



JIM KAPPAS
Malt Products Corp.
VP Sales & Marketing
Over 25 Years of Experience with Specialty Sweeteners and Nutritional Ingredients

NEED TO KNOW *Malt & molasses*

product knowledge



With clean labels being all the rage among consumers these days, various retailers are rethinking their prepared foods ingredients list, and how best to tailor it for mass appeal. When it comes to using sweeteners for those that are made in-house, malt and molasses not only fit the bill for a clean label, but have significant nutritional benefits that can enable your product to boast an even healthier lifestyle than its branded and shipped counterparts.

"Malt used to be thought of only for its nutritional value, in products such as Ovaltine and Carnation Instant Milk," says Jim Kappas, vice president of sales and marketing for Malt Products Corp. "Over the years, corn and cane sugar have been substituted because they are less expensive, so many Americans only think of malted milk shakes and malted milk ball candy as areas where malt can be used. Our main message is to consider adding malt for its nutritional value. On a gram-per-gram basis, malt has five times more antioxidant power than broccoli. It is also well established to help athletes recover after endurance exercise."

Malt has a lot of potential within its flavor profile, and not just when it comes to candy or milk-based beverages. It can also be used in bakery confections and both sweet and savory snacks. Globally, it's already used in products such as artisan breads, chocolate-coated foods,

bagels, pretzels, and breakfast cereals.

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Jim Kappas

"Beverages and snacks are emerging as high growth categories," Kappas says, "and cereals, baked goods and sauces/condiments are well established segments. Malt enhances nut flavors, and 'rounds' or 'softens' dark chocolate notes. It masks bitter

flavors, and complements savory flavors like cinnamon, cardamom or curry."

Malt and molasses are essentially unrefined sugars, and are similar to unrefined whole grains in their nutritional benefits, Kappas says. Malt Products Corp. offers everything from organic and non-GMO sweeteners to Kosher certified products, and sells a large variety of syrups based on everything from rice and grains to honey and corn.

"The goodness of 'whole sugars' is analogous to the whole grains message that has transformed the baking industry over the past few years," Kappas says. "In fact, the sprouting and malting process makes the nutrition in malt extracts more bioavailable than the whole grains themselves. Of course, it's a story that our grandparents knew, but somehow has gotten lost over the decades, due to cost savings initiatives and fascination with calorie reduction, etc."

Another benefit to using these products, he says, is that on top of putting any of the aforementioned buzzwords on your product label, you can also tell consumers that your product contains no processed sweeteners. "The only processing we do is to add water, time and temperature to concentrate the phytochemicals (aka antioxidants), vitamins, and minerals," Kappas says. "Our molasses is gluten free, GRAS (generally recognized as safe), non-GMO, and Kosher, with no added sulfites. And all of our malts have been developed to cover a wide range of flavors, colors, sweetness, body, and proteins. Should our standard malts not meet your requirements, other malt products can be custom-made to suit a retailer's needs."

There's even an interesting backstory behind how malt and molasses are made, which can appeal to those end customers who enjoy 'farm to fork' transparency in regard to what they eat.

"Essentially, our process is the front end of a brewery," Kappas says. "While a brewery takes a starch and ferments it to alcohol, we use the same natural enzymes present in the whole grain barley to convert it to sugar, then concentrate it to evaporate solids under vacuum (to minimize the temperature). While our process has modernized, it is interesting to note that along with honey, malt extract is the most ancient of sweeteners. The term 'ancient' is also used for grains today, and in that regard, malt extract is also a predecessor of modern refined syrups. From about 1,000 BCE to 1,000 CE, it was possibly the most widely used sweetener in the world."

Molasses isn't as old, and is basically a naturally occurring and equally nutritious sweetener extracted from sugarcane during the production



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- Other Available Products:**
- Tapioca Syrup
 - Brown Rice Syrup
 - Invert Syrups (sugar cane based)
 - Honey
 - Agave



of refined sugar. With a distinct and rich flavor, molasses can serve as a cost-effective substitute for highly-refined sugar and other non-nutritive syrups.

The nutritional properties of malt and molasses come from the sprouting and malting process. Malting destroys anti-nutrients that bind minerals, such as phytate, and sprouting releases the phenolic compounds that contain natural antioxidants from the fiber of the seed coating, allowing them to be bioavailable. In this sense, using malt or molasses can easily be marketed in a similar way to using whole grains or sprouted breads, both established trends among consumers.

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The predominant sweetener on the market is undoubtedly high-fructose corn syrup, which is generally cheaper to use. The FDA says that it meets all of the requirements for being considered 'natural': according to its longstanding policy, the term means that "nothing artificial (including artificial flavors) or synthetic (including all color additives regardless of source) has been included in or has been added to a food that would not normally be expected to be in the food." Because high-fructose corn syrup is made from corn, it is a natural grain product. But that hasn't changed many people's perception that it is unhealthy, and malt and molasses can capitalize on that perception.

"Malt contains protein, amino acids, vitamin C, niacin, riboflavin, iron, calcium and potassium," Kappas says. "Neither table sugar, corn syrup or high-fructose corn syrup have any of those nutrients. Malt extract contains less than 2 percent fructose. The carbohydrates maltose and maltotriose, which make up the bulk of malt extract, are made up of glucose, not fructose. This makes malt extract the healthy, non-toxic

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alternative to fructose-heavy sweeteners like high-fructose corn syrup and sucrose."

Why is glucose better than fructose? "Science has shown that fructose, like alcohol, is mostly metabolized in the liver, where it's transformed into toxins and interferes with the body's natural eating cycles," Kappas says. "Glucose, however, is metabolized by every cell in the body. It's our daily fuel and our most abundant source of energy."

And aside from being more nutritious than refined sugar or high-fructose corn syrup, malt and molasses are also practical from a manufacturing standpoint. They add bulk and binding, acting as a natural humectant, enhancing browning, fermentation, body and viscosity, and come in a broad spectrum of colors and flavors.

"From a purely product point of view, our molasses process contains multiple filtration and steam pasteurization steps, and we're able to achieve flavor and color more consistently than many who simply repackage the by-product of cane sugar," Kappas says. "Using malt in snacks and drinks is very popular outside of the US, especially in Asia, Africa and South America. Most consumers don't realize exactly how popular it is within the US food and beverage industry however. Brands like Pepperidge Farm, Hostess, Annie's, Kellogg's, Pepsi, Heinz, Bacardi, Nestle and more all use malt in their products." ■

