



PUREFRUIT™ Monk Fruit Extract A Revolutionary Natural Sweetener



Chicago Section IFT
the First Section



Dave Tuchler
VP Global Marketing
November 9, 2011

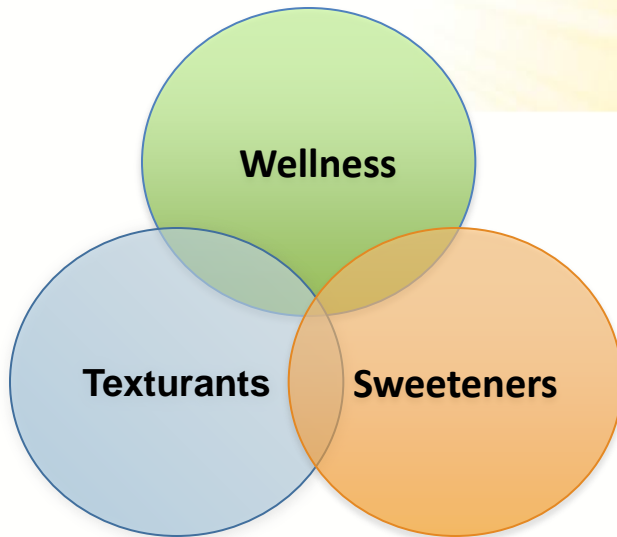
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ALL NATURAL • CALORIE FREE SWEETNESS



Tate & Lyle: Full-Service Solutions, Customer Focus

\$4B Global Company, *Broad Portfolio of Sweeteners*



Innovation Centre – Early 2012
Hoffman Estates, IL



Sweetener Platform Components



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An exciting new sweetening ingredient

***All Natural
No Calories
Great Tasting
From FRUIT***

Agenda

- Monk Fruit Extract - The Consumer Value Proposition
- Origins/Sourcing/Processing – Monk Fruit
- Creating Awareness
- Questions

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Monk Fruit (*Siraitia grosvenorii*):

Known as ***Luo Han Guo*** in China



Historically used in dried form



- A member of the melon (*Cucurbitaceae*) family
- Cultivated in subtropical Southeast Asia for centuries
- Used to sweeten tea, other beverages and as herbal medicine
- Active Ingredient: Mogroside V ('Mog 5') – an antioxidant
- FDA GRAS notification, no questions, January 2010 - sweetener and flavor enhancer*

*Additional approvals in China, Japan, S Korea, Australia, New Zealand

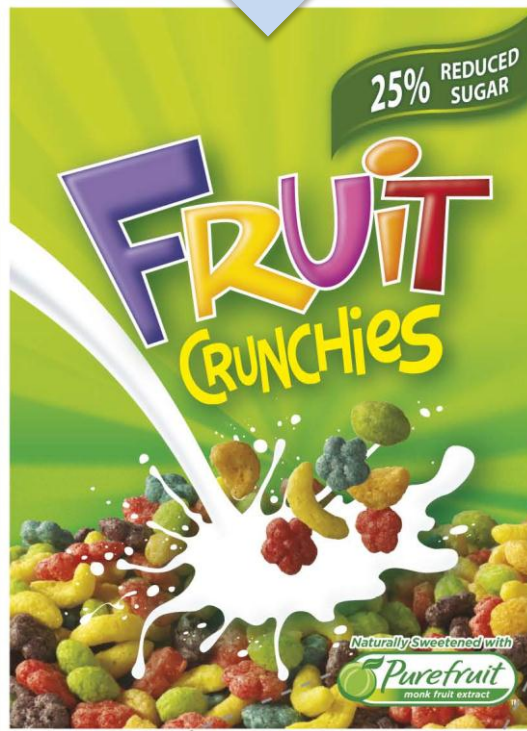
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Excellent Opportunities for Marketers

- Leverage fruit equity to address consumer needs

Reduced-sugar kids' products with Mom-approved sweetening system



Reduced sugar, naturally sweetened extension of a natural product



Enable 'Naturally Sweetened!' Claim on diet or reduced sugar products

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Consumer Appeal of Monk Fruit Extract

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Supported by Extensive Consumer Research

Monk fruit extract research areas:

- Consumer acceptance of monk fruit extract
- Interest among mothers
- How best show on product labels
- Interest by food and beverage categories



Studies:

Qualitative & quantitative
Oct 2009 – April 2011



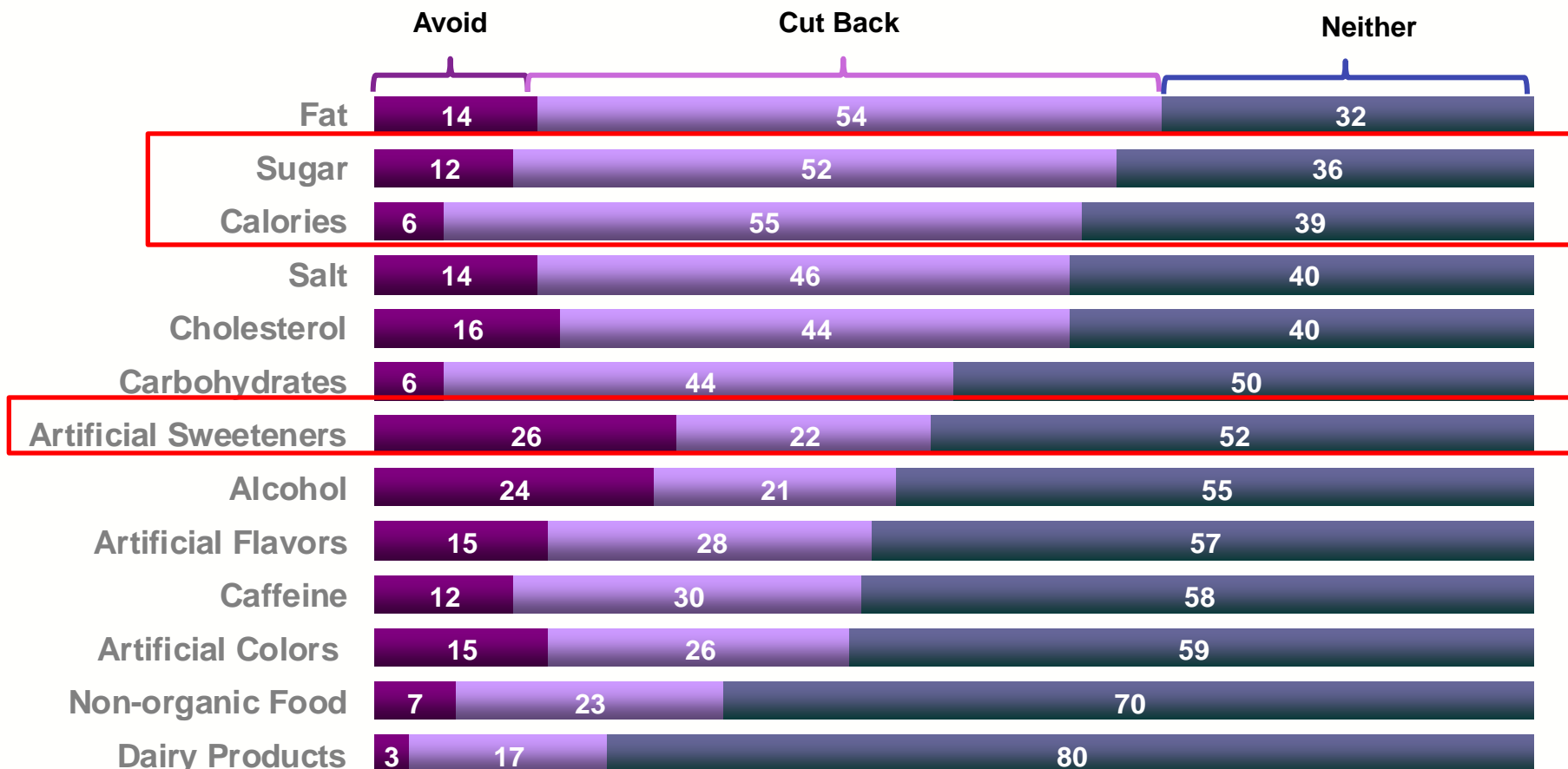
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Adults demonstrate different balancing behaviors

- Reducing sugar or calories is high on the list

What types of food do you try to avoid, or at least cut back on, for your own personal health or safety?
PROMPTED

- Roughly 1 out of 4 consumers claims to avoid artificial sweeteners



Base: All respondents (3092) Figures shown in % Source: Illuminas US Online Study 2010

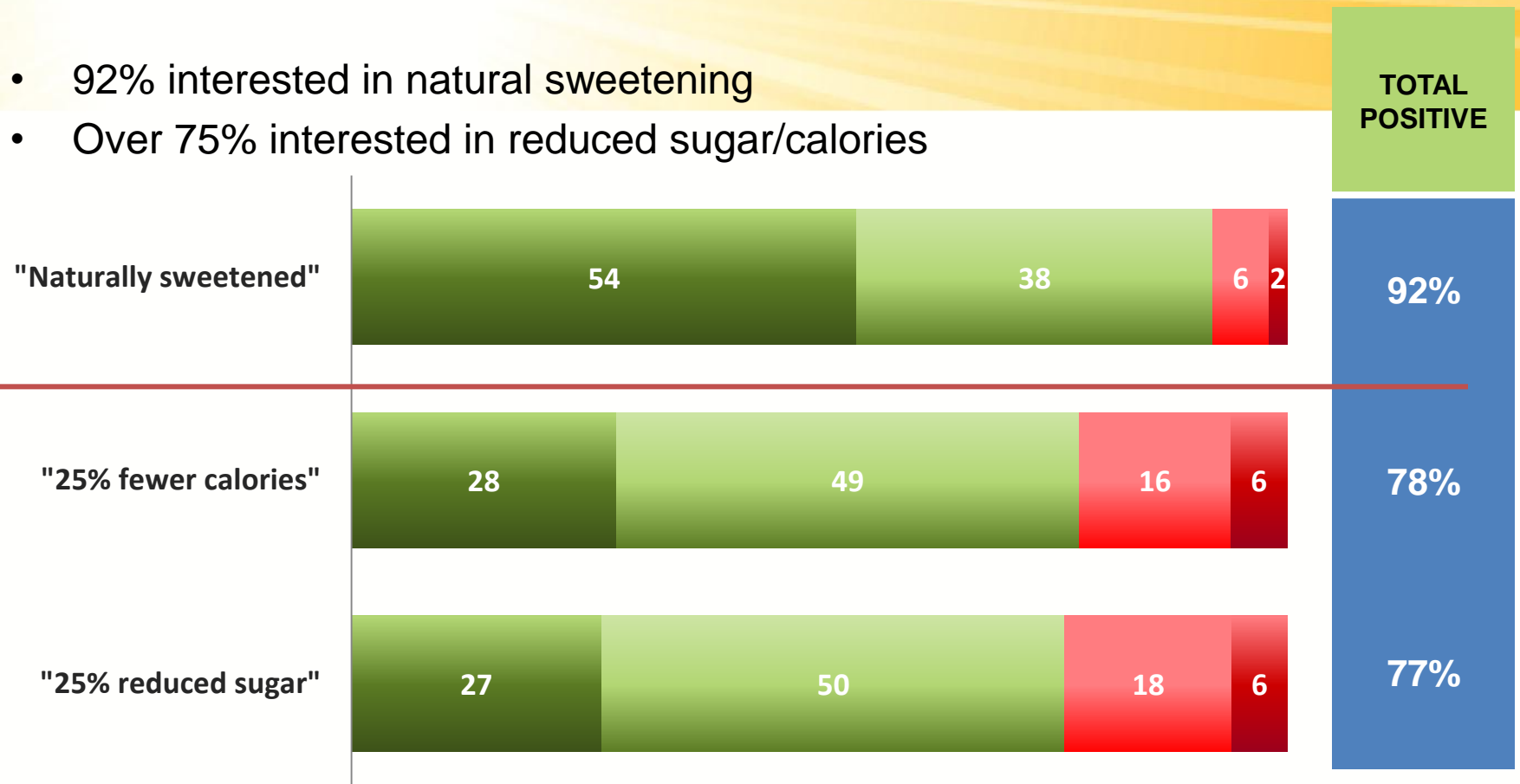




Consumer Research Identified Two Major Trends

- Naturally sweetened; reduced sugar/calories

- 92% interested in natural sweetening
- Over 75% interested in reduced sugar/calories



■ Very appealing
 ■ Fairly appealing
 ■ Not very appealing
 ■ Not at all appealing

Claim Preference

For each one, can you tell me how appealing you think the claim is?

Tate & Lyle Consumer Quantitative research conducted April 2011 n=3100

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Summary of Findings: Sweetening Choices Are Not Easy

- And require a lot of energy to manage

Sugar is powerful:

- Creates happiness at home
- Love for mom
- Can be a reward
- Can be energy source



Reduced sugar foods can be part of the solution:

- Lower calories
- Lower sugar
- Lots of choices

• However:

- Health tradeoffs -
 - Weight
 - Calories
 - Teeth
 - Bad habits
- Meltdowns/moodiness
- Failure as gatekeeper?

Balance/moderation is goal:

- Basis of healthy diet
- Allows periodic treats
- Starts good eating habits
- Control of inputs
- Pride as good parent

• However:

- Requires constant effort
- Control is difficult
- Choices/tradeoffs
- Potential battlefield

• However:

- Suspicion of how done
- Search for 'hidden' ingredients
- Taste suspicions (kids)

Monk Fruit Extract Can Provide An Answer

Moms Trust Fruit! - it's:

- Sweet
- Healthy
- Natural
- Wholesome
- Easy to understand
- Simple!



Fruit Tastes Great!

- Everyone likes it
- Kids will eat it
- Great sweet taste
- New fruits can be exciting (açai, pomegranate)

Mom Wins!

- Great taste
- Less sugar
- Happy family
- Easy solution
- Peace of mind
- Smart move by mom
- No angst!

Info Needs to be Available

Understanding the Fruit

- Familiarity/seeing it
- Origins
- Proof of naturalness
- Additional qualities/benefits

Safety Information

- Establishing trust
- Experts' endorsements

Reinforcement

- Other trusted products with monk fruit extract

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'Naturally Sweetened' Is An Idea That Strongly Resonates

- Balanced Taste/Health Solution

"...the thing is that right now I feel like I have to choose between either sugar, which is more natural, that has more calories than ... or something that has no calories but it's completely unnatural. And I haven't had a lot of products with [this] so I don't know how the taste is, but it seems like it's kind of a happy medium, where maybe it does have the calories, but it's more natural. So I definitely would [try it]"

[age 30-45, New York]

"If it was naturally sweetened, like you said, then it might be something that might be interesting to drink and it tastes good, but it's also not really bad for me or for my child."

[age 20-45, Chicago]

"[I would try it] because it is healthier. I like [Brand A]. If all of a sudden [Brand A] was naturally sweetened, but not with NutraSweet, and if it was still low calories, then I would definitely want to try it."

[age 35-55, Chicago]

"I am not going to sacrifice taste or flavor when I am shopping for the family"

[age 35-55, New York]

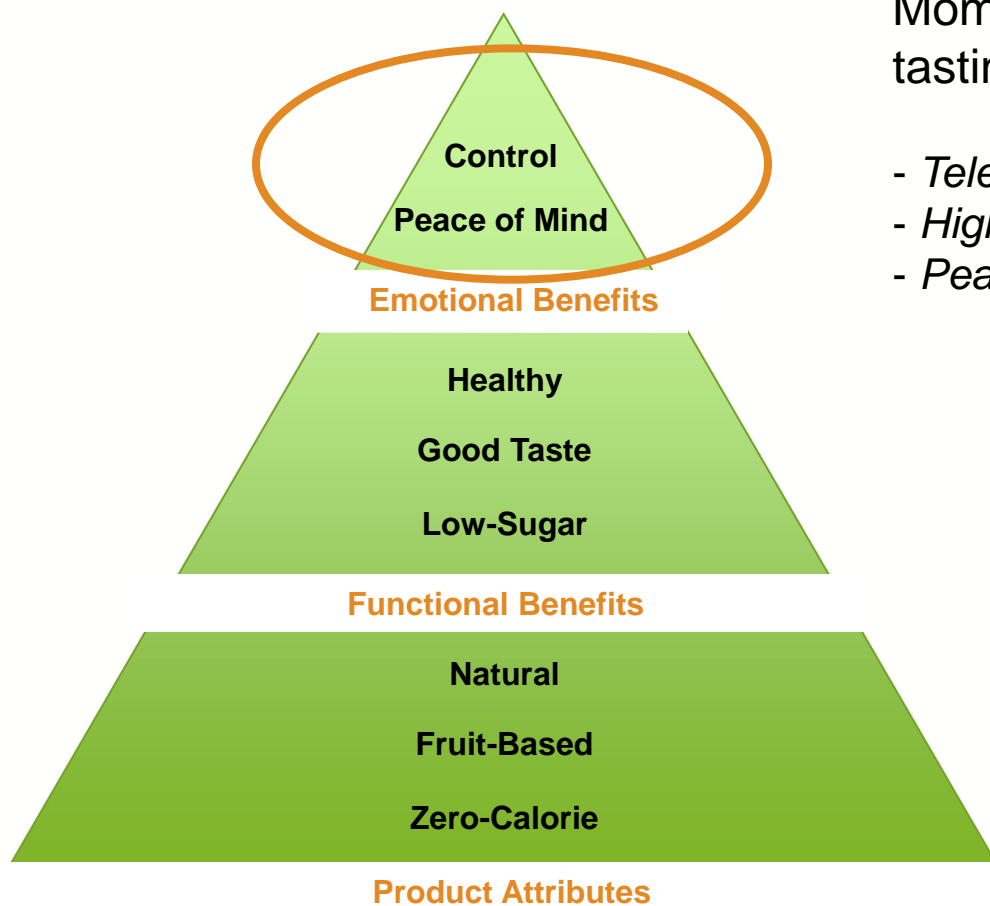
"It would be good for you, which is why I would [try] it. If it didn't taste good I would just say screw it and I wouldn't do it at all."

[age 20-45, Chicago]

Tate & Lyle Qualitative Consumer research conducted August 2009; N=903

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NET: *Fruit Source* is a Huge Positive for Monk Fruit Extract



BioVittoria primary research among mothers of 1st thru 8th graders, 2010

Moms trust fruit as a natural, great tasting, healthy choice for their families

- *Telegraphs: great taste, natural, wholesome*
- *High comfort level*
- *Peace of mind!*

FOCUS GROUP OUTTAKES

*"It's from a fruit,
so it's natural"*

*"Fruit...what could be
better than that?"*

"Fruit is delicious!"



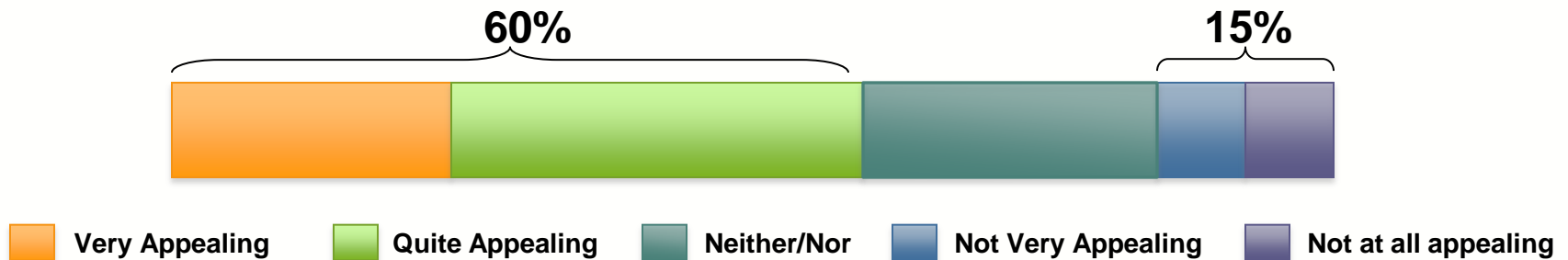
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60% Of Consumers Find Sugar Reduction With Monk Fruit Extract To Be Appealing (even with low awareness)

- Importantly, very low 'not appealing' scores

*How appealing is it to replace some of the sugar with a small amount of monk fruit extract in the food and drink products you buy for your own consumption?**



Figures shown in %

*Tate & Lyle Consumer Quantitative research conducted August 2010; N=903

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Monk Fruit Extract has Excellent Health and Taste Perceptions

- Remarkable for an unknown ingredient

- Moms compared back labels of a simulated fruit juice cocktail package with a '25% reduced sugar' claim*
 - Labels showed either *rebiana* (common name for stevia) or *monk fruit concentrate*



INGREDIENTS
 CONTAINS 15% FRUIT JUICE. FILTERED WATER, FRUCTOSE, CRANBERRY JUICE FROM CONCENTRATE, APPLE JUICE FROM CONCENTRATE, MONK FRUIT CONCENTRATE (SWEETENER), NATURAL FLAVORS, ASCORBIC ACID (VITAMIN C), CITRIC ACID.

INGREDIENTS
 CONTAINS 15% FRUIT JUICE. FILTERED WATER, FRUCTOSE, CRANBERRY JUICE FROM CONCENTRATE, APPLE JUICE FROM CONCENTRATE, REBIANA (SWEETENER), NATURAL FLAVORS, ASCORBIC ACID (VITAMIN C), CITRIC ACID.

- Monk fruit concentrate significantly outscored rebiana on key measures

	Monk Fruit Concentrate	Rebiana
Which do you think would be healthiest ?	47%	13%
Which do you think would be the best tasting ?	28%	10%
Which would you be more likely to buy ?	42%	13%

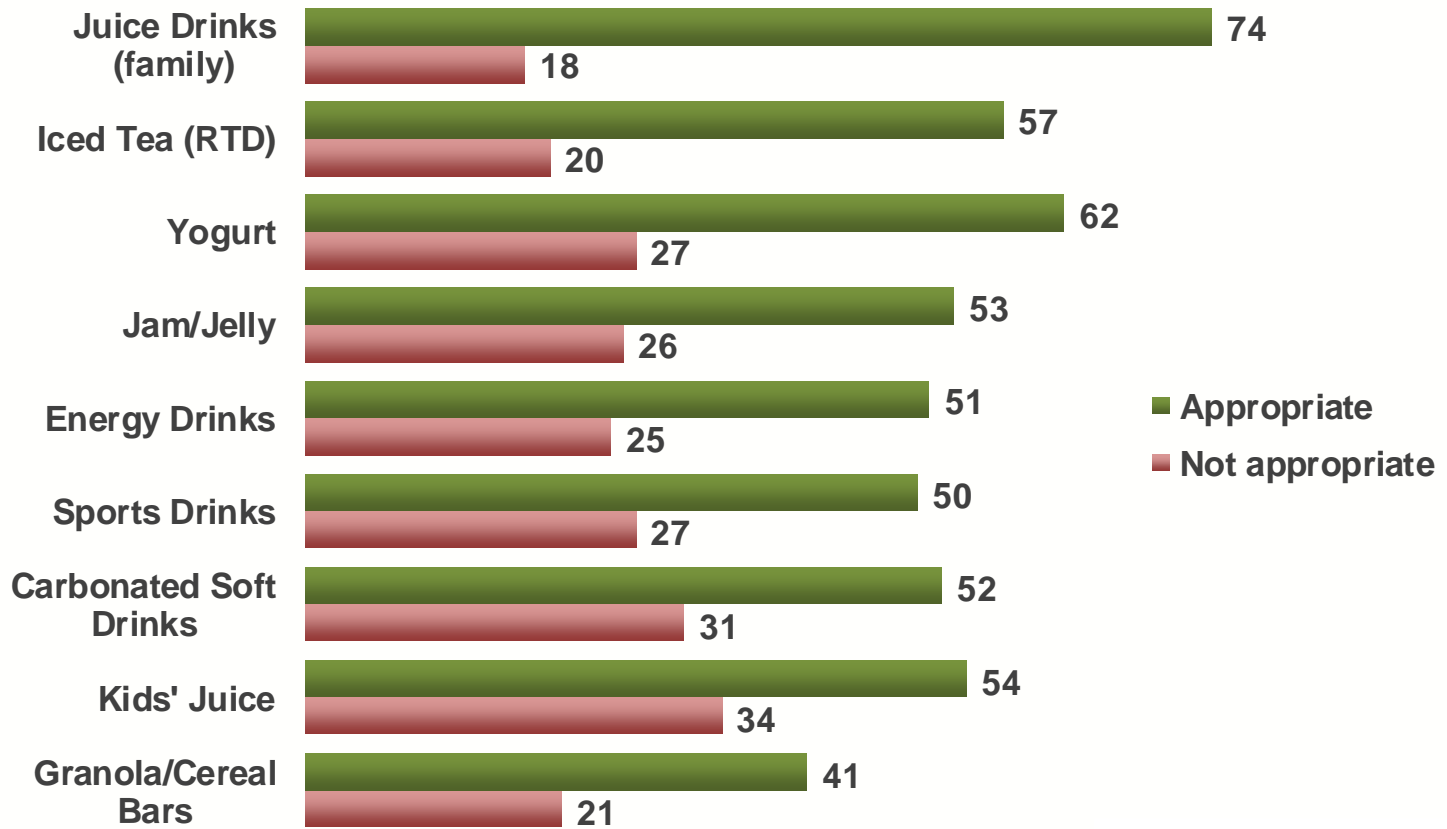
*Tate & Lyle Consumer research conducted January 2011; N=421 - - Respondents also compared against a back label showing sucralose – responses for sucralose, 'either' or 'none' make balance of 100%





Monk Fruit Extract Has Strong Appeal Across Most Categories

In which of the following types of food or drink do you think it would be appropriate / inappropriate...?



Tate & Lyle Consumer Quantitative research conducted January 2011; N=1070

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PUREFRUIT™ Consumer Value Proposition

Benefit: healthy food choices without sweetening concerns



Primary Target: Women with children at home

- Interested in natural
- Healthy moderators – Currently use sugar-sweetened products but try to moderate intake
- Demographics – 25-54, above-average income, higher education, married with children
- Shopping Behavior – Traditional Food, Walmart, Target, etc.

Secondary Target: Health-conscious women

Value Proposition:

- *For those who want great tasting, healthy foods and beverages, monk fruit provides the natural, wholesome sweetness of fruit without calories.*



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Sourcing/Processing of Monk Fruit Extract

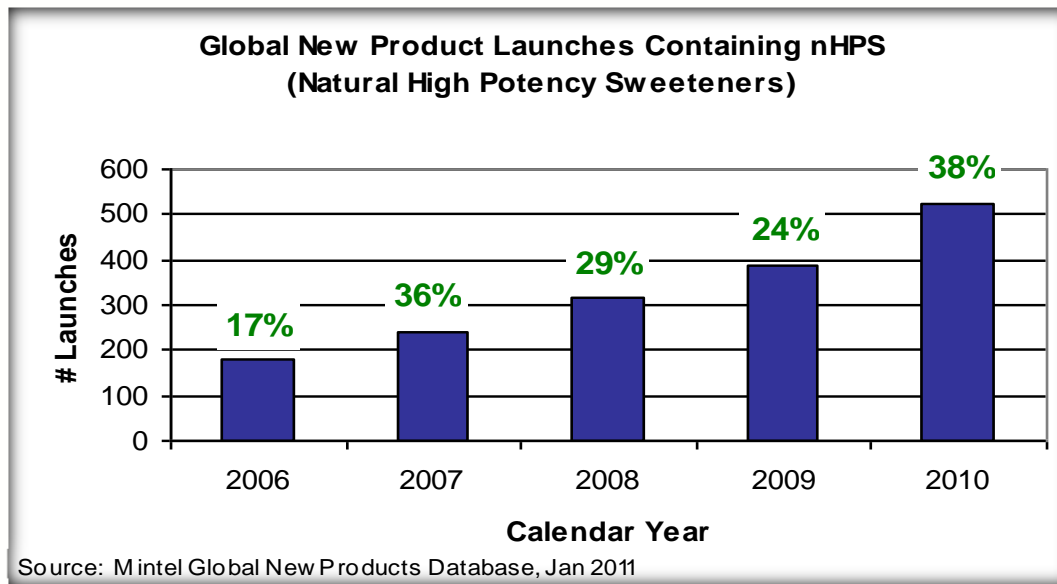
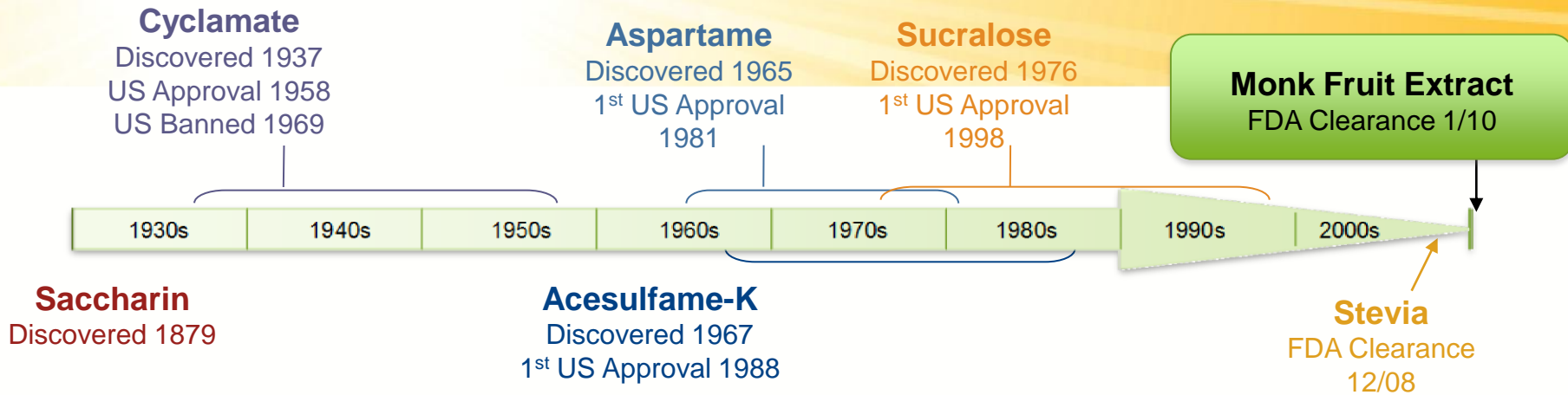
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High-Potency Sweeteners Have A Long History

Heavily Researched, Constantly Evolving; Naturals are New, Growing



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Monk Fruit – Regulatory

- **Monk Fruit Extract Is Approved in US and various parts of Asia** (China, Japan, South Korea)
- *Limited Approval in ANZ*



Tate & Lyle Had Been Investigating Natural Sweeteners

- Upon January 2010 Government Approval, In Position to Pursue Monk Fruit

NATURAL SWEETENERS



Stevia



Monk Fruit



Brazzein

Features

- Clean sugar-like taste
- High sweetness potency
- Low calorie
- Process-stable (e.g. heat)
- Versatile (applications)
- Regulatory approval
- 'Made from Fruit' consumer appeal
- Market-leading partner (BioVittoria)

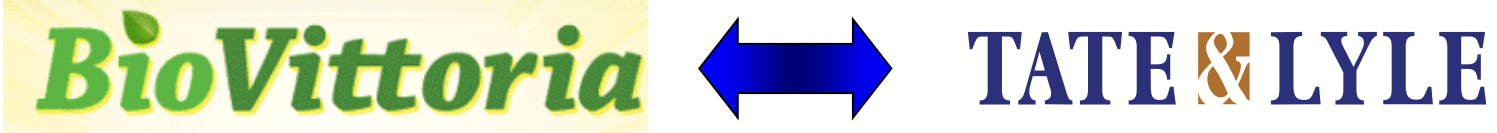
Desired Outcomes

- Allows formulation of great tasting foods with reduced sugar/ calorie content and a natural claim at an *acceptable cost*
- *Tate & Lyle has unique position*

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Our Long-Term Partnership with BioVittoria is Designed to Develop the Global Market for Monk Fruit Sweeteners



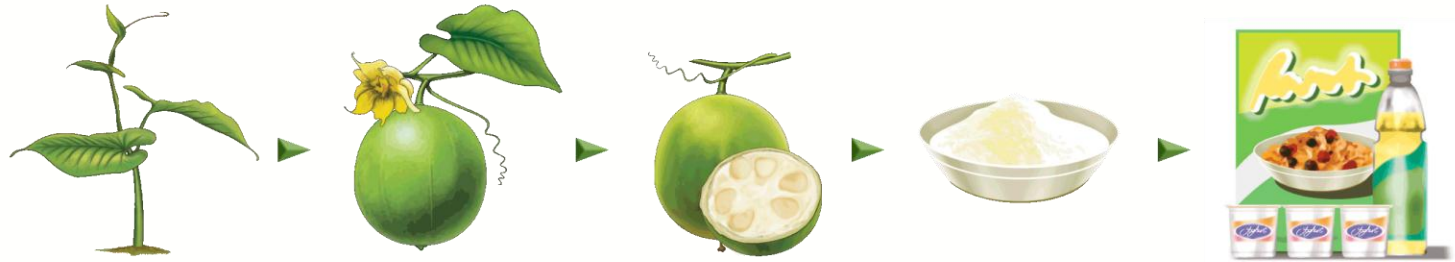
- **BioVittoria** brings leadership in monk fruit cultivation, harvesting and processing
- **Tate & Lyle** supplies Sales, Marketing, Technical Service, Applications and processing expertise, in addition to support of a large company
- **Collaboration** for product innovation and improvement (taste and cost)





Vertically Integrated Value Chain

- Ensuring the highest control and quality standards



From seedling to supermarket



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Monk Fruit Extract - Performance

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PUREFRUIT™ Monk Fruit Extract Has Excellent Stability and Versatility

- 150-250x sweetness of sugar

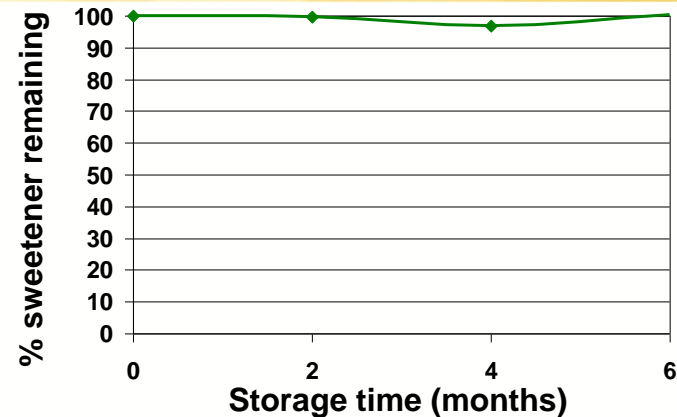
Excellent stability

- Very stable in both neutral and acidic foods and beverages
- Stable in manufacturing processes such as pasteurization

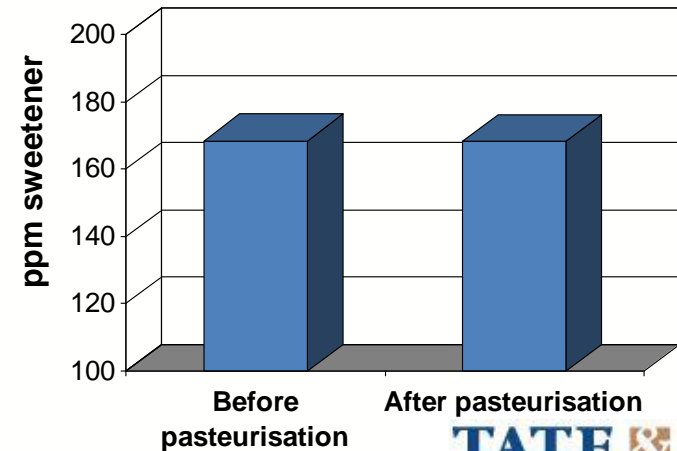
Applicable in a wide variety of foods and beverages

- Dairy (chocolate milk, yogurt, coffee beverages)
- Juice drinks
- Flavored/enhanced waters
- Sports drinks
- Powdered soft drinks
- Carbonated beverages
- Ready to drink teas
- Snack bars
- Breakfast cereals

Stability in Flavored Water (pH 3)
35°C for 6 months



Stability to Pasteurisation
Flavored Water (pH 3)

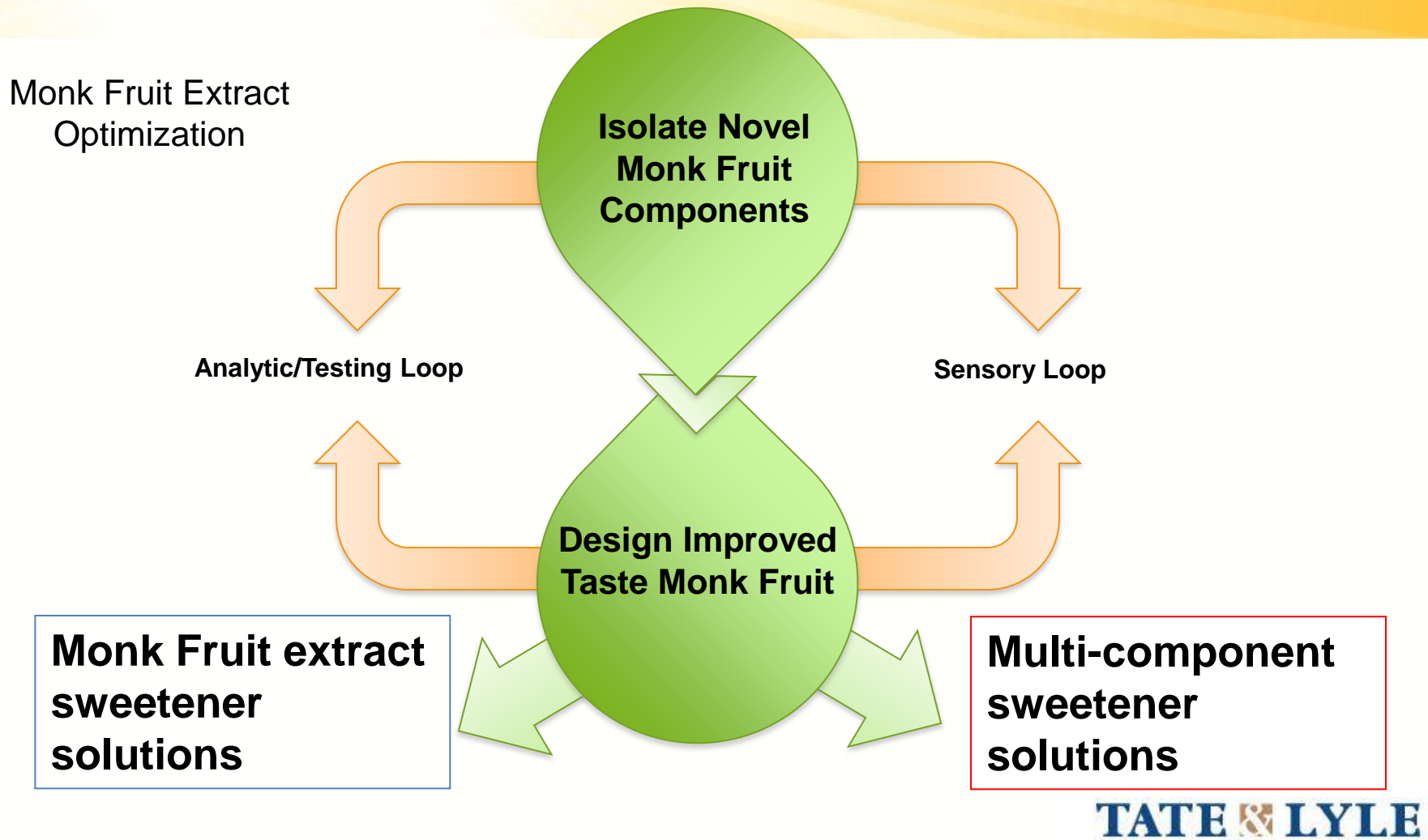


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An Intensive Multi-Year R&D Effort Had Already Been Underway

- Enabled Us to Offer Multiple Products For Different Needs

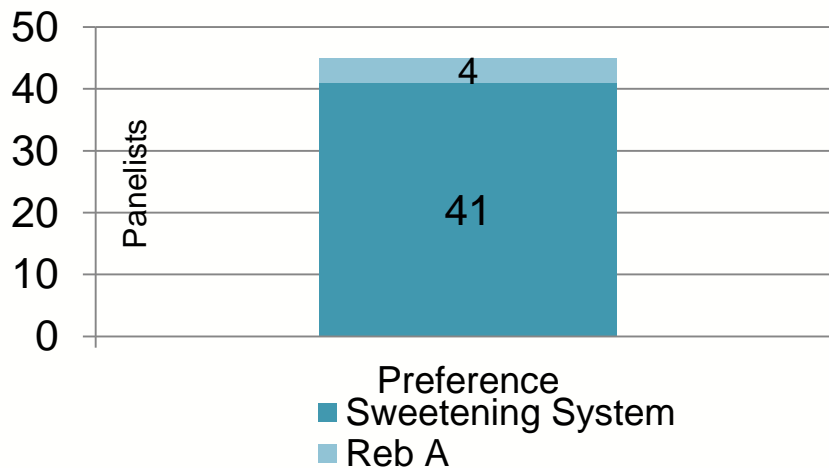




Sweetening System Approach – Taste Benefit Proven in Testing

- Taste Preference over Reb-A Shown

Paired Comparison Test
Sweetening Systems vs Reb A 97 at 1000ppm
in Citric Acid



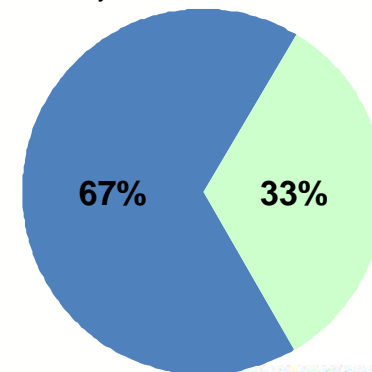
Consumer Taste Test Preference

• 67% preference for system in consumer taste testing (peach flavored water)

Sensory Test Preference

• 91% of panelists prefer system in sensory test

Preference
■ A - Sweetener System ■ B - 97% Rebaudioside A



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Customers Have Begun to Adopt Monk Fruit Extract



Kashi
Unit of Kellogg's
(multi-product line)

INGREDIENTS: WHOLE OAT FLOUR, OAT BRAN, EVAPORATED CANE JUICE SYRUP, YELLOW CORN MEAL, CORN FLOUR, **KASHI® SEVEN WHOLE GRAIN FLOUR (WHOLE: OATS, HARD RED WHEAT, RYE, BROWN RICE, TRITICALE, BARLEY, BUCKWHEAT), OAT FIBER, WHEAT GERM, HONEY, CINNAMON, SALT, EXPELLER PRESSED CANOLA OIL, NATURAL FLAVOR, DECAFFEINATED GREEN TEA EXTRACT, ALPHA TOCOPHEROL ACETATE (VITAMIN E), DECAFFEINATED WHITE TEA EXTRACT, BAKING SODA, SPICES, ASCORBIC ACID (VITAMIN C), ACTIVIN®† GRAPE SEED EXTRACT, LUO HAN FRUIT CONCENTRATE, BETA CAROTENE (A SOURCE OF VITAMIN A), FERROUS FUMARATE, FOLIC ACID, PYRIDOXINE HYDROCHLORIDE (VITAMIN B6), TURMERIC FOR COLOR, ZINC OXIDE, VITAMIN B12.**
CONTAINS WHEAT INGREDIENTS.



Bear Naked *Fit*
(multi-product line)

Ingredients:
Whole grain oats, brown rice syrup, whole grain crisp rice (whole grain rice, barley malt), oat bran, evaporated cane juice, ground flax seeds, freeze dried raspberries, freeze dried blueberries, natural flavors, luo han guo fruit concentrate.



Turtle Mountain LLC
Major supplier to Whole Foods
(multi-product line)

Ingredients:
Organic coconut milk (water organic coconut cream), gum arabic, cocoa (processed with alkali), vegetable glycerin, chicory root extract, erythritol, vanilla extract, natural flavors, sea salt, locust bean extract, guar gum, carrageenan, monk fruit extract.

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Consumer Label Appeal 'Monk Fruit Extract' or PUREFRUIT™



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A Name and Logo Were Developed for Consumer Appeal

- Both Designed to Feature the Fruit Component

- 'Fruit origins' claim instantly conveys great taste, natural, wholesome
- Logo is consumer-preferred way to communicate* **



Back Label: INGREDIENT LINE OPTIONS

Monk fruit extract
Monk fruit concentrate
Luo han fruit extract
Luo han fruit concentrate
Luo han guo extract
Luo han guo concentrate



*Would need 'with other natural sweeteners' underneath logo if another natural high potency sweetener is present (e.g. stevia)

**Logo preferred over generic claim or no claim - Tate & Lyle quantitative research, 2011; N=3101 adults



The 'Naturally Sweetened With PUREFRUIT™ Monk Fruit Extract' Logo Communicates Natural, Part Of A Healthy Lifestyle

Can you tell us whether or not you think the following apply?

STATEMENT			NEITHER
Looks like the sweetener is natural	77	42	11
Looks like something which could be part of a healthy lifestyle	77	42	12
Looks appealing	74	35	16
Looks like something I would be comfortable with in foods and drinks I buy for my children	73	33	18
Looks like something I would be comfortable with in foods and drinks I buy for myself	70	37	18
Looks like it would make foods or drink taste good	67	33	22

Base: All Respondents (3100) Figures shown in %
 Tate & Lyle Consumer Quantitative research conducted April 2011; N=3100

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Building Awareness

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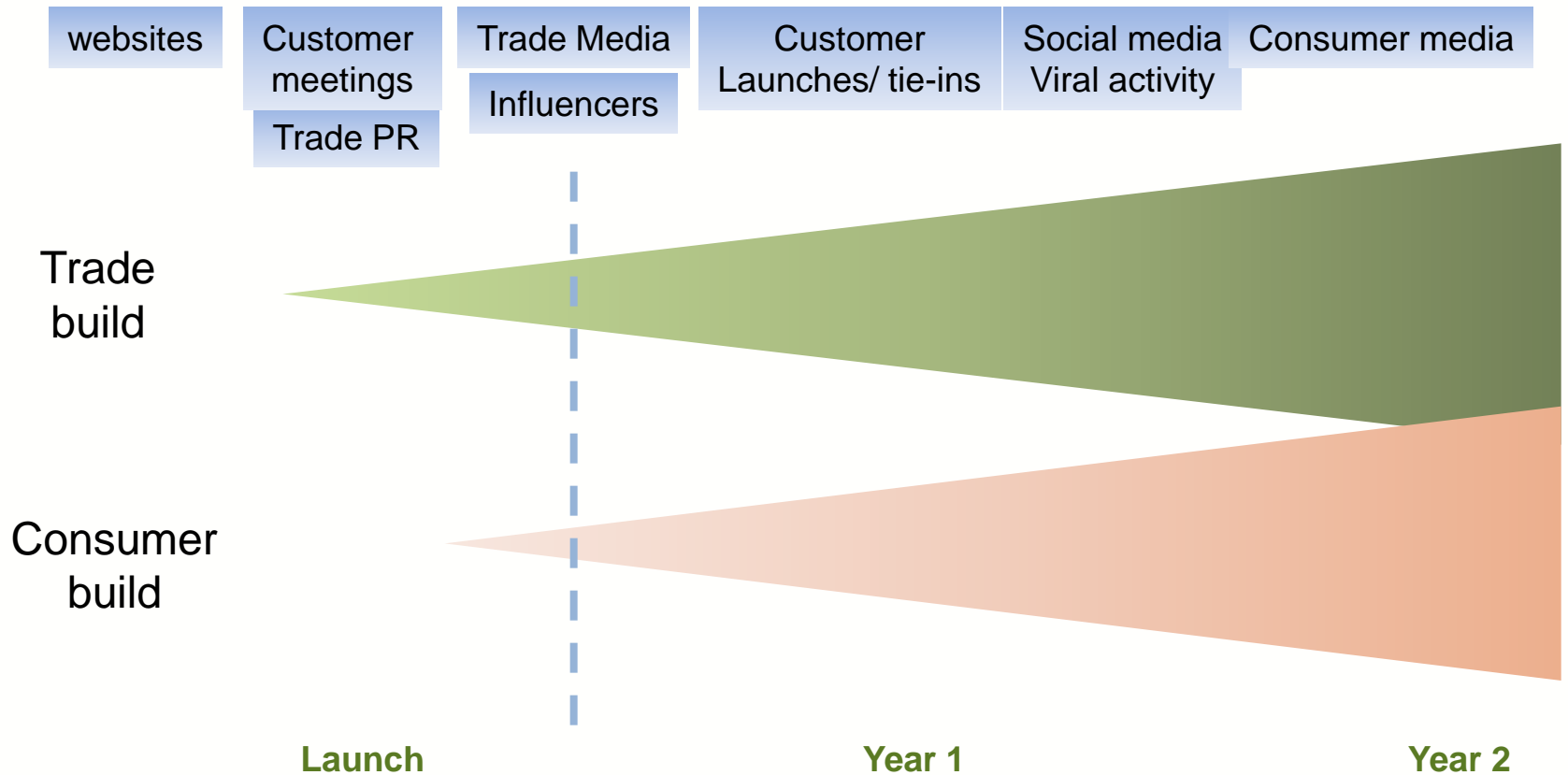


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Support rollout builds awareness over time

- Still early stage; customer launches will multiply impact



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www.monkfruit.org – Monk Fruit Industry Website
- Online Destination, Essential Element of Success

- Consumer & stakeholder destination
- Social network
- KOL outreach
- Consumer education platform
- Linkages to relevant brands



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Jointly Building Awareness & Support

Public Relations Support

- Trade editorial coverage (April, May 2011):

- Beverage Industry*
- Food Processing*
- Specialty Food*
- Dairy Foods*
- Sosland Baking and Snack*
- Snack Foods/Wholesale Bakery*
- FoodNavigator*

Expert Endorsements

- Linda Gilbert, CEO of EcoFocus and leading natural food trends expert*
- Elizabeth Ward, leading registered dietitian and nutrition editor*

Health Care Professionals Outreach

- including: ADA, iVillage, WebMD, Family Circle, RDs, other*

Social Networking Support

- Facebook, Twitter, Youtube*



MONK FRUIT

www.purefruit.com - PUREFRUIT™ website tells the story to health conscious women, moms, media and customers

Purefruit
monk fruit extract™

Search Search
Advanced search

Home | Origins and harvest | Appeal | Balanced lifestyle | FAQ | News | Contact us

Purefruit™

A sweet, new day has arrived!

Waiting for all-natural sweet taste? With less sugar?
The wait is over! Introducing **PUREFRUIT™ Monk Fruit Extract**:
All-natural, zero-calorie, great tasting sweetness!

It's Revolutionary! PUREFRUIT™ provides great sweet taste and reduces sugar in your favorite beverages and foods!

It's All-Natural! PUREFRUIT™ is different. The natural zero-calorie sweetness is extracted from real fruit. That's it. Nothing else.

It's Ideal! With PUREFRUIT™ you and your family can enjoy healthy sweet taste with less sugar!

Sweet beginnings
The healthy sweetness of PUREFRUIT™ comes from monk fruit, which has been harvested for generations.
♦ Read More

Delight in real fruit
Moms and women like you share their opinions on taste, healthy choices and happy families.
♦ Read More

Feel content and confident
With more than 70% of moms seeking naturally sweetened products,* and 54% of adults looking for ways to eat more healthily,* PUREFRUIT™ can be part of your balanced lifestyle.

Enlightening articles
Read the latest press, information and sweet news about PUREFRUIT™.
♦ Read More

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On April 28, T&L launched PUREFRUIT™ in the US

- Customer interest is exceeding expectations

- 2 Websites – monkfruit.org, purefruit.com
- Provide key information



- Excellent Press Coverage



- Trade shows are generating many leads →



- Print/web advertising raising customer awareness →



- Social media vehicles are building consumer awareness



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PUREFRUIT™ Monk Fruit Extract

- Print/Web/Whitepaper download

MONK-WHAT?

**All natural sweetness?
Zero calories?
From real fruit?**

You heard right. PUREFRUIT™ Monk Fruit Extract is zero-calorie, great tasting sweetness, made from monk fruit.

Introducing Revolutionary NEW

MONK-WHAT? NEW

All natural, zero-calorie, great tasting sweetness!

Click to Learn More

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harvest Appeal Balanced lifestyle FAO News and resources

ews and resources • Research reports

Research reports

Browse our PUREFRUIT™ research. Additional studies and reports are underway—watch for new releases!

The PUREFRUIT™ Revolution

Learn about monk fruit extract's subtropical origins and status as a national treasure, and how PUREFRUIT™ Monk Fruit Extract is the perfect zero-calorie choice, sweetened from nature.

[Read complete report](#)

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Thank You!

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