food usage
Rendering’s value to Pet Food

- Where we have come from...
- Where we are going?
- Pet Food is changing, we got an invite!

1987
- Feather Meal
- By Product Meal
- Poultry Fat

Product Innovation

2014

**Poultry Proteins**
- Feed Grade
- Chicken CBPM
- Poultry PBPM
- Turkey TBPM
- Chicken Meal
- Turkey Meal
- Feather Meal

**Poultry Fat**
- Turkey fat
- Chicken fat
- Feed grade fat
- Pet Food fat

**PET FOOD INGREDIENTS MARKET SHARE, BY TYPE**

Source: MarketsandMarkets Analysis
Rendering’s Value to Pet Food

- Decidedly qualified and monitored processes and products
  - USDA Inspected raw materials
  - DNR monitored
  - Industry compliance; APPI, CoP, AFIA, etc
  - HACCP or pre-requisite programs
  - Customer verified
  - AAFCO defined
  - Quality with repeatablity
Rendering’s Value

- **Significant of Nutrients**
  - Rendered products help meet or exceed protein and energy needs for formulation
  - Concentrated delivery of Protein & Fat

- **Nutrient availability**
  - Digestibility of proteins and stability of lipids
  - “Reset Button”
  - Renewable

- **Customer perception**
  - Meat based label-decks, natural ingredients, EE-AAs, Omega-FAs
Rendering's Value

- **Protein meals are primarily composed of**
  - *Moisture* – Currently a good indicator of freshness and process insult of materials
  - *Protein* – building blocks, essential amino acid, and stimulate palatability reactions
  - *Fat* - compact energy source, essential fatty acids, assist in texture
  - *Ash* – mineral components serves to facilitate growth and performance
Analyte’s Role in Rendered Products

- **Protein content – it is not as crude as you think**
  - **Essential amino acids**
    - Lysine, Methionine, & Taurine
  - **Palatability of AAs**
    - Glutamic, Aspartic, & Glycine
  - **Balance of AA**
    - Toxicity & Antagonist

---

**Protein Biological Value, %**

<table>
<thead>
<tr>
<th>Protein Source</th>
<th>Biological Value, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
<td></td>
</tr>
<tr>
<td>Soy</td>
<td></td>
</tr>
<tr>
<td>Wheat</td>
<td></td>
</tr>
<tr>
<td>Beef, Chkn</td>
<td></td>
</tr>
<tr>
<td>Egg</td>
<td>100</td>
</tr>
<tr>
<td>Fish</td>
<td></td>
</tr>
<tr>
<td>Milk</td>
<td></td>
</tr>
</tbody>
</table>
Fat or fatty acids (say that 3x fast)

- Carry flavor, modulated hormones, have autoimmune functions, etc...
- 2.5x the energy of carbohydrates
- Pets will consume enough food to meet, but not exceed, daily energy requirements

Saturated, Unsaturated, and Omegas

Stabilities
- Challenges - Natural vs. Synthetic
- FFA, PV, or aldehydes
Analyte’s Role in Rendered Products

- **Ash or inorganic material**
  - Imperative for growth and development
  - Animal vs. plant concentration;
  - Big challenge in future seasons for pet food manufacturers
  - Environment Phosphorus issues
  - Metabolic disorders – urinary calculi
Rendering’s Value

- **Proximate digestibility**
  - Rendered meals contend well
  - Process affects value
  - Ingredients synergies

- **Evaluating Availability**
  - Standardized testing metrics
  - Animal performance
  - Stabilization
  - Delivery

<table>
<thead>
<tr>
<th>Protein</th>
<th>Digestibility Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egg whites</td>
<td>100</td>
</tr>
<tr>
<td>Muscle meats (chicken, beef, lamb)</td>
<td>92</td>
</tr>
<tr>
<td>Organ meats (kidney, liver, heart)</td>
<td>90</td>
</tr>
<tr>
<td>Milk, cheese</td>
<td>89</td>
</tr>
<tr>
<td>Fish</td>
<td>75</td>
</tr>
<tr>
<td>Soy</td>
<td>75</td>
</tr>
<tr>
<td>Rice</td>
<td>72</td>
</tr>
<tr>
<td>Oats</td>
<td>66</td>
</tr>
<tr>
<td>Yeast</td>
<td>63</td>
</tr>
<tr>
<td>Wheat</td>
<td>60</td>
</tr>
<tr>
<td>Corn</td>
<td>54</td>
</tr>
</tbody>
</table>

What our Pets really want????

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Ancestral Diet</th>
<th>Dry Dog Food</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protein</td>
<td>56%</td>
<td>18-32%</td>
</tr>
<tr>
<td>Fat</td>
<td>25-30%</td>
<td>8-22%</td>
</tr>
<tr>
<td>Carbohydrates</td>
<td>14%</td>
<td>46-74%</td>
</tr>
</tbody>
</table>
Rendering's Value - Customer Part

- **The Label deck**
  - Who wants to be #1
  - “its name must not be named”
  - Stigmas – self induced

- **Positive Message**
  - There’s nothing crude about rendered meals
  - “not-sexy” sells
  - We are along for the ride, and will be for a long time
A Renderer’s Relationship with Pet Food

My Perspective

Simmons History

- **Est. 1949**
  - Bill Simmons and Frank Pluss found Pluss Poultry with headquarters in Decatur, AR

- **1952**
  - Headquarters moved to Siloam Springs, AR

- **1960's**
  - Simmons begins shipping overseas

- **1961**
  - Company begins selling pet food brand Bolo

- **1962**
  - Plant 2 Constructed in Siloam Springs

- **1968**
  - Mark Simmons joins the company

- **1982**
  - Acquire O'Brien Poultry

- **1987**
  - Mark becomes Chairman & CEO

- **1993**
  - Acquisition of Rymer Foods: Van Buren, AR

- **2010**
  - Acquisition of Menu Foods, Dry Pet Food Commences

- **2013**
  - Todd Simmons named CEO & Vice Chairman

- **2014**
  - New Pet Treat plant opens in Siloam Springs

Simmons

Poultry Prepared Foods

Pet Food

Feed Ingredients

Sioux Falls, SD
Wet Pet Food

STREETSVILLE, ON
Wet Pet Food

EMPORIA, KS
Dry Pet Food

SOUTHWEST CITY, MO
Rendering

PENNSAUKEN, NJ
Wet Pet Food

SILOAM SPRINGS, AR
Pet Food

DTR
WHERE DO YOU STAND?
DTR (could not resist)

- **Pet Food’s expectations…**
  - Volume – better not run them out
  - Quality – Has to be perfect (spec, color, smell)
  - Service – personally delivered and unloaded
  - Price - free

- **Rendering’s expectations…**
  - No complaints
  - Delivery whenever
  - Premium over market
  - Take what we make
Fruits of Relationship

- **Kidding aside**
  - Reality of expectations somewhere in the middle unless..
  - Great opportunity to understand presence in and of industry

- **Presence of Industry**
  - Raw-material to kibble/can
  - Leveraging time, talent, experience, and resources
  - Another man’s shoes
  - Better decision makers
  - Quality goes both ways
Soul-Searching the Relationship

- Presence of Industry (rhetorically)
  - Who is the audience and controls our success?
  - Are we a “Black Art”?
  - How to we educate?
  - Ask and you shall receive
  - Can we be better telling our story?
  - How are we preparing for our future?
Maintaining the Relationship

- **Being germane, relevant, meaningful, etc…**
  - **Proactive**
    - Have you rung out all the juice?
    - Do not know our products, then our customer will surely not
  - **Innovative**
    - Supplier have changed, Pet Food has changed, have you?
    - New processes, new metrics, new assurances
  - **Message**
    - Pet Food and customer wants us #1
Summation

- **Importance**
  - Rendering role in recycling & animal feeds will increase
  - Message of hope, not despondency

- **Value**
  - History and achievements
  - Stop being crude
  - New metrics
  - Tuning process

- **Fruitfulness**
  - Uphill... guidance, encouragement, and stimulus
  - Downhill... mentorship, assurances, and growth
Summation

- Integrating Importance, Value, and Relationship
  - Strategic partnerships
  - The relationship, as with our products cannot be fostered, or improved if not defined and managed unintentionally
It is me, between you and Happy Hour!

Thank You!

An approximate answer to the right question is worth a great deal more than a precise answer to the wrong question.

(John Tukey)

If I had an hour to solve a problem and my life depended on it, I would use the first 55 minutes determining the proper questions to ask.

Albert Einstein