

Tomato Sauce: Optimise formulation cost

How we helped protect against tomato price volatility in sauces

Opportunity

As tomato paste costs fluctuate and supply chains shift, manufacturers are under pressure to reformulate without compromising product quality. With supply instability driving reformulation across the category, finding cost-efficient alternatives that maintain taste and texture has become a priority.

Customer Challenge

A customer wanted to **cut tomato paste usage** in **tomato sauce** but struggled to retain body, consistency, and visual appeal. Reducing solids created thinning, weaker texture, and a loss of characteristic tomato mouthfeel that consumers expect..

Solution

We introduced **NUTRAVA® Citrus Fiber** to restore viscosity, mouthfeel, and stability in the reduced-tomato paste formula-rebuilding body and ensuring a comparable eating experience, even with significantly less tomato solids.

Differentiation

The customer selected Tate & Lyle for our ability to restore texture holistically - not simply replace paste - using our clean label **citrus fiber ingredient solution** and **formulation expertise** to deliver a stable, cost-efficient reformulation.

Disclaimer: "The information provided above is intended solely for your consideration and independent verification. You are responsible for determining whether and how to use this information. The applicability of ingredient substitutions, label claims, health claims and the regulatory and intellectual property status of our ingredients varies by jurisdiction. You should obtain your own advice regarding all legal and regulatory aspects of our ingredients and their usage in your own products to determine suitability for their particular purposes, claims, freedom to operate, labelling or specific applications in any particular jurisdiction. Tate & Lyle does not guarantee, and accepts no liability for, the accuracy or completeness of the information provided, nor the suitability of any products for your particular application."

The value you get

Shielded against price volatility

From:
33% tomato paste
+ 2 traditional stabilizers*

To:
25% tomato paste +
citrus fibre

* modified starch and xanthan gum

Clean Label

Citrus Fiber is an upcycled, consumer-friendly recognizable food ingredient.
 Shorter list of ingredients



Elevated taste

Improved pulpy texture and Mouthfeel Improved syneresis control. No opaqueness and flavor masking



Lower formula cost Volatility-proof



Savings

Up to
-25% of tomato paste
-20% in total formulation cost



Mayonnaise: Optimise formulation cost/ elevate perceived value

How we helped reduce oil costs in mayonnaise while improving texture

Opportunity

In the mayonnaise and emulsified sauces category, consumers increasingly expect great value alongside the quality they know. As raw material costs rise, reformulating toward lower-cost recipes while maintaining sensory performance has become a priority across the market.

Customer Challenge

The customer aimed to reduce fat content to lower recipe costs, but encountered a significant loss of mouthfeel and texture in the process. Removing oil disrupted the product's structure and sensory appeal, making it difficult to maintain the creaminess and viscosity consumers expect.

Solution Drawing on Tate & Lyle Sensation™

Insights, we restored texture by combining **RESISTAMYL®** cook-up starch with **KELTROL®** Xanthan Gum. This system rebuilt viscosity, increased firmness for optimal cling, and recreated full-fat mouthfeel - allowing the customer to deliver a stable, creamy low-fat mayonnaise while significantly reducing fat-related costs.

Differentiation

The customer chose Tate & Lyle for our ability to connect sensory science with formulation expertise. Our targeted ingredient system not only reduced oil costs - it delivered higher texture liking and purchase intent compared to the full-fat benchmark.

Disclaimer: "The information provided above is intended solely for your consideration and independent verification. You are responsible for determining whether and how to use this information. The applicability of ingredient substitutions, label claims, health claims and the regulatory and intellectual property status of our ingredients varies by jurisdiction. You should obtain your own advice regarding all legal and regulatory aspects of our ingredients and their usage in your own products to determine suitability for their particular purposes, claims, freedom to operate, labelling or specific applications in any particular jurisdiction. Tate & Lyle does not guarantee, and accepts no liability for, the accuracy or completeness of the information provided, nor the suitability of any products for your particular application."

1- Tate & Lyle Sensation 2025 – CLT; Apr 2025, n=205, UK & Germany

2- CIU includes oil, egg and T&L solutions

TATE & LYLE

The value you get

Shielded against price volatility

From:
68%
Oil content

To:
30%
Oil content

Elevated taste

Key sensory attributes maintained:
smoothness Shininess,
spreadability Firmness



Consumer acceptance

+ 14pp¹

in consumer liking



Elevated nutrition

-56% Oil



Lower formulation cost

-50%

Formulation cost



Mayonnaise: Optimise formulation cost/ Elevate perceived value

How we enabled a cost-effective, egg-free mayonnaise without compromising texture

Opportunity

Demand for vegan, egg-free mayonnaise is growing, with consumers expecting the same texture, stability, and sensory experience as traditional egg-based products. For manufacturers, this creates a dual challenge: meeting that expectation while reducing recipe costs.

Customer Challenge

A customer needed to remove egg yolk from their mayonnaise formulation - a significant technical challenge, as egg provides emulsification, structure through protein gel network formation, and contributes to flavour and colour. Replacing it affects emulsion stability, viscosity, texture, and appearance throughout the microstructure. The goal was clear: a stable, appealing vegan mayonnaise with sensory performance comparable to egg-based references - and at an advantaged cost.

Solution

Applying Tate & Lyle Sensation™ insights, we developed a targeted ingredient system that recreates the functional role of egg yolk in the emulsion. STAMIST® Instant 364 NG emulsifying starch stabilizes the oil and water phases, preventing fat separation and delivering a smooth, uniform texture. Combined with RESISTAMYL® cook-up starch and KELTROL® Xanthan Gum to build structure, stability, and consistent mouthfeel, the system delivers sensory performance that matches egg-based references – without the egg.

Differentiation

The customer chose Tate & Lyle because we went beyond ingredient selection. By connecting sensory science with deep formulation expertise, we delivered an egg-free solution proven to match the eating experience of traditional mayonnaise while reducing recipe costs by up to 25%.

Disclaimer: "The information provided above is intended solely for your consideration and independent verification. You are responsible for determining whether and how to use this information. The applicability of ingredient substitutions, label claims, health claims and the regulatory and intellectual property status of our ingredients varies by jurisdiction. You should obtain your own advice regarding all legal and regulatory aspects of our ingredients and their usage in your own products to determine suitability for their particular purposes, claims, freedom to operate, labelling or specific applications in any particular jurisdiction. Tate & Lyle does not guarantee, and accepts no liability for, the accuracy or completeness of the information provided, nor the suitability of any products for your particular application."

The value you get

TATE & LYLE

Egg usage

From:
8%

To:
0%

Consumer acceptance

Allows for "egg-free" or "vegan" positioning



Expected taste

Texture liking & Purchase Intent at par with the egg-containing reference¹ Maintained key attributes such as smoothness, thickness, spreadability



Lower costs of Reformulation

Speed and accuracy in development with Tate & Lyle Sensation



1- Tate & Lyle Sensation 2025 – CLT; Apr 2025, n=205, UK & Germany

2- CIU includes oil, egg and T&L solutions

Additional cost savings:
Egg reduction

- 25%²



Dressings: Optimise formulation cost - Shield against expensive and volatile raw materials

How we enabled egg replacement in pourable dressings

Opportunity

Egg price volatility and supply uncertainty are putting pourable dressings formulations under increasing pressure. For manufacturers, finding a reliable egg-free system delivers more affordable, resilient recipes without compromising the eating experience.

Customer Challenge

A North American customer needed to remove eggs from their pourable dressing to improve affordability and reduce supply risk. Early reformulation attempts fell short — resulting in quality loss, stability issues, inconsistent performance across production runs, and a significant drop in mouthfeel once egg was removed from the continuous phase.

Solution

We introduced HAMULSION® Functional Stabiliser System to replicate egg's emulsification and water-binding functionality. The result was robust emulsion stability, restored creamy and smooth mouthfeel, elevated viscosity, and full egg removal — all at a meaningful cost advantage.

Differentiation

Our deep understanding of emulsion science meant we could deliver consistent viscosity, optimised structure and cling, and reliable stability across shelf-life and processing conditions — while also lowering cost-in-use and reducing exposure to supply volatility. The outcome was a scalable, commercially ready system that gave the customer confidence to move from reformulation to market faster.

Disclaimer: "The information provided above is intended solely for your consideration and independent verification. You are responsible for determining whether and how to use this information. The applicability of ingredient substitutions, label claims, health claims and the regulatory and intellectual property status of our ingredients varies by jurisdiction. You should obtain your own advice regarding all legal and regulatory aspects of our ingredients and their usage in your own products to determine suitability for their particular purposes, claims, freedom to operate, labelling or specific applications in any particular jurisdiction. Tate & Lyle does not guarantee, and accepts no liability for, the accuracy or completeness of the information provided, nor the suitability of any products for your particular application."

The value you get

Pourable dressing

100%
Egg replacement

40%
Oil system

TATE & LYLE

Shielded against volatility

100%

Egg replacement

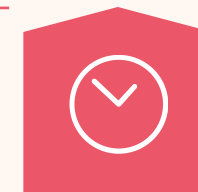
Target taste profile

Key attributes maintained:

Creaminess
Smoothness
Structure
Cling

Lower associated costs of Reformulation

Speed, accuracy and predictable
Performance with our functional
System.



Total cost savings:

Up to 55%



Bearnaise sauce: Optimise formulation cost, boost productivity

How we helped cost-optimize béarnaise sauce while achieving a cleaner label

Opportunity

Consumer demand for cleaner, more transparent labels is reshaping the condiments category. As regulatory expectations rise and reformulation becomes a commercial priority, manufacturers are looking for ways to simplify recipes and reduce costs — while giving consumers every reason to choose it.

Customer Challenge

A customer needed to reduce formulation costs by replacing expensive ingredients, including egg yolk, while also shortening their ingredient list. The technical challenge was significant: maintaining a stable emulsion and the rich, indulgent mouthfeel that defines a quality béarnaise sauce.

Solution

We introduced NUTRAVA® Citrus Fiber to replace egg yolk and several stabilisers in a single ingredient — delivering the emulsification, firmness, and viscosity needed to maintain the expected eating experience. One clean-label ingredient. Fewer components. The same quality result.

Differentiation

The customer chose Tate & Lyle because we delivered on two fronts simultaneously. NUTRAVA® Citrus Fiber simplified the formulation and reduced ingredient costs, while our technical and formulation support accelerated the development process — reducing both the time and complexity of getting the reformulated product to market.

Disclaimer: "The information provided above is intended solely for your consideration and independent verification. You are responsible for determining whether and how to use this information. The applicability of ingredient substitutions, label claims, health claims and the regulatory and intellectual property status of our ingredients varies by jurisdiction. You should obtain your own advice regarding all legal and regulatory aspects of our ingredients and their usage in your own products to determine suitability for their particular purposes, claims, freedom to operate, labelling or specific applications in any particular jurisdiction. Tate & Lyle does not guarantee, and accepts no liability for, the accuracy or completeness of the information provided, nor the suitability of any products for your particular application."

The value you get

Use fewer ingredients

One ingredient, same performance

From:
**Egg yolk +
4 traditional
stabilisers***

To:
Citrus fibre

* modified starch, maltodextrin, pectin and xanthan

TATE & LYLE

Clean Label

Upcycled, consumer-friendly recognizable food ingredient
Shorter list of ingredients



Target taste profile

No compromise on texture, viscosity and mouthfeel Improved heat stability



Optimised cost and productivity

SKUs rationalization Improved operational efficiency



Optimised cost and productivity

**Shorter list of ingredients,
from 5 to 1**
**Cost savings through
operational efficiency**
(procurement, logistics, production)

