Plant-Based Proteins:
The Future is Functional
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Speakers

Ashly Koenig
Director of Customer Experience
Marketing & Innovation
ADM Proteins

Ashly Koenig is responsible for marketing strategy and consumer-led innovation. Her more than 20 years of experience include leading foodservice marketing for a top global CPG company, and spearheading product and consumer activations for major CPG companies around the world. Koenig is a graduate of Southern Illinois University Edwardsville, earning a Bachelor of Science degree in Mass Communications.

Jacquelyn Schuh
Marketing Director for Alternative Proteins & Specialty Ingredients
ADM Proteins

Jacquelyn Schuh leads marketing for ADM’s protein portfolio and their newly formed Global Flexitarian Platform. She keeps a close eye on consumers’ dynamic definition of health and wellness and is excited about the growth and innovation opportunities starring plant-based proteins. Schuh is a graduate of the University of Wisconsin-Madison, earning Bachelor of Arts degrees in Marketing and Spanish with a specialization in Supply Chain Management.

Dina Fernandez
Global Protein Development Manager
ADM Proteins

Dina Fernandez leads protein ingredient development at ADM’s Global Research Center in Decatur, Illinois. She has spent nearly a decade working in plant protein research, protein ingredient innovation and applied protein nutrition research. Fernandez has written several scientific publications and is an active contributor to major publications in the areas of food technology, industry and nutrition. She holds a degree in Food Engineering from Zamorano University in Honduras, a master’s in Food Science and Human Nutrition from the University of Illinois at Urbana-Champaign, and a degree in Management from the University of Notre Dame.
Global Trends & The Evolving Consumer
What’s Driving Long-Term Impacts on Consumer Behavior?

We’re tracking large, transformative global macro trends to understand their impact on consumer culture and behaviors, market opportunities and ultimately, spaces for business growth.
The Consumer Definition of Health & Wellness is Evolving

Aspiring to live a higher quality life – for longer. Consumers see connections between various aspects of their bodies, their habits and world they live in.

Key Drivers of Contemporary Wellness

- Holistic wellness going mainstream
- Tailored and empowered approach to nutrition
- Healthy aging and healthy living

Daily decisions are now impacted by an increasing focus on preventive, holistic approaches to health and also wellness.
Wellness is achieved when aspirations & actions come into alignment.

Contemporary Wellness is a Complex Ecosystem

- **Good Food**
  - Real, fresh, varied

- **Restful Sleep**
  - Enough, quality, rejuvenation

- **Physical Movement**
  - Frequent, energizing, strengthening

- **Social Engagement**
  - Meaningful, warming, supporting

- **Supportive Healthcare**
  - Regular, holistic, thoughtful

- **Mental Practice**
  - Mindful, stabilizing, enlightening

**FEELING WELL**
Consumers are becoming savvy about choosing the right kinds of protein.
More than Half of U.S. Consumers Are Choosing Alternative Proteins

- **Flexible Protein Enthusiasts**: 44%  
- **Plant-Forward Protein Seekers**: 7%  
- **Plant-Based Protein Purists**: 8%  
- **Free Spirited Consumers**: 41%

59% (of those surveyed)
What Consumers Are Looking For

Considering the top protein occasion need states, sub-need states provide insight into opportunity areas.

1. Positive Nutrition
   - Fiber
   - Whole Grains
   - Calcium

2. Functional Benefits
   - Improving Heart Health
   - Lowering Cholesterol
   - Improving Digestive Regularity

3. Absence of Negatives
   - Sugar
   - High Fructose Corn Syrup
   - Artificial Ingredients

4. Moderation
   - Total Calories
   - Amount of Sugar
   - Amount of Fat

Hartman Group, 2019
Consumers are looking to functional foods and ingredients to recalibrate – both physically and mentally.

The desire for functional benefits like natural energy, emotional and mental wellness, hydration, and digestive health have given rise to a growing landscape of functional foods and beverages.
Positive Nutrition & Functional Benefits are *Top-of-Mind*

Providing call-outs of functional benefits can help increase consumers’ awareness and interest in plant-based eating.

**Consumers want “protein plus” options including**
- Omega-3, Omega-6
- Iron
- Vitamin D
- Vitamin B12
- Antioxidants
- Vitamin C
What Will Consumers Look For Tomorrow In *Plant-based Products*

- The future is not just answering consumers’ call for more protein, but going beyond, **combining protein with other functional health benefits** in product formulation

- As more protein-enriched plant-based products compete for market share, those who **incorporate additional value-adds** such as functional health claims, clean labels and other nutritional considerations will win
Delivering Winning Formulations
Taste is King

When it comes to consumer-preferred protein alternatives, nutrition and taste are king. Finding a way to deliver on taste is critical for success.

51% of flexitarians say their primary barrier when considering plant-based proteins is inferior taste.

ADM OutsideVoice℠ Primary Research Study, Fall 2018
### Achieving Great Taste

Understanding the inherent off-tastes that often accompany plant-based and functional ingredients and how they impact taste is critical to product formulation.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Description</th>
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<tbody>
<tr>
<td>SOY</td>
<td>Beany, oxidized</td>
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<tr>
<td>PEA</td>
<td>Earthy, green</td>
</tr>
<tr>
<td>RICE</td>
<td>Nutty, oxidized</td>
</tr>
<tr>
<td>OAT</td>
<td>Grainy, cereal, bitter</td>
</tr>
<tr>
<td>QUINOA</td>
<td>Grainy, bitter</td>
</tr>
<tr>
<td>POTATO</td>
<td>Earthy, sulfur</td>
</tr>
<tr>
<td>ALGAE</td>
<td>Fishy, oily umami</td>
</tr>
<tr>
<td>INSECT</td>
<td></td>
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</tbody>
</table>
Develop nutrition-forward products with purposeful, functional solutions to meet consumer demand for nutrient-dense, whole-food and plant-based products.
ADM brings taste, texture, appearance, functionality and nutrition together to create consumer-preferred eating and drinking experiences.
Peruvia n Black Bean Meatball

**CHALLENGE**
Deliver a whole-food, nutritious and 100% plant-based meatball with great texture.

**SOLUTION**
With a blend of black beans, soy and seeds, we created a delicious center-of-plate option that delivers plant-based protein and fiber – without compromising on taste or texture.

Fiber is the top ingredient associated with positive nutrition that consumers are seeking more of during protein consumption occasions.*
Peruvian Black Bean Meatball

Featured Ingredients:
- HiSolate™ TexSoy crumbles
- HiSolate™ soy flour
- VegeFull™ black bean grits
- VegeFull™ whole black beans
- Red quinoa
- Chipped pepitas
- Natural roast pork-type flavor (vegan)
- Natural protein masking flavor
- Peruvian roasted spice paste

**Nutrition Facts**

<table>
<thead>
<tr>
<th>Serving size</th>
<th>4 Meatballs (113g)</th>
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<tbody>
<tr>
<td>Amount Per Serving</td>
<td></td>
</tr>
<tr>
<td>Calories</td>
<td>180</td>
</tr>
<tr>
<td>Total Fat</td>
<td>9g</td>
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<tr>
<td>Saturated Fat</td>
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<tr>
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<tr>
<td>Cholesterol</td>
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<tr>
<td>Sodium</td>
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<tr>
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</tr>
<tr>
<td>Dietary Fiber</td>
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<tr>
<td>Total Sugars</td>
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<tr>
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<tr>
<td>Calcium</td>
<td>6mg</td>
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<td>Iron</td>
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<tr>
<td>Potassium</td>
<td>364mg</td>
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*The % Daily Value (%DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.*
Chocolate Almond Coconut Smoothie

CHALLENGE
Make a delicious dairy alternative that meets demand for added cognitive functional benefits.

SOLUTION
A carefully selected blend of ingredients, including DHA, delivered a smoothie with functional nutrition and an on-trend flavor profile.

PLANT PROTEIN
+ FIBER
+ DHA

In North America, brain and nervous system functional claims are among the fastest growing and over indexing product claims for food and beverage.*

*Mintel, ADM Internal Analysis, 2019
Chocolate Almond Coconut Smoothie

Featured Ingredients:
• Almond butter
• Soy lecithin
• Fibersol® soluble dietary fiber
• Black bean powder
• Natural flavors
• Coconut milk powder
• Onavita™ DHA algal oil

Allergen Statement
Contains: Tree Nut (Almond), Soy
Ginger Turmeric Kombucha Clusters

CHALLENGE
Create a grab-and-go, plant-based snack that combines exciting tastes and textures while also offering positive microbiome health benefits.

SOLUTION
We blended probiotics with ancient grains, nuts and seeds for texture, and combined that with on-trend kombucha, ginger, turmeric and Sicilian lemon flavors to create a nutrient-dense, on-trend snack that also supports the microbiome.

The microbiome plays an important role in our body’s function and is profoundly affected by the foods we eat.*
Ginger Turmeric Kombucha Clusters

Featured Ingredients:
• Pistachios
• Pepitas
• Chia seeds
• Quinoa flakes
• Biopolis probiotic
• Turmeric
• Coconut flakes
• Ginger flavor
• Natural kombucha-type Flavor
• Natural Sicilian lemon flavor
Consumer-Inspired, Health-Forward Solutions

With ADM you can rely on long-standing development expertise and portfolio breadth to ensure you have CONSUMER-INFORMED approaches to designing GREAT-TASTING, CONSUMER-PREFERRED and HEALTH-FORWARD FOODS AND BEVERAGES.
Your Partner for Nutrition-Forward Solutions

We leverage our premium portfolio of plant-based proteins in conjunction with expert taste, nutrition, texture, functionality, and color know-how to bring you solutions that help you get ahead and stay ahead of the competition.
How ADM Helps You Win

- Target the Right Consumer
  - Behaviors
  - Beliefs and Motivations
  - Demographics and Lifestyle

- With Relevant Benefits
  - Plant-Based Drivers
  - Health and Wellness Needs
  - Overcome Barriers

- With Relevant Products
  - Holistic Ingredient Solutions
  - Innovative Solutions
Bringing It All Together

• Consumer interest in functional foods will continue to grow, as will the opportunities.

• Focusing development on protein plus other health-forward benefits creates consumer-preferred eating and drinking experiences.

• Working with a partner who has the product portfolio, technical ingenuity and product development know-how to bring it all together is a key to your success.
Questions
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December 2019
For more information contact:

844-441-FOOD  |  food@adm.com  |  ADM.com/Proteins

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