

enhancing rich and smooth
mouthfeel in
beverage



บริษัท บ้านโป่งทาบิโอ จำกัด

CO-CREATION TO
FOOD & BEVERAGE
SOLUTIONS



Banpong
Tapioca

tapioca! transforming lives

The Market Dynamics Of Mouthfeel Enhancer

Today, drinks in the market such as carbonated beverages, flavored drinks, tea, and even drinking yogurt are not just judged based on their sweet taste - texture also plays a key role on preference.

Manufacturers create their own unique recipes to differentiate products in order to escape the red-ocean market. Consumers need high eating quality comprising 5 attributes: appearance, smell, taste and flavor, and mouth-feel.

Therefore, texture and mouth-feel defines the product's quality and whether it meets consumers' liking.

However excess sugar consumption has resulted in constantly increasing cases of type 2 diabetes, obesity, high cholesterol and tooth decay.

According to the International Diabetes Federation Report in 2021, 537 million adults (20-79 years) are living with diabetes - 1 in 10. This number is predicted to rise to 643 million by 2030 and 783 million by 2045.



The Market Dynamics Of Mouthfeel Enhancer

Hence, many countries have introduced sugar taxes to reduce the consumption of drinks with added sugar. Manufacturers are forced to lower sugar content substituting them with sweeteners. Fat is also another target ingredient to be reduced for health reasons and product stability purposes.

Therefore, texture and mouth-feel defines the product's quality and whether it meets consumers' liking.

Those reductions unfortunately often lead to unsatisfied mouth-feel attributes, often poor, watery textures. The challenge of product development is thus how to achieve the same mouth-feel attributes as the original recipes and satisfy their consumers.



The science behinds texture attributes

Mouthfeel is the physical sensation created in the mouth from food or drinks. This term may be used to describe the feeling on the tongue, the roof of the mouth or even one's feeling during swallowing.

Mouthfeel is described in words as oily, creamy, melt in mouth, cleanness, coating, etc.l.



An easy example is when somebody drinks coffee, and says "This coffee has great body!". The 'body' is a description of the mouthfeel

In response to the mega healthy trend, we are working hard to come up with a great solution and not compromise on the loss of texture and mouthfeel.

introducing

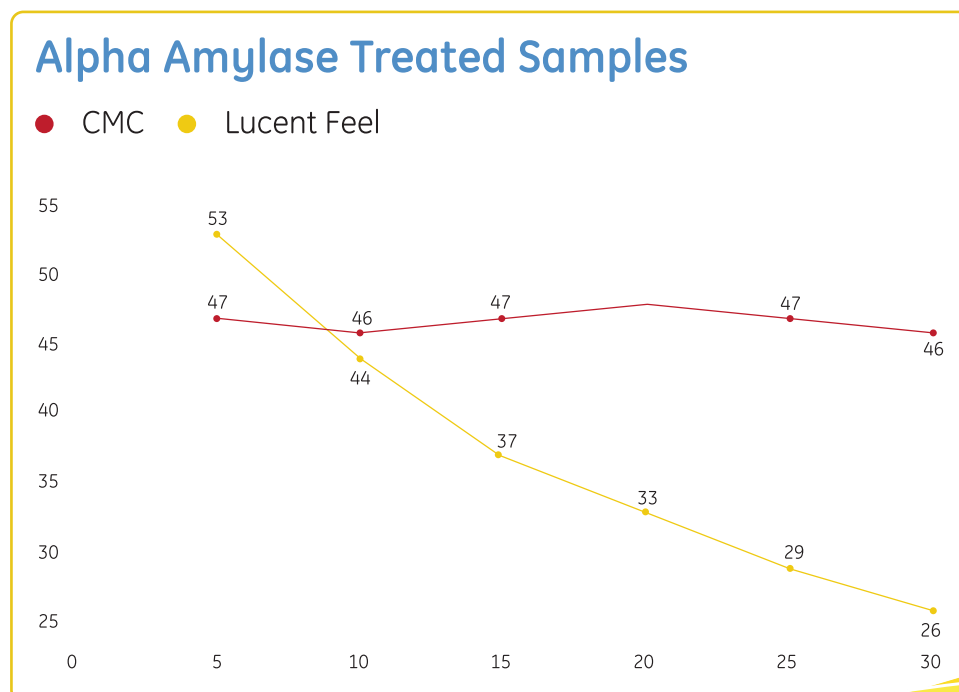
lucent feel

aesthetic
about
mouthfeeling

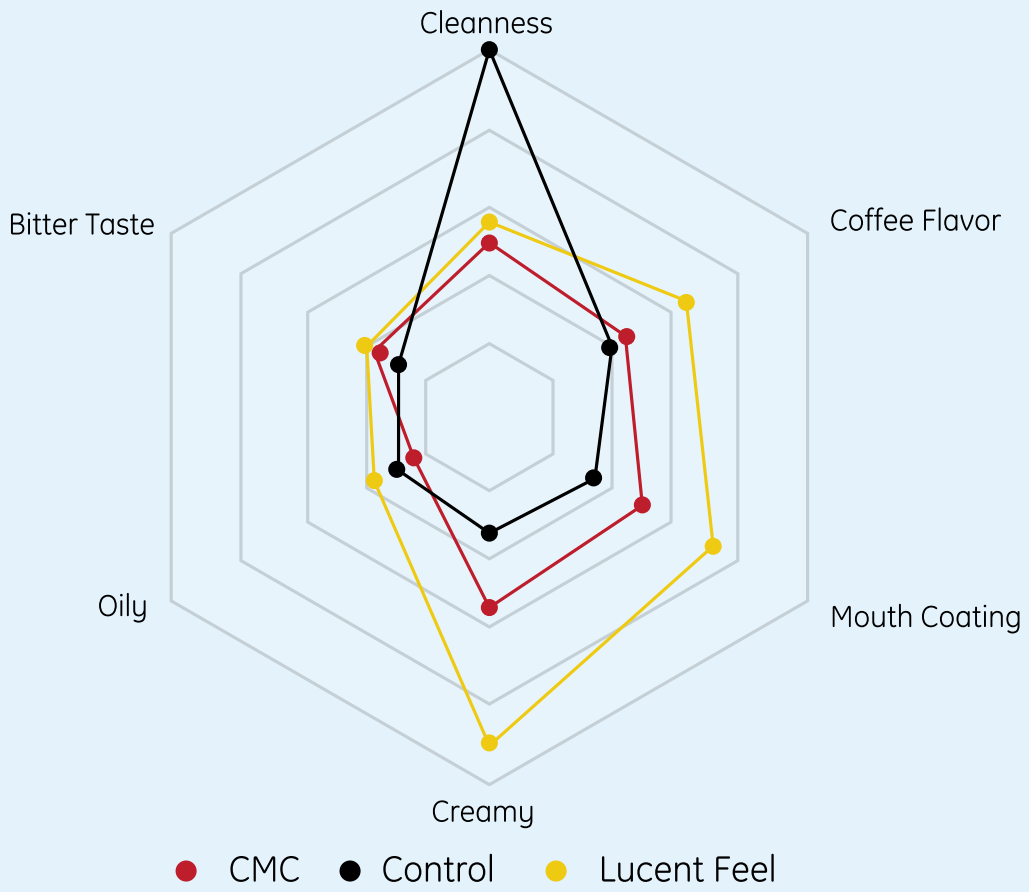
With our legacy and experience in tapioca starch and derivatives, today we are proudly introducing the latest technology and new product innovation of waxy tapioca starch. LUCENT Feel is a mouthfeel enhancer for low/zero sugar or low/zero fat products.

Lucent Feel promotes the texture and mouthfeel while still reducing the content of sugar, oil, and cream.

An apt substitute for milk or cream in the recipe, Lucent Feel maintains the “oily feeling which covers the tongue after swallowing” (Oiliness). On the other hand, it also boosts the body similar to the effects of the creaminess of low - zero fat products such as latte coffee or milk tea.



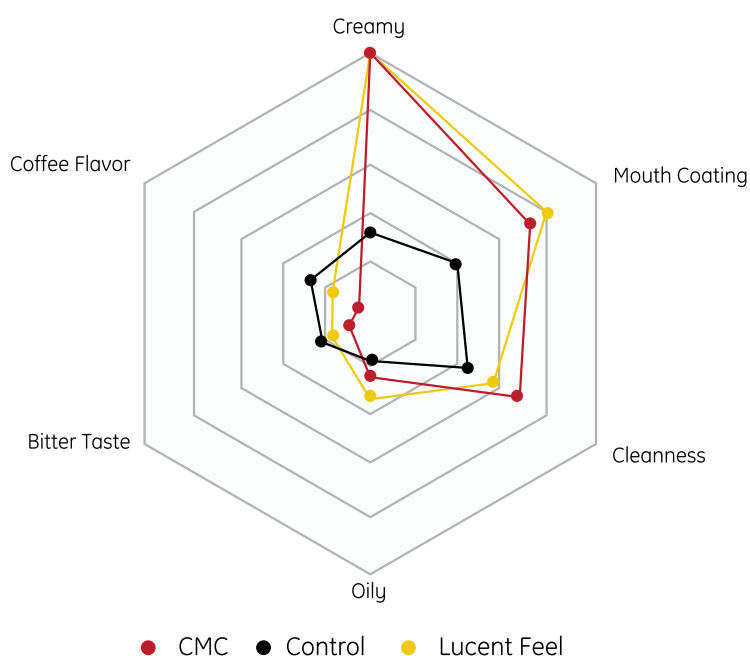
Americano



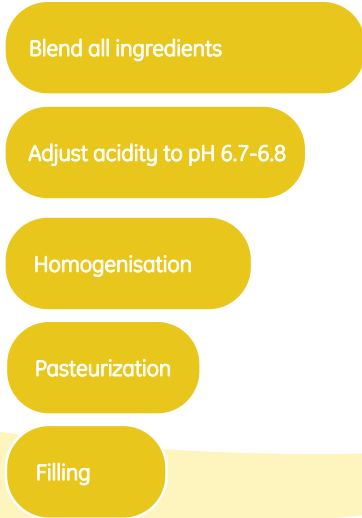
Milk Coffee Formulation



In this formula, we formulated 3 recipes of milk coffee comparing original, CMC, and Lucent Feel. After performing a sensory evaluation, the result has shown that we can successfully substitute **Lucent Feel** instead of adding more heavy cream. Moreover the “melt in mouth” feeling is significantly noticed.



Processing Flow of Milk Coffee



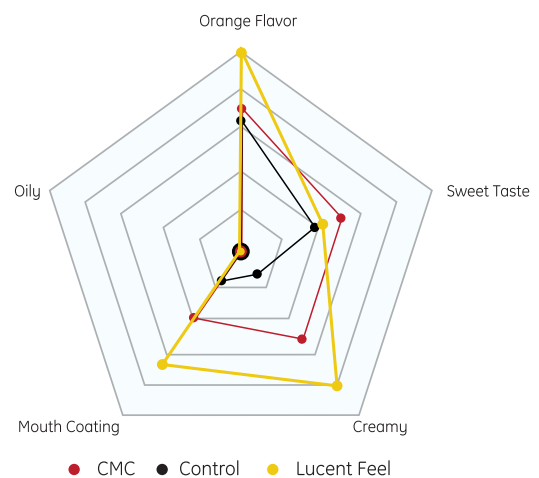
INGREDIENTS	CONTROL	CMC	LUCENT FEEL
Sugar	8	8	8
Full fat milk powder	3	3	3
Instant coffee powder	2	2	2
Sodium bicarbonate	0.1	0.1	0.1
Sugar ester	0.1	0.1	0.1
LUCENT Feel	-	-	1
Coffee flavor	0.1	0.1	0.1
Water	86.70	86.6	85.70
CMC	-	0.1	-
Total	100	100	100

Orange Juice Formulation

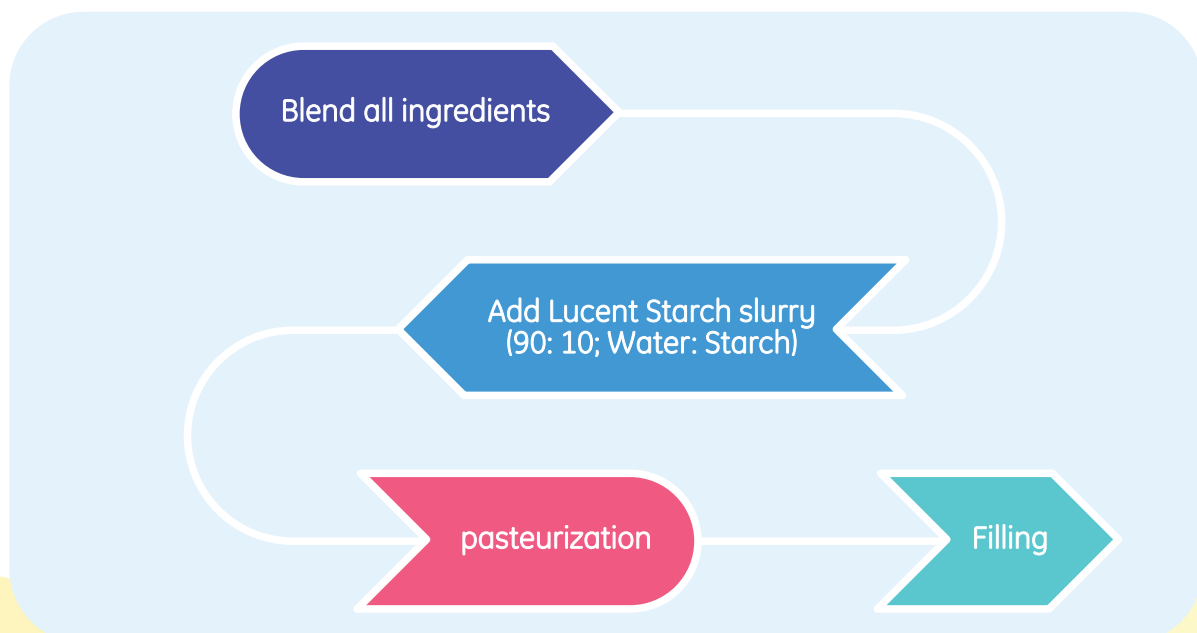
In this formula, we formulated 3 recipes of orange juice comparing original, CMC, and **Lucent Feel**. After performing a sensory evaluation, the result has shown that creaminess and mouth coating are significantly noticed. Moreover, the strength of the orange flavor is found to be higher than in the control recipe.



INGREDIENT (%)	CONTROL	CMC	LUCENT FEEL
Granulated sugar	8	8	8
Citric acid	0.2	0.2	0.2
LUCENT Feel	-	-	1
Orange flavor	0.25	0.25	0.25
Orange color	0.15	0.15	0.15
Water	91.40	91.20	90.40
CMC	-	0.2	-
Total	100	100	100



Processing Flow of Orange Juice



Talk to us

Banpong® designs complete solutions, using a wide portfolio of starch, and shortens the development pathway using its extensive experience and technological capabilities.

The **LUCENT FEEL** is manufactured at a non-GMO, Halal and Kosher certified facility that meets FSSC22000 standards, which means they can be used for products targeting in a wide range of specific markets.

If you have any questions, or would like more information, please contact us at:

info@banpong.co.th

Reference


'WHO on Diabetes, World Health Organization, 10 November 2021

'Sugar tax for public health: Soft drinks 20- 25% price rise', Bangkok Post, 27 April 2016.

new idea to solutions!

 www.banpong.co.th

 info@banpong.co.th

 T : +66 32 201 510
F : +66 63 374 8140

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