



Arcadia Biosciences

Nasdaq: RKDA

INVESTOR PRESENTATION
September 2023



Forward Looking Statements

- “Safe Harbor” statement under the Private Securities Litigation Reform Act of 1995: This presentation contains forward-looking statements about the company and its products, including statements relating to components of the company’s long-term financial success; the company’s traits, commercial products, and collaborations; the company’s anticipated financial results; current and future products under development; additional collaboration agreements and partnerships; business and financial plans; and other non-historical facts.
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- Further information regarding these and other factors that could affect the company’s financial results is included in filings the company makes with the Securities and Exchange Commission from time to time, including the section entitled “Risk Factors” in the company’s Annual Report on Form 10-K for the year ended December 31, 2022. These documents are available on the SEC Filings section of the Investor Relations pages of the company’s website at www.arcadiabio.com. All information provided in this presentation and in the attachments is as of the date hereof, and Arcadia Biosciences, Inc. undertakes no duty to update this information.



Arcadia cultivates next-generation better-for-you wellness products that make every body feel good



Arcadia has a long history in crop innovation, enhancing the quality, nutritional value and production efficiency of plant-based ingredients.



We're leveraging these agricultural roots to produce innovative plant-based health and wellness products in multiple consumer categories.



We've completed transition from R&D to CPG with streamlined operations and a deep bench of CPG talent in leadership and throughout the organization.



We're well positioned for long-term growth and profitability as we expand partnerships and explore new categories to monetize our proprietary IP.



Arcadia was founded in 2002 to enhance the quality, nutritional value and production efficiency of crops and plant-based ingredients

Building on over 20 years of industry expertise, leveraging our natural science platform

Owned or exclusively controlled more than 200 patents worldwide



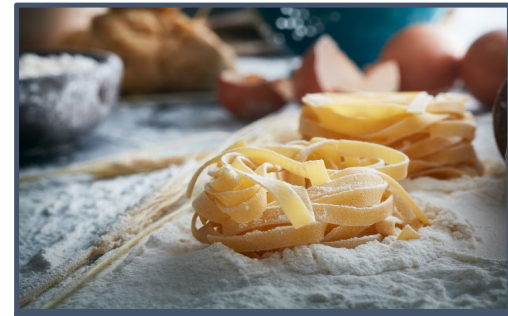
MANAGE

- Yield and quality
- Drought tolerance
- Herbicide tolerance
- Plant resilience
- Growth cycle



REDUCE

- Allergenicity
- Calories
- Added fibers and sugars
- Crop variability
- Environmental impact



IMPROVE

- Shelf life
- Dietary fiber
- Nutrient profile
- Plant proteins
- Flavor and color

Founded in 2002 ■ Public company in 2015 (Nasdaq: RKDA) ■ Headquarters in Dallas, TX

Arcadia's wheat patents used advanced breeding technologies (non-GMO) to deliver breakthrough nutrition quality and improved shelf-life benefits

Wheat intellectual property can impact nearly 1/3 of total US wheat production, and patents span North and South America, Europe, Asia, and Australia



RESISTANT STARCH DURUM (Durum Semolina)

- 20X the RS found in traditional wheat
- Exponentially higher fiber
- Increased protein
- Products include industrial and foodservice pasta, frozen pasta, canned pasta soups, couscous



REDUCED-GLUTEN BREAD (Red Spring Wheat)

- Allergenic portion of wheat gluten replaced with proteins
- Exponentially higher fiber
- Increased protein
- Products include breads, cereals, baking and breeding mixes, crackers and snacks, pizza crusts



OXIDATIVE STABILITY (Stacked on any wheat type)

- Edited the gene responsible for rancidity in whole wheat products
- Extends shelf life of whole wheat products without using preservatives
- Can impact all whole wheat products

We've built a focused patent portfolio addressing a variety of trait technologies in major crops in multiple geographies

WHEAT




**Wheat w/
Increased
Resistant Starch**





**Reduced Gluten
Wheat**




**Wheat Reduced
Lipoxygenase
Activity**

**Plants w/
Reduced Lipase 1
Activity**




**Herbicide
Tolerant Wheat**




Waxy Wheat




Other




Soybean




Hemp

Tomato





In 2021, we formed Arcadia Wellness, a subsidiary focused on commercializing our IP in consumer products

Arcadia Biosciences



- Manages intellectual property
- Commercial partnerships
- License / royalty revenue



- Utilizes intellectual property
- “Better-for-you” consumer products
- Expected revenue growth

Arcadia Wellness





We're now a producer of next-generation plant-based food and beverage products



- A nutritionally superior wheat grain that's naturally higher in fiber and other nutrients
- Farm grown in the USA and Non-GMO Project verified
- Pasta made from this one simple ingredient has 8g of fiber and 9g of protein per serving
- New breakfast products have 11g of fiber and 7g of protein per serving



- Coconut water made from coconuts sourced in Thailand
- Naturally low in calories with just the right balance of sweetness
- Provides plant-based hydration that replenishes with a taste consumers love

Forging a path for long-term growth and profitability with Project Greenfield



FOUR KEY STRATEGIES



Build agile organization/ winning culture



Expand GoodWheat retail footholds



Drive growth in Zola coconut water



Leverage partnerships for licensing revenue

STRATEGY 1:

Built an agile organization and winning, results-oriented culture

1

- ✓ Reorganized and right-sized company in 2021 to align with CPG growth strategy
- ✓ Hired new CEO in 2022 with 30+ years experience in CPG industry
- ✓ Built a deep bench of CPG talent in the leadership team and key positions throughout the organization, including sales, marketing, product development, finance, and operations
- ✓ Divested manufacturing facility to reduce overhead, simplify the supply chain, and enable scalability with minimal capital investment
- ✓ Exited the body care business, which is expected to result in annual operating savings of \$3M-\$4M



STRATEGY 2:
Establishing GoodWheat™ footholds in retail categories representing \$10B in annual consumer spending

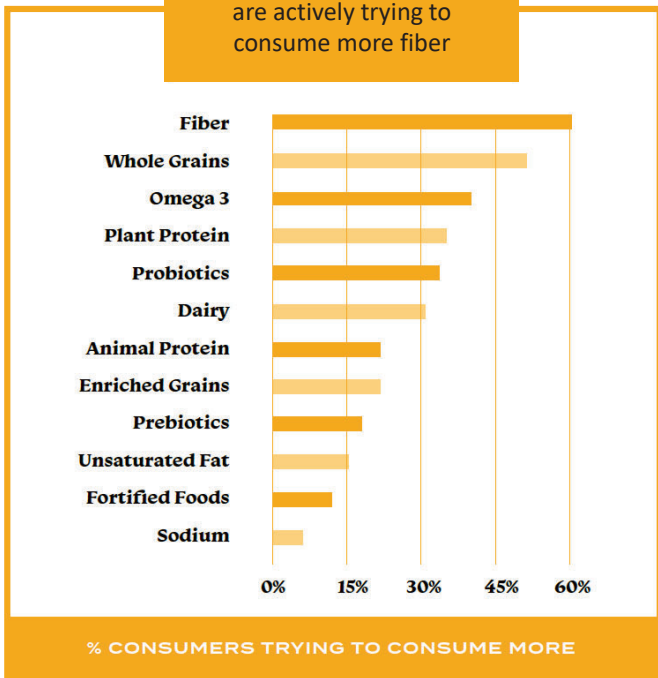


- Launched GoodWheat-branded products into pasta category June 2022, pancake category August 2023
- Multiple categories where GoodWheat value proposition is poised to break through and win
- Evaluating expansion opportunities based on size of opportunity, scalability and profitability potential
- May include combination of new product development and acquisitions

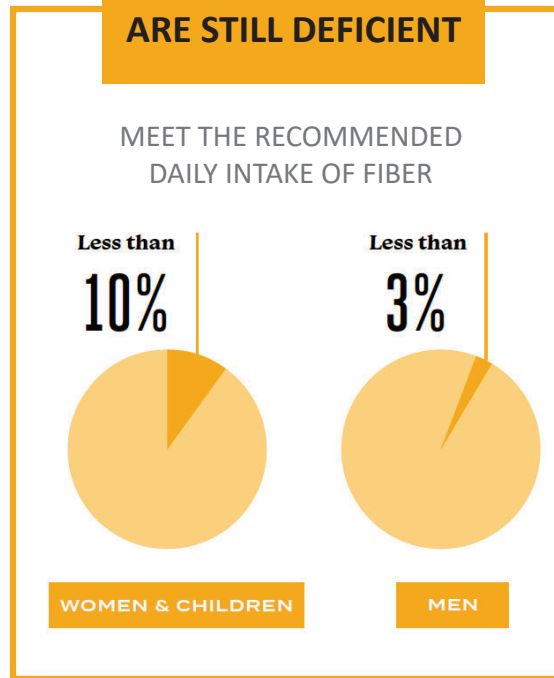


Fiber is a critical nutrient, yet it is a top deficiency among consumers

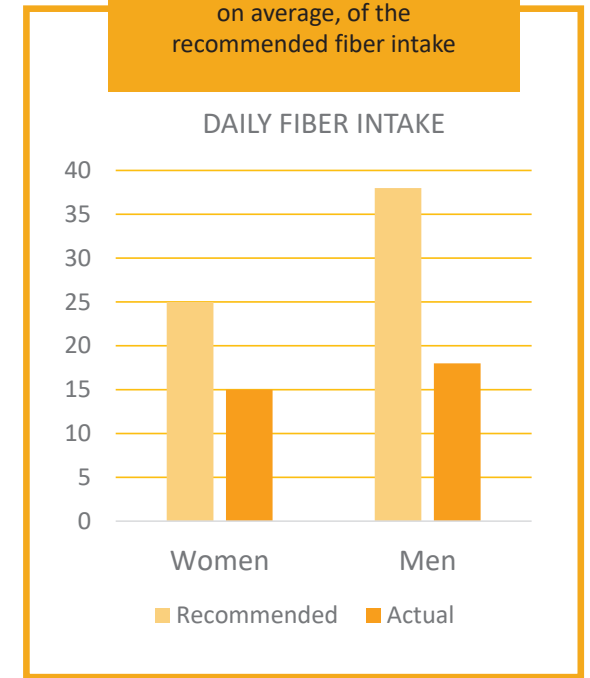
60% OF PEOPLE
are actively trying to
consume more fiber



**YET MOST OF US
ARE STILL DEFICIENT**



WE CONSUME JUST 50%
on average, of the
recommended fiber intake



Recommended Daily Value of Fiber: Women & Children 25g | Men 38g

Source: 2021 Food & Health Survey IFIC May 2021 | Dietary Guidelines for Americans 2020-2025 Chapter 4 | Kranz S, Brauchla M, Slavin JL, Miller KB. What Do We Know about Dietary Fiber Intake in Children and Health? Volume 3, Issue 1, January 2019

The impact of not eating enough fiber is devastating to the human body; this is a nutritional crisis.

IMPACT OF LOW FIBER DIET

(average 15g per day)

- ✓ Increased gastrointestinal diseases ^{1,2}
- ✓ Increased cardiovascular diseases ²
- ✓ Increased cancers (mainly colorectal & breast cancer) ^{1,2}
- ✓ Increased chance of stroke ²
- ✓ Increased digestion issues ^{1,2}
- ✓ Increased obesity ^{1,2}
- ✓ Increased type 2 diabetes ^{1,2}

IMPACT OF HIGH FIBER DIET

(25-35g per day)

- ✓ Healthy microbiome - contains prebiotic for gut health ¹
- ✓ Cardiovascular health - lower lipid profile, cholesterol ²
- ✓ Decreased cancer risk, chance of stroke ^{1,2}
- ✓ Better Digestive health – keeps you regular ^{1,2}
- ✓ Weight management - increase feelings of fullness ¹
- ✓ Regulated blood sugar levels - slows absorption of sugar ²
- ✓ 15-30% decrease in mortality (all-causes and cardiovascular related) ²

Sources:

1) Effects of dietary fiber on human health. *Food Science and Human Wellness*; Vol 11 January 2022 pages 1-10.

2) *Lancet Journal*. Carbohydrate quality and human health: a series of systematic reviews and meta-analyses. Jan 2019 (185 studies and 58 clinical trials over 2 decades)



GoodWheat™ delivers superior nutritional benefits with the same great taste as regular pasta

Good Wheat™

The wheat you love,
simply better.™



*Our pasta is made with just **one simple ingredient** – our GoodWheat Durum Semolina – a nutritionally superior wheat grain that is **naturally higher in fiber** and delivers a delicious pasta with **absolutely no sacrifice on taste or texture.***

- Launched June 2022
- Available in retail and online through Amazon
- Five varieties: Spaghetti, Penne, Fettuccine, Elbow, Rotini
- First traditional pasta to receive Certified Heart Health checkmark



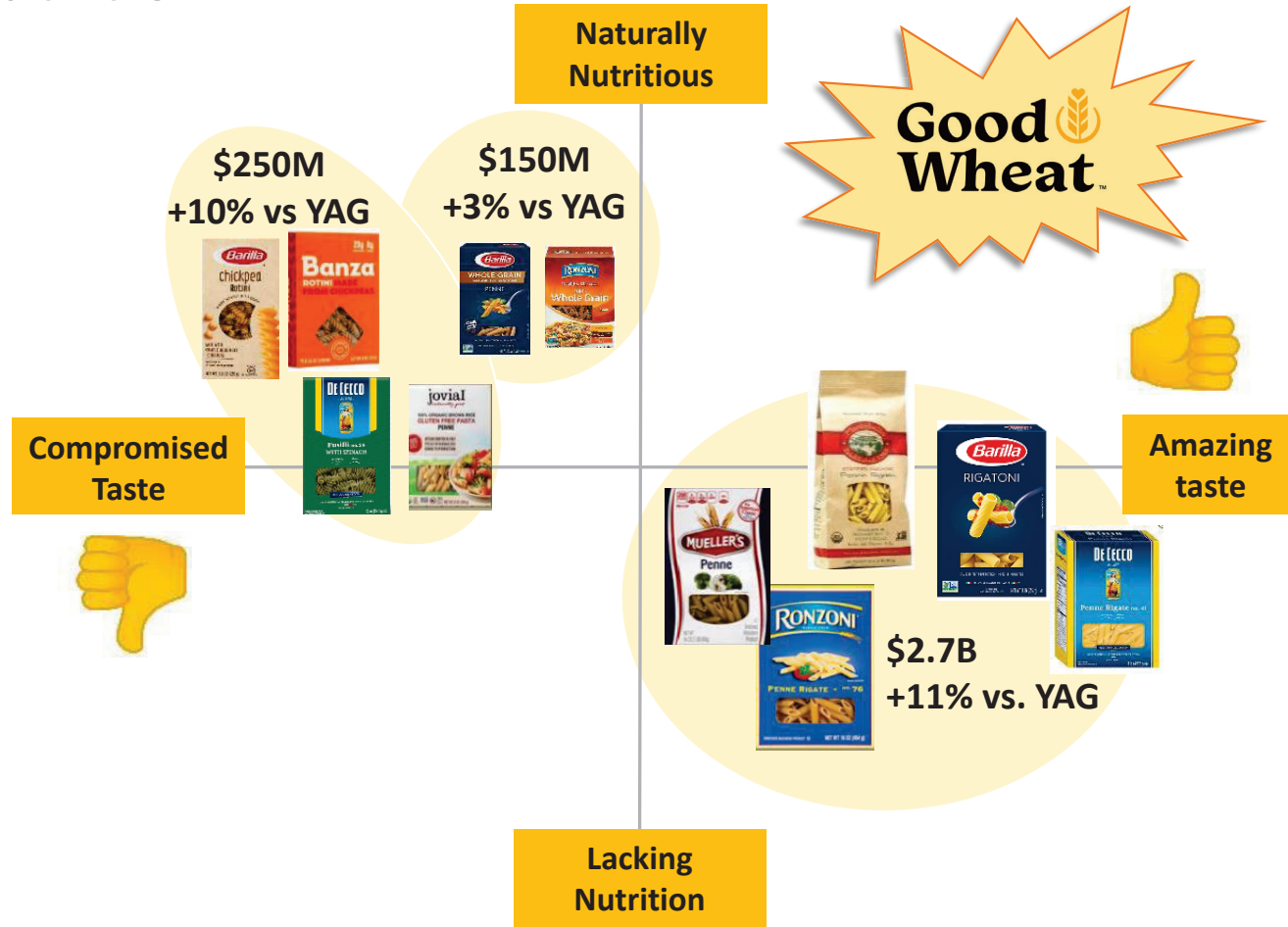
Current pasta offerings don't meet consumer needs in taste and nutrition

\$3.1B Category
+18% vs YAG



- Traditional wheat pasta is the largest segment with the highest growth
- Veggie/wheat alternative pastas are also seeing strong growth
- Whole wheat is the smallest segment with the slowest growth

Source: Nielsen FMCG Ending 52 weeks ending May 27, 2023





GoodWheat™ delivers superior nutritional benefits with the same great taste as regular pasta

GoodWheat has the highest fiber and is the most nutrient dense with no sacrifice on taste

	GoodWheat	De Cecco	Montebello	Barilla	Barilla (whole grain)	Jovial (brown rice)	Banza (chickpea)
Calories	180	200	200	200	180	210	190
Fiber	8g	2g	2g	3g	7g	2g	5g
Protein	9g	8g	6g	7g	8g	5g	11g
Ingredients	GoodWheat™ High Fiber Durum Wheat Semolina	Durum (wheat) semolina, Niacin, thiamine mononitrate, riboflavin, folic acid , ferrous lactate.	Organic Durum Wheat Semolina	Semolina (Wheat), Durum Wheat flour, Vitamin B3 (Niacin), Iron (Ferrous Sulfate), Vitamin B1 (Thiamine Mononitrate), Vit B2 (Riboflavin), Folic Acid	Wholegrain durum wheat flour	Organic brown rice flour, water	Chickpeas, pea starch, tapioca, xanthan gum
Taste*							

*Nutrition facts sourced from brand websites and based off regular penne pasta based on 2oz serving
* Consumer IHUT January 2022*

New: GoodWheat pancakes make everybody happy™

Launched August 2023

TWO Lines:

Flavor Varieties :

Multi-Serve, stand-up pouch

- Buttermilk (16oz)
- Chocolate Chocolate Chip (14oz)
- Apple Cinnamon (14oz)

Quikcakes™ Single-Serve Instant Pancakes

- Buttermilk
- Chocolate Chocolate Chip
- Confetti

Single serve multi-pack (5ct – 2oz sachets)

*Our pancakes are made with only **simple ingredients** and our GoodWheat – a nutritionally superior wheat grain that is **naturally higher in fiber** and delivers delicious pancakes with **absolutely no sacrifice on taste or texture.***

All offerings are just add water with product two lines: a standard multi-serve and an all-new single serve line providing a convenient solution for busy mornings.

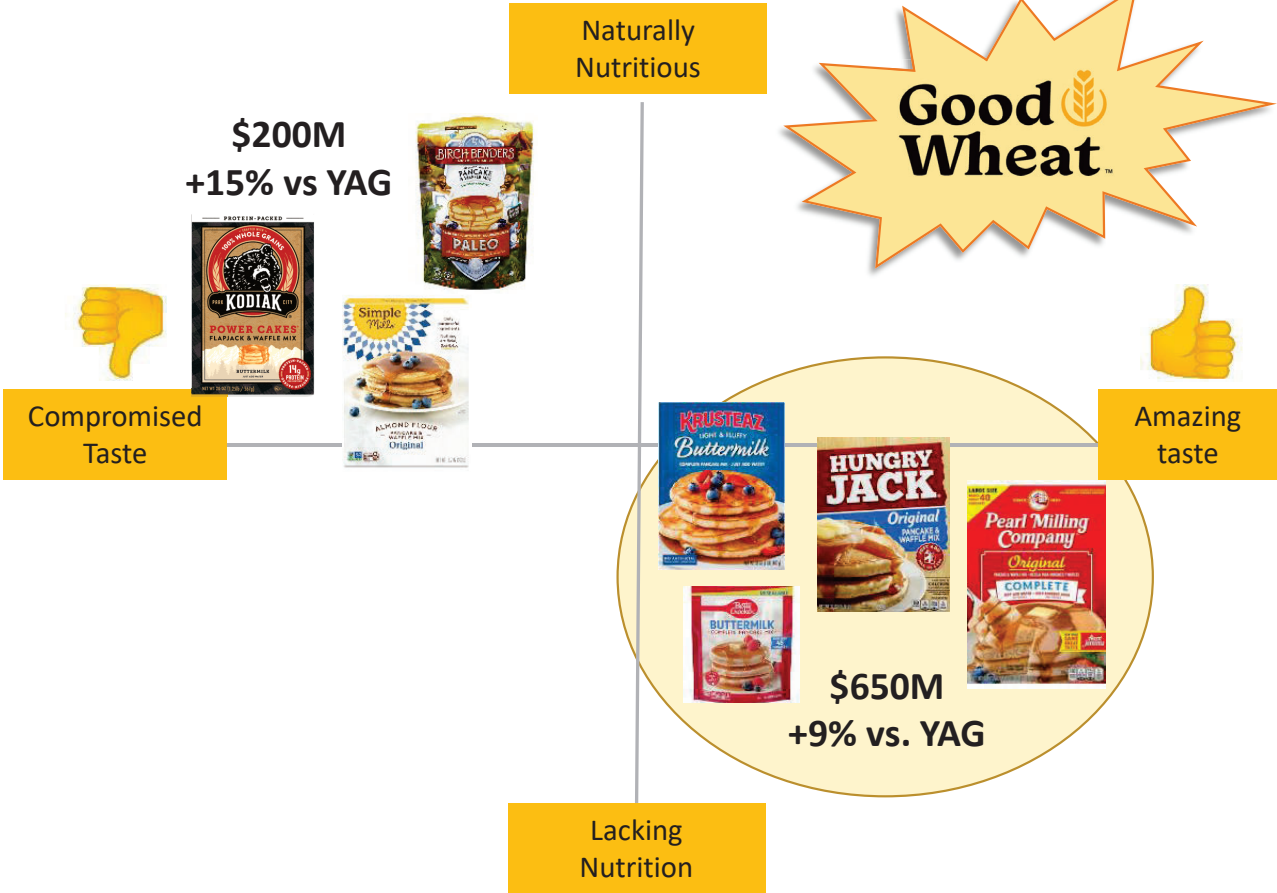


Current pancake set does not solve Moms' needs

\$850M Category
+10% vs YAG

- Traditional pancakes is the largest segment with moderate growth
- Nutrition/Protein forward segment is seeing the highest growth

Source: Nielsen FMCG Ending 52 weeks ending May 27, 2023





MULTI-SERVE BUTTERMILK PANCAKE SET:

GoodWheat is nutrient dense with lower calories



	GoodWheat (Just add H2O)	Pearl Milling (Just add H2O)	Krusteaz (Just add H2O)	Kodiak (Just add H2O)	Birch Benders (Just add H2O)	Bob's Red Mill (+ 4 ingredients)
Ounces	16 oz.	32 oz.	32 oz.	20 oz.	16 oz.	24oz
Base price	\$5.49	\$3.31	\$3.03	\$5.99	\$7.35	\$5.65
Serving	40g	45g	59g 40g (RACC)	53g 40g (RACC)	35g	40g
Calories*	120	160	210 142	190 145	120	140
Sugar	7g	5g	11g 7g	9g 7g	6g	4g
Total Carb	23g	33g	45g 30g	30g 22g	30g	27g
Net Carb	15g	33g	45g 30g	25g 18g	29g	22g
Fiber*	8g	<1g	<1g <1g	5g 4g	1g	5g
Protein*	5g	5g	4g 3g	14g 10g	3g	7g
Ingredient line	GoodWheat Flour, Sugar, Powdered Buttermilk, Baking Powder, Sea Salt, Sunflower Oil, Potato Starch	Enriched Bleached Flour (Bleached Wheat Flour, Niacinamide, Reduced Iron, Thiamin, Mononitrate, Riboflavin, Folic Acid), Sugar, Leavening, Dextrose, Buttermilk Powder, Palm Oil, Salt, Wheat Gluten, Corn Syrup Solids, Sodium Caseinate, Mono and Diglycerides, Dipotassium Phosphate, Lactic Acid, Tocopherols (to preserve freshness)	Enriched bleached flour (wheat flour, malted barley flour, niacin, reduced iron, thiamin mononitrate, riboflavin, folic acid), sugar, dextrose, leavening, food starch-modified, salt, soybean oil, egg whites, buttermilk.	100% whole grain wheat flour, 100% whole grain oat flour, wheat protein isolate, brown sugar, whey protein concentrate, milk protein concentrate, buttermilk powder, leavening , sea salt.	Organic Wheat Flour, Organic Evaporated Cane Juice, Leavening, Salt, Organic Potato Starch, Organic Cassava Starch.	Organic Whole Wheat Flour, Buttermilk Powder (Milk), Vital Wheat Gluten, Cane Sugar, Baking Powder, Salt.

Source: Brand websites, all buttermilk variety. Pricing Nielsen Grocery 52wk Ending Sept 2022

RACC stands for "Reference Amount Customarily Consumed" – in other words, how much an average person would be expected to eat in one sitting. It is used for a reference (or standard) and is legally regulated by the FDA.

SINGLE SERVE BUTTERMILK PANCAKE SET: GoodWheat wins on price, nutritionals and ingredients



	GoodWheat Quikcakes™	Pearl Milling Pancake On The Go	Kodiak Power Cup	Birch Benders Keto Pancake a la Cup
Ounces (serving)	57g	60g	61g	38g
Price per serving	\$1.20	\$1.30	\$2.10	\$2.54
Calories*	180	220	250	210
Sugar	12g	13g	15g	3g
Total Carbs	34g	42g	37g	10g
Net Carbs	23g	42g	33g	5g
Fiber*	11g	< 1g	3g	5g
Protein*	7g	5g	10g	7g
Ingredient line	Wheat Flour, Sugar, Powdered Buttermilk, Baking Powder, Natural Flavor, Sunflower Oil, Potato Starch, Cocoa Powder with Alkali, Salt	Enriched Bleached Flour (Bleached Wheat Flour, Niacinamide, Reduced Iron, Thiamin, Mononitrate, Riboflavin, Folic Acid), Sugar, Caramel Chips (Sugar, Palm Kernel and Palm Oil, Nonfat Dry Milk, Dry Whole Milk, Cocoa Powder, Soy Lecithin, Salt, Natural Flavor, Paprika Extract), Buttermilk Powder, Leavening, Palm Oil, Dextrose, Corn Syrup Solids, Salt, Wheat Protein Isolate, Natural Flavor, Sodium Caseinate, Mono and Diglycerides, Tocopherols (to preserve freshness)	100% Whole Grain Wheat Flour, 100% Whole Grain Oat Flour, Maple Syrup, Palm Oil, Brown Sugar, Wheat Protein Isolate, Whey Protein Concentrate, Milk Protein Concentrate, Leavening, Natural Flavor, Buttermilk, Sea Salt.	Almond Flour, Oil Powder (High Oleic Sunflower Oil, Pea Protein Isolate, Mixed Tocopherols), Eggs, Organic Coconut Flour, Tigernut Flour, Leavening, Natural Maple Flavor, Monk Fruit.

Source: Brand websites, all buttermilk variety. Pricing Nielsen Grocery 52wk Ending Sept 2022

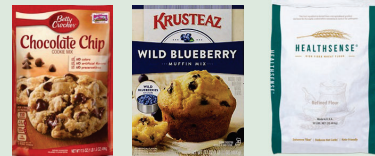
And there's another \$8B market in additional categories that we plan to enter by 2025

- Consumer staple categories
- Center-store with large addressable markets
- GoodWheat delivers clear, meaningful differentiation
- Better-for-you with the same taste/texture
- Premium pricing leverage
- Low capital scalability

POTENTIAL PRODUCT CATEGORIES

Baking Mixes & Flour Cookies, Muffins

- ✓ Lower calories
- ✓ Higher fiber
- ✓ Higher protein
- ✓ Guilt-free indulgences



Snacks Crackers, Cereal Bars

- ✓ Lower calories
- ✓ Higher fiber
- ✓ Higher protein
- ✓ Snacks with better nutrition



Noodles & Adjacent Categories

- ✓ Lower calories
- ✓ Higher fiber
- ✓ Higher protein
- ✓ Better nutrition in the foods you love



STRATEGY 3:

Beverage Expansion – Driving Share Growth in Zola® Coconut Water



- Superior product performance in large, established category
- Compelling upside to improving our retail footprint
- Potential to grow significantly faster than the category
 - Expanded distribution
 - Trial-driving marketing
 - Targeted innovation





Zola coconut water provides naturally light hydration that replenishes with a taste consumers love

Zola coconut water is a smart, satisfying way to reset and boost your mental and physical energy

- Crisp, clean taste
- Bottled at the source in Thailand
- Naturally lower in calories and sugar with just the right balance of sweetness
- Only natural, non-GMO ingredients – nothing artificial



Zola outperforms the competition on taste and sweetness

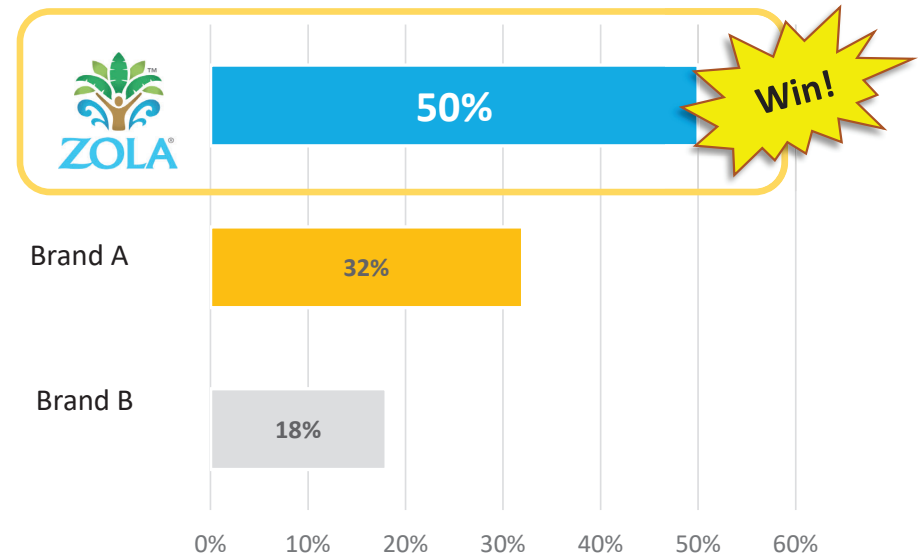
epicurious

September 2018

“Our favorite brand of coconut water is Zola Original Coconut Water. Stopping short of cracking open our own coconuts, we sampled 19 tetra-paks, cans, and bottles of nature's sports drink, ultimately deeming Zola the best coconut water. Zola has a pleasingly subtle flavor with just a bit of tropical aroma and natural sweetness, and a tart, refreshing finish.”



Taste Preference



Central Location Test July 2022

We expect Zola to grow faster than the category

Coconut Water Category

Sales
\$454M



+11% Y/Y

Units
142M

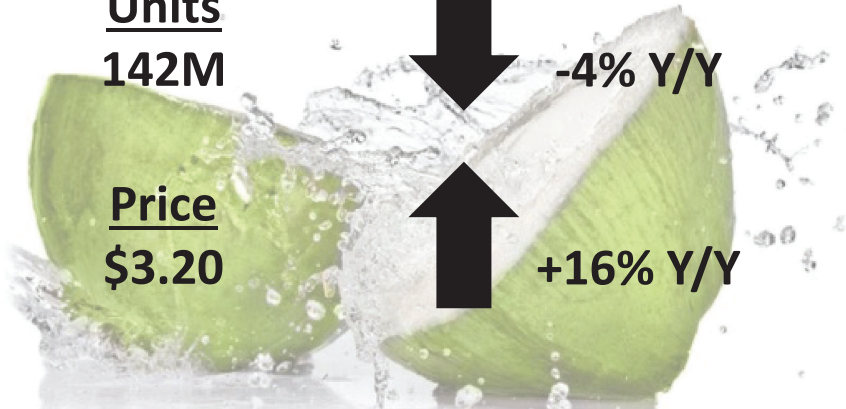


-4% Y/Y

Price
\$3.20



+16% Y/Y



Sources:
Nielsen FMCG 52 weeks Ending May 27, 2023 (Coconut Water Category)

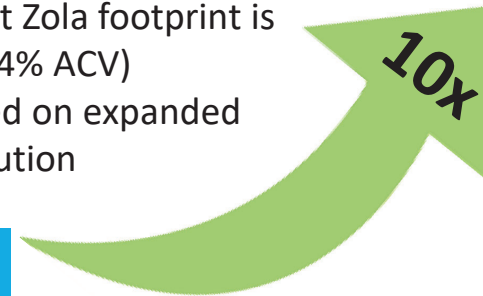


**40%
ACV**

- Current Zola footprint is small (4% ACV)
- Focused on expanded distribution

**4%
ACV**

2022



2025

Upcoming Zola innovation delivers consumer-preferred flavors and packaging

- Adding new flavors Q4 2023:
 - Pineapple: #1 selling Coconut Water flavor
 - Lime: #1 Sparkling Water flavor
- No sugar added, 100% Juice, Non-GMO
- 500ml, resealable single-serve Tetra Pak
- Expansion into Club and C-Store channels

500ml Flavors: Original, Pineapple and Lime



New packaging resonates with consumers on most important purchase-drivers

	Zola (new)	Zola (old)	Vita Coco	Zico	Harmless Harvest
No Added Sugar	83%	69%	61%	68%	59%
Naturally hydrating	94%	94%	84%	86%	74%
Better for you	90%	83%	75%	81%	70%
Refreshing	93%	94%	87%	87%	77%
Crisp Clean Taste	89%	90%	82%	82%	71%
100% Coconut Water	90%	79%	75%	87%	70%

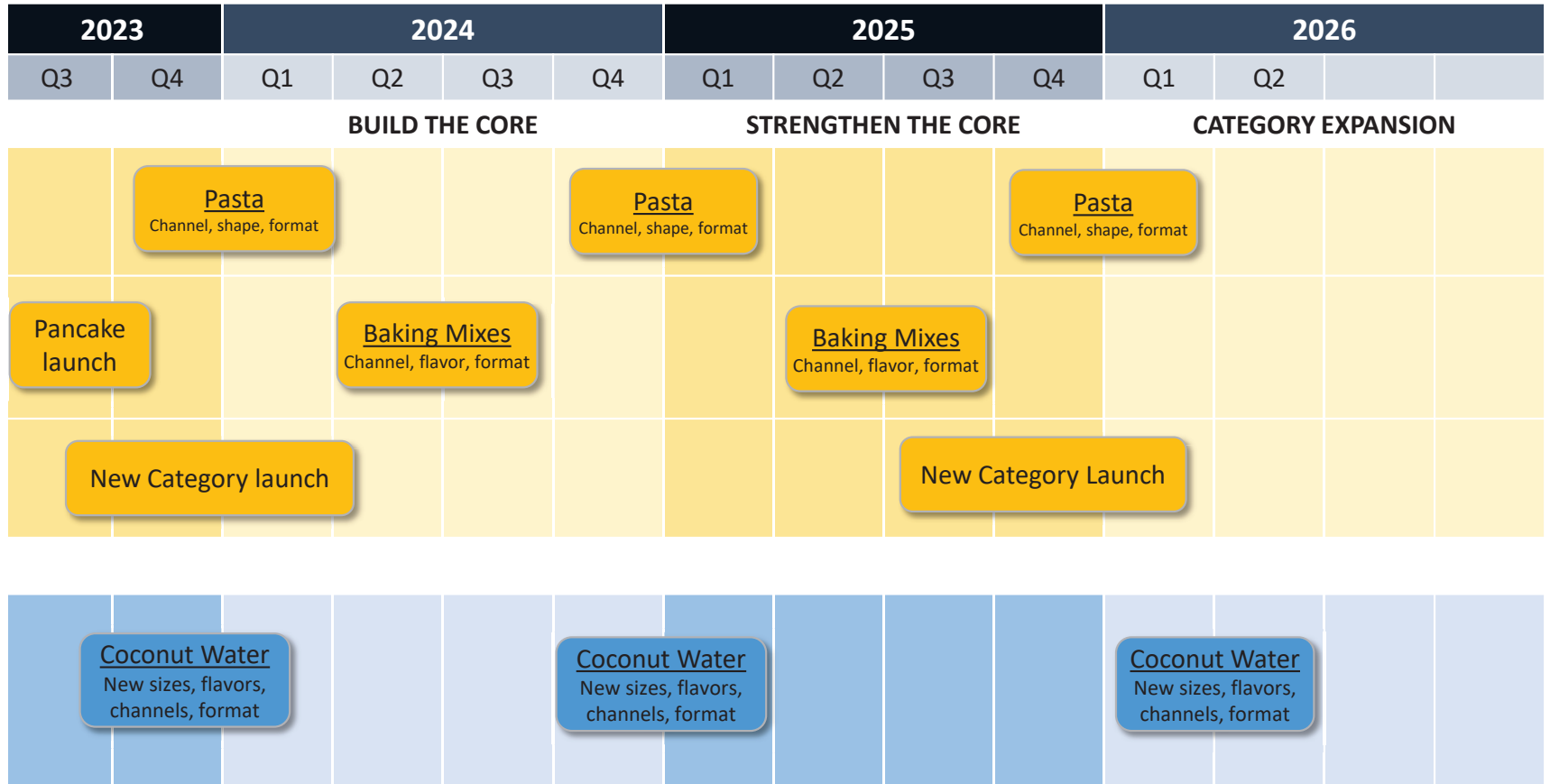


GoodWheat and Zola have established strong distribution footholds in over 4,000 stores





Innovation pipeline will continue to drive scale



STRATEGY 4:

Leveraging partnerships to expand future licensing revenue



- Arcadia’s Wheat patents deliver enhanced nutrition in major commodity crops
 - Durum Pasta (28M bushels per year)
 - Hard Red Spring (420M bushels per year)
- Able to monetize all steps of Wheat value chain
- Large partners with segment expertise can generate rapid licensing revenue expansion
- Sizable opportunity – \$3.6B addressable market



SEED PARTNERS



GRAIN & MILLING PARTNERS



FOODSERVICE PARTNERS



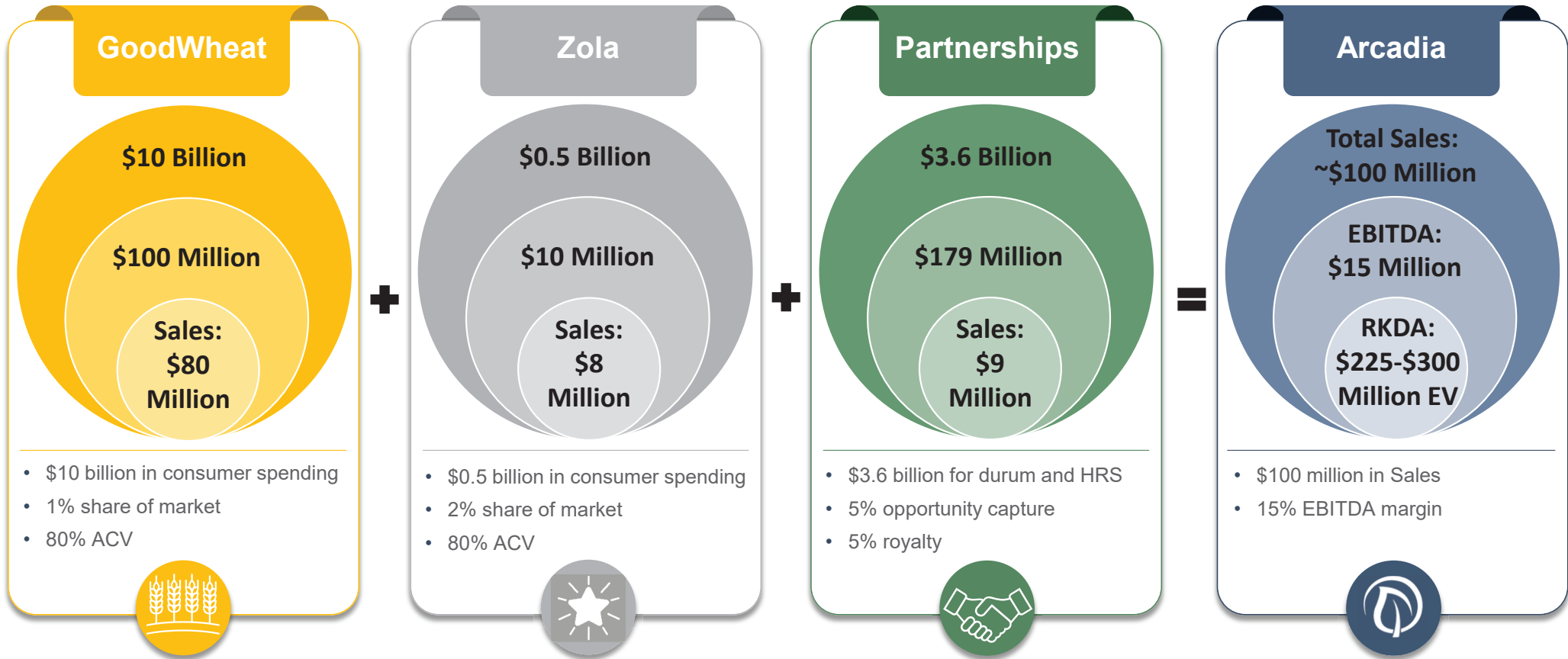
Bioceres partnership is an example of our licensing strategy – a royalty revenue stream that provides capital for future growth

- Arcadia has a royalty agreement with Bioceres Crop Solutions Corporation for its HB4 Soy trait.
- HB4 is the first drought resistant soy available to farmers and was approved for sale in China during 2022.
- We estimate that annual Bioceres HB4 soy revenues could exceed over \$100M annually by 2027.
- The agreement obligates Bioceres to pay a 6% quarterly royalty payment on net revenues and the total royalty payments are capped at \$10M.



Bioceres
Crop Solutions

Arcadia's strategy presents a compelling long term business profile



Note: The numbers above are estimates and do not represent or indicate forecasts, guidance, or future performance; actual results may differ materially



With a strong cash position and undervalued share price, Arcadia is well-positioned for long-term growth and profitability



Arcadia is a technology-enabled food and beverage company focused on high-growth, on-trend better-for-you products.



Strong management team of CPG executives has significant experience launching and growing better-for-you consumer brands.



GoodWheat and Zola brands address large and growing markets with a robust innovation pipeline.



High-value IP portfolio and capital-light business model enable self-funded growth long term.

A large, light green decorative graphic on the left side of the page, consisting of several overlapping, curved, leaf-like shapes that spiral outwards from the bottom left towards the top right.

ARCADIA BIOSCIENCES

Stan Jacot – President & Chief Executive Officer
TJ Schaefer – Chief Financial Officer

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