



MAKING EVERY DROP COUNT | **YOUR DAIRY CHECKOFF**

HIGH PLAINS
DAIRY CONFERENCE

DMI
INNOVATION UPDATE
MARCH 5, 2024

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MAKING EVERY DROP COUNT | **YOUR DAIRY CHECKOFF**

Agenda

- Macro Sales View
- Innovation Strategies and Outcomes
- 2023 Highlights
- 2024-2026 Strategy and Program Updates
 - Partners & Growth Platforms
 - Nutrition Science
 - Product Science
 - Technology

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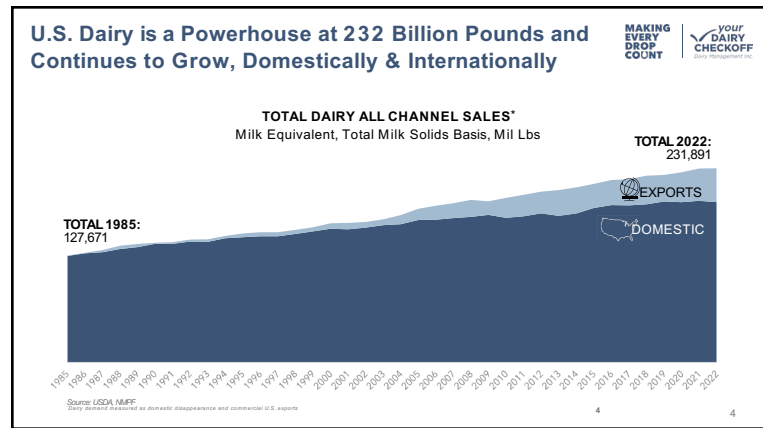
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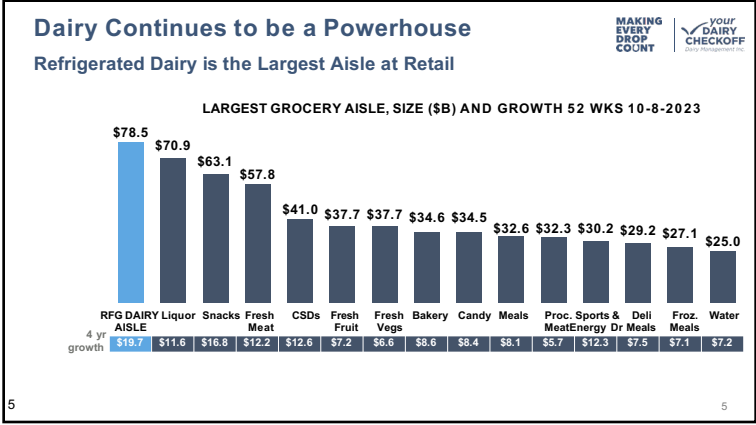
SALES BACKGROUND

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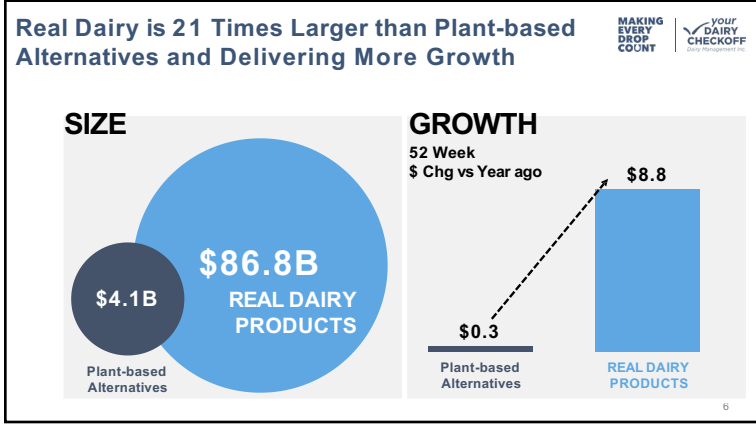
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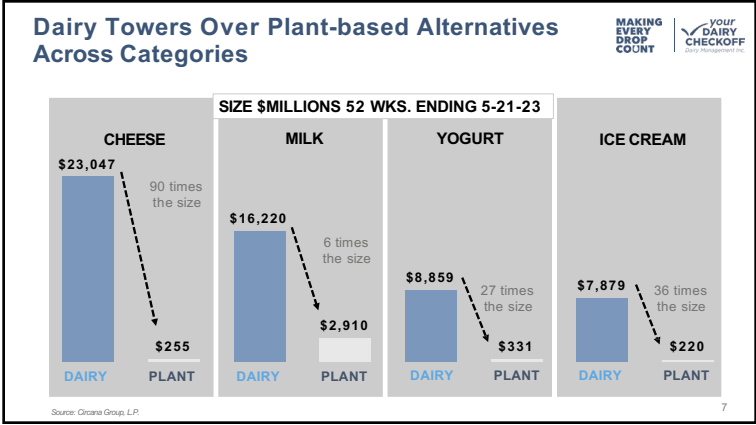
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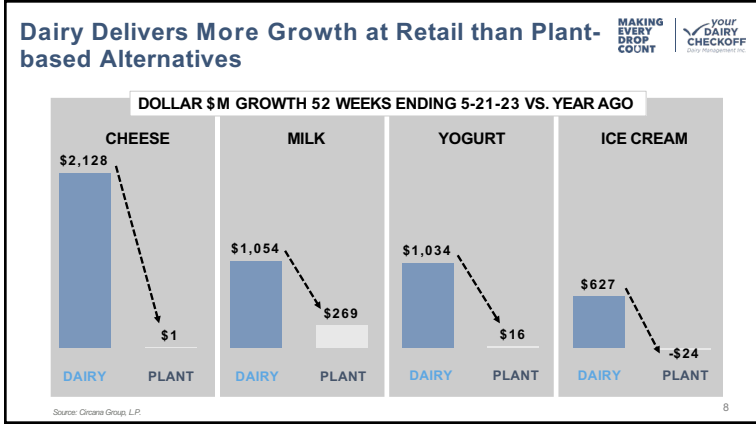
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DMI Focuses on 5 Interdependent Priorities for our Funding Farmers

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A S P I R E

ACTION **Sustainability** **People** **Innovation** **Reputation** **Exports**

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INNOVATION

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Objective
Develop technology-powered breakthrough science and innovations that advance U.S. dairy's wellness AND product leadership.

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Innovation Plan Outcomes

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<p>More Incremental Sales</p>  <p>Channel-leading partners to launch new innovation and growth platforms and new technologies (Encapsulation)</p>	<p>More Commercialized Science</p>  <p>Accelerated discovery and commercialization via platforms (Lactoferrin) and benefits (Immunity)</p>	<p>More Outside Investment</p>  <p>For product innovation, health and wellness science from non-dairy processors</p>	<p>More Trained Workforce</p>  <p>Connected technology, talent, and R&D capabilities to modernize and commercialize science and products</p>
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Science & Innovation for the Future

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Innovating for the Future
Four Focused Areas for Sustained Growth





Nutrition Research



Technology



Product Science



Growth via Innovation and Marketing Partners

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INNOVATION ECOSYSTEM



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Leading a Dairy Innovation Ecosystem

Identify high-growth opportunities and attract, stimulate, and secure investment and talent in health & wellness science, technology, and product innovation.





Prove Growth Opportunities



Attract Investment



Inspire Talent



Help Build Path to Market

← With and Through Industry & Partners →



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Unlocking Growth Platforms & Partners



Health & Wellness	Beverages	Food Service
		
\$350B	\$100B	\$240B

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\$350B HEALTH & WELLNESS PLATFORM OPPORTUNITY

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Health & Wellness: A great opportunity and challenge for US Dairy

- #1 area of consumer disposable income spend is H&W
- Consumer health is declining
- Dairy top health growth spaces total >\$150B and highly dissatisfied consumers
- Significant investments in marketing, innovation, and acquisitions by top global competitors
- Government getting more involved in regulation and definition of H&W
- Competitors closing H&W perception gap to real-Dairy

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HEALTH & WELLNESS INCLUDES THREE INTERLOCKING ELEMENTS

86% agree that mental and emotional balance is every bit as important as physical health
+4 pts from 2021

Source: The Hartman Group, 2021

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Food as Medicine is Arriving Now

Apple is reportedly developing an AI-powered health coaching service with personalized programming for exercise, eating, and sleep

Enabled by best-in-class technology, shoppers will be enabled to purchase food prescribed by healthcare provider at more than 10,000 stores across the country

Fresh Connect "Food Prescription" Network expands to include Walmart, Kroger and Albertsons

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Food as Medicine is Arriving Now



Sun Genomics, launches first fully customizable Multivitamin

Sun Genomics, a San Diego startup specializing in made-to-order probiotics based on an individual's gut microflora, launched the world's first fully customizable multivitamin. The multivitamin is called Floré Multi-V and is created as a build-to-order single capsule. | May 2023



Understand how food affects *your* body.

Precision nutrition app, ZOE, is picking up users amid a surge of media coverage in the conversation surrounding AI nutritionists

Within the first couple weeks of March, both the *New York Times* and *Newsweek* featured ZOE in their stories about AI nutritionists, supporting ZOE's science-backed approach and founder, Dr. Tim Spector. | March 2023

Gut microbiome

● Poor

Blood fat

● Good

Blood sugar

● Bad




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Innovation Following Trends

Metabolic health
(GlucoSmart)



Gastro-Intestinal
(3 in one: pre + pro + postbiotics)



**Healthy aging/
mitochondrial health**



Food allergies (HMOs)



Sleep and immunity

3 Benefits In One Pill



Personalization & ecosystems






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H&W Work Identified Top 37 Health & Wellness Conditions & Benefits Consumer are Addressing

<ul style="list-style-type: none"> 1 Physical / Athletic Performance 2 Bone Health 3 Hydration 4 Energy for Everyday Living / Work 5 Digestive Health 6 Weight Management 7 Immunity 8 Mental / Emotional H&W 9 Oral Health 10 Sleep 11 Hair and Nail Health 12 Vision 	<ul style="list-style-type: none"> 13 Joint Health / Mobility 14 Skin Health 15 Common Cold / Virus 16 High / Bad Cholesterol 17 Cancer Prevention (Skin) 18 High Blood Pressure 19 Osteopenia / Osteoporosis 20 Headaches / Migraines 21 Cardiovascular Disease 22 Type 2 Diabetes 23 Muscle Development/Tone 24 Seasonal / Environmental Allergies 	<ul style="list-style-type: none"> 25 Inflammation 26 Asthma 27 Liver Health 28 Nausea 29 Memory Issues / Cognitive Decline 30 Menopause 31 Reproductive / Fertility Challenges 32 Growth / Height Potential 33 Maternal / Paternal Challenges 34 ADD / ADHD 35 Kidney Health 36 Sexual Health 37 Brain Development
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Identified Top Health & Wellness Growth Spaces for Dairy

Growth Potential Totalling Over \$350B

ENERGY

PHYSICAL PERFORMANCE

SKIN HEALTH

MENTAL/ EMOTIONAL H&W

SLEEP

WEIGHT MANAGEMENT

BONE HEALTH

ORAL HEALTH

VISION

HEART HEALTH

HAIR & NAIL HEALTH

DIGESTIVE HEALTH

HYDRATION

IMMUNITY

H&W Condition Size Including F&B and Non-F&B Projected for Q2028 (\$B)




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Discover & Validate New Science Platforms

Both product and nutrition science working as an "orchestra" to yield discoveries for both the body and products at the macro whole milk matrix level to the molecular level

Matrix Whole Milk Dairy Foods

Liquid Physical Matrix

- Lactose
- Protein
- Fat
- Minerals
- Vitamins
- Enzymes

Dairy Matrix
All milk components working together

Milk Molecule
Looking at individual properties of specific milk component & it's benefits

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BEVERAGE PLATFORM OPPORTUNITY

\$100B

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The Beverage Landscape Has Grown Exponentially

1970s

- ✓ Milk
- ✓ Soft Drinks
- ✓ Coffee
- ✓ Juice

1980s

- ✓ Milk
- ✓ Soft Drinks
- ✓ Coffee
- ✓ Juice
- ✓ Bottled Water
- ✓ RTD Juice
- ✓ Teas

1990s

- ✓ Milk
- ✓ Soft Drinks
- ✓ Coffee
- ✓ Juice
- ✓ Bottled Water
- ✓ RTD Juice
- ✓ Teas
- ✓ Wellness
- ✓ Sports Drinks
- ✓ Flavored Teas

2000s

- ✓ Milk
- ✓ Soft Drinks
- ✓ Coffee
- ✓ Juice
- ✓ Bottled Water
- ✓ RTD Juice
- ✓ Teas
- ✓ Wellness
- ✓ Sports Drinks
- ✓ Flavored Teas
- ✓ Functional Bevs
- ✓ Energy Drinks
- ✓ Enhanced Water
- ✓ RTD Coffee
- ✓ Almond Drink
- ✓ Coconut Bevs
- ✓ RTD Smoothies
- ✓ K-Cups

Today

- ✓ Milk
- ✓ Soft Drinks
- ✓ Coffee
- ✓ Juice
- ✓ Bottled Water
- ✓ RTD Juice
- ✓ Teas
- ✓ Wellness
- ✓ Sports Drinks
- ✓ Flavored Teas
- ✓ Functional Bevs
- ✓ Energy Drinks
- ✓ Enhanced Water
- ✓ RTD Coffee
- ✓ Almond Drink
- ✓ Coconut Bevs
- ✓ RTD Smoothies
- ✓ K-Cups
- ✓ Vegetable/Fruit Blend
- ✓ Sparkling Juice
- ✓ Fusion Drinks
- ✓ Coconut Water
- ✓ Drinkable Yogurt
- ✓ Pea Protein Drinks
- ✓ Kombucha
- ✓ Other Fermented
- ✓ Cold Brew Coffee
- ✓ Cold Pressed Juices
- ✓ Alkaline Water
- ✓ Maple Water
- ✓ And many more...

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Beverages Driven by Dramatic Innovation and Branded Investment

Water

- Technology: Aquafina, SmartWater
- Premiumization: FIJI, smartwater
- Health-Focused: essence+
- Flavors/Carbonation: Propel, Bai
- Food Service: bubly

Coffee

- Technology: Keurig
- Premiumization: La Colombe, High Ground
- Health-Focused: BlueBottle, Coffee Provisions
- Flavors/Carbonation: Dunkin' Donuts Iced, Nitro Cold Brew
- Food Service: Starbucks, Peets

Source: Innova Market Insights, Pathwater, QSR Magazine, Keurig, McDonalds

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Gen Z: More Beverages at Younger Ages

By 5th Grade Youth Determines 75% of Beverages in Household

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Dairy Comprises 15% of Total \$175B Beverage Landscape

Top non-dairy categories	\$ Size
Carbonated soft drinks	\$38.0B
Energy drinks	\$18.9B
Juice	\$18.3B
Unflavored still water	\$15.6B
Flavored sparkling water	\$10.9B
Sports drinks	\$10.3B

Top dairy-inclusive categories	\$ Size
Dairy milk	\$16.5B
Whitened/RTD Coffee	\$8.3B
Yogurt drinks	\$1.2B
Smoothies	\$0.9B

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Top Demand Moments Represent \$100B in Sales

Dairy Milk Has Only a 15% Share of Those Moments

Mental Health & Wellness	Functional Health & Wellness	Special Treat	Routine Treat
<p>\$24.1B</p> <p>Address consumer demand for beverages that can deliver mental H&W benefits, whether it's energy or relaxation</p>	<p>\$19.0B</p> <p>Satisfy highly engaged, proactive younger consumers' demand for functional H&W</p>	<p>\$37.2B</p> <p>Delight consumers with delicious beverages that deliver special and rewarding experiences</p>	<p>\$19.1B</p> <p>Delight consumers with satisfying everyday beverages that fit into individualized daily routines</p>

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Team Will Inspire Industry To Spur Beverage Investment

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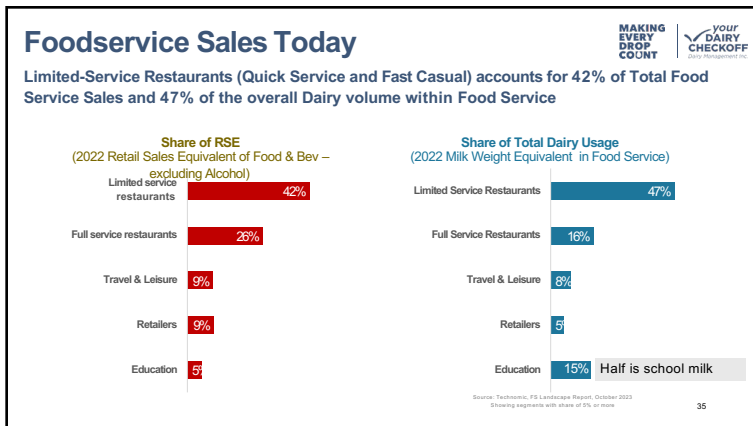
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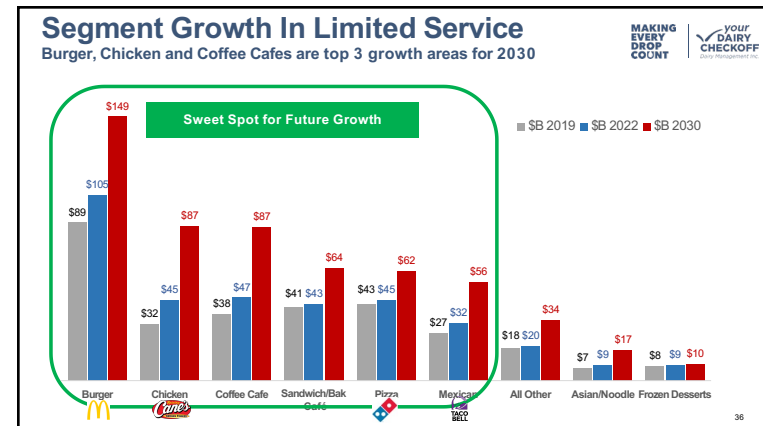
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Top Menu Platforms Based on Overall Growth Outlook and Dairy Usage Opportunities





1st tier: Top 6

- Total Coffees/Teas
- Burger
- Total sandwiches (deli style + hot sandwiches)
- Chicken sandwiches
- Breakfast sandwiches

2nd tier: Next 3

- Mexican entrees
- Pizza
- Salads



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Team Will Inspire Industry To Spur Foodservice Investment






Starring Butter
Tap into the momentum behind butter to make it the hero as a dish, star ingredient or condiment.



All Time Assist Leader
Butter can make everything better, so let's elevate its role to be menu-worthy.



Better Butter
Premiumize butter to command a higher price point with diners.



Versatile Butter
Butter is a valuable shape-shifter, but has the potential to build on that and do even more.



Butterly Convenient
As a kitchen staple, maximize butter's convenience to add value.

_____ DINER DRIVEN _____

_____ KITCHEN DRIVEN _____



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Team Will Inspire Industry To Spur Foodservice Investment




Beverages



Coffee Chillers
Milk Chocolate, Salted Vanilla, & Caramel Cheesecake

Chicken

CHEESY BACON POPCORN CHICKEN



CHEESY CHICKEN TENDERS



Butter





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Nutrition Research For Sustained Growth



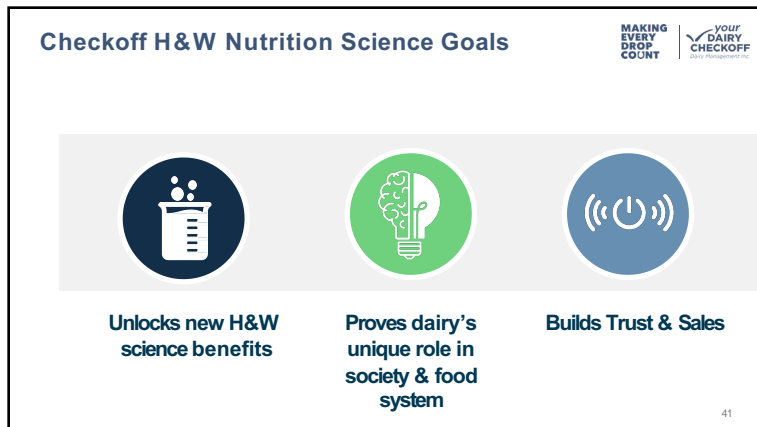





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Checkoff H&W Nutrition Science Goals



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Three icons in a row: a beaker with bubbles, a lightbulb with a brain inside, and a power button symbol.

- Unlocks new H&W science benefits
- Proves dairy's unique role in society & food system
- Builds Trust & Sales

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H&W Science Highlights 2023



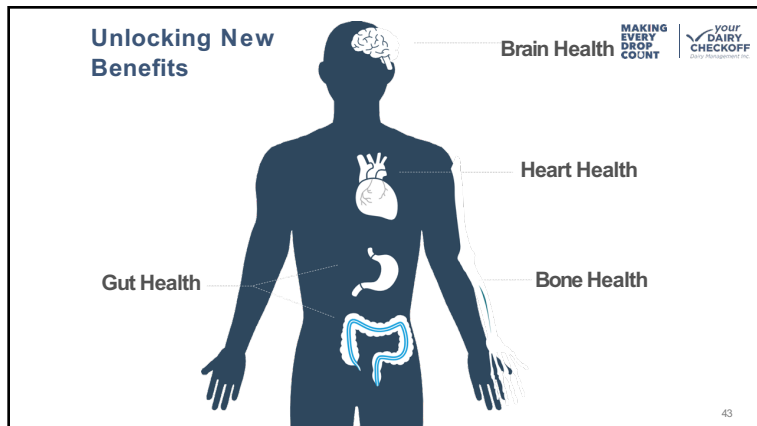
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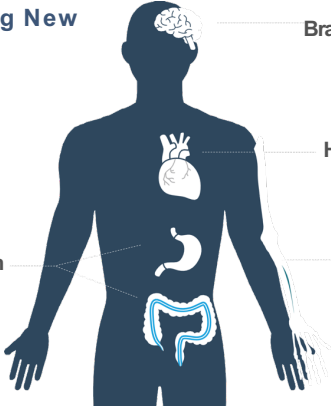
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Unlocking New Benefits



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Brain Health

Heart Health

Gut Health

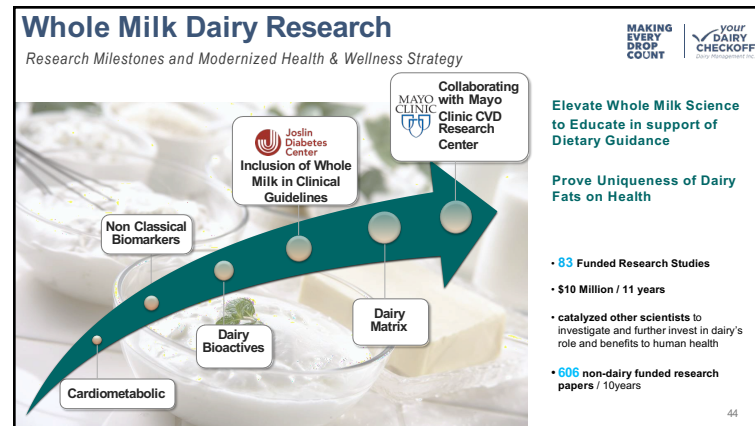
Bone Health

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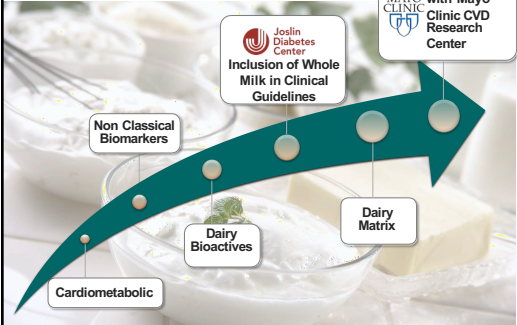
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Whole Milk Dairy Research

Research Milestones and Modernized Health & Wellness Strategy



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Collaborating with Mayo Clinic CVD Research Center

Justin Diabetes Center

Inclusion of Whole Milk in Clinical Guidelines

Non Classical Biomarkers

Cardiometabolic

Dairy Bioactives

Dairy Matrix

Elevate Whole Milk Science to Educate in support of Dietary Guidance

Prove Uniqueness of Dairy Fats on Health

- 83 Funded Research Studies
- \$10 Million / 11 years
- catalyzed other scientists to investigate and further invest in dairy's role and benefits to human health
- 606 non-dairy funded research papers / 10years

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DMI and Mayo Clinic Collaboration

Advancing the role of dairy foods in health and wellness across three working pillars

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Thirty Science Activations with Mayo Clinic in 2023

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Mayo Clinic Cardiovascular Support

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"...Studies in the United States and abroad suggest that full-fat milk, cheese and yogurt may not have the negative effects on heart or vascular health as previously thought."

Kyla M. Lara-Breitinger, MD, MS,
Mayo Clinic Division of Cardiovascular Prevention and Division of Echocardiography

"Thank you for being a sponsor for our meeting. It is so refreshing to see food represented here as it's a preventive cardiology meeting. We welcome your information and enthusiasm!"

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Key Takeaways

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