

Changes in Consumer Preference

Unlocking growth through insight,
innovation and partnerships.

FSSP Conference August 2019.
Matthew Godfrey and Dr. David Kannar

Global customers driving sugar reduction

Global trend for healthier low sugar food options accelerating

- 50% of US consumers looking to reduce sugar
- 2 in 5 are reducing sweetened snacks
- 20% of all 2018 USA Dairy launches in 2018 had lower sugar claims



“We aim to cut 20% of sugar by 2025.”

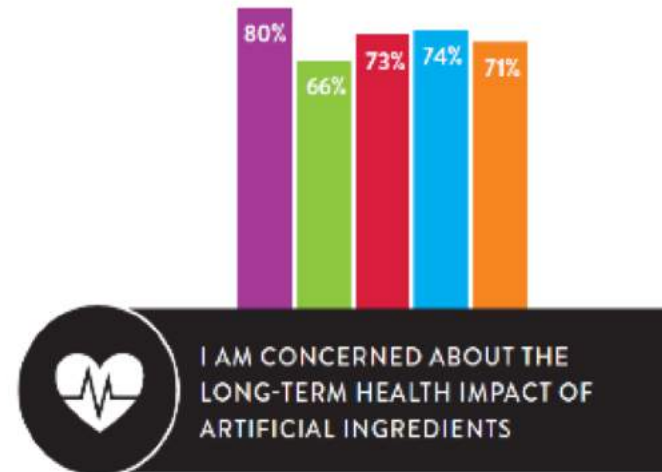
Colin Bradley. Coca-Cola USA BCI. 2019

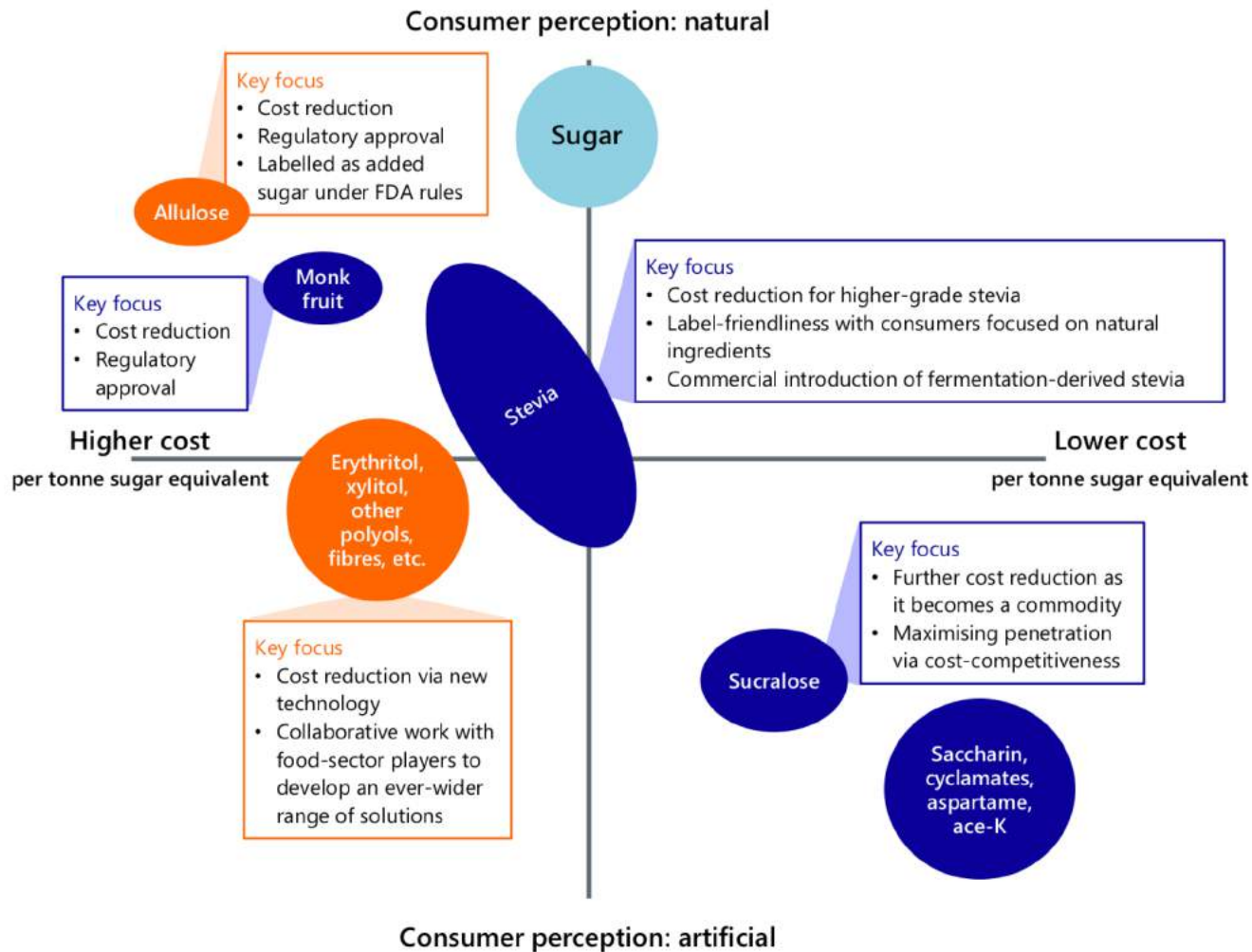
Consumers want nature not chemicals

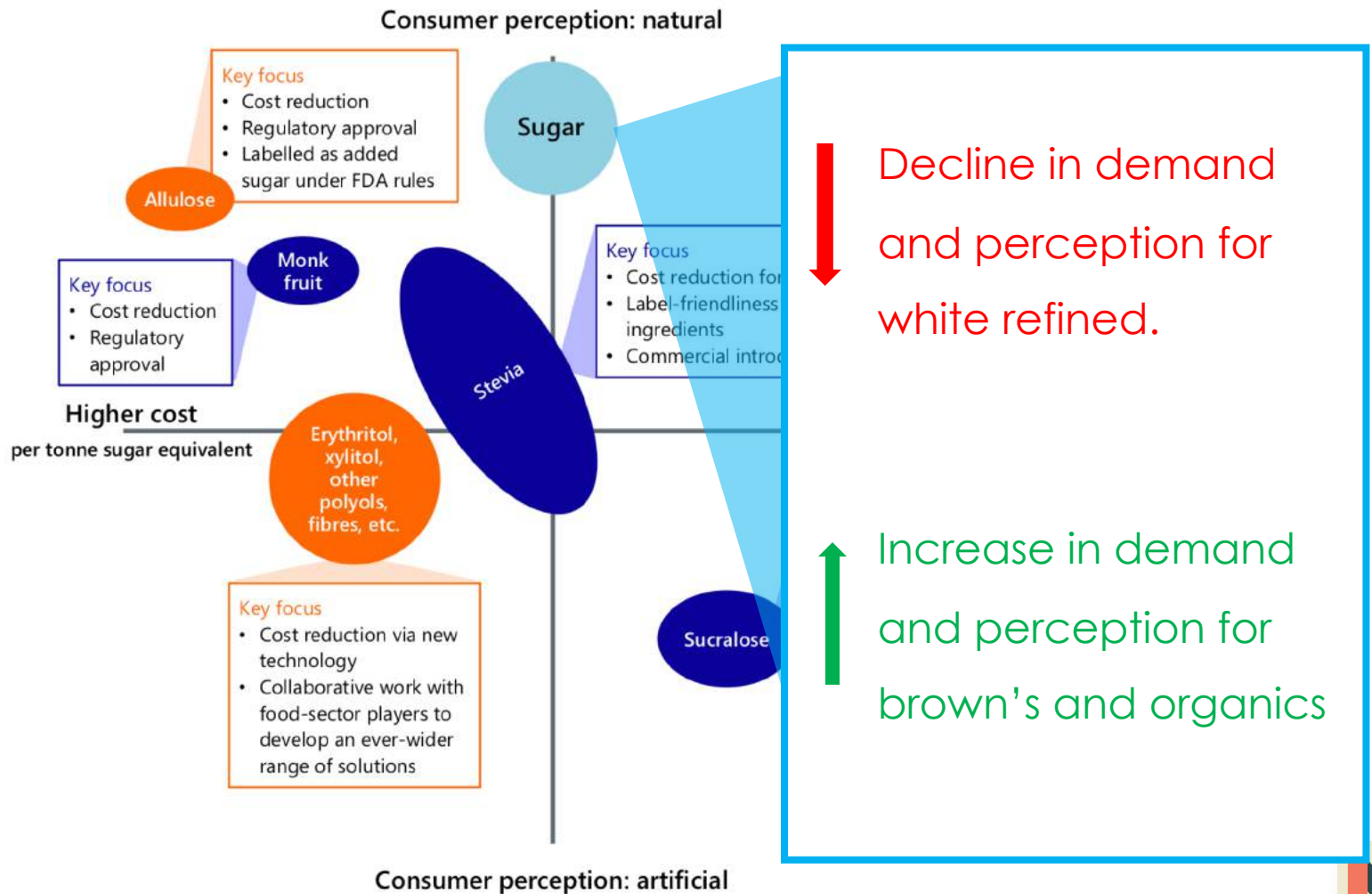
SIMPLY IRRESISTIBLE: CONSUMERS WANT STRAIGHTFORWARD SUSTENANCE

PERCENTAGE WHO STRONGLY OR SOMEWHAT AGREE WITH STATEMENT

● ASIA-PACIFIC ● EUROPE ● AFRICA/MIDDLE EAST ● LATIN AMERICA ● NORTH AMERICA







A NAURAL, HEALTHIER INDUSTRIAL SPECIFICATION OF LOW GLYCEMIC BROWN SUGAR



Nucane is a new industrial specification of “brown” sugar



Active Anti-oxidants



Supports sugar reduction



Taste/Sensory
benefits



Low Glycemic for normal
blood sugar levels



Less Processed
All Natural

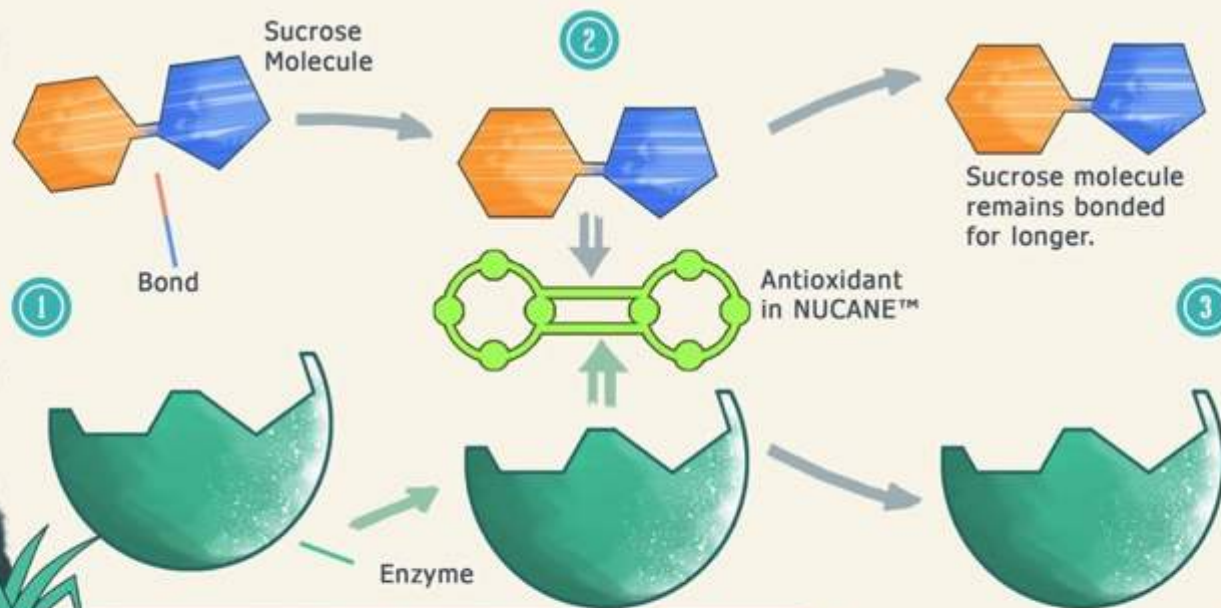


Clean Labelling

HOW IT WORKS:

Slows the metabolism of sucrose

WITH



The natural antioxidants in Nucane™ can inhibit digestive enzymes to reduce glucose and fructose absorbed by the body, therefore promoting a low glycemic effect.

Adapted from: Piparo et al. 2008; Ranilla et al. 2008.

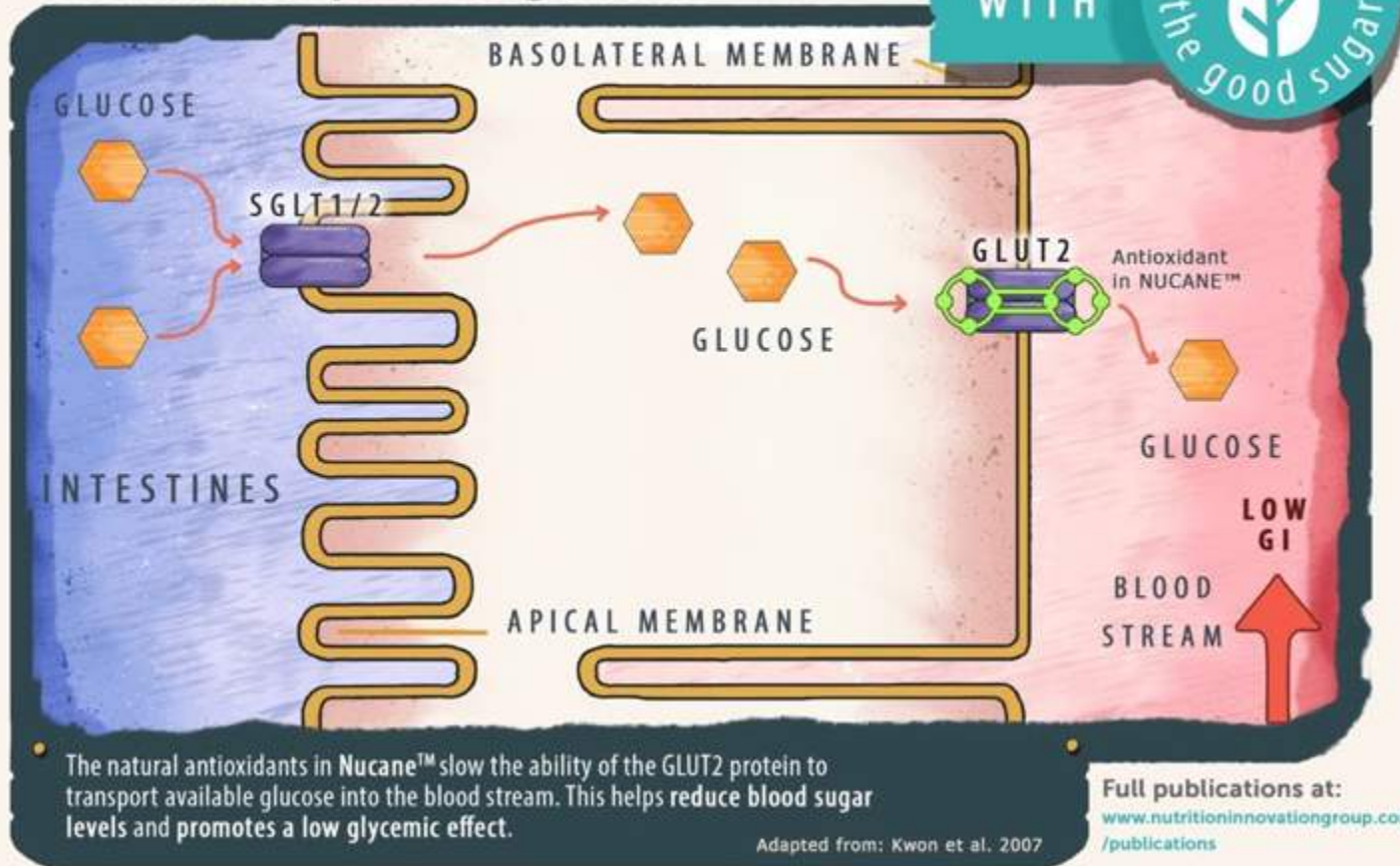
Full publications at:

www.nutritioninnovationgroup.com/publications

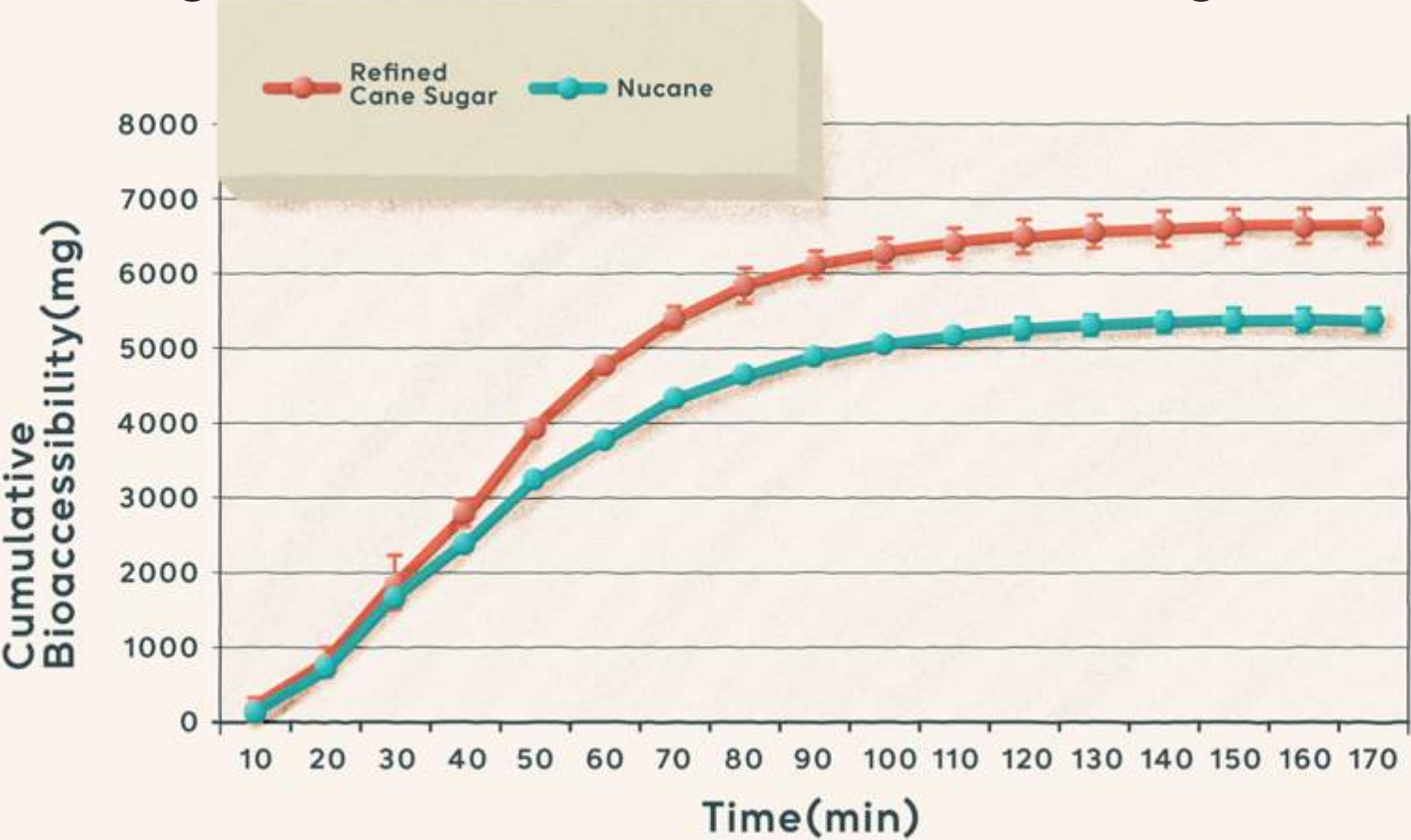
HOW IT WORKS:

Blocks absorption of glucose

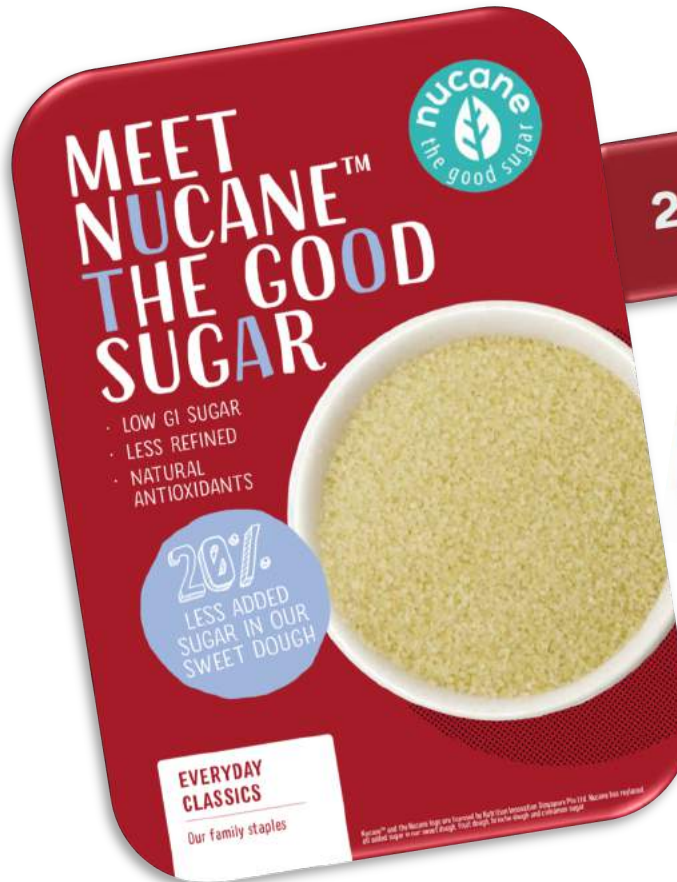
WITH



20% Less Sugar is Bio-accessible with Nucane Raw Sugar



BAKER'S DELIGHT OVER 600 STORES IN AUSTRALIA



CSR eyes S'pore, Mideast to export brown sugar

Its 'Better Brown Low G' product with a low GI will help cement CSR's footing in the aforementioned markets

By NIG BRUN SHEN

CENTRAL Sugars Refinery Sdn Bhd (CSR) is looking to grow its exports to Singapore and the Middle East, as the refiner and manufacturer of sugar products sees strong demand potential for brown sugar there.

The group believes its 'Better Brown Low G' product, brown sugar with a low glycemic index (GI), will help cement its footing in the aforementioned markets and grow its market share in Malaysia as it expands its production capacity.

"We see potential in a huge market," said CSR CEO.



producers alongside MSM, which has a production capacity of up to 1 million tonnes per annum. MSM is 51%-owned by Felda Group Berhad (FGB) and CSR Ventures Holdings Bhd (RGV), as stated on its official website.

Hishammuddin said CSR will continue to educate consumers on the benefits of brown sugar amid rising consumer consciousness about obesity, diabetes and various health issues linked to excessive sugar intake.

"Awareness is needed among consumers. Sugar isn't bad for your lifestyle," Hishammuddin said. "Better Brown Low G" is a low glycemic index (GI) sugar, while regular white sugar has a GI of 69.

The GI is a relative ranking of carbohydrate in foods based on their effect on blood glucose levels. Thus, a low GI value means the food is digested and absorbed more slowly, resulting in a lower blood sugar response.



"THE CSR GROUP BELIEVES BETTER BROWN WILL CEMENT ITS POSITION IN THESE MARKETS AND EXPAND CAPACITY"

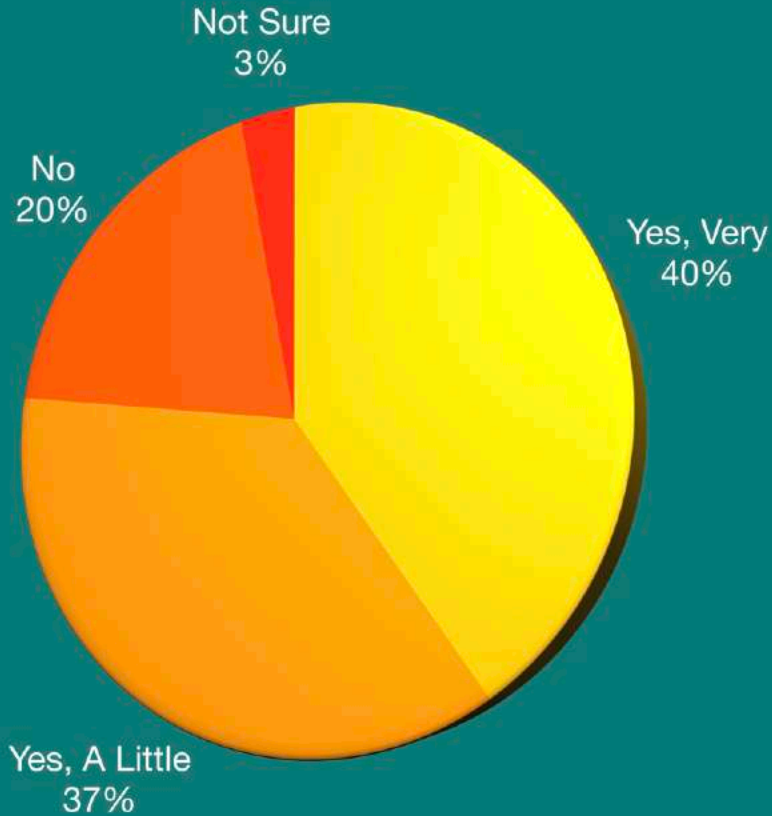


**In Partnership with
ESA, This Opportunity
Can Be Unlocked In
SACU And Beyond!**



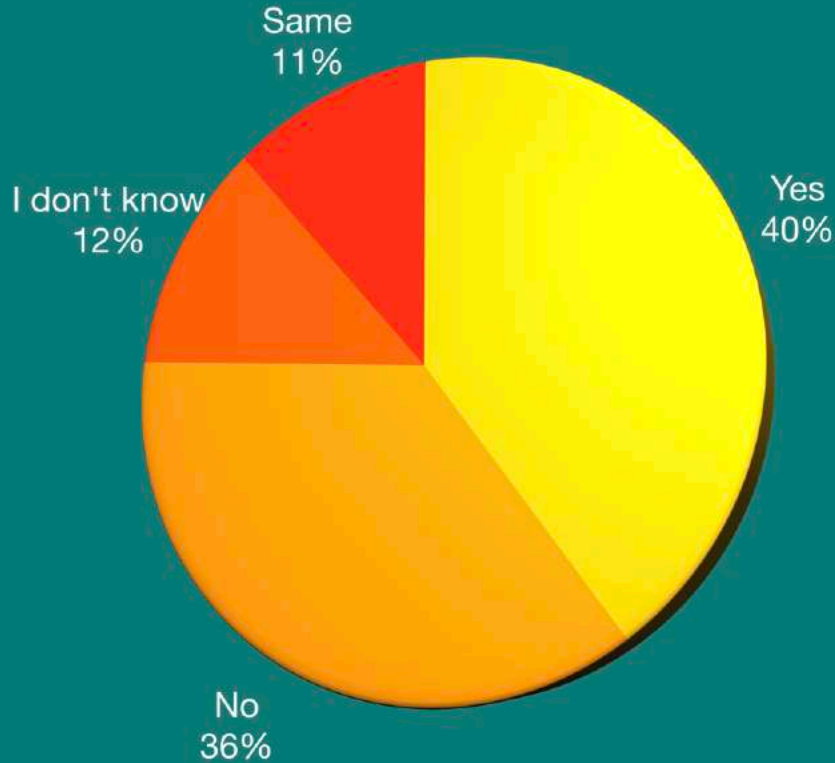
Our team on-site at Ubombo

Are you concerned about sugar in your diet?



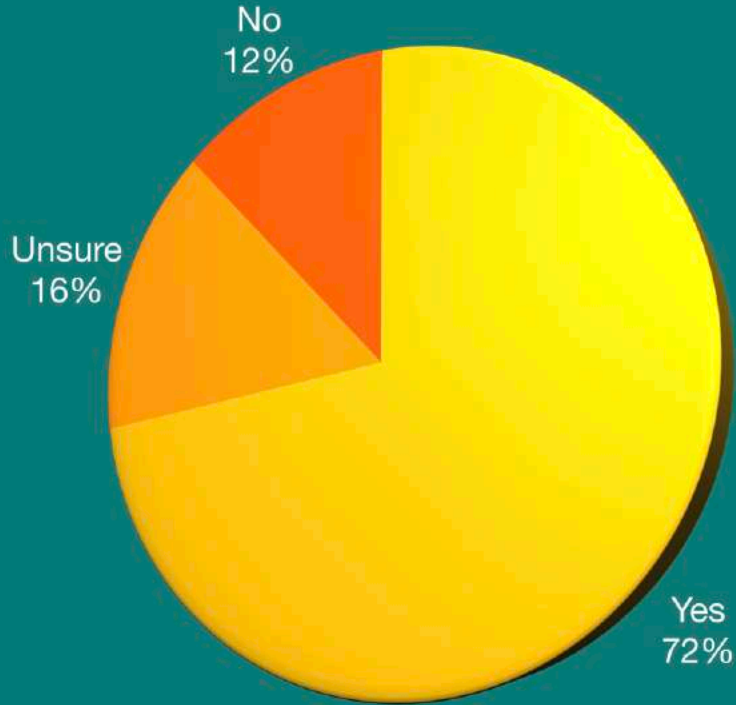
77% of S.A consumers are concerned about their consumption levels.

Has sugar tax been a positive step forward for S.A?



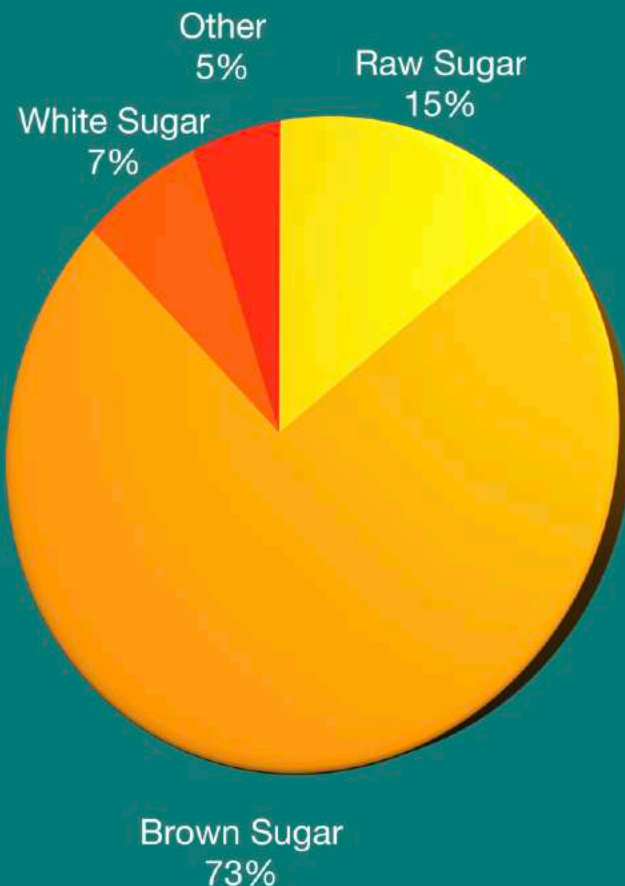
Taxes are usually unpopular, but around the world sugar tax general has support.. including S.A.

*Would a health claim motivate you
to change your brand of sugar?*



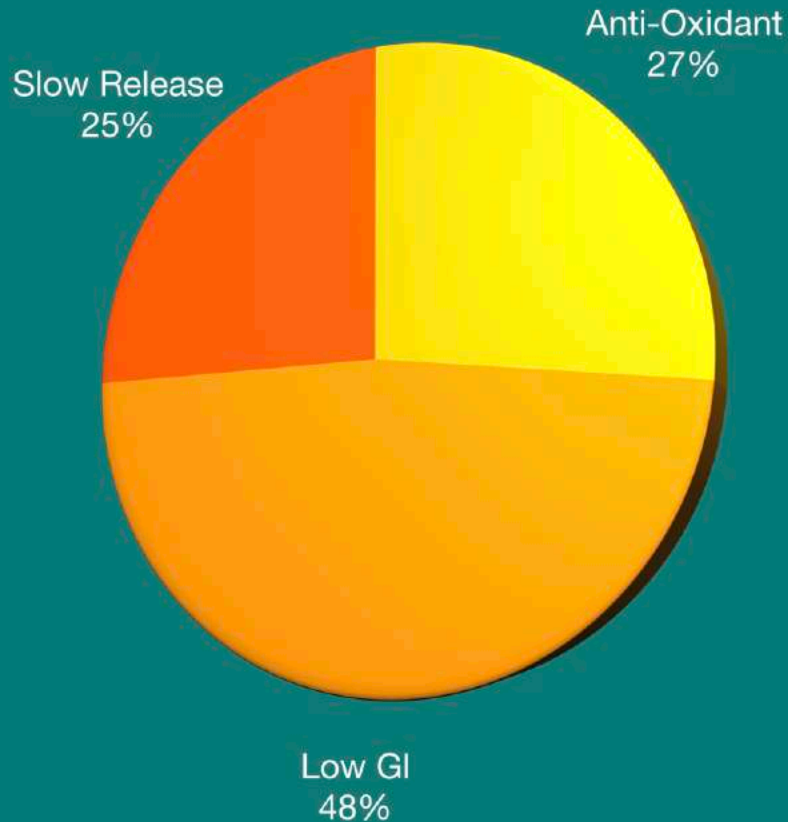
The majority of SA consumers will switch sugar brands for a healthier option.

Which is the healthiest sugar to eat?



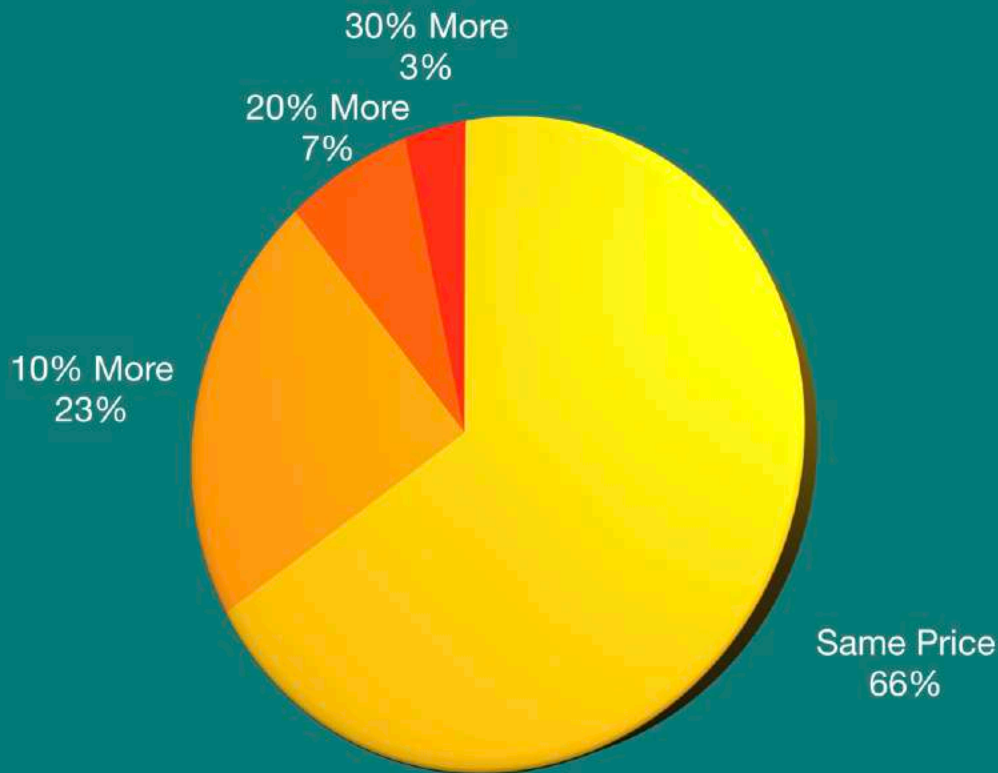
The perception towards “browns” as less processed and less refined translates as “healthier” in S.A to consumers.

Which of these claims is most motivating to you for a sugar brand?



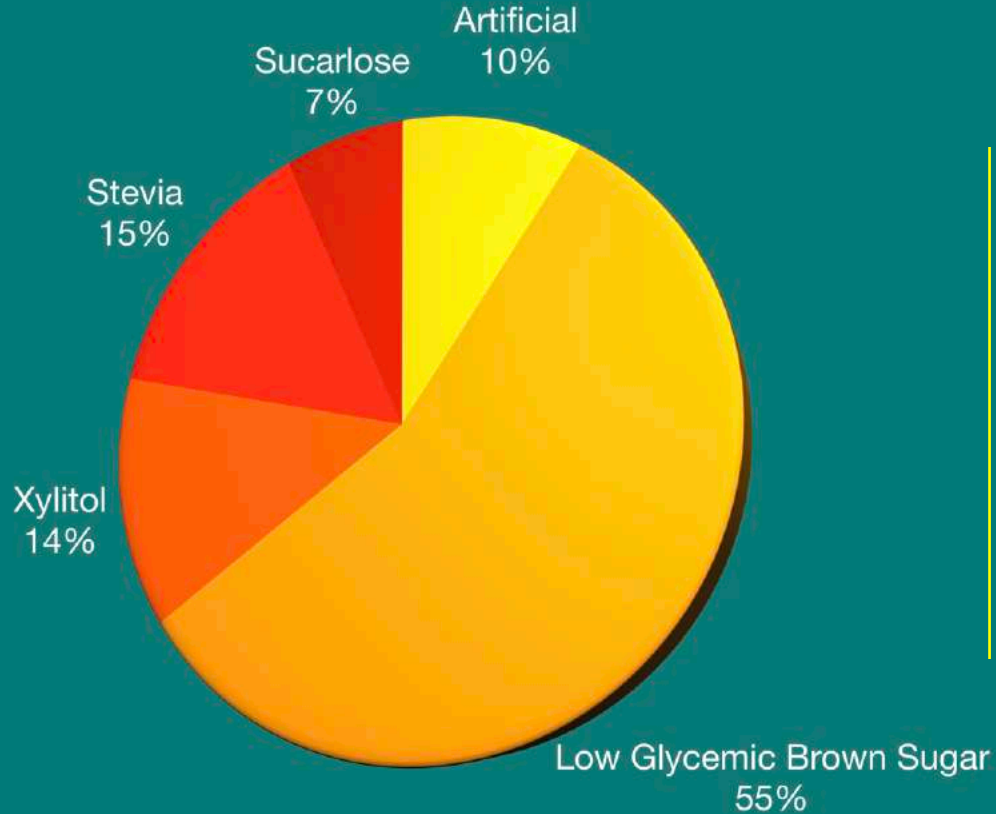
Low Glycemic is a claim that nearly 50% of SA consumers find motivating.

What should a healthier sugar be priced at?



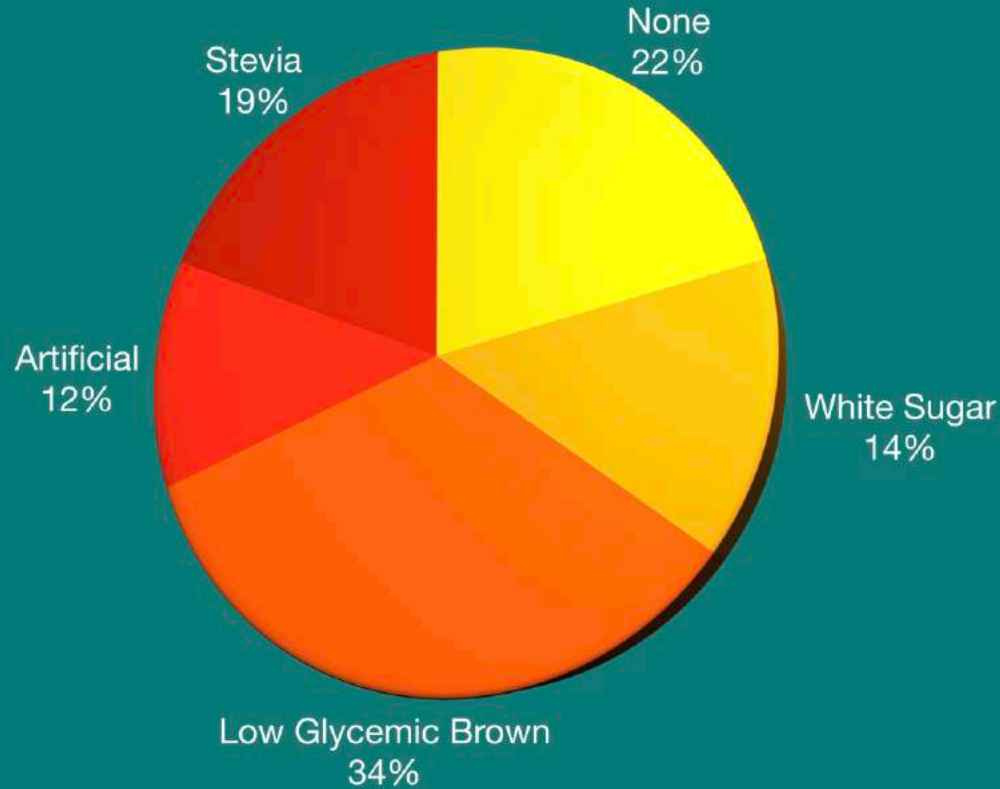
Over 35% of SA consumers will consider paying a premium for a healthier sugar.

Which sweetener is healthier to consume?



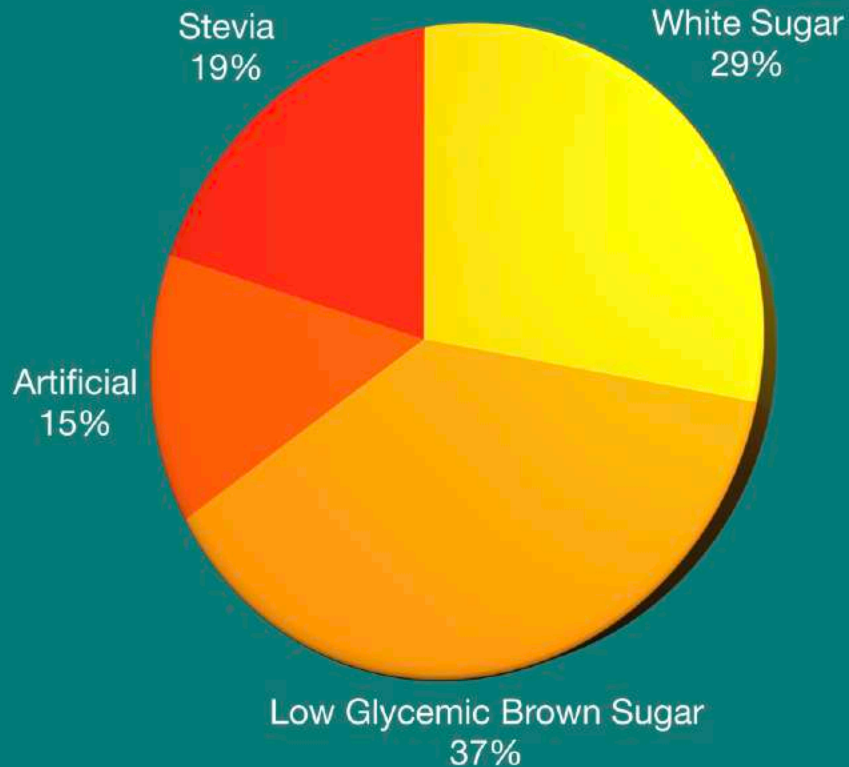
Over 50% of SA consumers already consider a low glycemic brown sugar to be healthier than other sweeteners.

Which soft drink, with a sweetener, would buy?



S.A Soft drink brands could also gain a competitive advantage “made with Low GI Brown sugar”.

*If you could reduce tax on one sweetener,
which one would it be?*



S.A consumers
would also support
a tax reduction for
low glycemic
brown sugars.

South Africa Research Indicates:

- Consumers are looking for a “natural and healthy” sugar option.
- A brown low glycemic option has strong initial appeal.
- Our technology, clinical research and ESA partnership supports this innovation.
- A retail product will be an important catalyst for awareness and sales momentum.
- When consumer demand grows, industrial brands will follow.

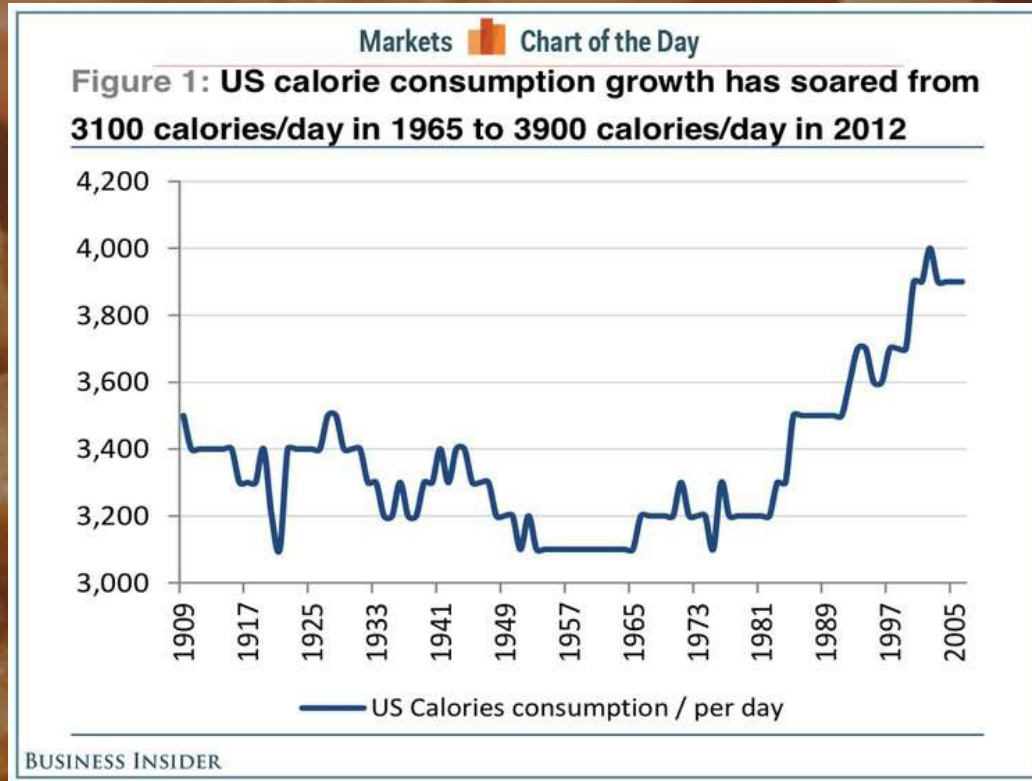
DR. DAVID KANNAR: FOUNDER & CHAIRMAN



Founder & Chairman:
Dr. David Kannar

- Leading Australian Entrepreneur
- Inventor of over 45 Food Patents
- Ph.D Clinical Pharmacology
- One of the world's leading carbohydrate experts.

Calorie reduction is important to global health



<https://www.businessinsider.com.au/us-calorie-consumption-surged-in-the-80s-2013-9?r=US&IR=T>



SUGAR ALTERNATIVES ARE NOT ALWAYS “HEALTHIER”..

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Q

BIOLOGY

Artificial Sweeteners May Change Our Gut Bacteria in Dangerous Ways

Substances such as saccharin may alter the type of bacteria inside us, could lead to obesity

Artificial sweetener sucralose worsens gut inflammation in mice with Crohn's disease

[Download PDF Copy](#)

March 15, 2018

In a study that has implications for humans with inflammatory diseases, researchers from Case Western Reserve University School of Medicine and colleagues have found that, given over a six-week period, the artificial sweetener sucralose, known by the brand name Splenda, worsens gut inflammation in mice with Crohn's-like disease, but had no substantive effect on those without the condition. Crohn's disease is an inflammatory


WELL GOOD

GOOD SWEAT GOOD LOOKS GOOD ADVICE GOOD FOOD GOOD

NOT-SO-SPLENDID SPLENDA MIGHT TRIGGER INFLAMMATORY SYMPTOMS IN CROHN'S DISEASE PATIENTS

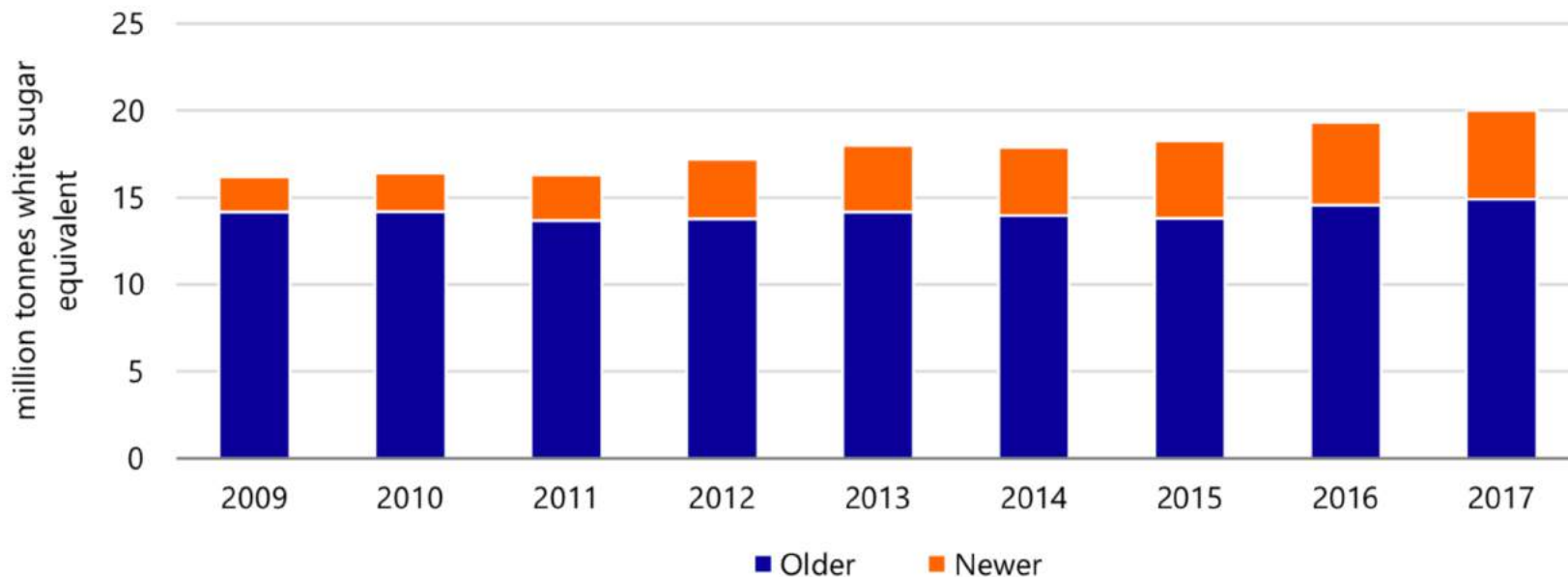
 GOOD ADVICE
by TEHRENE FIRMAN, MARCH 20, 2018

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...yet they are seeing growth!

Figure 3: Market development for alternative sweeteners, 2009-2017



Source: ISO 2017, LMC, Rabobank 2018

.. and most of the “replacement” innovation comes from outside of the sugar industry



OUR SOLUTIONS ARE FOCUSED ON SUGAR!

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FOOD
Innovation
Awards
2019

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CSR eyes S'pore, Mideast to export brown sugar

its 'Better Brown Low G' product with a low GI will help cement CSR's footing in the aforementioned markets

By NIS BERN ECHO

CENTRAL Sugars Refinery Sdn Bhd (CSR) is looking to grow its exports to Singapore and the Middle East, as the company's new 'Better Brown Low G' product with a low GI will help cement CSR's footing in the aforementioned markets.

The group believes its 'Better Brown Low G' product, brown sugar with a low glycemic index (GI), will help cement its footing in the aforementioned markets and grow its market share in Malaysia as it expands its production capacity.

"We are potential in a lot of markets for this type of sugar. In Singapore, there is a market gap for better sugar as well as in the Middle East. These are the markets we're looking at and are ready for better quality sugar," CSR MD and Malaysia Director is a round interview.

The group now expects to be the main supplier of sugar to the region, as the company's new 'Better Brown Low G' product with a low GI will help cement CSR's footing in the aforementioned markets.



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producers alongside M&M, which has a production capacity of up to 1.2 million tonnes per annum.

M&M is represented by F&B Global Ventures Holdings Bhd (F&B), in part. It is a subsidiary of CSR.

to educate consumers on the benefits of brown sugar amidst growing concerns over consumption of health issues linked to excessive sugar intake.

"Awareness is needed among consumers. Sugar isn't bad for you — it's your lifestyle," Mohdaminuddin said.

CSR's 'Better Brown' sugar is made from having a GI count of 95 or less, which is significantly lower than a GI value of 100.

The GI is a relative ranking of carbohydrate in foods based on their effect on blood glucose levels. Thus, a low GI value means the food is more slowly digested, absorbed and metabolized.

blood glucose levels, which in turn helps the consumer maintain energy for longer and prevent hunger pangs.

Despite having a lower GI count, CSR's 'Better Brown' sugar tastes just as sweet as regular sugar, with many consumers even claiming it tastes better, Mohdaminuddin said.



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FINALIST

NOVEMBER 27, 2017

Nutrition Innovation selected as one of the top 10 start-ups by FI Europe 2017

Frankfurt, Germany. FI Europe held "The Start-Up Innovation Challenge" to find the most exciting innovations in food & beverages. Vaucluse Provence Attractivité and UBM, joined forces to launch the Challenge aimed at the promotion of international innovative projects on ingredients, during Food Ingredients Europe 2017.





life



in association with **ife**

FINALIST



KEY BENEFITS



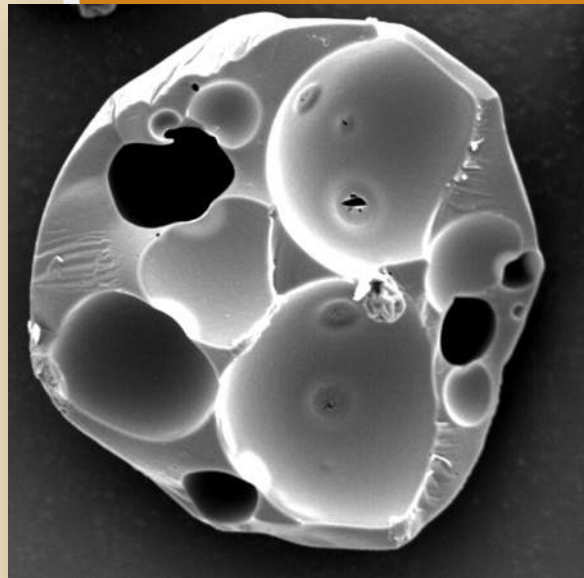
HOW DOES NUCANE LIFE DELIVER SUGAR REDUCTION?



Bulk density is illustrated here by the same weight of Nucane sugar versus white refined sugar occupying twice the amount of volume

▶ The unique Nucane Life “Low Bulk” approach creates fluffy micro air-pockets in the sugar. This creates bulk density and reduces the total amount of sugar required.

In a food system, this can deliver significant sugar reduction and still deliver the bulk filling needs of a product.



DAIRY
PROTEIN

VEGETABLE
PROTEIN

HYDRO-
COLLOIDS

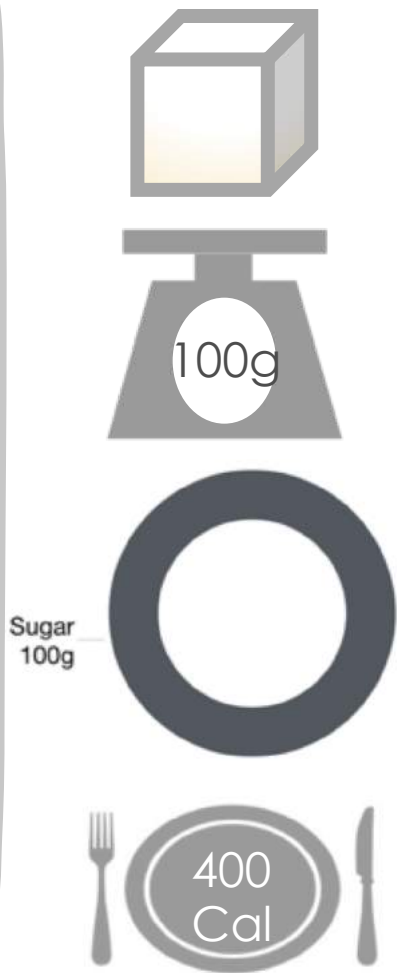
FIBRE

STEVIA

MONK
FRUIT

THE **NUCANE LIFE** PLATFORM ALSO INCORPORATES SUGAR CANE WITH BESPOKE SUBSTRATES TO MEET DEFINED FOOD MATRIX OBJECTIVES. THESE CAN BE UP TO **20%** OF THE FINAL INGREDIENT AND BE SPECIFIED TO DELIVER FUNCTIONALITY, TASTE AND PRICE.

WHITE REFINED SUGAR



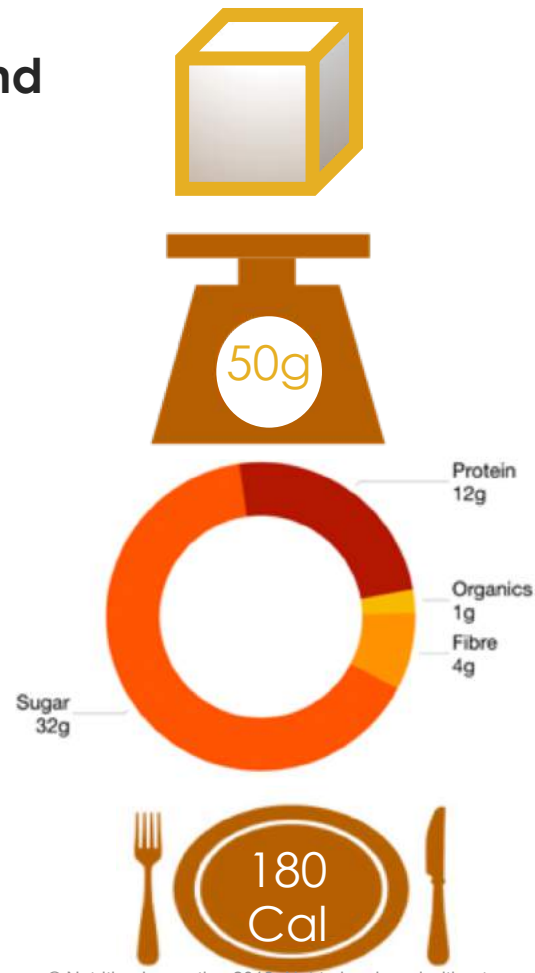
For the same volume and
sweetness →

50% Less Weight

68% Less Sugar

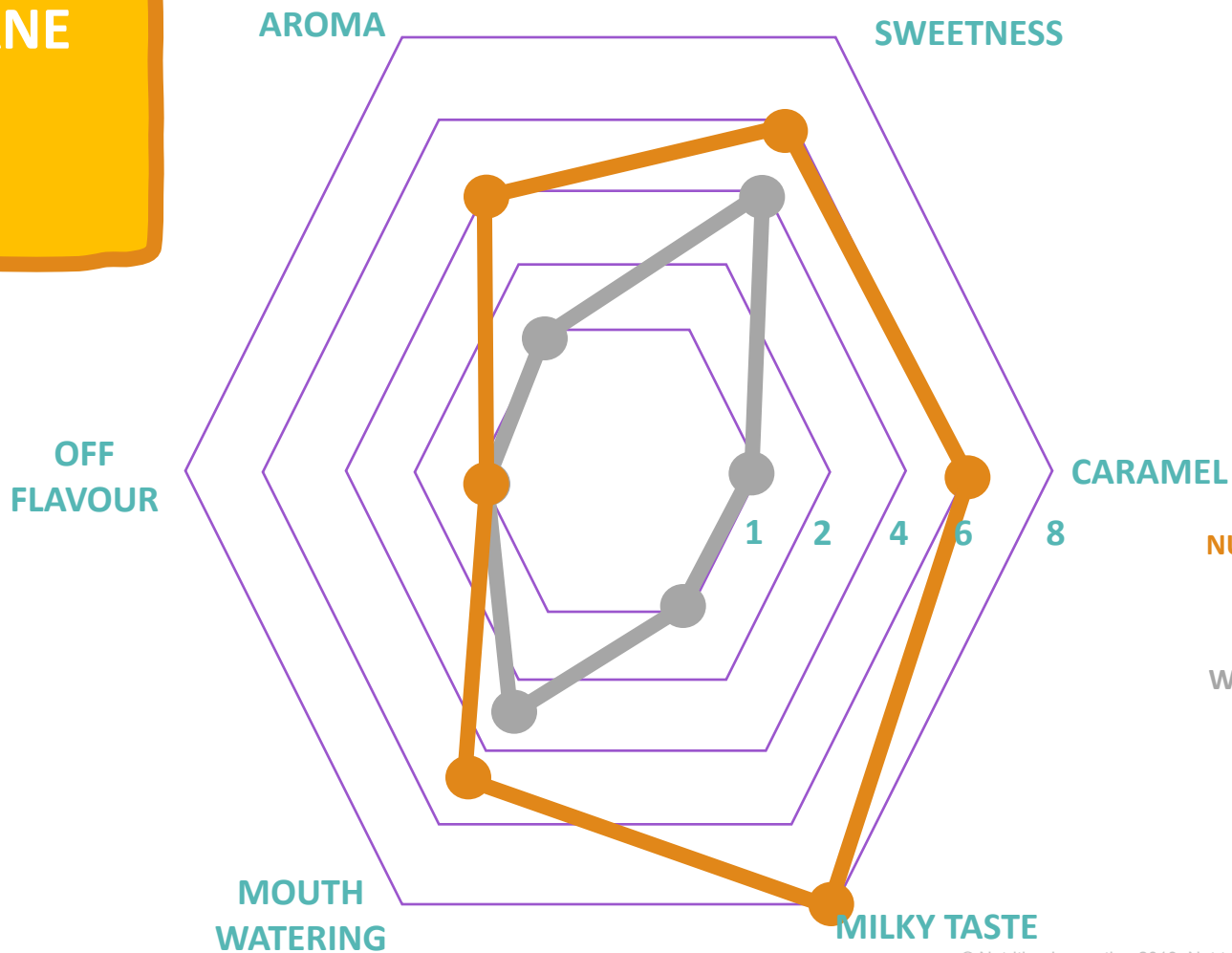
Increased Protein
Increased Minerals

55% Less calories



NUCANE LIFE
(WITH 20% PROTEIN)

NUCANE
LIFE



NUCANE ENERGY WITH
20% PROTEIN

WHITE REFINED SUGAR



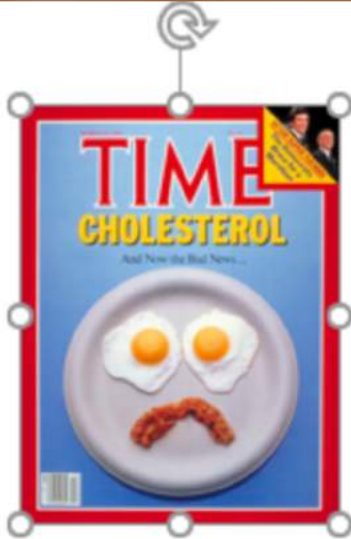
NUCANE LIFE IN CHOCOLATE

- These chocolates were made with Nucane Life.
- 72% sugar reduction
- 19% calorie reduction
- Adds calcium, magnesium & potassium
- Nucane Life is made from natural sugar
- Nothing artificial, no new regulations
- Gives chocolate a smooth, rich & creamy taste
- Technology can be licensed to the industry
- Now working with customer application trials

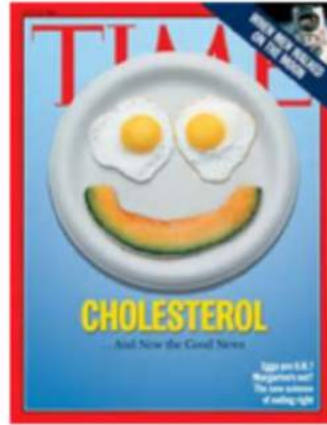
The sugar debate can follow fats.



1961



1984



1999

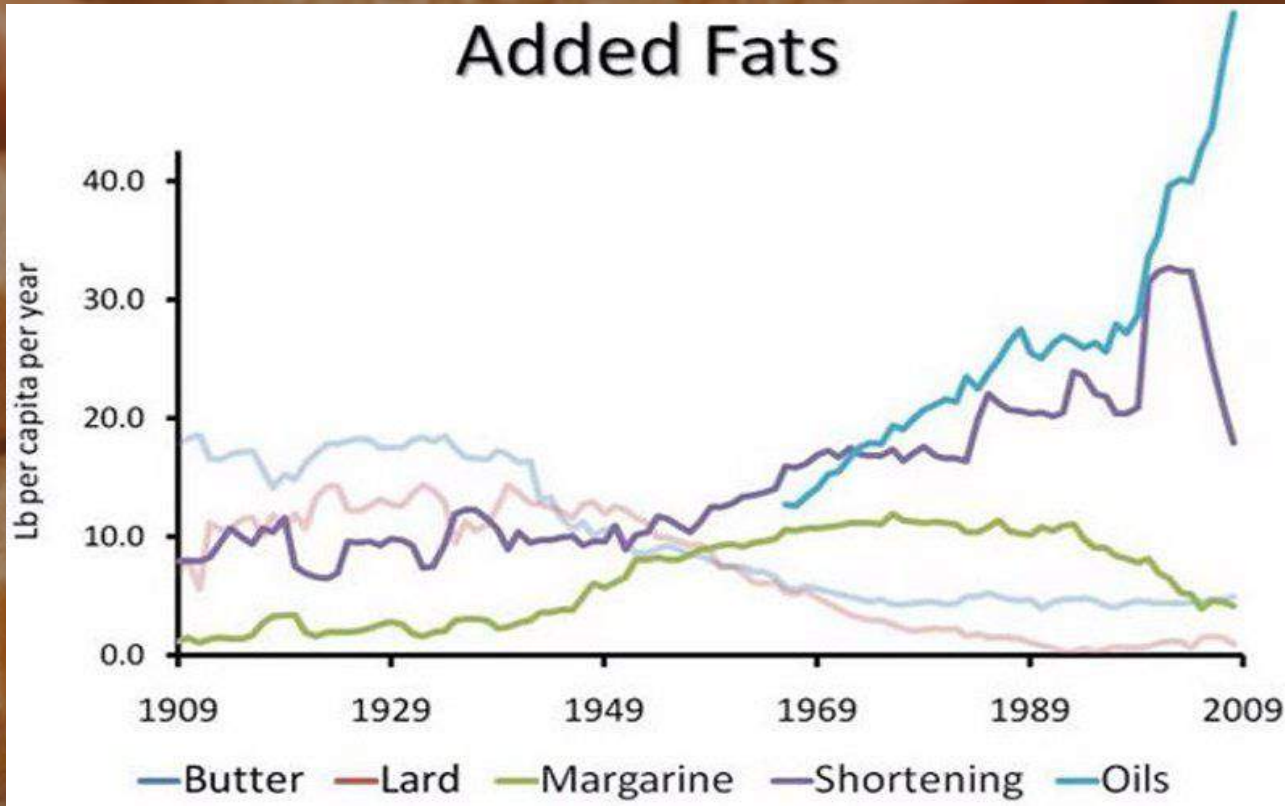



2003



2014

With innovation, growth can be unlocked





**Together we can ensure sugar is
the solution to sugar challenges!
Join us.**

david@nutritioninnovationgroup.com

matthew@nutritioninnovationgroup.com

www.nutritioninnovationgroup.com

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