



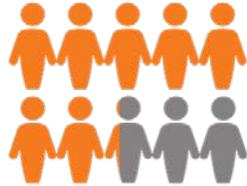
Simplifying your labels with multi-functional flours

2018 Clean Label Conference | March 26-28, 2018

Presented by: Sharon Chittkusol, Associate Marketing Manager, Wholesome Innovation



Clean labels are more important than ever...

78% 

of U.S. consumers find it important to recognize the ingredients used in the products they buy¹

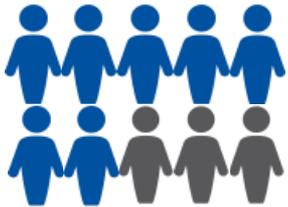


FRESHER

There is a correlation between cleaner labels and products being perceived as fresher by consumers²



Consumers want additive-free products with ingredient lists like those of homemade recipes³



>80% of consumers are more likely to buy a product if they recognize all the listed ingredients¹

>60% willing to pay more for simple³

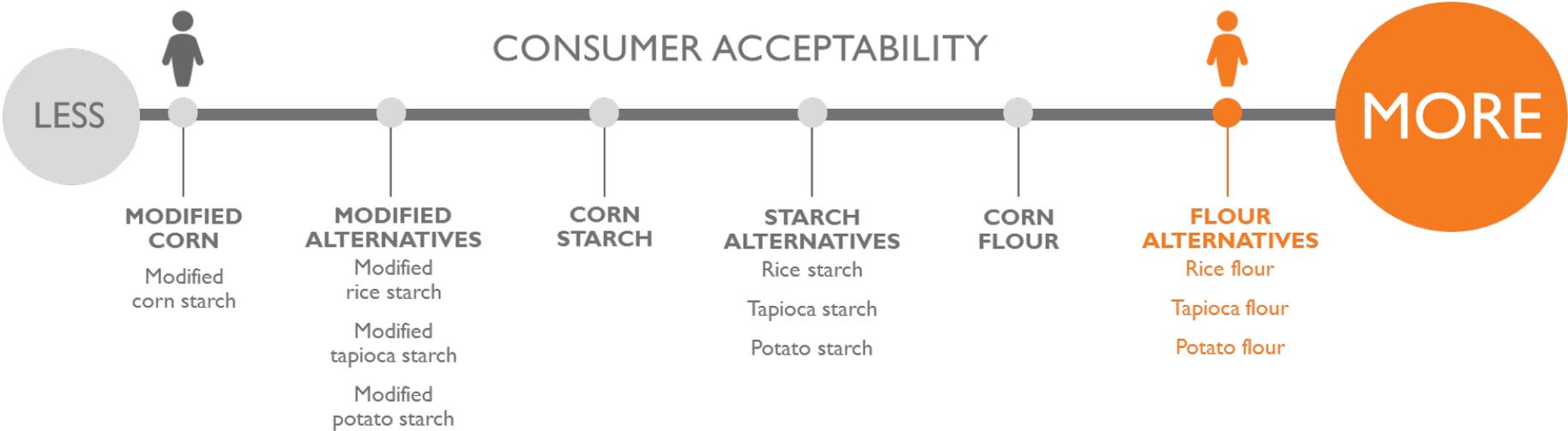
...and simple labels get a price premium!

1. Ingredion proprietary research, MMR, Consumer Study, USA, April 2017
2. Ingredion proprietary research, Vision Critical, Clean & Clear Labeling Research, USA and Canada, February 2016
3. Ingredion proprietary research, Dragon Rouge, Consumer Study, USA and UK, June 2016

CLEAN & SIMPLE 

Ingredion
idea labs 
IDEAS TO SOLUTIONS

Consumer acceptance of starch forms



Source: MMR Global QBIC Study 2017, proprietary research commissioned by Ingredion; Dragon Rouge: Rice and Pulse Ingredients 2017, proprietary research commissioned by Ingredion



Why flours?

- Ingredients are preferred when described as ‘flour’ rather than ‘starch’
- Flours are seen as ‘natural’ and ‘healthy’
- Preference of base type can differ in the context of specific applications
 - Rice and tapioca (cassava) are well perceived compared to wheat flour, which lacks free-form positioning

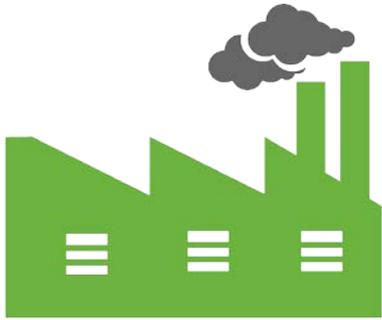
Multi-functional flours



Ingredient's multi-functional rice and tapioca flours

- Made from specific varieties of rice and tapioca with proprietary physical process
- Deliver superior flavor and textural performance, preventing gelling, water release and loss of viscosity
- Can replace other flours and stabilize at a lower usage level
- They also provide opacity, creaminess, process tolerance, and increased cold temperature stability

Benefits at a glance



MANUFACTURERS

- » **Upgrade** to a flour label
- » **Achieve** robust functionality and stability previously associated with hydrocolloids and modified starches
- » **Replace** other flours and stabilize at a lower usage level
- » **Provide** authentic creamy textures with a clean flavor profile
- » **Reduce** cost with lower usage and ability to reduce fat



CONSUMERS

- ✓ Consumer preferred flour ingredient label
- ✓ Enhanced textural experience, leading to fresher perception
- ✓ Extended shelf life
- ✓ Premium quality

Multi-functional clean label rice flour in action

The evidence in a Béchamel Sauce

AFTER 6 FREEZE/THAW CYCLES

Former best clean label rice starch solution



LOW
freeze/thaw
stability:

Grainy texture and
low eating quality
after defrosting

Innovation:
Multi-functional rice flour



HIGH
freeze/thaw
stability:

Short, smooth texture
and high eating quality
after defrosting

Multi-functional rice flour
closely resembles the
fresh sample

EVEN AFTER



6

freeze/thaw
cycles

Multi-functional clean label tapioca flour in action

The evidence in a Vanilla Pudding

AFTER 7 WEEKS REFRIGERATION

Native tapioca starch solution



LOW
freeze/thaw
stability:

Grainy, gelled texture
and low eating quality
after defrosting

Innovation:
Multi-functional
tapioca flour



HIGH
freeze/thaw
stability:

Short, smooth texture
and high eating quality
after defrosting

Multi-functional tapioca flour
delivers improved cold
temperature stability

EVEN AFTER



7

Weeks in
refrigeration

homecraft® Create multi-functional flours

Deliver improved textural performance with Ingredion's proprietary physical process

FUNCTIONALITY	VALUE	REGULATORY STATUS
<ul style="list-style-type: none"> • Texturize • Thicken • Stabilize 	<ul style="list-style-type: none"> • Wide range of applications through improved process tolerance and cold temperature stability • Enhance texture • Provide creamy mouthfeel • Clean flavor release • Consumer desired 'flour' label • Offer opportunities for cost saving in some applications through higher viscosity • Gluten-free 	<ul style="list-style-type: none"> • FSSC/ ISO Certified • Certified Kosher and Halal • Meet FDA definition for Gluten-free • Certified as Non-GMO Project Verified  • Label declaration: <ul style="list-style-type: none"> – homecraft® Create multi-functional rice flours: rice flour – homecraft® Create multi-functional tapioca flours: tapioca flour • GRAS status: <ul style="list-style-type: none"> – Generally Recognized As Safe (GRAS)

Closing comments

THE DEMAND

Multi-functional rice and tapioca flours provide unique functional benefits and address a number of the trends in the food industry today, allowing product developers to **“Simplify Labels”** and **“Save Money.”**

THE CHALLENGE

The lack of process tolerance and cold temperature stability of native flours limit usage in many processed foods applications.

SOLUTION

Ingredion’s specific rice and tapioca varieties and proprietary physical treatment process imparts the desired functional performance properties and attributes, which allow for use in a broad range of applications.

AVAILABLE SOLUTIONS

homecraft® multi-functional flours

Base	
Tapioca	Different degrees of process tolerance and stability
Regular and waxy rice	
Gluten-free systems	

Thank you!

Contact:

sharon.chittkusol@ingredion.com

For more information visit:

ingredion.us/tapiocafLOUR

ingredion.us/ricefLOUR