

Unlock new value from feathers



Every year, millions of tons of valuable poultry feathers go to waste. Containing 80–90% keratin, they're an excellent source of protein that feed producers need for their products. But poor digestibility of feather proteins has limited their market potential – until now.

Enzymatic hydrolysis of feathers breaks down the keratin to significantly improve its digestibility. Not only can you convert your waste stream into a valuable animal feed ingredient, enzymes also reduce the environmental impact of your poultry processing. With Novozymes, you can design your optimal feather protein hydrolysate as well as the process that yields most profit.

Benefits

Maximize the value of co-products

Feather waste from poultry slaughter can comprise 5–7% of poultry body weight, posing a waste management challenge. Enzymes help you convert feather waste into profit by creating high-quality feather meal. Enzymatic hydrolysis breaks down the protein to make it digestible, enabling more accessible nutrition for animal feed. Since the enzymatic process uses mild cooking conditions, the feather meal also has less odor and a lighter color.

Reduce energy and add economy

Enzymatic hydrolysis can reduce your energy use, processing time and costs. Because you can reduce cooking temperatures, you can save 10–15% on energy costs compared to standard steam-pressure cooking. Enzymes also efficiently tackle fat balls, which otherwise require time- and energy-consuming sieve separation before milling.

Improve your process

Ensure a smooth transition into an efficient enzymatic hydrolysis process with Novozymes' experienced technical services staff and advanced enzymes. Together, we'll select the optimal enzyme combination and dosage for your process. Since you'll be getting even more out of the world's limited resources, you'll also be sending a strong sustainability message to your stakeholders.

Partner to expand your hydrolyzed feather capabilities

Novozymes works with you to ensure enzymes make your business better:

Differentiate

Understanding market demands

The demand for additional protein sources in feed manufacture is growing, while the quality and digestibility requirements are no less demanding. Feather hydrolysis is a sustainable way to derive value from your co-products. By working with Novozymes' experts, you can design your optimal ingredient that will help you win in the marketplace.

Optimize

Optimizing your product with enzymes

Protease technology has unique and versatile functional benefits. Through experimentation, we select the optimal balance and dosage of enzymes to develop your new ingredient. The enzymes that can boost the value of your feathers are Novo-Pro® D and Alcalase®.

Expand

Winning customers and sales

Poultry processors can boost both financial and environmental sustainability by extracting the maximum value from materials. Novozymes helps you meet your production and launch goals with a partnership mentality. You have access to a wealth of expertise, from labeling and regulatory to technical services, supply chain and commercial account management. Together we ensure that your feather hydrolysis is a commercial success.

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.

Novozymes Switzerland AG

Neumattweg 16
4243 Dittingen
Switzerland

Tel. +41 61 765 6111
Fax +41 61 765 6333

Novozymes A/S

Krogshoejvej 36
DK-2880 Bagsvaerd
Denmark

Tel. +45 4446 0000