

In the News

Canadian Pork Faces Competitive Pressures

Canada's Pork industry faces an uphill battle in terms of competitive issues, including the high cost of feed and a strong Canadian dollar, says the Canadian Pork Council, Canada Pork International and the Canadian Meat Council. Together they have submitted a 23-page report to the federal government, outlining their concerns, entitled 'Canadian Pork Value Chain: Strengthening our Competitiveness', available at www.cpc-ccp.com.

Meanwhile a new report from the George Morris Centre titled 'Canadian Pork Industry Issues and Challenges' notes the damaging impact that increased pork production costs, labour shortages and the high Canadian dollar, among other factors, are having on the pork sector. This report is available online at www.georgemorris.org.

(Source: *Meat & Poultry Magazine*, May 2007)

Upcoming Events

Worldwide Food Expo '07 – October 24-27, McCormick Place, Chicago, IL

The Worldwide Food Expo is the year's largest food & beverage processing and packaging event in the world, covering more than a million square feet of exhibits and featuring 1000 of the world's leading suppliers, with more than 25,000 attendees from 100 countries. The Worldwide Food Expo features two co-located events, the AMI International Meat, Poultry & Seafood Industry Convention & Exhibition and the Food, Dairy & Beverage Exposition. For more information, visit www.worldwidefood.com.

the meat of it: snack meats



Snack meats continue to be a growing trend, offering the consumer convenience, great taste, and a lot more variety than in times past. Snack Meats are generally considered to be shelf-stable, single serving portioned, or bulk packaged meat products such as Jerky or Pepperettes. Shelf stability is achieved through a combination of preservative ingredients, pH adjustment, and reduction of water activity.

The History of Meat Snacks

It has been known for centuries that salting, drying and smoking meats and fish is a very effective way to preserve them. Long before Europeans arrived in the Americas, pemmican and charqui (from whence the word "Jerky" is derived) were dietary staples. These dry meat products were a convenient source of sustenance for hunters, as they were constantly on the move.

Jerky

Whether Jerky is sliced from whole muscle, or extruded from ground meat, it will typically have less than 15% moisture, and have a pH of no higher than 4 - more typically around 3.5. In addition, jerky will typically be cured with Sodium Nitrate cure prior to drying, to aid shelf life enhancement and colour development. These three factors are very important to ensure a safe, shelf stable product.

Jerky has traditionally been made from lean beef (lean meat ensures ease of drying), but can be made from any meat traditionally eaten by humans. In fact, there is jerky currently produced from Alligator, Bison, Emu, Elk, Duck, Goat, Tuna, Trout, Yak and even Kangaroo! For a Jerky producer, the product possibilities are endless, particularly once you factor in the almost infinite flavour profile possibilities. Whether Traditional, Hot, Peppered or Teriyaki, to more adventurous combinations of fruit and exotic spices, it is easy to produce a unique, appealing Jerky.

FROM THE LAB

Jerky Processing

Whether Jerky is sliced from whole muscle, or made from ground and reformed meat, we recommend you consider the following steps when it comes to production.

1. Slice whole muscle frozen to - 6 to - 4 °C, such as inside or outside round when using beef, with all fat and connective tissue removed, typically 1/8 to 1/4 inch thick, or, in the case of ground meat, grind at 1 °C using a 6 - 8 mm plate, then mix seasoning and cure into the ground meat. Reform into uniform, thin, strips by freezing - 6 to - 4 °C, and slice.
2. For whole muscle jerky, marinate meat, including salt, seasoning and Sodium Nitrite Cure, at low temperature. This can be done by soaking for 4-8 hours, or vacuum tumbling (for whole muscle, only).
3. Spread on smoke screens, or hang product, and heat to a minimum of 71 °C prior to drying.
4. Smoke and Dry product, ensuring that water activity (aw) of 0.85 or less is achieved†, and that a temperature of 60 - 65 °C is maintained. This will inhibit further pathogenic growth. If the temperature is maintained at a level higher than this for an extended period of time, the meat will “cook” and entrap moisture, thus making complete drying impossible.

To ensure pathogen kill, there are two additional steps, commonly used in the U.S. and allowed in Canada as well, that are recommended:

1. Dip meat in a 5% Acetic Acid solution prior to marinating.



2. Reheat the finished, dried product in Smokehouse (0% humidity) at 135°C for ten minutes.

As with any meat product, it is very important to use safe storage, handling and preparation methods, including:

1. Always wash hands thoroughly with soap and water prior to, and after, handling meat products.
2. Always use clean equipment and utensils.
3. Defrost meat in refrigerator or cooler, not at room temperature.
4. Marinate meat in refrigerator or cooler, not at room temperature, and NEVER reuse left-over marinade.

Following the above steps should ensure a shelf life of “shelf stable”, packaged jerky of one year or more.

For more information, contact Chris, our technical specialist, at 1-888-456-6252, or via email at lab@malabarsuperspice.com.

† For more information on Dry and Semi-Dry Sausage Technology, see pages 90 – 92 of Malabar’s Definitive Catalogue.

The information provided is accurate and reliable to the best of our knowledge, but is offered solely for consideration, without warranty or guarantee.

Did You Know?

The Effects of Freezing

It is vital when formulating frozen food to adjust for the effects of freezing on flavours.

Common changes that follow freezing include:

- An increase in flavour for Pepper, Cloves, Garlic, Green Pepper, Artificial Vanilla, and some Herbs
- A decrease in flavour for Celery, Chives
- An undesirable change in flavour for Curry (which becomes ‘musty’), Onion, and Paprika
- Rancidity in the case of products containing Salt in the presence of fat.



Did You Know?

Bovine Gelatin Extends Shelf-Life

Researchers at the Ohio State University found that spraying bovine gelatin on meat extends shelf-life. Published in the July 2007 edition of the Journal of Food Science, the study was conducted by spraying a 20% bovine gelatin solution onto beef tenderloins, pork tenderloins, chicken breasts and salmon fillets.

Researches found that the gelatin acted as a barrier to water loss, reducing purge, while also reducing colour deterioration in beef & pork. The solution had no effect on the flavour of beef tenderloins, resulted in no change in lipid oxidation, and was equally effective during light and dark storage.





“Pepperoni Sticks” or Pepperettes

The same principles of curing, low water activity and pH apply to pepperoni sticks (often referred to in Canada as ‘pepperettes’), with an increased focus on pH. This low pH is necessary due to the relatively high fat level typically found in this product, and can be achieved through fermentation (from 1 day to as much as 20 days), or through the addition of acidulants such as citric acid or ascorbic acid.

Pepperoni Sticks are usually made from ground meat. The “toughness” of the finished product can best be controlled by fat content and the amount of drying. The product is stuffed into small diameter casings (mostly collagen, although sheep casings are still used), after which a number of production methods can be applied. Some pepperettes are simple smoked and dried, some smoked and cooked, some smoked, cooked and dried, all with various levels of fermentation. Your flavour and shelf life goals, along with equipment will determine your production method.

As with Jerky, it is becoming common to find not-so-common flavour profiles in pepperoni sticks! This is an indication of today’s consumer’s openness to try new flavours, coupled of course, with producers’ willingness to experiment.

Trends in future products

Sales of meat snacks in North America in 2006 exceeded \$303million (US), having been on a marked increase for over 5 years. While meat snacks have traditionally been popular with men and teens, their increase in popularity can partially be traced to the fact that more and more women are buying them – for themselves, and as nutritious snacks for their children. Three key consumer trends in meat snacks have been identified: convenience, healthy choice and meal-replacement. As a result, the brands and producers who cater to these trends will be the ones to watch as sales continue to climb.

In addition, available flavours are changing, and the range is expanding, with the newest flavours ranging from hot & spicy to smoky & chipotle, and incorporating a number of new meat options, like wild game, in addition to the more traditional beef, pork, chicken and turkey. Sales are expected to continue to climb, making the question not ‘should you try your hand at Jerky and Pepperettes’, but rather, ‘which ones will you try’?

Equipment Review

VORTRON

**Smokehouses &
Smoke Generators**

from Modern Butcher Supply:

Modern Butcher Supply is a wholly owned subsidiary of Malabar. In this issue, we feature Vortron Smoke Houses, an industry standard sold and serviced exclusively in Canada by Modern Butcher Supply.

Vortron Smoke Houses are industry leaders in both quality and ease of use, since 1969! The stainless steel construction combined with state of the art microprocessor controller technology provides the highest level of quality and control at affordable prices.

Vortron Smoke Houses feature:

- USDA accepted, modular design & stainless steel construction
- Microprocessor controller, storing up to 99 separate programs, with up to 15 stages each, as well as wet & dry-bulb heat & humidity controls
- Microprocessor controller also communicates with your computer via cable or modem for remote control or monitoring
- Welded seams, with long-lasting gaskets
- Heavy duty door and hardware
- A wide range of control options
- Pre-wired and fully tested, for easy installation

Multi-Cage Smoke Houses

Vortron Smokehouses can be engineered in multi-cage configurations to produce an energy-efficient system to fit your specific needs. These multi-cage smokehouses feature:

- Space saving options
- Customized or Side-by-Side Configuration
- Single or Double Door
- Delivers Quality and Consistent Products through Increased Productivity
- Rear Door Available as an Option for “Flow Through Design”

Smoke Generators

Vortron Smoke Generators are the right choice to complement Vortron’s line of smokehouses. Models range from the **250** to the **1500**, and vary in size to support single to multiple smokehouse use - designed and built with Vortron quality and reliability.

For more information, contact Doug toll free at 1-866-634-7151, or via email at doug@modernbutchersupply.com.



Modern Butcher Supply is a wholly owned subsidiary of Malabar Super Spice Co. Ltd.

See our From the Lab section, for recommendations on processing Jerky and on safe handling and preparation.

BLENDS of Autumn



As autumn approaches it's all about comfort food – and meat snacks are high on our list of comfort food this fall. To take advantage of the growing interest in meat snacks, try any one of Malabar's full range of Jerky Seasonings - start with something more traditional, like Malabar's traditional blend for Beef Jerky (MALBJ-001A), or broaden your range with something a little different:

BBQ Jerky	BBQBJ-001
Cajun Jerky	CAJBJ-001
Honey Garlic Jerky	MALHGJER-036
Teriyaki Jerky	MALTJP-002
Peppered Jerky	MALPBJ-040
Hot Jerky	MALRBJH-031

Lastly, here's one for the more adventurous:

Jalapeno Jerky	MALJJS-086
-----------------------	------------

Try something new this autumn! **To Order a Sample** of any of the above or if you have a new flavour you'd like to try, contact Chris at 1-888-456-6252, or email lab@malabarsuperspice.com.

You'll find 50 pages of Malabar's signature seasonings in Malabar's Definitive Catalogue, beginning on page 53. To request your copy, visit www.malabarsuperspice.com.

Check out our NEW CATALOGUE

To request a copy, call Malabar at 1-888-456-6252, or visit our website www.malabarsuperspice.com.

Make it With Malabar!



OUR PRESIDENT'S Message



We value our customers and all of their comments and requests. We particularly heard comments (and some surprise!) regarding the broad range of products and services that we provide – so we have followed up on your feedback by producing a full product catalogue that is designed to be both comprehensive and informative. So, after more than 10 months of product lists, reference ideas, graphic design and picture review, (and of course the tedious task of editing!) we are proud to release our first full-colour catalogue and reference guide (all 175 pages!) featuring over 3000 products, and over 50 pages of reference material for processors.

Malabar's Definitive Catalogue is the first of its kind in Canada – providing meat processors and sausage makers with a comprehensive selection of flavourful meat seasonings, marinades, breadings and much more! We have also included numerous reference pages including how to calculate nitrite levels, trouble shooting guide for fermented meats, and how to use marinades.



The initial feedback from our customers has been incredible. We have received many customer calls with great reviews, and with keen interest in our seasonings, casings and supplies. We are thrilled with the success of our catalogue, and want you to have a copy too. Call us to receive your copy if you haven't done so already.

Happy Reading!

Doris Valade
President
Malabar Super Spice Co. Ltd.



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.

Look for our next edition in Nov/Dec 2007.

Malabar Super Spice Co. Ltd., 459 Enfield Road, Burlington, Ontario L7T 2X5 www.malabarsuperspice.com



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.