The power of “natural”

Danisco’s BioVia™ YM 10 is a natural, label-friendly food protection solution that rivals the efficacy of traditional chemical preservatives – such as potassium sorbate. A natural antifungal blend, BioVia™ YM 10 is specially designed to enhance the quality of a wide variety of refrigerated and shelf-stable culinary products. With cultured dextrose and plant extracts as active components, BioVia™ YM 10 is particularly effective against difficult-to-control fungal spoilage organisms, such as yeasts and molds.

Product Benefits:
- Control over challenging spoilage yeasts and molds
- Natural, sustainable solution
- Clean, friendly labeling
- Effective over a broad pH range (2-7)
- Multi-component system provides robust efficacy
- Improved oxidative stability

BioVia™ YM 10:
Yeast and mold control that’s natural and effective

With the consumer trend toward natural products still going strong, food manufacturers have been faced with a choice: Get maximum shelf life for their product through a chemical preservative and forego the advantages of a natural claim, or sacrifice a little shelf life to deliver a more consumer-friendly label. Now they don’t have to choose.

BioVia™ YM 10 is a natural, label-friendly food protection solution that rivals the efficacy of traditional chemical preservatives –
Introducing BioVia™ YM 10

Danisco’s BioVia™ YM 10 blend employs “hurdle technology” to control yeast and mold by combining the patent-pending synergistic effects of cultured dextrose, green tea extract, and mustard essential oil. The result is a three-pronged attack against challenging food spoilage organisms by the most effective natural, label-friendly antifungal weapon on the market today.

BioVia™ YM 10 provides a powerful, natural food protection solution for fighting yeast and mold in a variety of culinary food products. In addition, BioVia™ YM 10 delivers:

- Heat stability at low pH values
- Minimal flavor impact
- Activity across a broad pH range (pH 2 – 7)
- High dispersibility in water
- Enhanced oxidative stability

Manufacturers’ challenges

While extending product shelf life has always been important to food manufacturers, it may well be that food protection challenges have never been greater. Regulatory requirements are tightening, the overall distance between farm and fork is increasing, and adaptive microbial strains continue to develop resistance to current methods.

Maximizing shelf life is also critical to the sustainability of your business: Reducing food waste brings with it an inherent reduction in your material, manufacturing and transportation costs, as well as in your company’s carbon footprint.

As they have for the past several years, many consumers are consistently choosing “natural” products with cleaner, friendlier labels. While an increasing number of natural antimicrobial and antioxidant ingredients have come available, matching the effectiveness of chemical preservatives has been difficult ... until now.
Refrigerated Culinary

Refrigerated items – such as fresh salsas, dips, hummus, dressings, and some ready-to-eat meals and sides – do not typically undergo intense heating during processing, so they are particularly vulnerable to spoilage organisms. In challenge studies, BioVia™ YM 10 demonstrated a remarkable ability to control the outgrowth of yeasts that included Zygosaccharomyces bailii and Candida parapsilosis, while suppressing outgrowth of molds such as Aspergillus spp. and Penicillium spp., even when compared to potassium sorbate.

Heat-Processed Culinary

Shelf-stable culinary products – such as barbecue sauces, marinades and certain condiments – have been heated in processing to the point of killing the majority of spoilage organisms present, which accounts for their longer stability on the shelf without refrigeration. However, some microbes typically remain, and the opportunity for post-processing contamination calls for additional protection in these items to achieve the longer desired shelf life.

Low pH / Higher Fat Culinary

Non-refrigerated culinary products – such as certain dressings and vinaigrettes – gain a degree of shelf stability from their low pH and higher fat levels, which tend to minimize the spoilage potential in these items. However, as with other shelf-stable culinary products, maximizing shelf life requires the addition of an effective antifungal ingredient, such as BioVia™ YM 10.
Your gains and benefits

BioVia™ YM 10 delivers a powerful and innovative combination of attributes that make it an especially effective solution for controlling yeast and mold in your culinary products. Its patent-pending technology provides a natural, label-friendly alternative to chemical preservatives, helping you achieve the longer product shelf life that’s so important to your business.

<table>
<thead>
<tr>
<th>Product Feature</th>
<th>Your Business Gain</th>
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<tbody>
<tr>
<td>Patent-pending, multi-component blend</td>
<td>Robust, synergistic technology maximizes shelf life gains</td>
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<tr>
<td>Non-Allergenic / Non-GMO Halal &amp; Kosher certification</td>
<td>Broader consumer acceptance</td>
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<td>Sustainable sourcing</td>
<td>Stable, reliable supply chain</td>
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<td>Naturally-produced components</td>
<td>Meets consumer demands for natural, sustainable ingredients</td>
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<td>Contains clean-label ingredients</td>
<td>Improves consumer appeal and meets demands for cleaner labels</td>
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<tr>
<td>Contains Green Tea Extract</td>
<td>Improves oxidative stability of finished goods</td>
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Contact Danisco to learn more about how you can use BioVia™ YM 10 to broaden the consumer appeal of your products, achieve your goals for product shelf life, and protect your brand reputation for reliable quality.

About Danisco

With a rich and innovative portfolio, Danisco is a world leader in food ingredients, enzymes and bio-based solutions. Using nature’s own materials, science and the knowledge of our 6,800 people, we design and deliver sustainable ingredient solutions that meet market demand for healthier and safer products to a growing global population. Headquartered in Denmark and operating from more than 80 locations, our key focus is to become our customers’ First choice and a truly market-driven global business particularly in the areas of food, health, energy and chemicals. In May 2011, DuPont acquired Danisco forming a global leadership position in Nutrition & Health and Industrial Biosciences. Find out more at www.daniscoCARE4U.com or by contacting a Danisco Culinary sales representative at 1-800-255-6837.

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