

NON-GMO ALTERNATIVES TO SWEETENING, STARCHES AND ENRICHMENT

TATE & LYLE

MAKING FOOD EXTRAORDINARY



FORMULATING FOODS FOR TODAY'S CONSUMERS

It's an exciting time to be a food scientist. At Tate & Lyle, we've been passionate about making food extraordinary for over a century, and we've never seen a more complex food and beverage landscape than the modern global market.

As consumer trends drive movements such as organic, clean label, and non-GMO formulations, scientific innovations continue to expand the realm of what's possible. The future has never been so bright. Yet, for today's manufacturers, it can be a challenge to grapple with new consumer demands while maintaining product taste and quality – and balancing costs.

56% OF CONSUMERS CLAIM THEY ARE TRYING TO LIMIT GMOS FROM THEIR DIET¹

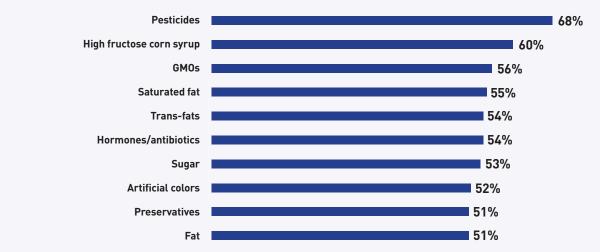
That's why having Tate & Lyle as a partner is so valuable. We understand your consumers, your categories and your unique formulation challenges, and we're dedicated to helping you find the right ingredients to meet your goals. Whether you need to sweeten a beverage with fewer calories, lower the fat in yogurt without compromising its texture, or add fiber to a snack bar while maintaining its great taste, we have the non-GMO solutions and ingredients you need to give your consumers a product they'll love with a label they can understand.

UNDERSTANDING THE NON-GMO TREND

Modern consumers are increasingly interested in non-GMO foods.

Regardless of whether consumer concerns are rooted in evidence,* one thing is clear: There's a rising demand for non-GMO products. At Tate & Lyle, our goal is to provide you with options to meet the diverse demands of your consumers.

*despite the fact that the FDA has stated that foods derived from genetic engineering do not present any different or greater safety concern than foods developed by traditional plant breeding.



% general population indicating they are trying to limit the following ingredients in their diet

Source: NMI, 2017 Health & Wellness Trends in America

NON-GMO SOLUTIONS FOR EVERY NEED

Today's consumers know what they want – great-tasting food with irresistible texture and a short and simple ingredients list they can understand. What consumers don't know is how much work goes into creating the products they love. Fortunately, reformulating foods and beverages to use non-GMO ingredients doesn't have to compromise taste or texture. Our non-GMO products and solutions have the same functionality as their GMO counterparts, which means you can offer your consumers the foods and beverages they love with a label they can understand and trust.

Non-GMO Enrichments

Soluble Fiber Enrichments

- STA-LITE[®] Polydextrose
- PROMITOR[®] Soluble Gluco Fiber
- PromOat[®] Beta Glucan

Protein Enrichments

PrOatein[®] Oat Protein

Non-GMO Sweeteners

Sweeteners

- FRUCTOPURE[®] Fructose
- MALTOSWEET[®] Maltodextrin
- •STAR-DRI® Maltodextrin

Low-/No-Calorie Sweeteners

- PUREFRUIT™ Monk Fruit Extract
- TASTEVA[®] Stevia Sweetener
- SPLENDA[®] Sucralose

Non-GMO Starches

Dough Binding Starches

• X-PAND'R®

Thickening Starches

- FRUITFIL®
- KOL GUARD[®]
- MAXI-GEL[®]
- MIRA-THIK®
- NU-STAR™
- PERMA-FLO®
- REZISTA[®]
- TENDERFIL®
- BINASOL[™]
- REDISOL®
- CONSISTA™
- STA-SLIM[®]
- RESISTAMYL[®]
- MERIGEL®

Gelling Starches

- THINGUM®
- CLARIA[®] Top-Gel
- CREAMIZ®

Coating Starches

- MIRA-CAP[®]
- **Emulsifying Starches**
 - MIRA-MIST[®]

Functional Clean-Label Starches

- CLARIA[®] Essential
- CLARIA[®] Plus
- CLARIA® Elite
- CLARIA® Bliss



THE VALUE OF NON-GMO

In general, non-GMO products are growing faster than their traditional counterparts, even though they carry a price premium. For example, non-GMO yogurts, despite an average price premium of 5%, have increased by 7.3% in the last three years. By contrast, the category as a whole has risen 0.7%. Although sauces carry a whopping 60% price premium for non-GMO varieties, these items have jumped by nearly 60% in the last three years, compared to a 2.9% growth across the category.²



References

¹Natural Marketing Institute, 2016 Health and Wellness Trends in America, <u>http://www.nmisolutions.com/index.php/research-reports/health-a-wellness-reports/17th-annual-consumer-report-2016-health-and-wellness-trends-in-america</u> ²IRI, 2017.

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