Partially hydrogenated oils, or PHOs, contain trans fats, which are linked with heart disease. New regulations in the U.S. prohibit manufacturers from adding PHOs to food. The World Health Organization has launched a program to reduce PHOs and trans fats globally. Europe is also considering new limits. Manufacturers continue to need stable shortenings, with appropriate shelf life, the correct color, and with proper melting properties. Enzymatic interesterification provides a simple, efficient, and environmentally-friendly way to produce margarines without the use of chemicals while improving product quality and production yields.

**Higher quality product**
- No trans fats
- Higher yield
- Fewer by-products
- No color changes in the fat blend
- Low diglycerides

**Cost-efficient**
- Low capital investment – only simple reactors required
- Total variable costs are on a competitive level with alternative processes
- Less energy consumption
- Reduced production of greenhouse gases

**Simple, continuous process**
- Fewer unit operations than alternative processes
- No need for washing or post-bleaching
- No chemicals
- No wastewater
- Better industrial safety
Cut the trans fats and produce a higher-quality product

Novozymes Lipozyme® TL IM offers a simple process without chemicals that efficiently produces higher quality products.

Understand market demands

Vegetable oil and fats command an overwhelmingly dominant share in the oil and fats market. The vegetable oils market is expected to grow through 2021, but more slowly compared to the animal and dairy fats sector. Because of these trends, producers will need to continue to focus on efficiency, cost-savings and quality. Novozymes’ experts can help you design the optimal process to help you win in the marketplace.

Get ahead

Staying ahead of the dynamic food and beverage market requires the best technology and expertise to become even more flexible, efficient and profitable. With our solutions and know-how, Novozymes can support you on that journey. Let’s transform the quality and sustainability of your business together.

It’s the quality that counts

Novozymes provides safe production strains, assessed and approved raw materials – under strict, controlled processes that have full traceability. We are your expert when it comes to monitoring, understanding and complying with local and global food legislation, and we continue to pursue key international food safety and quality certifications – so you and your customers can feel confident.

About Novozymes

Novozymes is the world leader in biological solutions. Together with customers, partners and the global community, we improve industrial performance while preserving the planet’s resources and helping build better lives. As the world’s largest provider of enzyme and microbial technologies, our bioinnovation enables higher agricultural yields, low-temperature washing, energy-efficient production, renewable fuel and many other benefits that we rely on today and in the future. We call it Rethink Tomorrow.