

ACDA ANNUAL CONFERENCE

Coming Together to Nourish the Nation



April 21 - 24, 2024
Marriott St. Louis Grand
St. Louis, Missouri

Today's Speakers



Kelly Bristow MS, RDN
Bayer



Dr. Sarah Davidson Evanega
Okanagan Specialty Fruits



Thorsten Schwindt
Bayer



Rebecca Catlett
Okanagan Specialty Fruits

Ag-Tech Innovations to Improve Fruit and Vegetable Availability, Quality, Taste, and Overall Appeal

The Challenge:

Only **1 in 10**
American Adults
consumes
recommended
daily allowance of
fruits and
vegetables



The Challenge

1 in 3 of US Kids do not eat a daily fruit¹



Childhood obesity on the rise

Nearly
HALF

of US Kids do not eat a daily vegetable¹



Dietary diseases on the rise

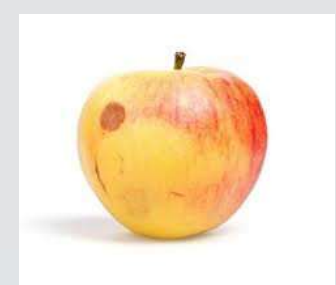
Only 3% of innovation in supermarket is in produce

The Opportunity: Embrace and Accelerate Innovation

Traits for Consumers



Traits for Growers/ Sustainability Traits



New Innovations are possible with biotechnologies

Consumers Embrace of Food-Tech for Personal and Environmental Benefit

Several independent studies suggest US consumers don't know much about gene editing but when they learn more about benefits, the majority feel positive about it.^{1,2}

US consumers are especially excited about the role of gene editing in¹:

- Making food more nutritious
- Reducing pesticide use
- Reducing water use



Consumers Increasingly Seek Out Novel Produce Concepts



Bella Fina™ Baby Bell Peppers



Cheddar Cauliflower

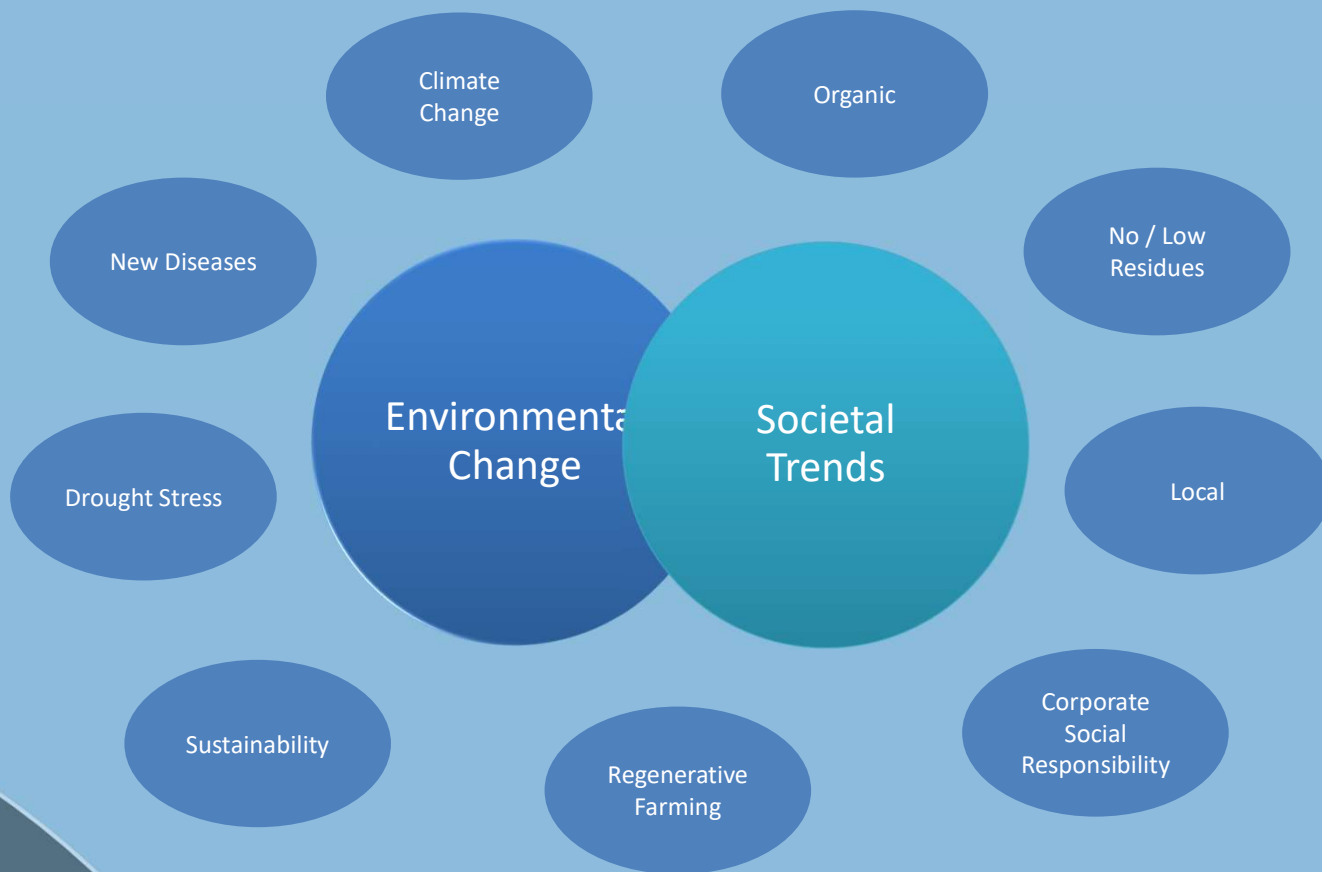


Sugar Bombs® Tomatoes

The Importance of Win-Wins Along the Food Value Chain

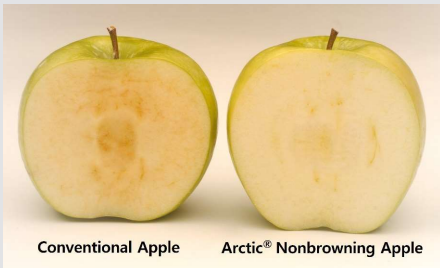


Environmental Changes and New Societal Trends Drive a Growing Number of Objectives



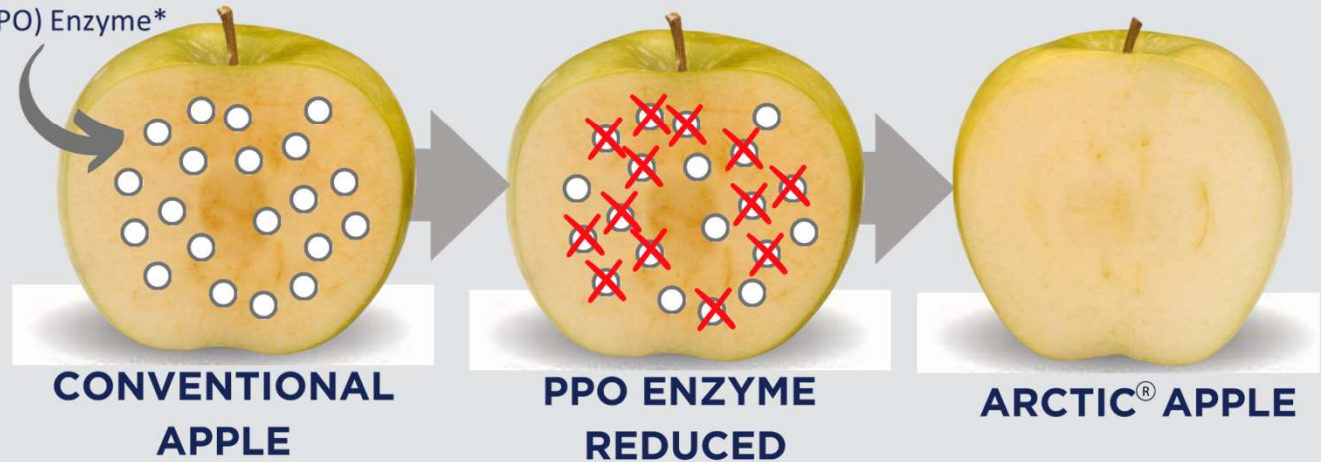
New breeding technologies could help address the needs across the value chain

Arctic® Apple – the nonbrowning apple



we simply used the apple's own genes to "turn off" the specific enzyme that makes apples brown when cut or bruised.

Polyphenol Oxidase (PPO) Enzyme*



*Apple cells are damaged through biting, slicing and bruising. The damage causes PPO enzymes to initiate browning. By suppressing the PPO enzyme, enzymatic browning is reduced.

Why We Did It

- Sustainability
 - Less apple waste within the supply chain
 - Less consumer waste – “no more half eaten apples”
 - 20 – 30% reduction in shipping weight (whole apples vs. slices)
- Flavor
 - Orchard Freshness Longer – a sliced apple that does not have a flavor transfer from overuse of antioxidant
 - Extended shelf life (>conventional apple’s 14 days)
- Health Benefits
 - Increase apple consumption by providing a flavorful, convenient snack
 - Studies have shown that kids are more apt to eat fruit or veggies when it is sliced

Fresh Picked Flavor Up to 28 Days
Perfect for schools!

Arctic
Nutrition Matters
Fun facts about apple nutrition and why it matters

RESTAURANT PATRONS LOVE APPLES

PATRONS LIKE SEEING APPLES ON THE MENU

- 88% of patrons agree apples make a dish more appealing
- 76% of patrons agree apples encourage them to order dishes with them
- 60% of patrons agree apples encourage them to order dishes with them

HOW PATRONS VIEW APPLES
Apples (and dishes that include them) are viewed as healthier and more appealing.

- 97% of patrons agree "apples make a dish more appealing"
- 96% "apples make a dish healthier"
- 71% "the health benefits of apples encourage me to order dishes with them"
- Only 3.8% say "apples are boring"

APPLE DISH TOP 5

1. BAKED GOODS
2. DESSERTS
3. PANCAKES, FRENCH TOAST, CRISPS & WAFFLES
4. SALADS
5. CHARCUTERIE, CHEESE, OYSTERS, AND PASTRY BOARDS

The menu items that patrons want apple ingredients added to:

- 67% PIES OR TARTS
- 65% BAKED GOODS
- 56% SIDE DISH
- 54% SALAD AS A SIDE
- 53% GARNISH

PEOPLE ARE TALKING

"...apples are different, especially for the product. You don't need to blend it and hide it in something or the flavor, you can really get it and bring it out!"
— CAU EXECUTIVE CHEF

"I order apple-related desserts whenever I get the chance."
— RESTAURANT PATRON

WHY AREN'T THEY ORDERING APPLES NOW?

75% of patrons agree "apples are healthy but often not ordered"

Consumers Know...

- 96% OF PATRONS AGREE APPLES MAKE A DISH HEALTHIER
- 71% SAY "THE HEALTH BENEFITS OF APPLES ENCOURAGE ME TO ORDER DISHES WITH THEM"

DENTAL HEALTH
Regular oral bacteria buildup and lower risk of tooth decay!

HEART
Reduced risk of heart disease (thanks to high antioxidants and flavonoids!)

DIGESTION
Good dietary fiber means better digestion!

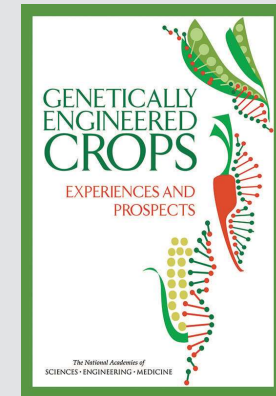
Less prep. Less Waste. Better Taste.

Get apples can bring better nutrition to your menu.
arcticapples.com/3-12-nutrition

QUESTIONS?

Biotechnology Foods are the Safest Foods

- >3000 scientific studies have assessed the safety of these crops in terms of human health and environmental impact
- 284 scientific institutions globally recognize that GM crops are safe



AMERICAN COMMODITY DISTRIBUTION ASSOCIATION
Agriculture • Industry • Government • Community
Working Together to Nourish the Nation

“...no substantiated evidence of a difference in risks to human health between current commercially available genetically engineered (GE) crops and conventionally bred crops, nor did it find conclusive cause-and-effect evidence of environmental problems from the GE crops.”

ACDA ANNUAL CONFERENCE

Coming Together to Nourish the Nation



April 21 - 24, 2024
Marriott St. Louis Grand
St. Louis, Missouri