

**CHECK OUT OUR WEBSITE!**

MALABAR's full catalogue is available online.

[malabarsuperspice.com](http://malabarsuperspice.com)

## Upcoming Events

February 19 – 21, 2012

### American Meat Institute's Annual Meat Conference

Rosen Shingle Creek, Orlando, FL

[www.meatconference.com](http://www.meatconference.com)

March 4 – 6, 2012

### CRFA Show '12

Direct Energy Centre, Toronto, ON

Come & see us again this year at the Canadian Restaurant & Food Association Show 2012!

[www.crfa.ca](http://www.crfa.ca)

## In The News

### Changes for Maple Leaf's Prepared Meats Business

Maple Leaf has announced the construction of a new C\$395 million, 402,000 square foot prepared meats plant in Hamilton. Maple Leaf will also invest in existing plants in Winnipeg, Saskatoon and Brampton, establishing highly efficient category-focused "centres of excellence".

The Company's plants in North Battleford, Kitchener, Hamilton, Toronto, Moncton and a small facility in Winnipeg will close by the end of 2014 as production is consolidated into new or expanded facilities.

## Malabar's Holiday Hours

Dec 23rd – 8:30am – 12noon

Dec 26, 27 – Closed

Dec 28, 29 – Open regular hours

Dec 30th – 8:30am – 12noon

Jan 2nd – Closed

Open regular hours as of Jan 3rd.

# THE MEAT OF IT:

## OUR GIFT TO YOU – YOUR QUESTIONS ANSWERED

*Given the season, we're in the mood for gift giving, and one thing we're good at giving is advice! This Christmas we've dedicated our newsletter to answering your questions. Below you'll find the answers to some of the most popular and common questions that we field every day. Sit back, relax and enjoy.*

*I want a cleaner label for my smoked meat product and I want to remove the phosphate. Would this have any negative impact on my product?*

Removing phosphates from your meat process would definitely result in a number of negative effects. Phosphates in meats directly increase water-holding capacity by raising the pH. Phosphates also stabilize the texture of meat products by increasing protein solubility in combination with salt, and reduce lipid oxidation/rancidity, offsetting the occurrence of negative flavours. Phosphates have also shown the ability to reduce microbial growth.

Phosphate replacers have been developed, but they are usually a combination of other additives or ingredients blended together, which will result in an expanded product label, and will not provide all of the benefits provided by adding the one ingredient - phosphate.

*Additional Background: Phosphorus is an important nutrient in the diet, and phosphate based food additives have been deemed safe by the international regulatory community. Phosphates are used in meat products, and also pasteurized cheese products, ice cream, frozen custard, breads, rolls, buns, flour, macaroni products, fruit jellies, preserves and jams, frozen eggs, and vanilla powder.*

*continued on page 3*

# FROM THE LAB

In the spirit of answering your questions this season, we look at how to determine the quantity of various ingredients used in a brine, one of the most common questions we encounter:

## How can you determine the quantity of ingredients used in brine?

**First:** Determine the amount of brine (% pump) you are injecting into the raw meat AND the expected yield after the cook process.

**Second:** Decide which functional ingredients you want to use and what level you want in the finished product.

(Note that regulations limit the usage of some ingredients such as sodium nitrite (200 ppm and 120 ppm in bacon) and phosphates (0.5% as disodium phosphate) going into the raw product.)

**Third:** The concentration of each component of the brine is calculated using the following formula:

$$\frac{\% \text{Yield (meat plus brine weight)}}{\% \text{ Pump}} \times \% \text{ of ingredient in finished product} = \% \text{ used in brine}$$



Here's a worked example to show you how to determine the % of components used in your brine. Assume that we're looking to produce an end product with the following properties:

**% Yield** = 115% yield after cook

**% Pump** = 25% injection (pump), with

**% ingredients in the finished product:**

2.0% salt, 1% sugar AND (in the raw pumped meat) 0.42% phosphate, 0.05% erythorbate (500 ppm), 0.018% nitrite (180 ppm)

So, use the formula for each component of the brine:

**Salt:**  $\frac{115\% \times 2.0\%}{25\%} = 9.2\%$

**Sugar:**  $\frac{115\% \times 1.0\%}{25\%} = 4.6\%$

**Phosphate:**  $\frac{125\% \times 0.42\%}{25\%} = 2.1\%$

**Erythorbate:**  $\frac{125\% \times 0.05\%}{25\%} = 0.25\%$

**Nitrite:**  $\frac{125\% \times 0.018\%}{25\%} = 0.09\%$

**Total Brine Ingredients:**

$(9.2\% + 4.6\% + 2.1\% + 0.25\% + 0.09\%) = 16.24\%$

**%Water in Brine:**

$100\% - 16.24\% = 83.76\%$

\* Values calculated on the in-going level to raw-pumped meat instead of the finished product.

To determine the amount of each brine component by weight, multiply the %ages by the total weight of finished brine. So, using our example above, if you want to make 40 kg of brine, you will need:

**Water:**  $40 \text{ kg} \times 83.76\% = 33.5 \text{ kg}$

**Salt:**  $40 \text{ kg} \times 9.2\% = 3.68 \text{ kg}$

**Sugar:**  $40 \text{ kg} \times 4.6\% = 1.84 \text{ kg}$

**Phosphate:**  $40 \text{ kg} \times 2.1\% = 0.84 \text{ kg}$

**Erythorbate:**  $40 \text{ kg} \times 0.25\% = 0.10 \text{ kg}$

**Nitrite:**  $40 \text{ kg} \times 0.09\% = 0.036 \text{ kg}$

### When using SureCure:

Since we do not use pure sodium nitrite we must calculate the quantity of Sure Cure required (@ 6.25% sodium nitrite, 93.75% salt) and adjust the added salt quantity accordingly.

**Sure Cure** = the amount of nitrite needed/the amount of nitrite in the SureCure  
 = 0.036 kg (nitrite needed)  
 = 0.0625 (% of nitrite in Sure Cure)  
 = 0.576 kg

**Salt Adjustment** = (weight of salt needed) MINUS (amount of salt in the SureCure used)  
 = (weight of salt needed) - (weight of SureCure used x %salt in the SureCure)  
 = 3.68 kg - (0.576kg x 0.9375)  
 = 3.68 kg - 0.54 kg  
 = 3.14 kg salt to be added to brine

*Your Low-So Salt Replacer is made with potassium chloride – but won't this have the metallic, bitter taste?*

One strategy to reduce sodium is to replace it with potassium, as Potassium Chloride is ionically the closest salt molecule to sodium chloride, giving it the closest functionality to sodium chloride compared with any other salt combination.

One of the drawbacks to potassium chloride can be its bitter taste. However, our Low-So Salt Replacer (manufactured by Nu-Tek) has been developed using a patent pending technology that effectively removes this off-flavour. The crystal structure is modified to reduce the metallic, bitter flavour while the functionality and ionic activity remains the same. We encourage you to request a sample and take the Taste Test Challenge!



*How do Malabar Cures compare to other cures in the marketplace?*

There are different curing formulations available under a variety of brand names.

All of these ingredients are used for the purpose of curing meat products which result in a characteristic red pink colour, distinct flavour, extended shelf life and microbiological protection.

These ingredients are a combination of salt with sodium nitrite and/or sodium nitrate.

Malabar Product	Equivalent To	Salt %	Nitrite %	Nitrate%	Usage/kg meat
7603-Sure Cure	Prague Powder #1 Pink Salt Insta Cure #1	93.75	6.25		3.0 g
MALTSC-001 Total Sure Cure		99.06	0.94		20.0 g
7605-Dry & Semi Dry Cure	Prague Powder #2 Insta Cure #2 Morton's Tender Quick	89.0	4.0	5.0	3.0 g



*Is refined soybean oil an allergen?*

In the Oct 4 Health Canada Food Allergen Labelling webcast, Health Canada stated that refined soy oil is not considered an allergen because the protein fraction has been removed. Therefore, it's not necessary to include soy in a "Contains" allergen statement, however, it would have to be labelled as "soy oil" in the list of ingredients.

*Are there any allergens in Malabar spices or ingredients?*

Most pure spices do not contain allergens. However, when they do, Malabar spices, ingredients and blends are labeled, as per Health Canada regulations, to indicate the presence of any priority allergens, including peanuts, tree nuts, egg, milk ingredients, soy, sesame seed, wheat or cereals containing gluten, mustard, fish and shellfish, and added sulphites greater than 10 ppm. Our product specifications for each ingredient and blend include an allergen status table which confirms the presence of any allergenic material.

*Can sodium diacetate be used to preserve the colour of fresh meat products?*

Sodium diacetate is a preservative with antimicrobial properties which are effective against pathogens including *Listeria monocytogenes*. It is permitted at 0.25% in fresh, cooked and cured meat products.

Since sodium diacetate is added at such low levels, it has been shown to not effect or to have a very limited effect on meat colour. Its use does decrease meat pH slightly, which can decrease cook yield of ground meat patties, but with no significant effect on meat texture.

(Source: Anwar et al, 2000; Grones et al, 2000)



At Malabar, we specialize in helping our customers with technical issues. Our website also contains over 50 pages of technical information, ready & waiting for you to explore! Visit us at [www.malabarsuperspice.com](http://www.malabarsuperspice.com), or call us at 1-888-456-6252.

# Top Selling Innovative Products for 2012



Once the rush of the Christmas season is over, we know that you spend time in thinking, planning & developing new products. In this issue we feature some of our newest & most innovative products just in time as you plan for 2012.

## **HOLDBAC™ 131 (Starter Culture) # 7218**

With outstanding natural ability to inhibit specific contamination flora (*Listeria*), combined with enhanced nitrate/nitrite reduction. (Available in a 50 g pouch for 100 kg meat batch.)

## **Low-So Salt Replacer™ # 14510**

A truly functional salt made with potassium chloride modified to a smaller crystal structure for excellent salty taste, **without bitterness**. Its proven effect on water activity matches that of traditional salt. Low-So Salt Replacer™ also allows for a clean label declaration: potassium chloride.

## **BOMBAL (Antimicrobial) # 7205**

The most economical way to extend the shelf life of meat & poultry products by controlling bacterial and pathogen growth. In addition BOMBAL helps with moisture retention and yield maintenance, and enhanced taste & visual appeal. BOMBAL is an easy to use, fine powder that dissolves quickly, can be mixed at any processing stage, and will not react with any other ingredients.

## **Stabiliton (Rosemary Extract) # RA00792**

Highly functional rosemary extract protects against fat oxidation to prolong product storage and shelf life, without flavour alteration, with the added advantage of a clean label. The active ingredient has been captured by delicate processing. Stabiliton has been used in Europe for many years.

## **Cultured Celery Blend Plus # 6254**

An economical blend of sea salt, dextrose, spice and cultured celery powder, for a consumer-friendly label. Celery powder provides a natural nitrite source to ensure the desired pink colour, and cured flavour.

*For more information on any of the above, contact us at 1-888-456-6252, or email [csr@malabarsuperspice.com](mailto:csr@malabarsuperspice.com).*



## OUR PRESIDENT'S Message

The Christmas season for meat processors is a time of long hours, higher production demands and the challenge of maintaining equipment (no breakdowns please!) along with food safety programs, all while staying sane at the same time. This can be a miracle in itself!

In the midst of it all, this is also the season to remind ourselves just how fortunate we are. Our abundance of food in Canada is often taken for granted. Here in Canada, it is estimated that approximately 11% of household expenditure goes toward food, compared to countries such as Albania where it is 69%. We are fortunate.

So, in the spirit of giving back, Malabar Super Spice will be making a donation on behalf of our customers to Halton Women's Place. This organization provides shelter and crisis services to abused women and their children to brighten their Christmas too.

To all of our customers – we appreciate your business over the past year, and look forward to working with you in 2012. May peace, happiness and prosperity be yours this holiday season, and through the New Year.

*All the best, from Malabar.*

**Doris Valade**  
President  
Malabar Super Spice Co. Ltd.

*Happy Holidays*  
*from all the staff at Malabar*



*For more information on any of the subjects covered in Malabar's newsletter, or to suggest topics you'd like to see covered in future editions, please contact Sara Alexander at [marketing@malabarsuperspice.com](mailto:marketing@malabarsuperspice.com). Look for our next edition in Jan/Feb 2012.*

*Malabar Super Spice Co. Ltd., 459 Enfield Road, Burlington, Ontario L7T 2X5 [www.malabarsuperspice.com](http://www.malabarsuperspice.com)*



*Malabar is certified to provide both Kosher and Halal products, and is proud to be HACCP accredited.*



*Malabar takes your privacy very seriously, and we do everything in our power to safeguard it. We NEVER rent, sell, lend or otherwise circulate our mailing lists or other contact information to anyone outside of Malabar.*