

FOOD SPECIALTIES

**novozymes**<sup>®</sup>

Food & Beverages



## MORE OF THE **GOOD** FRUIT

Changing climate conditions cause fruit raw material shortages, which increase prices for high-quality products. Novozymes Novoshape<sup>®</sup> is a pure, tailor-made pectin esterase that maximizes the use of your raw material and maintains high fruit integrity and rheological properties during processing.

### Key benefits

- Higher yield of good quality fruit
- Increased juice retention
- Improved rheological properties

### Additional benefits

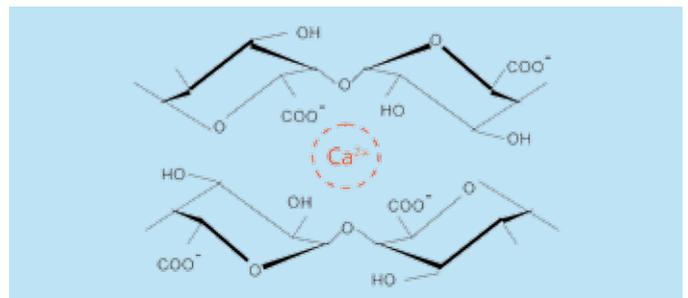
- Fewer texturants needed; Novoshape works on the fruits' own pectin and minerals
- Preservative free
- Organoleptic properties are preserved

### How Novoshape works

Novoshape is a pure pectin esterase that de-esterifies the fruit's own high-methylated pectins. This gives the pectins increased calcium sensitivity. In the presence of sufficient  $\text{Ca}^{2+}$  ions, a three-dimensional gel matrix is formed, which leads to greater shape retention, better final appearance, and improved taste.

To achieve an optimal result, the following must be taken into consideration:

- The quality of the fruit
- The availability of  $\text{Ca}^{2+}$  (either from the fruit itself or added)
- The acidity or pH of the fruit (a lower pH results in a faster-setting gel)



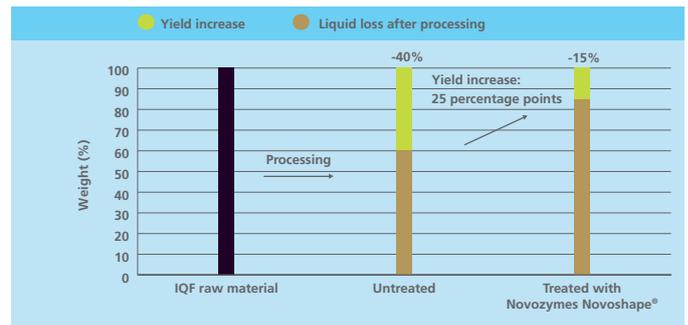
Rethink Tomorrow

## Increased drain weight

With Novoshape you benefit from higher juice retention and a significant decrease in liquid loss. Based on typical results, strawberries treated with Novoshape provide a 25 percentage point overall yield increase – representing approximately USD 350 USD savings per ton of raw materials.

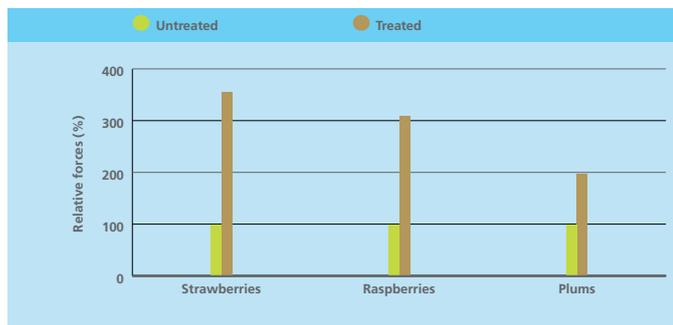
	Drain weight	Liquid loss
Untreated strawberries	60%	40%
Strawberries treated with Novozymes Novoshape®	85%	15%

## Increased drain weight



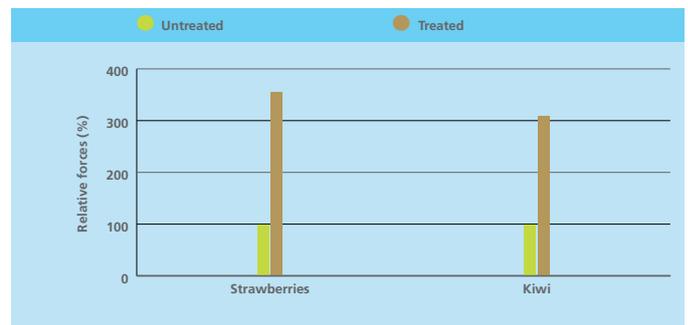
## Improved rheological properties

### Fruit preparations



Novozymes Novoshape®-treated fruits formulated in fruit preparation enjoy an improved fruit texture.

### Jam



Novozymes Novoshape®-treated fruits formulated in jam enjoy a higher gel strength without syneresis.



Novozymes is the world leader in bioinnovation. Together with customers across a broad array of industries we create tomorrow's industrial biosolutions, improving our customers' business and the use of our planet's resources.

**Novozymes Switzerland AG** · Neumattweg 16 · 4243 Dittingen · Switzerland · Tel. +41 61 765 6111 · Fax +41 61 765 6333 · foodandbeverages@novozymes.com  
**Novozymes A/S** · Krogshøjvej 36 · 2880 Bagsvaerd · Denmark · Tel. +45 4446 0000 · Fax +45 4446 9999 · www.novozymes.com

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