



Novozymes Acrylaway®

# Up to 95% less acrylamide, same great-tasting snacks

To comply with increasing regulation and protect their brands, many food manufacturers are looking to reduce the acrylamide levels in their products. Consumers are increasingly concerned with health issues, and the EU now requires food manufacturers to ensure acrylamide levels are below benchmark levels.

Acrylamide is primarily formed as part of the Maillard reaction between asparagine and reducing sugars. This typically occurs at temperatures over 120°C and is responsible for the delicious flavor and color of fried products. Acrylamide is an undesired by-product that the European Food Safety Authority and others evaluate as a possible carcinogen.

Novozymes' asparaginase, Acrylaway® converts asparagine into aspartic acid. This means less asparagine is available to form acrylamide. The other amino acids and sugars in the food remain active to contribute to the Maillard reaction.

With Acrylaway®, producers can offer great-tasting potato-based snacks with up to 95% less acrylamide.

## Benefits

### Up to 95% reduction

In pilot and industrial-scale trials, Acrylaway® has reduced acrylamide in snack pellets and finished snack products by up to 95%.

### Easy to use

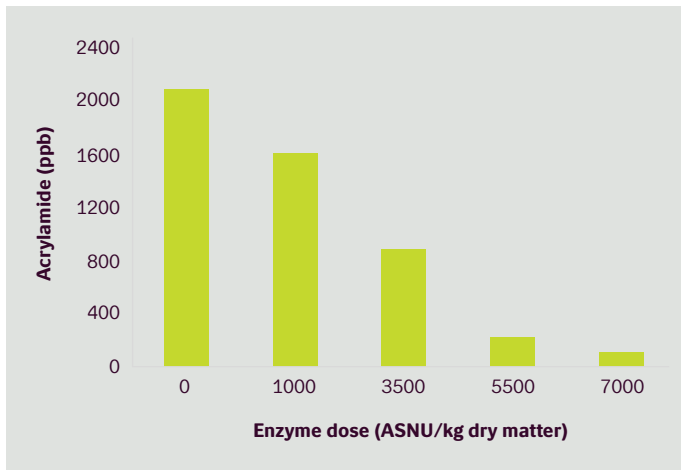
Acrylaway® is easy to implement in production of potato granules, snack pellets or final snack manufacturing. Acrylaway® requires limited or no process modifications.

### Easy to use

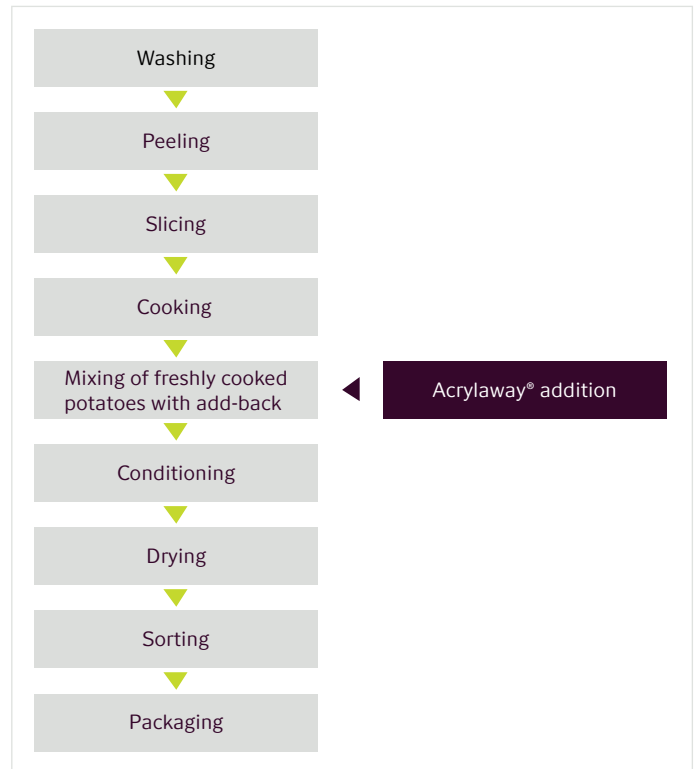
Acrylaway® preserves the flavor and appearance of the final product. No differences in taste, texture or appearance have been observed with use of Acrylaway®.

### Expert support

To implement a solution that's right for your business, our committed Technical Service team is available to offer support in optimizing the technical implementation and cost-in-use tailored to your particular process.



**Fig. 1.** Acrylamide was reduced by more than 95% in the final product, potato chips, in a pilot trial using Acrylaway®-treated pellets



**Fig. 2.** Example of a potato granule production process, showing when Acrylaway® can be added

## Learn more about Acrylaway® at [novozymes.com/acrylaway](https://novozymes.com/acrylaway)

### 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.

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