

08/2010

Petfood Industry WATT

www.PetfoodIndustry.com

Check out the
all-new

Petfood Industry
.com

See p. 18



New product
development
for future
petfood
markets

Bringing
sustainable
ingredients
to petfood

The
possibilities
of probiotics
in petfood

Feature company

NATURE'S VARIETY MAKES PETFOOD WITH A PURPOSE

Reed Howlett of Nature's Variety, p. 20

Digital version at www.petfoodindustry-digital.com

Reveal[®] 2.0

The Next Generation of Trusted Results

Introducing Reveal 2.0

Reveal[®] lateral flow tests provide simple, quick and accurate results

Use Reveal 2.0 *Salmonella* for consistent same-day results for complex food matrices and environmental samples. New single-step enrichment protocols are available for select foods, sprout rinses, poultry rinses, raw meat and poultry, and ready-to-eat matrices.

Use Reveal 2.0 *E. coli* O157:H7 for 375 gram samples to achieve exceptional specificity to *E. coli* O157:H7 and *E. coli* O157:NM, with no reactivity to *E. coli* O157 LPS or *Citrobacter* spp. expressing similar antigens.

Use Reveal 2.0 *Listeria* with Neogen's LESS medium to produce accurate results in only 24 hours for environmental samples— and eliminate the time and effort required for multiple media.

Reveal 2.0 tests can be read visually, or with AccuScan[®] III—an easy way to objectively read, store, and analyze lateral flow test results.



800/234-5333 or 517/372-9200
foodsafety@neogen.com • www.neogen.com

ISO
certified
9001

Are you tired of doing tricks and not getting the **reward** you deserve?



At Trouw Nutrition we are prepared to give your pet that little something extra. We are **focused** on your pets health and nutritional needs. We offer innovative nutrients & premium premix to bring products to a superior level.

Trusted Premium Nutrients = Premium Foods.

Premium Foods = Premium Pets.

Premium Pets = Premium Pet Parents.

Premium Pet Parents = Premium Business.

Digital version available at www.petfoodindustry-digital.com

Features

New PetfoodIndustry.com launches | 18

August marks the debut of the all-new, most comprehensive information source for petfood professionals.

Nature's Variety makes petfood with a purpose | 20

By Debbie Phillips-Donaldson

The maker of raw and holistic diets seeks to help transform pets.

New product development for future petfood markets | 26

By Jessica Taylor

Are key drivers of new product development for petfood and pet treats changing?

Bringing sustainable ingredients to petfood | 30

By Jessica Taylor

Companies like Pulse Canada and Mars Petcare are making "green" ingredients a top priority.

The possibilities of probiotics in petfood | 34

By Sara Cutler, PhD

The benefits of "good" bacteria and their potential as supplements and antioxidants in petfood.

Columns

Something to Chew On | By Debbie Phillips-Donaldson | 6

Petfood Insights | By David Dzanis, DVM, PhD, DACVN | 38

Ingredient Issues | By Greg Aldrich, PhD | 40

Departments

Industry News | 10

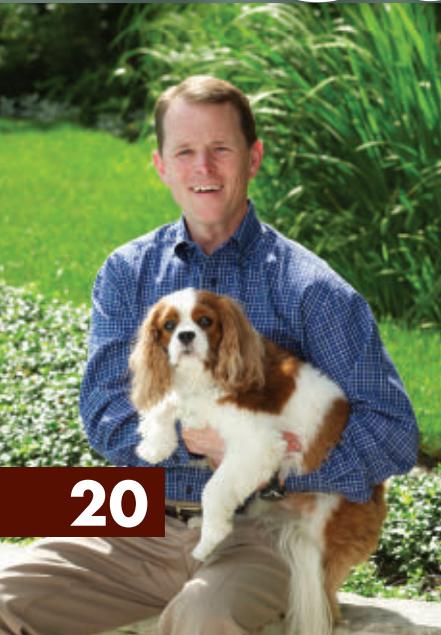
New Products | 12

Research Notes | 42

Market Place | 44

Advertisers' Index | 47

Industry Calendar | 48



20

On the cover: As CEO of Nature's Variety, Reed Howlett (shown here with Henry) has led the company in defining its purpose, which has led to new products, branding and packaging.



18



26



30



34

Protein ingredients you can

Trust

www.adf.com

They look to their owners with love and trust. And their owners look to you for healthy ingredients for petfood. Which is why, for 30 years, ADF has been the most trusted supplier of spray-dried protein products in the industry. Our focus has always been on developing and providing ingredients of uncompromising quality made right here in the USA, and backed by the industry's finest customer care team. ADF® brand protein products. Novel ingredients your customers will love, supplied by a company you can trust.



ADFTM
30
YEARS
1978 - 2008

SUPERIOR AIB RATING

For more information call: 800.456.3447 or visit us at www.adf.com
In Europe, please contact: ADF-CIMA Nutrition nv: +32.56.61.7151 • E-mail: adf@cima.be
All ADF plants are EU Certified

ADF® is a registered trademark of American Dehydrated Foods, Inc. in the United States and / or other countries.

Petfood Industry

www.PetfoodIndustry.com

The information source for
petfood professionals worldwide

Community

Petfood-Connection: Check out the Dog Talk Project

[http://www.petfood-connection.com/profiles/
blog/new-results-posted-on-the-dog](http://www.petfood-connection.com/profiles/blog/new-results-posted-on-the-dog)

Daily Tweets

www.twitter.com/petfoodindustry

Stay Connected

<http://companies.to/petfoodindustry>
www.facebook.com/PetfoodConnection

Petfood Industry TV

www.youtube.com/user/petfoodindustrytv

Online exclusives

Research: New petfood product development

Dive into John Adams' extensive information on new petfood product development, the future of global markets and new R&D technologies and strategies at www.petfoodindustry.com/NPD.aspx.

PowerPoint: Sustainable pulses

View a presentation from Pulse Canada to discover why pulses may be the best sustainable ingredient for petfoods at www.petfoodindustry.com/PulseCanada.aspx.

Article: More on probiotics for petfood

Read Dr. Sara Cutler's entire article on probiotic considerations for petfood at www.petfoodindustry.com/Probiotics.aspx.

WATT

CORPORATE HEADQUARTERS

303 N. Main St., Ste. 500
Rockford, Illinois 61101-1018 USA
Tel: +1 815 966 5400; Fax: +1 815 968 0941

VP/Publisher **Steve Akins**, sakins@wattnet.net
Tel: +1 919 387 7961; Fax: +1 815 966 0941

VP/Director of Content **Bruce Plantz**,
bplantz@wattnet.net Tel: +1 815 966 5425

EDITORIAL TEAM

Editor-in-Chief **Debbie Phillips-Donaldson**
dphillips@wattnet.net Tel: +1 815 966 5424

Associate Editor **Jessica Taylor**
jtaylor@wattnet.net Tel: +1 815 966 5413

Copy Desk Team

Managing Content Editor **Ken Jennison**

Community Manager/SEO Editor

Kathleen McLaughlin Milella

Senior Content Editor **Tara Leitner**

Associate Editor **Andrea Saladino**

Associate Editor **Kayla Kling**

Art/Production Team

Art Director **Candi Teachman**

Production Manager **Jim Riedl**

jriedl@wattnet.net Tel: +1 815 966 5426

Advertising Production

Coordinator **Connie Miller**

SALES TEAM

USA

Sales Manager

Karen Blandford-Anderson

kanderson@wattnet.net Tel: +1 815 966 5571

Inside Sales Manager **Michelle Adams**

madams@wattnet.net Tel: +1 815 966 5503

Sales Associate **Ginny Stadel**

gstadel@wattnet.net Tel: +1 815 966 5591

Europe/Asia

Tineke van Spanje

spanje@xs4all.nl Tel: +31 495 526 155

Southeast Asia

Dingding Li

dingdingli@vip.163.com

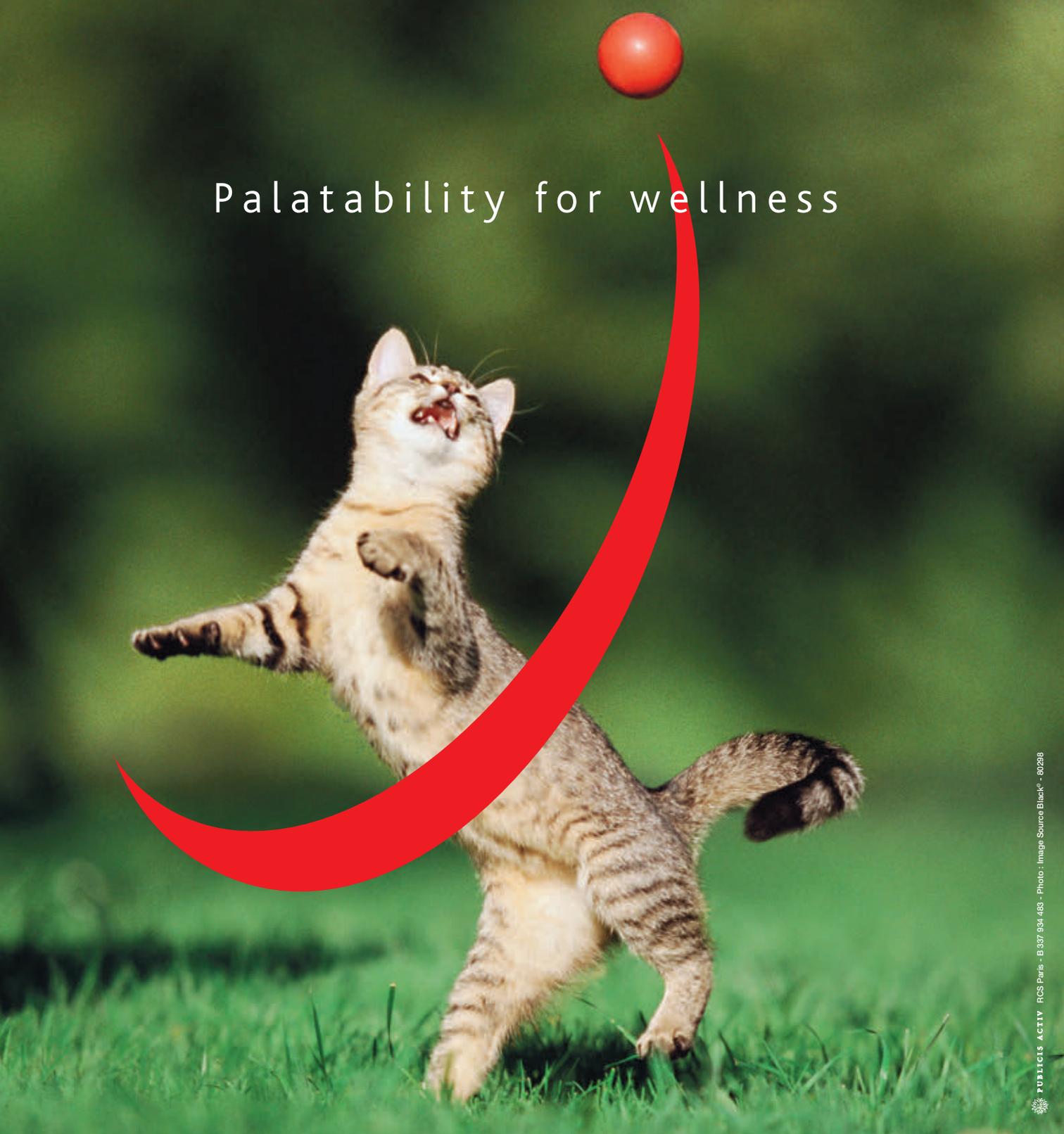
Tel: +86 21 54136853

To order reprints contact **FosterReprints**
+1 866 879 9144 www.fosterprinting.com.

SUBSCRIPTIONS: www.PetfoodIndustry.com or
contact customer service at +1.800.869.6882
or +1.763.746.2792. Business and occupation
information must accompany each subscription
order. Single copy price US\$14.00 unless
otherwise marked. **Change of address:** Give
both old and new address when reporting
change of address to PETI@KMPSGROUP.COM
or fax to +1.866.658.6156

© Copyright 2010, Watt Publishing Co.
All rights reserved



A photograph of a tabby kitten jumping on a green lawn, reaching up towards a red ball suspended in the air. A large, thick red swoosh graphic curves from the bottom left towards the top right, framing the kitten and the ball. The background is a soft-focus green field.

Palatability for wellness

SPF, worldwide leader, innovates and invents the Palatability New Generation combining its best performing palatants with exclusive solutions for the well-being of cats and dogs.

With 12 plants in the world, SPF is the only one able to offer a true local approach providing you differentiation and competitiveness.

www.spf-diana.com

The logo features a stylized grey globe with a red swoosh and a red dot, mirroring the visual theme of the advertisement.

SPF Palatability
N°1 WORLDWIDE

A Diana Ingredients company

Something to Chew On

Debbie Phillips-Donaldson

Find more

Get the latest recall notices and other news online on the all-new PetfoodIndustry.com.

Petfood needs regulatory common sense



Some government oversight is necessary, but are increased FDA inspections a case of overkill?

IT SEEMS EVERY day brings notice of a new US petfood recall due to potential *Salmonella* contamination. Most people in the industry would say this is not because petfood manufacturers are making unsafe products or failing to follow safety protocols. Rather, it's from the US Food and Drug Administration (FDA) stepping up its inspections (many unannounced) of manufacturing facilities and rules on reporting the findings from those inspections.

With the various strains of *Salmonella* being the type of organisms that are nearly always present in minute amounts, they're likely to show up during an inspection, even if nowhere near the raw materials, processing areas or finished products and even if the amount present is nowhere significant enough to cause a problem.

TODAY'S CONSUMERS DEMAND not just the highest levels of safety but also transparency and communication about it. This is especially true in petfood since the massive 2007 recalls. Though those were caused by intentional adulteration with melamine, a substance that should not be anywhere in the vicinity of petfood, the situation made pet owners, especially in the US, keenly aware of how petfood is made.

But are the increasing regulations a case of overkill? One industry member says the business models of many small companies don't account for the costs of meeting the regulations; and even larger companies that can afford the latest equipment and programs will never recoup their costs.

AT THE OTHER extreme, a recent article from the Associated Press (AP) describes how several states—including Wisconsin, Wyoming, Maine

and Tennessee—are easing licensing and inspection regulations for homemade goods sold at farmers markets, small farms and similar venues. As more US consumers become interested in buying locally grown food, the article says, these states are creating exemptions for “amateur chefs.” The exemptions are causing anxiety among food processors still required to follow inspection and licensing rules.

This got me thinking about the many times I've heard owners of small petfood companies, especially those specializing in raw products, describe how they started making food for their own pets in their kitchens, began sharing it with friends and acquaintances and then decided to make and market the foods commercially.

Many of these start-ups have gone on to become successful manufacturers that have state-of-the-art safety programs, as do most raw petfood companies (read about Nature's Variety on p. 20). But how many others are giving away or selling their homemade products without safety standards in place? If they're not subjecting their own pets to unsafe foods, should we trust that those foods, like the homemade goods now being exempted by some states, are OK?

I BELIEVE RECENT crises like the economic meltdown (fueled by speculation and investment in ultra risky home mortgages and other bogus financial products) and the ongoing oil-spill disaster in the Gulf of Mexico make the case that government oversight is necessary. But regulations should be based on science and enforced in a way that doesn't penalize companies doing the right things and making safe, healthy products that consumers want and need.

The AP author, Dinesh Ramde, hit the nail on the head with a reference to “regulatory common sense.” If only that didn't seem such an oxymoron at times. ■

Debbie Phillips-Donaldson is editor-in-chief of *Petfood Industry* magazine. E-mail her at dphillips@wattnet.net.



Superior extrusion qualities, reduced drying costs and a range of other powerful, functional benefits will work near miracles on your production processes.



Carload.

After carload.



Each shipment of Empyreal 75 is exactly like another. Same nutrient composition. Same texture. Same everything. Dependably pure, every time.



From its design to its processing, Empyreal 75 is pure on purpose.

HOW MUCH CAN ONE INGREDIENT DO? DO YOU PREFER HONESTY OR HUMILITY?

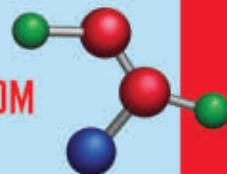
Empyreal® 75 is the high-density, high-purity corn protein concentrate that performs wonders for pet well-being and profits. This is the one ingredient that gives you remarkable flexibility and new opportunities—in how you formulate, produce and market your pet food products. Discover the difference it can make.

EMPYREAL
75
dependably pure.

**CONFIDENT YOU'RE GETTING
THE VERY BEST QUALITY?**



VISIT KEMIN.COM



**When it comes to quality, Kemin Palasurance®
promises complete palatability assurance.**

Palatability is more than whether he enjoys his food or can digest it.

It starts with controlling the freshness of raw materials and final pet food product. Over the last 42 years Kemin has mastered the science behind stability and palatability. We know fresh ingredients that are stabilized quickly are essential to consistent performance and total acceptance of your product. Let our global service team work with your suppliers to improve the quality of the fats and meals you rely on.

CONTACT A KEMIN PALATABILITY EXPERT TODAY!

North America +1 877 890 1462

Europe +32 14 25 97 80

South America +55 (49) 3312 8650



INSPIRED MOLECULAR SOLUTIONS™



Industry News

Quick hits

- Exclusively Pet Inc. announced it is now connected with social media through Facebook and Twitter.
- Bravo! LLC selected Animal Supply Co. as its Northern California, USA, and Northern Nevada, USA, distributor.
- OurPet's Co. appointed William L. Lechner as an advisory board member.
- Preform Technologies LLC announced it will move to a new facility, located at 11362 South Airfield Road, Swanton, Ohio USA 43558.
- The Riverside Co. acquired Turkish petfood manufacturer Tropikal.

Learn more

The latest news and updates are always on www.PetfoodIndustry.com

Call for papers for 2011 Petfood Forum events

Share your expertise and experience in the petfood industry by submitting an abstract for consideration as a presentation for Petfood Forum 2011 or Petfood Forum Europe 2011.

Petfood Forum 2011 is scheduled for April 11-13 and is moving to a larger, newer venue, the Renaissance Schaumburg Convention Center Hotel (near Chicago, Illinois, USA). We're looking to expand the number of sessions and need more content than ever!

Petfood Forum is also returning to Europe for the first time in four years. It will happen May 4 in Cologne, Germany, in conjunction with Victam International 2011. The theme for the one-day Petfood Forum Europe will be innovation in petfood.

Submit your abstracts to www.petfoodindustry.com/PFF2011callforpapers.aspx or www.petfoodindustry.com/PFFEuro2011callforpapers.aspx. The deadline for both events is October 1.

PetfoodForum 2011
PetfoodForum 2011
EUROPE

PFI releases new publication

Pet Food Institute (PFI) is releasing a new publication, *PFI Monitor*.

Through the publication, PFI said it hopes to reach out to all segments of the US petfood industry, particularly suppliers, to strengthen ties and reinforce the association within the industry.

The magazine includes feature articles on consumer confidence levels in the industry, the effort PFI is leading to establish international trade rules for petfood under the World Organization for Animal Health, an introduction to the veterinary staff of the APHIS National Center for Import and Export and a preview of PFI's Feed and Petfood Joint Industries Conference.



Fabric Belt Driers/Coolers

AMANDUS KAHL GmbH & Co. KG
Dieselstrasse 5-9, D-21465 Reinbek / Germany
Phone: +49 40 727 71 0, Fax: +49 40 727 71 100
info@amandus-kaahl-group.de
www.akahl.de

Boulder, Colorado, USA, leads natural petfood movement

Residents in Boulder, Colorado, USA, lead the movement in feeding natural petfood diets to dogs and cats, according to an article on Dailycamera.com.

Although the price of natural and organic petfoods can be more than traditional food, Boulder residents are willing to pay, the article says. Some pet owners attribute the higher-priced, premium-based foods to their pets' good health and lower veterinary bills.

"For people in Boulder, it's not about the money," said Marty Grosjean, owner of Only Natural Pet Store. "Boulder is on the cutting edge of everything."



Top scoring petfood brands in eco-friendliness ranking

Just three of 30 popular petfood brands received top scores in a ranking of eco-friendliness by Greenopia (www.greenopia.com).

Greenopia collected data from petfood manufacturers and independent sources about many product factors, such as ingredients, packaging, animal testing policies and green building design. The brands were rated on a green-leaf system, with companies receiving extra points for the implementation of environmental initiatives.

Top scoring brands got a four-green-leaf award and included the Karma Organics line from Natura Pet Products, The Honest Kitchen and Raw Advantage. Nearly one-third of the brands evaluated got the lowest, zero-leaf rating.

Did you know?

- Lonza is a life science company headquartered in Switzerland that manufactures a trusted source of L-Carnitine known as **Carniking™**.
- L-Carnitine helps cells maintain function and integrity.
- Carniking™ is valuable in helping to live longer, healthier lives.

Carniking™ from Lonza... a simple solution!



Carniking™ offers pure L-Carnitine and is a trademark of Lonza Ltd, Switzerland.

www.carniking.com

Contact us to learn more about Carniking™ solutions for you and your customers. Lonza Inc., Allendale, NJ USA, Tel +1 201 316 9270, carniking@lonza.com

The statements made in this advertisement have not been evaluated by the Food and Drug Administration. Lonza's Carniking™ is not intended to diagnose, treat, cure or prevent any disease. No statement is intended or should be construed as a recommendation to infringe any existing patent. The information contained herein is believed to be correct and corresponds to the latest state of scientific and technical knowledge. However, no warranty is made, either express or implied, regarding its accuracy or the results to be obtained from the use of such information and no warranty is expressed or implied concerning the use of these products. The buyer assumes all risks of use and/or handling.

New Products

Get more

To feature your new product in *Petfood Industry*, contact Tara Leitner, Tel: +1.815.966.5421, tleitner@wattnet.net.

For Consumers

Instinct Grain-Free Biscuits

Nature's Variety's Instinct line has Grain-Free Biscuits for dogs. The oven-baked treats are made with meat protein, fruits and vegetables, with no added sugar or salt, according to the company. The biscuits come in four flavors: Chicken Meal, Cranberries and Garlic; Duck Meal, Sweet Potatoes and Cinnamon; Lamb Meal, Carrots and Mint; and Rabbit Meal, Apples and Ginger.

Nature's Variety
+1.888.519.7387

www.naturesvariety.com



The treats contain omega fatty acids, are low in fat and have no animal by-products, the company says. Several treat options are available: Chewy Bites, Little Trix, Grande Bones and Mini Bones.

Sergeant's
+1.800.224.7387

www.sergeants.com



Old Mother Hubbard dog biscuits

WellPet LLC's Old Mother Hubbard line offers a variety of dog biscuits, including Extra Tasty P-Nuttier, Special Recipe Just Vegg'N and Old-Fashioned Original Flavor. All are made with whole wheat flour, oatmeal and wheat bran. Additional flavors are available.

WellPet LLC
+1.978.289.5500

www.wellnesspetfood.com



L.I.D. lamb, bison dog formulas

Dick Van Patten's Natural Balance L.I.D. Limited Ingredient Diets for dogs are available in Lamb & Brown Rice Formula and Bison & Sweet Potato varieties. The line is designed for dogs with sensitivities to common petfood ingredients. Offerings include dry and wet food and treats.

Dick Van Patten's Natural Balance Pet
Foods Inc.

+1.800.829.4493 x145

www.naturalbalanceinc.com

PurLuv dog treats

The PurLuv line of dog treats from Sergeant's features ingredients like honey, peanuts, tomatoes and carrots.

Whole Food Nutrition Program

Proportions Whole Food Nutrition Program allows dog owners to create a customized meal specifically for their dogs and have it delivered to their doors each month. The program

Premium Pet Food

PUREBRED®

What's in a name...everything!

www.PurebredCompany.com

For Consumers

is based on seven variables beyond the dog's weight, including breed, gender, age and activity level, and the company aims to develop a three-part whole meal for each dog using the appropriate balance of protein and reduced carbohydrates.

Proportions
+1.800.860.4956

www.proportions.com

Planet Dog EATS dog treats

Planet Dog offers the EATS line of dog treats. The treats are designed for tartar control and are perforated to break into smaller pieces for portion control. EATS are wheat, corn and soy-free and contain no wheat gluten, according

to the company. They come in Salmon Seafood Chowder, Pumpkin Pear Ginger and Peppermint Cranberry Crunch.

Planet Dog
+1.800.381.1516

www.planetdog.com

Tropical Fruit Mix-ins for reptiles

Zoo Med Laboratories Inc. Mango & Papaya Tropical Fruit Mix-ins are fresh canned fruits in sauce to be used with fresh pelleted diets. The mix-ins are appropriate for tropical lizards, box turtles, hermit crabs, iguanas, crested geckos and



more. They can be fed to hatchling animals daily and to adult animals three to four times per week.

Zoo Med Laboratories Inc.
+1.888.496.6633
www.zoomed.com



Rex poultry flavored sausage

Agro-Trust Ltd. Rex sausage for dogs is poultry flavored and has 12% protein content. The Rex Extra variety has added vitamins and minerals, and a chicken and liver-flavored snack variety with 13% protein content is also available.

Agro-Trust Ltd.
+36.20.497.46.71
www.agrotrust.hu

Drying Profitability.

Superior finished product with energy consumption reduced up to 20%.

Industry leading AirFlow II technology literally smashed dryer efficiency standards when introduced. This exclusive technology simply operates at the highest efficiency today. Efficiencies accomplished through the ability to independently manage air flows and temperatures within each dryer zone have taken product quality to levels that benefit customers in every corner of the world.

How we manage energy today will determine the kind of world we live in tomorrow. What started as pure innovation at Extru-Tech has grown into dryer/cooler technology that an entire industry now uses to gauge efficiency. Now that's innovation driven by Extru-Tech.



Corporate Office

P.O. Box 8 • 100 Airport Road • Sabetha, KS 66534, USA
Phone: 785-284-2153 • Fax: 785-284-3143
extru-techinc@extru-techinc.com • www.extru-techinc.com



For Consumers

Perform and Training dog food

Redpaw Inc. offers Perform 32 dog food and Training 26 dog food designed for active, athletic and working dogs.

The amount and variety of amino acids and fatty acids are tailored for optimum performance and endurance, according to the company. It also offers Perform treats.



Redpaw Inc.
+1.888.700.5681
www.redpawfeed.com

My Perfect Pet frozen dog food

My Perfect Pet dog food is made with fresh ingredients that are fully cooked to the minimum temperatures recommended by the Food and Drug Administration for safe handling, then frozen. No processed foods, dehydrated or freeze-dried ingredients are used. A variety of formulas are available, including chicken and beef, turkey and salmon, lamb and personalized blends. The company also offers dog treats.



My Perfect Pet
+1.858.486.6500
www.myperfectpet.net

For Manufacturers

Construction incorporates sealed ball bearings and self-cleaning tracks for blank transfer.

Eagle Packaging Machinery
+1.305.622.4070
www.eaglepm.com

M-Vac wet-vacuum sampling system

Microbial-Vac Systems Inc. offers its M-Vac wet-vacuum microbial sampling system for use in US Department of Agriculture-inspected facilities. The M-Vac is designed to collect a representative microbial sample from any environmental surface and bacteria off product surfaces.

Microbial-Vac Systems Inc.
+1.801.523.3962
www.m-vac.com

Poplok Tray Former

The Poplok Tray Former from Eagle Packaging Machinery is a self-locking tray erector that erects corrugated trays with no glue. Poplok is designed for any self-locking tray, including 1-tuck, 2-tuck, multi-tuck and more intricate display trays.



Ref 70 elevator bolt

Tapco Inc. offers the Ref 70 style bolt for use in heavy-duty applications. The bolt accompanies the existing styles No. 1 Norway Flat

Are you backing your claims with solid data?



Today's petfood claims require solid data. At Summit Ridge Farms, we provide the pet food industry with accurate, reliable and precise research on all types of testing protocols for cats and dogs.

- Dental Protocols (as per VOHC)
- Palatability Testing
- Digestibility/ Metabolism Testing
- Stool Quality Analysis
- Blood Level Protocols
- AAFCO Nutritional Adequacy
- Urine pH
- Weight Loss Protocols
- Customized Tests Available
- Product Safety Testing



Setting the standard for pet food testing
570.756.2656 • Fax 570.756.2826 • www.SRFarms.com

For Manufacturers



Countersunk, No. 3 Eclipse (slotted), Fanged, Pointed End Fanged and Western 3-Prong. It is employed on pulleys more than 20 inches in diameter and is strongest when coupled with an oval washer.

Tapco Inc.
+1.800.288.2726
www.tapcoinc.com

Sump-Gard model SGK-2700

Vanton Pump & Equipment

Corp. offers the Sump-Gard model SGK-2700. All wetted components are molded out of solid polypropylene, PVDF or CPVC. The alloy shaft, which is isolated from fluid contact by a thick-sectioned thermoplastic sleeve, transfers torque

from a 125 hp motor.

Vanton Pump & Equipment Corp.
+1.908.688.4216
www.vanton.com

Automated VOC Sample Prep System

Teledyne Tekmar's Atomx Automated VOC Sample Prep System combines an autosampler and purge and trap into a single instrument for the analysis of volatile organic compounds, with the ability to perform methanol extractions. The

system features the Extractasol clean-up step to reduce carryover or cross-contamination.

Teledyne Tekmar
+1.800.874.2004
www.tekmar.com



MORE THAN INGREDIENTS.
INGENUITY.™

Pet owners look at ingredients and expect to find something more. More benefits. More ingenuity. More results. With Omega-3 Dry you can give them exactly what they want and ease your formulation process. Omega-3 Dry is a free flowing, dry fish oil powder that delivers the proven benefits of long chain omega-3 fatty acids and simplifies formulation. These days you have to offer more. With our products, resources and expertise, we can help you become the preferred pet food.



Omega³ Dry
The Omega-3 Solution for Dry Application

www.OmegaNutrient.com

877.866.3423





Presented by
 Pet Food Institute
 National Grain and Feed Association



Feed and Pet Food Joint Industries Conference

September 22-24, 2010
 Marriott Downtown
 Magnificent Mile,
 Chicago



The Joint Industries Conference is THE pet food meeting for CEOs and other top executives, technical and regulatory staff, plant managers and other personnel.

Top speakers will help your company prepare for:

- New food safety regulations
- Supply chain traceability
- Consumer expectations on sustainability
- Impact on plant operations
- Expanding into export markets

And don't miss our trade show. PFI members make 98% of the dog and cat food in the U.S. marketplace.

The Joint Industries Conference.
 The place to meet. The place to market.

Early Bird Rates end soon
Register today at
www.JointIndustriesConference.org

For Manufacturers

bMET packaging film

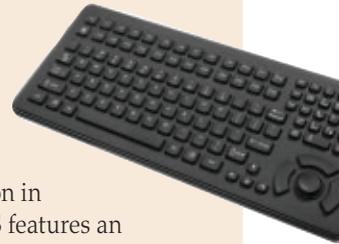
Bemis Co. Inc.'s bMET packaging film uses 20% less material and costs less than three-ply laminations, according to the company. The film delivers hermetic polyethylene seals and the barrier equivalent of metallized OPET or metallized OPP in a single film. Thicknesses range from 0.75 mil to 1.5 mil.



Bemis Co. Inc.
 +1.920.527.2300
www.bemis.com

Wireless safety keyboards

iKey Ltd. aims to combine the protection of intrinsic safety with the convenience of wireless in the DW-5K-IS and BT-87-TP-IS keyboards. The products are Factory Mutual-approved to ensure they meet requirements for operation in hazardous locations. The DW-5K-IS features an



Wenger Industry Poll

**Add your input
 to the dialogue.**

To answer the poll question, log on to
www.petfoodindustry.com



For Manufacturers

integrated HulaPoint IITM pointing device. The BT-87-TP-IS is a Bluetooth-compatible, submersible keyboard and features an integrated touchpad.

iKey Ltd.
+1.800.866.6506
www.iKey.com

Flight Bar Wrapping System

EDL Packaging Engineers' Flight Bar Wrapping System is designed for multi-shift use and maintaining control of the product while pulling film tightly around collations. The film is metered out using controlled tension and, combined with the seal being in immediate proximity to the product, creates a snug sleeve.

EDL Packaging Engineers
+1.920.336.7744
www.edlpackaging.com



ANDRITZ
Feed & Biofuel

Well proven key machinery and complete process lines



ANDRITZ FEED & BIOFUEL is a major player on the global market for supplying of plants, equipment, and services for the petfood industry.

Our solutions are tailor-made to the specific requirements, be it for know-how, engineering, process lines, single unit machines, spare and wear parts, or service. Modular design tailor made particularly to meet your needs. Each process carefully controlled and monitored to secure a safe feed of the highest possible quality - at all times...

ANDRITZ FEED & BIOFUEL
Europe, Asia and South America:
andritz-fb@andritz.com

USA and Canada:
andritz-fb.us@andritz.com

www.andritz.com

Dairyloc® 80 • Nutri-Gold® • Brewtech®

PROFICIENT

EVALUATION

<input checked="" type="checkbox"/>	Outstanding
<input type="checkbox"/>	Very Good
<input type="checkbox"/>	Satisfactory
<input type="checkbox"/>	Marginal
<input type="checkbox"/>	Unsatisfactory



INTERNATIONAL
INGREDIENT
CORPORATION



licag@licag.com 636.343.4111 www.licag.com

Sugar Food Product • GroBiotic® Products • Dried Whey

New **Petfood**Industry.com launches

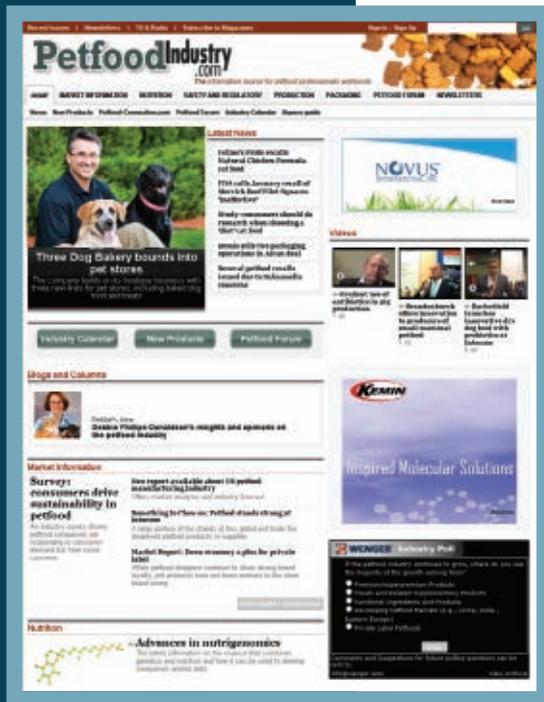
AUGUST MARKS THE debut of the all-new PetfoodIndustry.com—not just a digital companion to this magazine but also the most comprehensive information source for petfood professionals worldwide.

The website includes many new and interactive features:

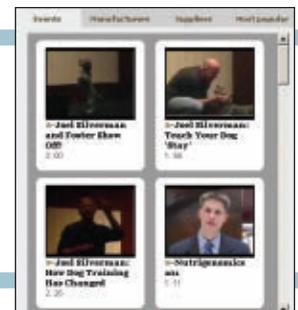
- Easy, intuitive navigation;
- An all-new search function that makes finding past articles fast and convenient;
- More web-exclusive content;
- The latest industry news;

- Categorization of articles on key topic pages: market information, nutrition, safety and regulatory, production and packaging, plus additional pages on palatability, extrusion and wet petfood processing;
- A new product search function for manufacturers to find and compare equipment, ingredients, packaging materials, testing and other services, plus new retail petfoods and treats to see what your peers (and competitors) are offering;
- The ability to comment on any article or product;

- Updated blogs by editor-in-chief Debbie Phillips-Donaldson plus guest blogs from industry professionals;
- Access to the most recent columns, plus online archives, from popular columnists Dr. Greg Aldrich (Ingredient Issues) and Dr. David Dzanis (Petfood Insights);
- Petfood TV and Radio, with more videos than before plus podcasts (coming soon);
- A direct link to and the most recent discussion forums from Petfood-Connection.com, our rapidly growing online community;



The new website features more videos than before, plus the latest news, top industry stories and popular blogs and columns.



- A list of the most popular content on the site: what your peers are reading, e-mailing, watching and commenting on;
- Easy access to the latest information on our Petfood Forum conferences;
- A calendar of other industry and related events; and
- Links to the most recent editions of our two e-newsletters, *Pet e-News* and *Nutrition News*.

Tell us what you think

After you've checked out the new PetfoodIndustry.com, please tell us what you like and what you think we should keep working on. Post a comment on the site, start a discussion on Petfood-Connection.com or E-mail dphillips@wattnet.net.

This should be spoiled rotten.



This shouldn't.

Relax — it's just that simple. You don't *need* to spend more to get consistent, effective antioxidant protection for your pet food products. Ameri-Pac provides high-quality, affordable antioxidants through our OxyGon® and OxyBlock® lines.

Our products are backed by experienced technical support and responsive, knowledgeable customer service. They are simply a better *value*.

Be finicky about your bottom line.

Call Ameri-Pac at 800-373-6156.

www.Ameri-Pac.com

© 2010 Ameri-Pac, Inc.

 **Ameri-Pac**® Inc



25 Years of Quality

Online extra!

Read more about Nature's Variety's purpose and the activities that support and derive from it. Visit www.petfoodindustry.com/NaturesVariety.aspx.

Since joining Nature's Variety in 2006, CEO Reed Howlett has used his background in the ice cream industry to work with distributors and retailers on attractively presenting and maintaining the quality of frozen products, such as the company's raw diets.

JUST THE FACTS

Headquarters: St. Louis, Missouri, USA

Officers: Reed Howlett, CEO; Aaron Grimm, CFO/VP of supply chain; Stephanie Arnold, VP of sales; Steve Carstensen, VP of operations; Ed O'Neill, senior director of technical services/quality; Laura Duclos, PhD, director of R&D

Sales: Privately owned company does not divulge sales; double-digit growth in 2010

Brands: Instinct (raw and grain-free dog and cat food, plus biscuits); Prairie (natural dog and cat food); Sweet Spots, Raw Frozen Bones and Slow Roasted Treats (all dog treats)

Distribution: Pet specialty stores and veterinary clinics in the US and Canada

Facilities: Headquarters and administrative offices in St. Louis; plant and warehouse in Lincoln, Nebraska, USA

Employees: 100+

Website: www.naturesvariety.com



Nature's Variety makes petfood with a purpose

By Debbie Phillips-Donaldson

The maker of raw and holistic diets seeks to help transform pets through its products, philosophy, education and research

A BRAND SHOULD have a purpose, a reason for being, says Erin Mulligan Nelson, VP/chief marketing officer for Dell computers, in an article for *Advertising Age*. "It should make a difference in the world in some way."

Perhaps no other company has embraced that philosophy more than Nature's Variety. "We spent a lot of time over the last 15-18 months examining our purpose: Why are we here as a company?" explains Reed Howlett, CEO since July 2008. "Obviously, we need to grow, we need to provide a return to our shareholders, but that's not the main purpose why people are here and why they come

to work every day excited about what they do. It's because they work in an industry they're passionate about, and we felt it was important to articulate what it is about our company that unlocks that passion."

What is that key? Nature's Variety's purpose is to empower people to transform the lives of pets. And the many initiatives the company has undertaken over the past 12-plus months have happened with an "eye toward bringing that to life," Howlett says.

THAT INCLUDES EXTENSIVE consumer research that has driven changes such as new products, new packaging and

positioning for its brands, new safety processes and scientific research on raw petfood, the category Nature's Variety is best known for. Its products in that segment include frozen and freeze-dried raw as well as Raw Frozen Bones.

While the company is focused on continuing double-digit growth rates for all its products—which also include Instinct grain- and gluten-free dry and wet foods and biscuits, natural dry and wet foods under the Prairie brand, SweetSpots frozen treats and Slow Roasted Treats—Howlett believes much of the growth will be driven by the raw category.

"There's no place we feel more passionate about pursuing growth than through raw, because it delivers every day in such meaningful ways," Howlett says. "The testimonials we receive, the recommendations that consumers make to one another, what we see on social media like Facebook—it's really compelling. As the leader in that category, I think we've got unique responsibilities to grow it."

TO THAT END, Nature's Variety partners with the University of Nebraska's Food Sciences Department near the company's plant in Lincoln, Nebraska, USA. The university has also helped with the company's quality assurance program, base research on safety technology and nutritional training for field sales and demonstration staff, who educate retailers and consumers about raw and Nature's Variety products.

At Global Pet Expo in March, Nature's Variety presented a recent study by Kelly Swanson, PhD, and his team at the University of Illinois Department of Animal Sciences on the palatability, digestibility and safety of raw dog food. "As we relaunched our raw business under the Instinct brand

name, we wanted to be able to talk from more of a fact-based standpoint about why raw delivers nutritionally on the promises we make," Howlett says.

Another factor that sets Nature's Variety apart from its competition is its rotational philosophy: "We believe feeding a variety of foods overall supports an animal's health and rotating different types of proteins and forms is very beneficial to the pet," Howlett explains. "We recognize not all consumers can feed raw all the time. So our philosophy is it's OK to mix dry with raw, and we formulate our foods in a way that encourages



Nature's Variety carries on an active dialogue with its 3,400-plus Facebook fans.

consumers to do that.

"When we think about how our brands are positioned for growth and we look toward our purpose," he adds, "yes, raw is definitely the tip of the spear, but this overall rotational philosophy is a very important part of the message we're sending to retailers and consumers."

HOWLETT BELIEVES EDUCATION

is crucial. "Our greatest challenge is educating consumers and pet nutrition experts, including vets, on the benefits and safety of feeding a raw diet. I think that's the key to unlocking the growth,

Social media: powerful stuff

While most manufacturers in the natural and holistic petfood category don't have the financial means to launch large advertising campaigns, today they have digital and social media, says Reed Howlett, CEO of Nature's Variety. "It's a powerful enabler to help this industry grow even more rapidly, because there are so many low-cost ways for us to get the message out now."

Nature's Variety has nearly 3,500 fans on Facebook (www.facebook.com/NaturesVariety) and almost 1,000 followers on Twitter (<http://twitter.com/NaturesVariety>), which it uses to

promote retail events involving its products. "On Facebook our fan base continues to grow very rapidly because I think the quality of what we're seeing there, not just the content we provide but the content our consumers provide, is very high," Howlett says. "People are coming back and suggesting that

other people go there."

A member of Nature's Variety's staff is responsible for these social media activities. "It's so important to have the right voice, the right tone, in responding to questions you get online," Howlett explains. Nature's Variety also participates on a few blogs and has just upgraded its website, which receives over half a million visitors a year, he says.

"The number of consumers we're touching and we're accessible to through digital and social media is very exciting, because it's a way to build on our message and quickly further our purpose as a company," he says. "If we're doing that and maybe five other companies in natural and holistic foods are building category awareness, when you put that together it's very powerful stuff."

NATURE'S VARIETY

having consumers view the product as safe and convenient."

Earlier this year Nature's Variety issued a voluntary recall of some of its raw frozen diets because of potential *Salmonella* contamination. As a result, the company expanded its use of high pressure pasteurization (HPP), a process that kills pathogenic bacteria, which it had begun applying to its freeze-dried raw products in November 2009. "When we had this issue come up, we were fully prepared to put HPP in place for all our raw products; we had done all the research about its effect on palatability



Nature's Variety promotes a rotational philosophy, giving consumers choices and the ability to rotate their pets' diets across formats—including raw—and protein sources.



and nutritional value, and we became very comfortable with HPP in both regards," Howlett says.

After undergoing HPP, all the raw diets are held while they're tested to ensure no pathogens remain. Nature's Variety also uses HACCP and other

GMPs, Howlett says.

"As I think about the development of the industry, at least our part of it, I absolutely see nutritional education as the biggest opportunity to catalyze even more rapid growth in independent pet specialty," Howlett says. "Pet parents who have become educated and seen a transformation from feeding a higher-quality food are so excited.

There are so many products that don't deliver on their promise that when you see foods like ours and others that do, that's something consumers just stand up and take notice of." ■

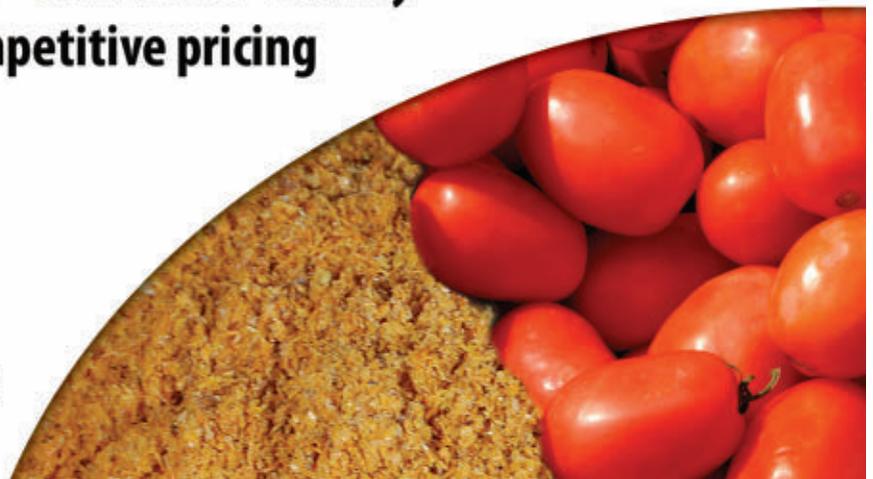
Tomato Pomace Dried Right!

The new **Pet Grade** is not **Feed Grade** anymore.

- Dedicated drying process • Low plate counts
- U.S. grown & processed • GMP/HACCP facility
- Guaranteed C of A • Competitive pricing



www.marshallingredients.com
1.800.796.9353



VIRTUAL PETFOOD FORUM INNOVATION

**LIVE, ONLINE,
FREE-TO-ATTEND PRESENTATIONS**
for Petfood Manufacturing Professionals.
Visit www.WATTevents.com to register and learn more.
Save the Date: October 21, 2010

Petfood Industry announces their second online, interactive forum focused on innovations in the petfood manufacturing industry.

WHAT IS AN "ONLINE FORUM"?

- A one-day educational event put together by the *Petfood Industry* editorial team for global petfood manufacturing professionals held in a "virtual environment" on the Internet. Attendees can enter and leave the event as their schedule allows.

WHO SHOULD ATTEND?

- Petfood manufacturers, petfood packaging professionals, petfood nutritionists and ingredient professionals, technical consultants, manufacturers of petfood health products and petfood marketing professionals.

WHY ATTEND?

- Live, educational presentations on the latest issues impacting petfood nutrition and health, packaging, marketing and manufacturing and processing.
- Live question and answer sessions with top industry experts.
- Networking opportunities with your peers from around the world.
- Ability to visit "virtual booths" and communicate with petfood industry solution providers.
- FREE to attend and you can log-in from the comfort of your office or home.
- It's fun and you have a chance to win prizes!

Can't make Virtual Petfood Forum: Innovation the day of the live event? Not a problem. Register now and you can visit the archived Virtual Petfood Forum for ninety days after the live event.

Learn more by taking the "virtual tour" on www.WATTevents.com.

**"THE ULTIMATE ONLINE EXPERIENCE PLATFORM FOR THE
GLOBAL PETFOOD COMMUNITY TO INTERACT"**

Greg Watt, President/COO, WATT

PRESENTATIONS AND SPEAKERS...

INNOVATION IN NUTRITION & INGREDIENTS

by: Serge Boutet, agronomist and manager of petfoods and nutrition for Mondou Ltd.

INNOVATION IN MARKETING: EXPLORING SOCIAL AND ONLINE MEDIA

by: Julie Lenzer Kirk, CEO and chief muse of Path Forward International.

INNOVATION IN PETFOOD PROCESSING

by: Mian Riaz, PhD, director of the Food Protein R&D Center at Texas A&M University.

INNOVATION IN PETFOOD PACKAGING

by: Scott Whiteside, PhD, associate professor of the Department of Packaging Science and associate director of the Center for Flexible Packaging, both at Clemson University in South Carolina, USA.

Virtual Petfood Forum: Innovation will also include a session on innovation in petfood safety. More information will be available soon.

SPONSORS...



Powered by: **PETFOOD INDUSTRY IN PRINT • ONLINE • EVENTS**
Petfood Industry, Petfood Forum, PetfoodIndustry.com,
Petfood Industry eNews, Petfood Nutrition eNews, e-Marketing,
Petfood Industry TV, Podcasts, Webinars, Research, Data Base Management

Petfood Industry | **WATT**

303 N. Main St. | Rockford, IL 61101 USA
Tel: +1.815.966.5400 | www.WATTevents.com



north america 800.218.5607
northamerica@afbinternational.com

asia/pacific 61.398.799093
khal@afbinternational.com

PROBIOTICS AS PROMISED.

To be truly functional, probiotics must survive manufacturing, shelf life, and the digestive system. AFB's BioFlavor® with GanedenBC³⁰ is designed to do just that.

SURVIVABILITY AND EASE OF APPLICATION.

BioFlavor® with GanedenBC³⁰ is incorporated *prior* to extrusion, using the same processes you would with any other functional ingredients. There is no new expensive equipment to install, no special procedures to put in place.

BioFlavor® with GanedenBC³⁰ brings you everything you are looking for in a probiotic: palatability, survivability and ease of use.

Learn more about the next generation in probiotics and how they can increase your market share. Contact your AFB Account Executive or call 800 218 5607.





New product development for future petfood markets

By Jessica Taylor

© shutter - BigStockPhoto.com

While trends like sustainability, “eco-friendly” labeling and humanization will continue to drive growth in the US and Europe, there are still areas of the globe that remain virtually untapped.

Are key drivers of new product development for petfood and pet treats changing?

INNOVATION HAS BECOME a key business process and is seen as essential for business growth and development.

“The aim of the innovation/new product development process is to start with a collection of many ad-hoc ideas and finish with a selection of a few defined ideas to present to the marketplace,” explained John Adams of Adams Developments in his Petfood Forum 2009 presentation on new product development.

PetSmart worked with Edison Nation in 2009 to invite new pet product ideas from pet owners and other consumers. Del Monte developed the product in its Snauges line, Breakfast Bites, using input from a social network of dog owners it formed. “This is focus group R&D in the digital

age and Web 2.0 era. Besides providing relatively inexpensive ways to get ideas and feedback from target customers, these new strategies and programs offer speed to market,” said *Petfood Industry* editor-in-chief Debbie Phillips-Donaldson in a Petfood-Connection.com discussion. “Are these just isolated experiments with social media and other new platforms? Just fads? Or are they the wave of the future?”

NEW PRODUCT DEVELOPMENT of pet products can be mapped out in the following steps:

1. Concept idea generation
2. Definition of concept/principle
3. Development, prototype and testing
4. Implementation marketing and launch

In the initial stage of developing a product concept, a large number of ideas are considered against near and future

Dig deeper online!

To read John Adams’ extensive information on new petfood product development, the future of global markets and new R&D technologies and strategies, check out www.petfoodindustry.com/NPD.aspx.

strategic market needs to decide which are worth exploring. The most fruitful ideas are often sourced from interacting with customers and encouraging involvement from employees, research has found. Idea generation requires an open listening culture, with good feedback—an example of why social networking has become so crucial, allowing in-house research to be replaced by a public forum.

PROJECTS SELECTED TO go into development are decided on the basis of business need, potential market acceptability, risk/reward criteria and the availability of the required resources (people, facilities and money). Progress to market depends on satisfactory feedback on the prototype, an assessment of the competitive response and deliver-



New products entering both the human food and petfood markets are focusing on messages of natural, organic and environmentally friendly in both their ingredients and their labeling.

able strategies on sourcing, marketing and pricing/margins.

THE BEGINNING OF 2008 saw owners and shareholders of companies expecting a further year of market and company growth. New products entering both the human food and petfood markets were focusing on messages of natural, organic and environmentally friendly. Governments were encouraging companies to develop future new products and technologies that encompassed the philosophy of sustainability of mate-

rials and practices that reduced operations and promoted global warming.

BUT BY THE end of 2008, many pet-based businesses were changing their immediate strategies from one

of targeting growth to one of how to operate in a recession. "In times of low or no business growth, opportunity comes by seeking new things that will work, based on new needs," says Adams. "In a recession there

The Sustainable DHA Omega-3



Every Family Member Deserves a Healthy Start.

Research has proven DHA is an important nutrient for humans - now, a growing body of evidence is pointing to many of the same benefits for pets! **DHAgold®** goes directly to the source and gets DHA from the same place fish get it - algae. Grown in fermentation tanks, **DHAgold®** provides a sustainable algal source of DHA that is naturally free of ocean-borne contaminants.

- Fish-free algal source of DHA
- Guaranteed minimum of 17% DHA
- Ethoxyquin-free



Visit www.DHAgold.com for more information!

MARTEK
life enriched.™

For a free sample call 1-800-662-6339
or email animalnutrition@martek.com

©2010 Martek Biosciences Corporation. DHA Gold® is a registered trademark of Martek Biosciences Corporation.

will always be opportunities because people will still buy and sell, it is just that they may buy with different requirements." As the past couple years have proven, pet parents still need their petfood but also need to see

the products on the shelves differently.

SUSTAINABLE INNOVATION IN petfood—which remained a market driver throughout the recession—is not just about new concepts. It is about

commercialization of technologies, products and services, plus entrepreneurship. It can also be about the adoption of new processes and systems at societal level. "Green" innovation is the creation of novel and competitively priced goods, processes, systems, services and procedures designed to satisfy pet parents' needs and provide a better quality of life for not only their pets, but the environment as well. "Finding solutions to environmental problems through eco-innovation has been, and is likely to remain, the primary focus for sustainable innovation while aiming to achieve social benefits," says Adams.



To satisfy today's consumer demand for more Earth-friendly ingredients, Arista offers a wide range of high quality natural and organic oils from renewable sources.



1-800-ALL-OILS

MARINE, VEGETABLE AND SPECIALTY OILS AND BUTTERS

ARISTA INDUSTRIES, INC.

203-761-1009 • FAX 203-761-4980

www.aristaindustries.com • info@aristaindustries.com

Join the discussion!

Interact with R&D peers and start-up petfood companies by joining Petfood-Connection.com's Product Development group at www.petfood-connection.com/group/productdevelopment.

WHILE TRENDS LIKE sustainability, "eco-friendly" labeling and humanization will continue to drive growth in US and Europe, there are still areas of the globe that remain virtually untapped. It is projected there will be a global population of 8.04 billion for the year 2025 and 9.37 billion for 2050.

The population of the developed countries as a group will have increased by less than 350 million between 1950 and 2050. The developing countries will have an estimated 6.8 billion people more—almost quintupling their 1950 population. Focusing efforts on bringing new products to these developing markets may be the key to growing an already successful petfood brand or strengthening an already impressive market share. ■

Centre**Focus**llc



CentreFocus, LLC is a leading advisory organization with expertise in the pet food industry.

The main challenge of any organization is the clarity of their mission — Where are we going? What is our role? Why are we doing this? — These are all questions that CentreFocus, LLC can assist in answering.

We work with top management to assess their current requirements and make recommendations that will generate a substantial and lasting financial impact.

The pet food industry has had many new requirements pushed upon it with more to come. The recent recall has brought great attention to this sector and the regulations continue to tighten. Plus, with the idea of a pet as part of the family becoming more prevalent, the pet food industry is set for an exciting future with many new ideas coming to market.

If your needs are with production, marketing, logistics, nutrition, labeling or any other segment, our team of experts will use their unique comprehensive background to provide direction with great transparency throughout the process.

If you are dissatisfied with any portion of your current business model, **contact CentreFocus, LLC today** so that we may assist in getting you back on track towards success.

Pet Food

- Label Registration
- Marketing
- Branding
- Nutrition
- Logistics
- Market Intelligence
- Qualitative Auditing
- Value Message Creation
- Leverage of Product Features and Benefits

Tel. +1.815.966.5580 • Fax. +1.815.966.6416 • www.CentreFocusLLC.com
303 North Main Street, Suite 500 • Rockford, Illinois 61101-1018 USA

Online extra!

View a PowerPoint presentation from Pulse Canada to discover why pulses may be the best sustainable ingredient for petfoods. Visit www.petfoodindustry.com/PulseCanada.aspx.

As people and pet populations grow, it's increasingly important to minimize the need to change the planet's wildlife habitat and other fragile lands to use for petfood production.

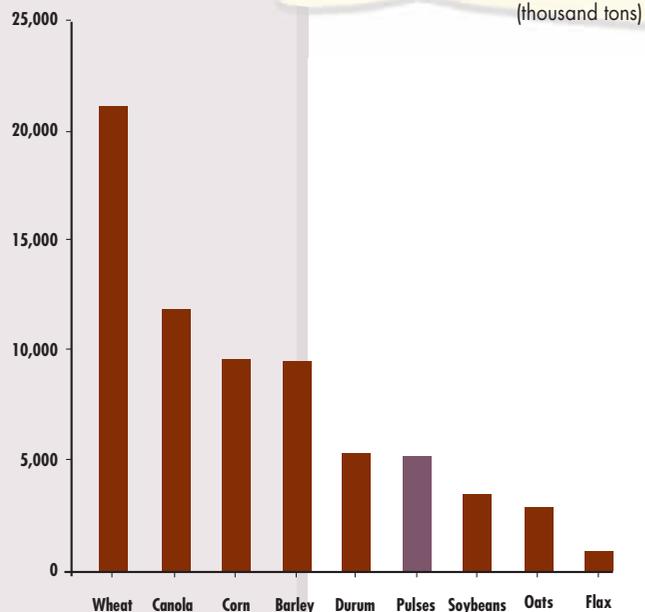
Bringing sustainable ingredients to petfood

By Jessica Taylor

Companies like The Honest Kitchen, Pulse Canada and Mars Petcare are making "green" ingredients a top priority

2009-10 crop production in Canada

Vegetable sources like pulses are one way to meet increasing protein needs while minimizing the environmental footprint, says Pulse Canada.



FOR THE ENVIRONMENTALLY conscious consumers who have done it all, from greening their homes to decarbonizing their travel, there's a new frontier: greening their pets. In June, *Petfood Industry* conducted a survey of our petfood professional readers and asked them about their thoughts on sustainability and the pet market. A majority of respondents (62%) thought consumer demand is the driver for adopting sustainable and "green" practices, while 58% believe their organizations are following such practices because it's the right thing to do. A whopping 77% of respondents believe consumers define "green" petfoods as having natural ingredients, and the same percentage believe it's very or somewhat important for their organizations to be leaders in adopting sustainable practices.

WHAT DOES "SUSTAINABLE petfood" mean, anyway? According to the National Academies' recently released report, *Toward Sustainable Agricultural Systems in the 21st*

Do you want to provide *better* health and wellbeing to your pet?



You can achieve more with Biorigin.



Pet nutritional needs are becoming increasingly similar to human needs, and this is why offering natural ingredients makes the difference when supplying healthy foods. Biorigin has a 100% natural product line that contributes for animal health and welfare.

For further information, please contact Biorigin.

Phone. + (1) 502 719 0140 • + (55) 14 3269 9200 • + (32) 3 542 43 77
www.biorigin.net • biorigin@biorigin.net



MACROGARD®

More purified beta-glucans

Studies have shown that the use of **MacroGard®** improves animal health and performance.



Better intestinal health

It is highly efficient in agglutinating pathogens. It favors the growth of bacteria that are beneficial to animals, protecting intestinal integrity.



Higher bioavailability



More protein and B-complex vitamins



Higher digestibility and palatability

Biorigin

Art in Natural Ingredients

SUSTAINABLE INGREDIENTS

Century, sustainability has four goals:

- Satisfy food, feed and fiber needs, and contribute to biofuel needs;
- Enhance environmental quality and the resource base;
- Sustain the economic viability of agriculture; and
- Enhance the quality of life for farmers, farm workers and society as a whole.

THE PETFOOD INDUSTRY is often overlooked as a major source of fish consumption. According to a study that appeared in the *Journal of Agricultural and Environmental Ethics* in October 2008, our industry uses about 2.48 million metric tons of forage fish each year to produce wet cat food. (That excludes fishmeal used to produce dog food, dry cat food and fish food.) So



Worlée Natur-Produkte, producer and processor of raw materials for the petfood industry, prides itself on using sustainable herbs, dried fruits and vegetables.

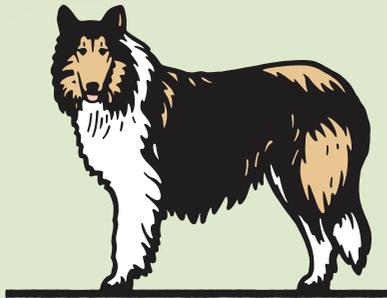
how can we balance cats' dietary needs with protecting the oceans? Several manufacturers have recently begun to answer that question.

MARS PETCARE—MAKERS OF

Whiskas and Sheba brand cat food—announced its commitment in Europe to introduce petfood certified by the Marine Stewardship Council by the end of 2010. The company is working in conjunction with the World Wildlife Fund (WWF) to develop its fish sustainability commitment, which will roll out across all its petfoods by 2020.

Mark Johnson, the UK general manager of Mars, said people were increasingly aware of the importance of sustainability. "We are now the first pet company to make a commitment to sustainable fish, and we hope that will act as a catalyst for the whole industry."

The program's goals are to use only fish from 100% sustainable wild catch and sustainable aquaculture sources, to replace all wild catch whole fish and



ONE PET FOOD NEWSLETTER CAN'T DO EVERYTHING. WELL, THAT'S THE OFFICIAL STORY.

Subscribe to Empyreal® 75 Update today. The one pet food industry e-newsletter that qualifies as a must-read. Stay current with insights, key information and original perspectives on pet well-being and business success strategies. All brought to you four times a year by the makers of Empyreal 75, the naturally pure source of protein.

Subscribe today to Empyreal® 75 Update. Go to <http://eforms.kmpsgroup.com/jointforms/Forms/Subscription.aspx?pubcode=empu&step=form>



Empyreal is a registered trademark of Cargill Corn Milling. ©2010 Cargill, Incorporated. All Rights Reserved.

fish filet with sustainable fish by-products and sustainable aquaculture and to use only sustainable alternatives to marine fish ingredients.

THE HONEST KITCHEN announced similar products with the launch of the cat treat Wishes (Made From Fishes) which consist of 100% Icelandic haddock, which is more sustainable than haddock in US waters, according to the company. The stock has risen dramatically in the past five years around that country, which means more fish, but they are “wild caught” so it’s less invasive, thus more eco-friendly, to catch them that way. The Honest Kitchen is also an approved member of Green America, which places a high priority on sustainability, “green” business and fair-trade.

AGRICULTURAL-BASED INGREDIENTS, WHICH make up the bulk of most manufactured petfoods, need to be sourced sustainably, and Pulse Canada says it’s time for our industry to give peas a chance. How are we helping the environment and pets by using products that include pulse crops?

Get more online!

To learn more about The Honest Kitchen’s Green America membership and for a full listing of its ingredients, visit www.thehonestkitchen.com/knowledge/our-ingredients.

Pulse crops, which include beans, peas, lentils and chickpeas, are among the small group of crops that draw

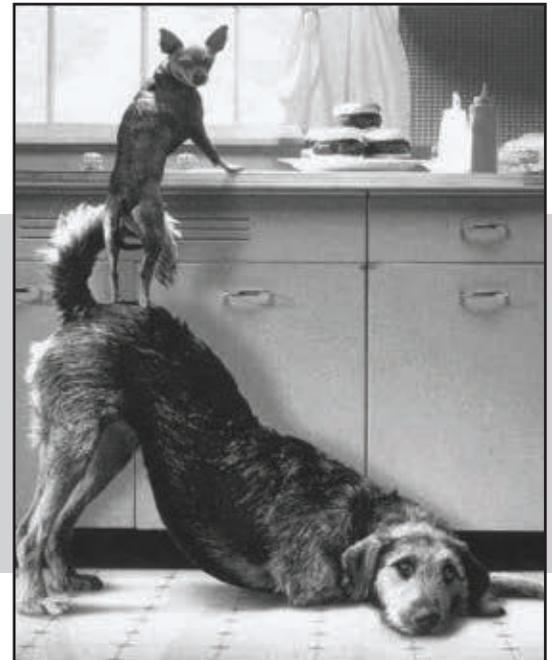
their own nitrogen fertilizer directly from the atmosphere. “When products are made using pulse crops, you are making the environmentally friendly choice because less fossil fuel is used to grow the plants and less carbon dioxide (CO₂) is emitted as a result,” explains Pulse Canada literature. “Pulse crops use less nonrenewable energy inputs, reducing overall greenhouse gases in the atmosphere.”

Vegetable protein sources like pulses are one of the few ways to accommodate increasing protein needs while minimizing people’s and pets’ environmental footprint, according to the organization. As people and pet populations grow, it’s increasingly important to minimize the need to change the planet’s wildlife habitat and other fragile lands to use for petfood production. ■

Let us help you reach your goals

We are experienced in developing proprietary ingredients to meet your specifications with assured confidentiality. Whether you’re looking for a new variety, or just want to add some spice to your existing line, call The Peterson Company.

Solutions Provided.



Get more in-depth online!

Intrigued? Read Dr. Cutler's entire article on probiotic considerations for petfood at www.petfoodindustry.com/Probiotics.aspx.



Photos by Ilndrea, Global Photographers and juggle 33 at BigStockPhoto.com

It is important to have a friendly relationship with intestinal bacteria. When searching for a probiotic to maintain that relationship for consumers with their pets, there are multiple considerations to contemplate.

The possibilities of probiotics in petfood

By Sara Cutler, PhD

A scientist from Kemin Nutrisurance explains the benefits of "good" bacteria and their potential as supplements and antioxidants in petfood

IT'S NO SECRET that bacteria have a bad rap. With constant marketing of hand gels, soaps, wipes and other personal antibacterial products, it's not surprising that most of the non-scientific public fears bacteria. However, maintenance of the proper microbes in the intestinal tract allows animals to gain nutrients from their food that they cannot absorb from their own digestion. In fact, with over

1 billion bacteria in our intestine, the bacteria outnumber our own cells 10 to 1.

Bacteria present in dogs and humans are similar, which is not surprising given our similar predispositions for eating what is available at any given time. The cat's microbiome is still being determined. The microbial community of any animal is a dynamic population.

WE ARE WHAT we eat, but are microbes also indicative of where we've been? In some ways, they are. Animals that are raised exclusively indoors have different bacteria present in their intestines than those raised with exposure to an outdoor environment (Mulder, 2009). Dogs that run outside frequently could have a different variety of bacteria present in their intestine than more sedentary indoor animals.

In the lab, the growth curve of bacteria may be easily manipulated by changing the media provided for nutrition. Simple sugars are used quickly, and when they are used up the bacteria dies. More complex prebiotic fibers may give the desired beneficial bacteria a prolonged growth curve. In the animal, this gives the commensal bacteria a survival advantage. Products that contain specific prebiotics that target the probiotic are known as synbiotics (Figure 1, p. 36).

PROBIOTICS, WHICH ARE live bacterial products, have become popular for their proposed benefits to humans. This popularity has now spread to our pets as well. There are many things to consider when deciding how to choose the bacterial species included in a supplement or petfood diet, such as:

- Will the bacteria survive food processing and through the stomach of the animal so they reach the intestine?
- Do the bacteria give a desired

benefit to the animal?

- Is the target dose of the live bacteria still known at the time of feeding?
When fed, live bacteria elicit a different immune response than when

they are dead. In a 2009 study, Van Baarlen and colleagues investigated the differences in immune response when a probiotic strain of *Lactobacillus* was fed to mice when the culture was live and harvested when actively

A "NOSE" for Quality

Peroxide Value

Free Fatty Acids

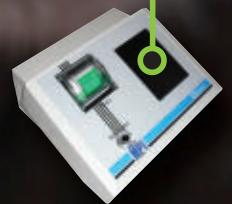
Percent Fat

Alkenals

Aldehydes

"Touch Screen Easy"

"Meet the NEW SaftestII™ high sensitivity platform for petfood and raw ingredient testing. The combination of touch screen based protocols with ready-to-use kits make your most demanding applications easy to analyze in the convenience of your own laboratory. With nanomolar sensitivity and high reproducibility, 5%CV, the SaftestII™ AOAC certified platform and kits are the most economical and environmentally-friendly solution for quick, simple and accurate determination of Peroxide Value, Free Fatty Acids, Percent Fat, Aldehydes and Alkenals in production, R&D, process control and quality assurance of your products."



PRE/PROBIOTICS

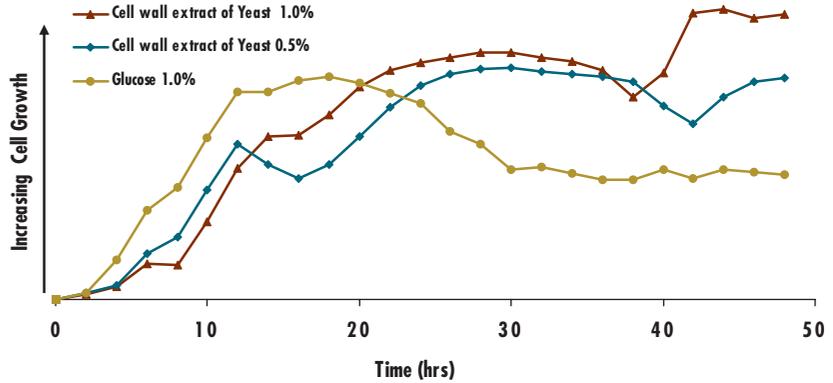
growing vs. a killed preparation of the same bacteria. They found that while the live bacteria stimulated intestinal cell proliferation, the dead bacteria stimulated the immune system of the mouse, causing an inflammatory response characterized by TNF cytokine excretion.

Similar results were found in a study conducted by Kemin Nutrisurance with the probiotic Subactil. When fed to mice at live doses from 10 million to 10 trillion bacteria/gram, the *Bacillus* organism did not elicit an inflammatory response, but a killed dose of the bacteria increased circulating levels of pro-inflammatory cytokines.

WITH ONLY ONE layer of cells between the intestine's microbial population and the rest of the body,

Figure 1. SubactilMOS Growth Rate

More complex prebiotic fibers may give desired beneficial bacteria a prolonged growth curve. In the animal, this gives the desired commensal bacteria an advantage for survival. Figure courtesy of Kemin Nutrisurance



it is important to have a friendly relationship with our intestinal bacteria. When searching for a probiotic to maintain that relationship for pets, there are many considerations to contemplate, including lifestyles and

nutritional challenges.

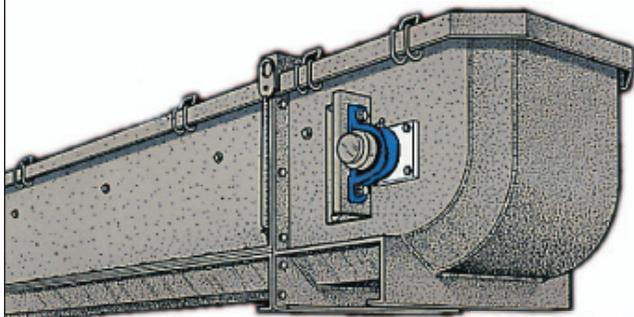
Sara Cutler, PhD, is R&D manager of the functional ingredient and supplement group for Kemin Nutrisurance, www.kemin.com.

Kleen-Drag Self-Cleaning Conveyor

Superior cleanout and disinfectant capabilities, all from

intersystems

an ISO 9001 certified company with 50 years of engineering and manufacturing experience



Check out our new website!

9575 N 109th Ave
Omaha, NE 68142 USA
Fax 402.330.3350

800.228.1483
402.330.1500
www.intersystems.net

Petfood Industry CUSTOM REPRINTS

LEAVE YOUR EDITORIAL EXPOSURE OUT THERE

REPRINTS ARE IDEAL FOR:

- New Product Announcements
- Sales Aid For Your Field Force
- PR Materials & Media Kits
- Direct Mail Enclosures
- Customer & Prospect Communications/Presentations
- Trade Shows/Promotional Events
- Conferences & Speaking Engagements
- Recruitment & Training Packages



For additional information, please contact Foster Printing Service, the official reprint provider for Petfood Industry.

F O S T E R
PRINTING SERVICE

Call 866.879.9144 or sales@fosterprinting.com



Save the Dates!

Join us next year for these learning and networking events

PetfoodForum 

April 11-13
Chicago, Illinois, USA

PetfoodWorkshop 

April 13-14
Chicago, Illinois, USA

In 2011 Petfood Forum and Petfood Workshop move to a new location: the Renaissance hotel and convention center in Schaumburg, Illinois, close to Chicago and O'Hare airport. Only five years old, this venue has plenty of space and is located in an area with more than 70 restaurants, a large shopping destination (Woodfield Mall) and plenty of other activities.

Check it out at www.renaissanceschaumburg.com.

Petfood Forum and Petfood Workshop offer the latest information and knowledge from leading petfood industry experts. Plus, you'll enjoy many opportunities to network with colleagues and visit with key suppliers.



Interested in being considered as a speaker for any of these events?

Find the call for papers at www.petfoodindustry.com/petfoodforum.aspx.

Petfood Forum returns to Europe!

PetfoodForum 
EUROPE

May 4
Cologne, Germany
(in conjunction with Victam 2011)

Petfood Forum Europe moves to beautiful and historic Cologne for a day of learning and networking. You can also visit many petfood and agrifeed exhibits as part of Victam 2011 (www.victam.com).

Watch

for Petfood Forum updates on

www.petfoodindustry.com

Petfood Insights

David A. Dzanis, DVM, PhD, DACVN

Get more

Read more of Dr. Dzanis' columns online at www.petfoodindustry.com/191.html.

Cat food's role in urinary tract health now unclear



The most recent theory is that feline idiopathic cystitis is caused by stress.

I WAS VERY pleased to be invited to speak at the American College of Veterinary Internal Medicine Forum, held in Anaheim, California, USA, in June. My topics were carbohydrate-related claims for both horse feeds and petfoods.

Attending the meeting gave me the opportunity to learn from other speakers. Particularly interesting were presentations on feline idiopathic cystitis (FIC) and how the understanding of the role of diet in its pathophysiology and treatment has changed.

I AM ESPECIALLY intrigued by how the terminology has evolved. In my early days working for a veterinarian, this condition was simply called cystitis, a very general term referring to inflammation of the urinary bladder.

While I was in veterinary school, the disorder was renamed feline urological syndrome (FUS), intended to refer (albeit vaguely) to a particular set of urinary tract signs. Later, the preferred nomenclature became feline lower urinary tract disease

resolve within a week, recurrence is common. In the most serious cases, the urethra becomes obstructed and the cat is totally unable to urinate, which if left untreated, leads to kidney failure and death. Because of these potentially serious consequences, it is of extremely high concern to cat owners, even though it affects only a small percentage of all cats.

THE TERM IDIOPATHIC means the cause is unknown. However, many potential causative factors have been implicated over the years, most often related to a dietary component (see sidebar). Some purported causes have subsequently been discounted—for example, high ash content.

Dry food is still often considered a factor, but since by one estimate up to 99% of cats receive dry food or a mixture of dry and wet, it is hard to pin the blame on that alone. US Food and Drug Administration policy for allowing “helps maintain urinary tract health” claims assumes neutral to alkaline urine pH and, to a lesser degree, high magnesium content, to be major predisposing factors.

The most recent theory is that FIC is caused by stress. In fact, the hypothesis is that it is not a urinary tract disease at all but rather a neuroendocrine disorder manifested by urinary signs. Thus, while many cat foods on the market have overt or implied claims relating to urinary tract health, the food *per se* may have little relevance.

TREATING FIC DEPENDS on the severity of signs. If the cat is obstructed, emergency medical or surgical procedures are indicated. Otherwise, most times the signs dissipate in five to seven days regardless of medical or dietary treatment. Preventing recurrence seems key to long-term health, but an effective strategy remains elusive.

If stress is the cause, relieving it may be the answer. The Indoor Cat Initiative at Ohio State University advocates multimodal environmental modification (MEMO): changing the cat's environ-

Purported causes of FIC over the years

- Dry food
- High ash content
- High magnesium content
- High urinary pH
- Low water intake
- Meal feeding vs. continuous feeding
- Stress

(FLUTD). Today, though, the vocabulary appears to have come full circle, with the predominant terminology again including the word cystitis.

FIC is typically characterized by frequent urination, straining and blood in the urine. It is diagnosed by ruling out other potential causes of similar signs (e.g., infection, bladder stones). While signs often

Dr. Dzanis is a writer and consultant on nutrition, labeling and regulation. Tel: +1.661.251.3543; E-mail: dzanis@aol.com.

ment to mitigate activation of the stress response system. This may include changes to the housing and litter box, use of toys, increased human interaction and even music!

FOOD IS A part of MEMO. Changing from dry to wet food is often advised. The increase in water intake may help, but also the mouth feel of wet food and the increased owner interaction achieved by the ritual of meal feeding are thought to positively affect the cat's neurobiology. Feeding treats may also increase human-cat interaction.

While food is important to treating/preventing FIC, the presentations I

attended didn't give any indication that specific dietary aspects such as effect on urine pH or magnesium content are important, at least not to the degree once thought. In fact, it has been found that most cats with FIC already produce urine in the acidic range (<6.5 pH). This may be because the bulk of cat foods today are formulated to produce acidic urine, whether or not the company has pursued substantiation of a claim.

If further investigation finds merit with the stress theory, the presumed role of diet and risk of FIC may be lessened to where claims for cat foods regarding urine pH or other dietary factors may be deemed to be unsubstantiated. ■

Further information

D.J. Chew and CAT Buffington, 2010. Multimodal environmental enrichment therapy of FIC. Proceedings, ACVIM Forum, Anaheim, California, www.vin.com/acvim/2010

Indoor Cat Initiative: IC Diet Management, www.vet.ohio-state.edu/2361.htm



The Extru-Technician
The digital magazine for pet food extrusion.

Subscribe now
to get the next issue delivered
directly to your in-box...**FREE.**

brought to you by  **EXTRU-TECH, INC.**

To register for your own digital issue of *The Extru-Technician*, please go to http://eforms.kmpsgroup.com/wattpub/forms/extr_subscribe.htm.
It's FREE and the next issue will be delivered right to your inbox.

ANIMAL & SPECIALTY PROTEINS

- Ostrich Meal
- Duck Meal
- Rabbit Meal
- Squid Meal
- Chicken Meal



- Spray Dried Poultry Powder
- Fish Protein Concentrate
- Salmon Hydrolysate
- Brewers Yeast

*For Quality Animal & Specialty Proteins,
Count on Scoular People*

Mike Beckius
(800) 875-8905


www.scoular.com

Ingredient Issues

Greg Aldrich, PhD

Find more

Read all of Dr. Aldrich's columns online at www.petfoodindustry.com/177.html.

Citric acid: misperceptions and misplaced blame



Internet claims have led some pet owners to doubt the safety and utility of this natural functional ingredient.

IN PETFOOD, CITRIC acid is a common additive used mostly in the fat preservative (antioxidant) system. Food and nutrition experts consider this ingredient a natural functional compound, which, at its worst, is benign to pet health and wellness. However, increasingly pervasive Internet claims have led some pet owners to doubt its safety and utility.

The least important of these issues is confusion between citric acid and ascorbic acid (also known as vitamin C), but the more insidious allegation implicates citric acid as a cause for “bloat” in dogs. This disease, also called gastric dilatation volvulus (GDV) by veterinarians, is an acute life-threatening condition. So, is there anything to these concerns?

TO THE HARD-CORE chemist, citric acid is 2-hydroxy-1,2,3-propane-tricarboxylic acid. It might sound a bit ominous, but this compound occurs naturally in nearly all plant and animal tissues. In our food supply, it is most abundant in citrus fruits like lemons and limes (5-8%).

Commercially, citric acid is produced by fermentation of crude sugars from a special strain of *Aspergillus niger* fungi. The commercial grade ingredient is a white crystalline powder produced in various locations where raw material streams, such as molasses, are abundant. In addition, depending on region and season, some citrus- and pineapple-extracted citric acid is also available.

As an ingredient, citric acid is water soluble but virtually insoluble in ether, alcohol, fats and oils. In foods and pharmaceuticals, it is used:

- To modify pH;
- As a reactant in effervescent applications;

- To synergize phenolic antioxidants;
- To chelate ionic forms of transition metals; and
- In flavor additives to promote tartness in jams, jellies and beverages.

It also has some applications in industrial acid-base reactions in such things as ink and dye color development, electroplating, biological sample preparation for analytical chemistry and medically as a component in anticoagulant solutions.

THE CONFUSION BETWEEN citric acid and ascorbic acid has most likely occurred due to their common origin—both compounds are found naturally occurring in their highest concentration in citrus fruits. While ascorbic acid, aka vitamin C, is an essential dietary component for many mammals (humans, primates, guinea pigs, but not dogs or cats) where it functions as a key component of collagen synthesis, citric acid doesn't possess this vitamin status nor is it a dietary requirement for companion animals.

But, citric acid is important to normal physiology. It lies at the very crossroads of glycolysis and the tricarboxylic acid cycle (also called TCA cycle, citric acid cycle or Krebs cycle), which converts dietary sugars into energy (ATP). In the “entry reaction” from glycolysis to the TCA cycle, citrate synthase catalyzes the reaction of acetyl-CoA and oxaloacetate to form citrate. In other words, citric acid (citrate) occupies the initial piece of the machinery in the most important biochemical cycle in the conversion of sugar to energy.

BLOAT, OR GDV, is an acute and often fatal disease that more commonly affects deep-chested large and giant breed dogs. It is characterized by gas accumulation resulting from a malposition of the stomach. There have been several published research papers on the topic, and the general conclusion has focused on the dogs' genetic

Dr. Greg Aldrich is president of Pet Food & Ingredient Technology Inc.

predisposition, exercise regime and feeding practices.

Citric acid got implicated in this because of a research summary from a clinical case-control study that has in various forms circulated the Internet. One conclusion from the study stated, "The risk of GDV significantly increased three-fold (or 200%) in dogs that consumed dry foods containing citric acid as a preservative" (Raghavan *et al.*, publication date unknown).

However, in the subsequent peer-reviewed veterinary journal article, it was concluded in part that there was a 2.4-fold greater risk of GDV associated with fat as one of the top four ingredients on the food label (Raghavan *et al.*, 2006), but the article made no mention of citric acid. Whether the authors retracted this statement following additional scrutiny or published these conclusions elsewhere is not known.



Citric acid occurs naturally in nearly all plant and animal tissues. In our food supply, it is most abundant in citrus fruits like lemons and limes.

Citric acid does have a history of involvement in gas production. For example, the reaction of citric acid and sodium bicarbonate is used to produce the effervescence in Alka Seltzer. So, it's probably not unreasonable that citric acid would be swept up in the initial round of suspects. However, given the amount of citric acid associated with fat preservation is probably on the order of less than 5 ppm in a petfood, the likelihood that it could produce enough CO₂ to be problematic is remote.

First, the stomach normally

contains a substantial amount of acid (hydrochloric acid) that could far out-gas citric acid. Second, GDV is more about a relaxing of the stomach ligature and torsion of the gastrointestinal tract, with gas accumulation as a secondary effect. Finally, citric acid and its salts are commonly used in therapeutic applications at much higher doses to inhibit urinary tract formation of calcium oxalate crystals and alkalize the urine—all without ill effects.

CURRENTLY CITRIC ACID is generally recognized as safe (the so-called GRAS status) and is widely used in human food and petfood applications without harm. There are no required warning statements or stated maximum tolerable levels for its use. Toxicity testing with dogs showed no adverse effects when fed at high dosages for extended periods

(1.38 g per kg BW for 120 days, www.inchem.org/documents/sids/sids/77929.pdf).

So, given the lack of case reports and causal data, there doesn't seem to be good reason to exclude the use of citric acid in antioxidant premixes or other food functions. It is unfortunate that it was errantly associated with bloat in large breed dogs. The hope is that a more targeted rationale for this disease condition can be found and citric acid can be restored to its place as a truly functional ingredient in the production of quality petfoods. ■

HAMMER IT OUT WITH CPM

Champion Hammermills are built on a solid foundation with the standard features you need. Features that are optional from them come standard from us. Bearing temperature monitor probes, vibration switches, trap key interlock and dynamically balanced rotors are all standard equipment. AR235 abrasion-resistant wear liners come standard, too. Raise your standards. Call 800-366-2563 or visit us on the Web to get the right machine for your job.



**ROSKAMP
CHAMPION**
Your Partner in Productivity

800-366-2563 | 319-232-8444

WWW.CPM.NET
WATERLOO, IOWA

Research Notes

Get more.

For more abstracts of petfood research, go to www.petfoodindustry.com/178.html.

Key concepts

- **Effect of rendering on animal by-products**

(*JAPAN* online June 2010. doi: 10.1111/j.1439-0396.2010.00998.x) Rendering has negative effects on protein and fat quality of meat and bone meals. Continuous monitoring is recommended to ensure the quality of each batch before use.

- **High calcium intake in growing dogs**

(*JAPAN* online June 2010. doi: 10.1111/j.1439-0396.2010.00989.x) Excess dietary calcium may be associated with systematic differences in nutrient digestibility by different breeds of dogs.

- **Determining bioavailability of lysine**

(*JAPAN* online June 2010. doi: 10.1111/j.1439-0396.2010.00988.x) For heated casein, the rat growth assay significantly underestimated bioavailable lysine as determined in kittens while the *in vitro* method closely approximated this value for the cat.

Effect of rendering on animal by-products

This work studies the effect of rendering on quality of meat and bone meals (MBM) processed in two Spanish rendering plants according to the standard procedure recommended by 96/499/EC Directive for MBM category III. Twelve samples of raw animal by-products and their corresponding meals were analyzed for chemical composition, amino acids content, FDNB-reactive lysine content, pepsin digestibility, protein dispersibility index and fatty acids content.

The results indicate rendering has negative effects on protein and fat quality of MBM. Variability between and within plants is attributed to differences in raw material, processing conditions and fat removing efficiency. Continuous monitoring is recommended to ensure the quality of each batch before use.

Source: E. Pérez-Calvo *et al.*, 2010. Effect of rendering on protein and fat quality of animal by-products. *JAPAN* online June 2010. doi: 10.1111/j.1439-0396.2010.00998.x

High calcium intake in growing dogs

The current study was part of a larger investigation (Dobenecker, 2002). The apparent digestibility of protein, fat, nitrogen-free extract (N-free extract) and organic matter as well as energy of a tripe and rice-based diet supplemented either with normal calcium or excess calcium was determined in growing dogs of two breeds, Beagles and Foxhound-Boxer-Ingelheim Labrador crossbred dogs (FBIIs).

Apparent energy digestibility was significantly impaired by excess

We know where to find

the "A" players!

15 Years Recruiting in Pet Food — 20 Years Recruiting in Food Processing
(one feeds the other)

- Successful in Recruiting and Placing most all major Disciplines
- Fast and Thorough
- Ability to Recruit Internationally
- Petfood Industry Partner



Smith & Laue Search

Consultant to Management
Bringing the best talent to the Animal Science Industry since 1990

3244 NE Glisan Street, Portland, Oregon 97232

Phone: (503) 460-9181 • Fax: (503) 235-6016 • chuck@smithlaue.com

calcium in both breeds, with the effect stronger in FBIs than in Beagles. The same was true for organic matter, N-free extract, crude protein and fat. The decrease in protein and fat digestibility was significant in FBIs but not Beagles. By contrast, the apparent digestibility of ash was lower in FBIs than in Beagles.

The results of the current study suggest excess dietary calcium may be associated with systematic differences in nutrient digestibility by different breeds of dogs.

Source: B. Dobenecker *et al.*, 2010. High calcium intake differentially inhibits nutrient and energy digestibility in two different breeds of growing dogs. *JAPAN* online June 2010. doi: 10.1111/j.1439-0396.2010.00989.x

Determining bioavailability of lysine

Growth assays were performed to determine lysine bioavailability for kittens and rats in untreated and heated casein; these values were compared with estimates obtained with an *in vitro* method. Body weight, food intake, nitrogen and dry matter digestibility and plasma lysine were determined during an

80-day growth trial with kittens. Body weight and food intake were determined during a 21-day growth trial with weanling rats.

The growth data showed bioavailable lysine to be 102.4% and 100.2% (for untreated casein) and 66.1% and 51.7% (for heated casein) for kittens and rats, respectively. There was no relationship between plasma lysine and dietary lysine concentrations for kittens, nor significant differences in nitrogen or dry matter digestibility among diets for kittens.

Heat treatment of casein resulted in significantly decreased lysine bioavailability as estimated by all methods. For untreated casein, both growth assays showed good agreement with the *in vitro* method for available lysine. For heated casein, the rat growth assay significantly underestimated bioavailable lysine as determined in kittens while the *in vitro* method closely approximated this value for the cat.

Source: J.A. Larsen *et al.*, 2010. Bioavailability of lysine for kittens in overheated casein is underestimated by the rat growth assay method. *JAPAN* online June 2010. doi: 10.1111/j.1439-0396.2010.00988.x

See what premium packaging can do for you.

Watch pet owners reach for your premium packaging first with PolyCello's 10 colour process and high quality 175 line screen print.

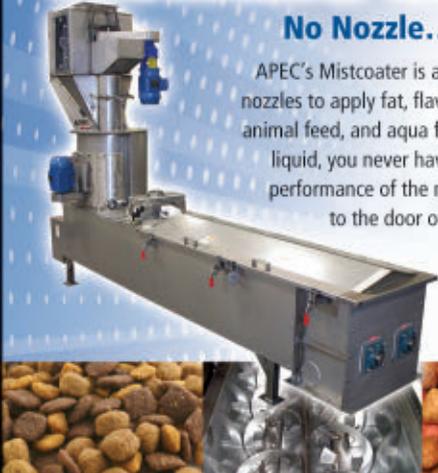
With our responsive customer service and sustainable packaging, we may just be your new best friend.



COATING CONFIDENCE

No Nozzle...No Clogging...No Problem

APEC's Mistcoater is a significant improvement over traditional spray nozzles to apply fat, flavorings, mold inhibitors or enzymes to pet food, animal feed, and aqua feed. Since it uses spinning disks to atomize the liquid, you never have to worry about clogged nozzles affecting the performance of the machine. By attaching the entire drive assembly to the door of the coating chamber our engineers developed an elegant solution to improve access to the bearings and increase bearing life.






PROCESSING THE INGREDIENTS FOR SUCCESS
Liquid Coating • Liquid Handling • Continuous Flow • Batch Process • Automation System Solutions • Material Handling • Custom Fabrication • Accessories

+1 (616) 374-1000 • www.apecusa.com



Ingredients



Hesco
Dakota ORGANIC PRODUCTS™
A DIVISION OF HESCO, INC.

Safe, quality pet food starts here.

www.Hesco-Inc.com

Your source for Organic & Conventional grains for the Pet Food Industry!

Watertown, SD 57201 • (800) 243-7264



NATIONAL RICE COMPANY

Brown Rice Organic Rice
Brewers Rice Bran
Rice Hulls Rice Protein

John Welisch
www.nationalrice.com



CERCO Cereal Byproducts Company

- BARLEY PRODUCTS
- OAT PRODUCTS
- RICE PRODUCTS
- DRIED BREWERS YEAST
- DRIED WHEY • BEET PULP

55 E. Euclid Ave., Suite 410
Mt. Prospect, Illinois 60056
PH: 847-818-1550 FAX: 847-818-1659
Web Site: www.cerealbyproducts.com



WILBUR-ELLIS

SPECIALIZING IN:

- EU LAMB MEATS, MEALS & ORGANS
- IMPORTED/DOMESTIC MARINE PROTEIN MEALS
- VENISON, BEEF & POULTRY PRODUCTS
- POTATO AND PEA PRODUCTS
- FISH AND VEGETABLE OILS
- TOMATO POMACE & ORGANICS
- JUST-IN-TIME DELIVERIES FROM INTERNATIONAL MARKETS



CONTACT US:

- 1 613 649-2031 (PH)
- DAFELSKI@WILBURELLIS.COM
- WWW.WILBUR-ELLIS.COM



EDC

Enzymes for
Flavors

Enzymes for
Processing

Enzymes for
Nutrition

Enzyme Development Corp
360 W 31st, Ste 1102
New York, NY 10001
www.EnzymeDevelopment.com
info@EnzymeDevelopment.com

FIBER SOLUTIONS

*Apple
Blueberry
Cranberry*

VEGETABLE BLEND

Unique blend of carrots, celery, beets, parsley, lettuce, watercress and spinach

LaBudde Group Inc
800-776-3610
262-375-9111
www.labudde.com
labudde@labudde.com

Product solutions from concept to completion



SK FOOD INTERNATIONAL

Let us be your **Best Value - Quality, Service, Price** - supplier for:

- Soybeans
- Grains
- Seeds
- Dry Edible Beans
- Flours/Meals
- Rice Products
- Vegetable Oils
- Vinegars
- Brans/Germs/Fibers
- Instant Powders/Flakes
- Split/Dehulled Soybeans
- Sweeteners

Including Brown & Golden Flaxseed & Flaxseed Meal

Gluten-free | Omega-3's | Whole Grains | Trans-fat free





Visit www.skfood.com for our complete product listing!
4666 Amber Valley Parkway • Fargo, ND 58104 USA
skfood@skfood.com • 701.356.4106 TEL • 701.356.4102 FAX

Premium Quality Ingredients



LANSING
TRADE GROUP, LLC

"Your partner for ingredient sourcing, processing and supply"

**WHITE POTATO
SWEET POTATO**

www.lansingtradegroup.com

Isaac Matthews
imatthews@lansingtradegroup.com
419-897-3186
www.lansingtradegroup.com

**SPRAY DRIED LIVER
PORK
POULTRY
DRIED EGG PRODUCT**

Manufactured and sold by:

VAN ELDEREN, INC.
Martin, MI
Tel: (269) 672-5123
Fax: (269) 672-9000

Jedwards International, Inc.
Leading supplier of Omega-3 Oils
Supplier of Bulk Specialty Oils to the Food, Dietary Supplement and Cosmetic Industries



tel: 617-472-9300
fax: 617-472-9359
www.bulknaturaloils.com



MeadowPure
Premium Grad™
Whole Milled Flaxseed

- Cost-effective Omega-3 source
- Enhances nutritional value
- Guaranteed stability for 2 years
- Processed in a food quality facility

Available in regular or organic varieties, whole or milled. For a sample, call Gregg Griffin at (608) 807-7816.



glanbia
NUTRITIONALS

800-336-2183 • www.glanbianutritionals.com • nutrition@glanbia.com

Ingredients



Prairie
FLAX PRODUCTS, Inc.

Portage la Prairie, MB. Canada

Specializing in sales of milled and whole flaxseed to the Petfood Industry

Contact Richard at
1 866 283 3331

Or Email:

rzacharias@prairieflax.com

PetfoodIndustry.com

**TOMATO
POMACE**

High Quality

LaBudde Group
262-375-9111

Wild Alaskan Salmon Oil

Bulk & Private Label

Life Line Pet Nutrition

1-253-905-0951

email: sales@lifelinepet.com



FROM CONCEPT TO MARKET
LASI IS YOUR CHOICE!

- Custom Blending & Milling!
- Over 500 High Quality Pet Food Ingredients!
- Bulk & Tote Bag Packaging Available!



Call Us Today 800-874-2376

Your Pet Food
**INGREDIENT
SOURCE**

Organic ingredients/blends

Dehydrated Potato/
Potato blends

Oatmeal Pellets

For Details Please Contact:

Martin Brown — 612-486-3853
mbrown@agmotion.com

Mary Jo Langenecker — 262-623-2654
mlangenecker@uscommodities-ag.com

Paul Boisclair — 559-355-1680
pboisclair@agmotion.com

1-612-486-3853 **US** Commodities
An AgMotion Company

**RICE PROTEIN CONCENTRATE
and RICE SWEETENERS**

Product from facility in Pakistan —
Non GM Conventional and / or
Certified Organic

Tel: (573) 785-5444

Email: FAYYAZSAJ@aol.com **Habib-ADM**

Services



Custom Formulation
Private Label Pet Food

*“The Race for
Quality Has No
Finish Line.”*

Ohio Pet Foods, Inc.
38251 Industrial Park Road
Lisbon, Ohio 44432
330-424-1431

Fax: 330-424-1108

800-THE-1-PET

info@ohiopetfoods.com

www.ohiopetfoods.com

Used Equipment

FOR SALE

Reconditioned Cooking
Extruders & Dryers
Single & Twin Screw Designs

▪ CLEXTRAL ▪ WENGER

▪ EXTRU-TECH ▪ AEROGlide

EXTRU-TECH, INC.

100 Airport Road

Sabetha, KS 66534

extru-techinc@extru-techinc.com



Phone: 785-284-2153

Fax: 785-284-3143

Attn: Equipment Sales Group

FRAIN GROUP **QUALITY MACHINERY USED**

NEW ARRIVALS EVERY DAY!

- 503971-American Newlong 4 Head Rotary Bag Filler 25bpm
- 505924-Fischbier Double Fold H/W Bag Sealer 60 ft / minute
- 507005-FPEC 80 cu feet 304 S/S Horizontal "U" Paste Mixer
- 5C0908-Horizon Systems S/S 3 cu ft / 60L Bag Break Station
- 5B9711-Inglett 1950 Automatic Top Load Bag Hanger 25bpm
- 6D7881-Ohlson S/S Dual Lane Bulk/Trickle Scale up to 200lb
- 5C4509-Package Machine Auto form/Fill/Seal Machine 75ppm
- 5E2550-Roberts Packaging Auto Horiz Form/Fill/seal 200ppm
- 5E0876-Spiroflow Sys Bulk Bag Super Sack Unloader 4400lb
- 5E3451-Stephen Machinery S/S Emulsifier output: 8800lb/hr

Chicago AREA **(630) 629-9900**
www.fraingroup.com

Testing

Blue Ridge Kennel

USDA registered research facility performing petfood testing since 1975.

Traditional and in-home panels available.

Contact: Paul Plessner
telephone: 334/567-8195

KENNELWOOD INC.

Quality affordable testing for palatability and nutritional adequacy since 1982.

217 356-3539

email: dowatts@aol.com

Employment



Job board website specializing in the Pet Food sector.

email: ClientCare@AnimalJobHunter.com

Equipment

**Manufacture Quality Product
with the
Best Altima Hammermill**

*Proven, Trouble Free Performance
In difficult grind applications.*

Mill Technology Company, Inc.

763-553-7416

888-799-5988

gary@mill-technology.com



HOSOKAWA BEPEX

Leading manufacturer of cooking, forming, extruding, cutting, cooling equipment for over 50 years. Let us bring our experience to your operation.

4445 Malone Road • P.O. Box 18844
Memphis, Tennessee 38118

Tel: 901-531-6100 • Fax: 901-531-6105
e-mail: Contact@hosokawa-cb.com

Fast/Friendly Service

HIGH QUALITY WEAR PARTS

For most common Extruders

- * Cast D-2 Knives
- * Wear Rings
- * Insert Dies
- * Knifeholders
- * Die Plates
- * Misc. Machined Parts

Manufactured to OEM or Customers Specifications.

Over 15 years experience supplying precision parts to the Feed & Petfood Manufacturing Industry.

New Technology Inc.

11063 Highway 59 North, Gravette, AR 72736

Telephone: 479-787-6772 Fax: 479-787-9957

1-800-684-0042

Home page: www.newtechnology.com

DIE ROLLS
800.343.7655

weidenmiller.com

MARKETPLACE
ads are also placed on
www.PetfoodIndustry.com
for maximum exposure!

To order:

Ginny Stadel

Tel: +1.815-966-5591 Fax: +1.815-968-0941

gstadel@wattnet.net

Petfood Industry CUSTOM REPRINTS

**LEAVE YOUR EDITORIAL
EXPOSURE OUT THERE**

REPRINTS ARE IDEAL FOR:

- New Product Announcements
- Sales Aid For Your Field Force
- PR Materials & Media Kits
- Direct Mail Enclosures
- Customer & Prospect Communications/Presentations
- Trade Shows/Promotional Events
- Conferences & Speaking Engagements
- Recruitment & Training Packages



For additional information, please contact Foster Printing Service, the official reprint provider for Petfood Industry.

Call 866.879.9144 or
sales@fosterprinting.com

F O S T E R

PRINTING SERVICE

**VIRTUAL
PETFOOD
FORUM
INNOVATION**

**Registration is now available—
and it's free!**

Go to www.wattnet.com

Don't miss this unique, online only event! Visit virtual booths, network via live chat with peers and learn about innovation in petfood:

- Nutrition
- Marketing (social media)
- Processing
- Packaging
- Safety

Ad Index

ADF-Amer Dehydrated Foods 3 www.adf.com	Kemin Nutrinsurance Inc 8-9 www.kemin.com
AFB International 24-25 www.afbinternational.com	Lonza Inc 11 www.lonza.com
A Kahl GmbH & Co KG 10 www.amandus-kahl-group.de	Marshall Indust Dried Goods 22 www.marshallingredients.com
Ameri-Pac Inc 19 www.ameri-pac.com	Martek Biosciences 27 www.martek.com
Andritz Feed & Biofuel A/S 17 www.andritz.com	Neogen CorpC2 www.neogen.com
APEC 43 www.apecusa.com	Omega Protein Inc 15 www.omegaproteininc.com
Arista Industries Inc 28 www.aristaindustries.com	Pet Food Institute 16 www.JointIndustriesConference.org
Bemis Flex Pkg-Milprint DivC3 www.bemis.com	Polycello 43 www.polycello.com
Biorigin 31 www.biorigin.com.br	Purebred Company Inc 12 www.purebredcompany.com
Cargill Corn Milling 32 www.empyreal75.com	SafTest, A Division of MP Biomedicals 35 www.mpbio.com/safest
Cargill Sweeteners N A 7 www.cargill.com	Smith & Lave Search 42 www.linkedin.com/in/charlesdsmith
CentreFocus llc 29 www.CentreFocusLLC.com	SPF Diana 5 www.spf-diana.com
CPM/Roskamp Champion 41 www.cpm.net	Summit Ridge Farms 14 www.srfarms.com
DSM Nutritional Prods Ltd 47 www.dsm.com	The Peterson Co 33 www.thepetersoncompany.com
Extru-Tech Inc 13, 39 www.extru-techinc.com	The Scouler Company 39 www.industrialfoodingredients.com
InterSystems 36 www.intersystems.net	Trouw Nutrition USA LLC 1 www.trouwnutrition.com
Intl Ingredient Corp 17 www.iicag.com	Wenger Manufacturing Co 16, C4 www.wenger.com

Essentially Pet

Nutrition. Commitment. Solutions.



**Don't miss
any of the
essential
information
DSM has to
offer.**

By subscribing to *Essentially Pet*, you can have the next issue delivered directly to your inbox!

Subscribe today at
http://eforms.kmpsgroup.com/wattpub/forms/essp_subscribe.htm

Unlimited. **DSM**

PETFOOD INDUSTRY (ISSN 0031-6245) is published monthly by Watt Publishing Co., 303 N. Main St., Suite 500, Rockford, Illinois 61101-1018 USA. All rights reserved. Reproduction in whole or part without written permission is strictly prohibited. PETFOOD INDUSTRY and its logos are registered trademarks of Watt Publishing Co. POSTMASTER: Send address changes to: PETFOOD INDUSTRY, 303 N. Main St., Suite 500, Rockford, Illinois 61101-1018 USA. Periodical postage paid at Rockford, IL and additional mailing offices. Canada: Canada Post International Publication Product Mail Code 1686232.

Industry Calendar

See more

Find out what industry events are approaching. Go to PetfoodIndustry.com.

	S	M	T	W	T	F	S
August	1	2	3	4	5	6	7
	8	9	10	11	12	13	14
	15	16	17	18	19	20	21
	22	23	24	25	26	27	28
	29	30	31				

- Chapman University Short Course: Better Process Control (English), August 9-12, 2010. Chapman University Campus, Orange, California, USA. To participate in this course, register at www1.chapman.edu/enhance/FoodScienceMainPage.htm or contact wiesmull@chapman.edu.

- ExpoZoo 2010, August 29-30, 2010, St. Hyacinte, Quebec, Canada. For registration and exhibition information, contact communications@pijac-canada.com or visit www.pijaccanada.com/en/tradeshows/expozoo.



Online Events

- Energy Management: A Practical Approach online seminar will be presented on August 10, 2010. To register, go to www.centrefocusllc.com/online_services/animal_agriculture.
- Mixing and Blending Fundamentals Online Lecture Series is available online until August 31, 2010, at The Powder and Bulk Online Training Center at www.powderandbulk.com/online_training.
- Virtual Petfood Forum: Innovation will be live online on October 21, 2010. To register, please visit www.wattevents.com

	S	M	T	W	T	F	S
September			1	2	3	4	5
	6	7	8	9	10	11	12
	13	14	15	15	16	17	18
	19	20	21	22	23	24	25
	26	27	28	29	30		

- AFIA Liquid Feed Symposium, September 14-16, 2010. Grand Hyatt Hotel, San Antonio, Texas, USA. To register, contact afia@afia.org or visit www.afia.org.



- SuperZoo West, September 14-16, 2010. Mandalay Bay Convention Center, Las Vegas, Nevada, USA. To register, visit www.superzoo.org or contact info@superzoo.org.



- National Pet Industry Trade Show, September 19-20, 2010. International Center, Mississauga, Ontario, Canada. To register for this event, visit www.pijaccanada.com/en/tradeshows/national.



- Feed and Pet Food Joint Industries Conference, September 22-24, 2010. Chicago Marriot

Downtown Magnificent Mile, Chicago, Illinois, USA.

To register for this conference, please visit <http://jointindustriesconference.com> or E-mail info@petfoodinstitute.org.



- Guangzhou International Pet & Aquarium Show 2010 (CIPAS), September 21-24, 2010. Guangzhou Pazhou Poly World Trade Expo, Beijing, China. For more information, please contact liuqsh@northexpo.com.cn or visit www.cipas.com.cn.

- 17th Annual Practical Short Course on Aquaculture Feed Extrusion, Nutrition and Feed Management, September 26-October 1, 2010. Texas A&M University, College Station, Texas, USA. For further information, visit www.tamu.edu/extrusion or E-mail Dr. Mian N. Riaz at mnriz@tamu.edu.

- AFIA Import & Export Seminar, September 27-28, 2010. Arlington Court Suites Hotel, Arlington, Virginia, USA. To register, contact afia@afia.org or visit www.afia.org.



com and check for updates at www.petfoodindustry.com.

- AFIA Webcasts: Controlling Salmonella in Your Facility and

Management Considerations for Salmonella/Microbial Control are available for download at www.afia.org.



**Stand. Fetch. Roll Over.
Good Package!**



Perform More Tricks at Retail with Bemis Packaging

New super-strong, super-sized polymer bags from Bemis are a brand's best friend. The smart, flat-bottom design lays down or stands tall for twice the shelf impact. Integral handles, sliders or press-to-close zippers carry their weight in convenience. And the bold, premium graphics fetch attention like never before.

Roll over sales in record numbers. Contact us today at 920-527-2300 or milprint@bemis.com.

Sign up for strategic packaging insights with BEBriefs e-newsletters at milprint.com.

U N S T O P P A B L E C U S T O M E R C O M M I T M E N T

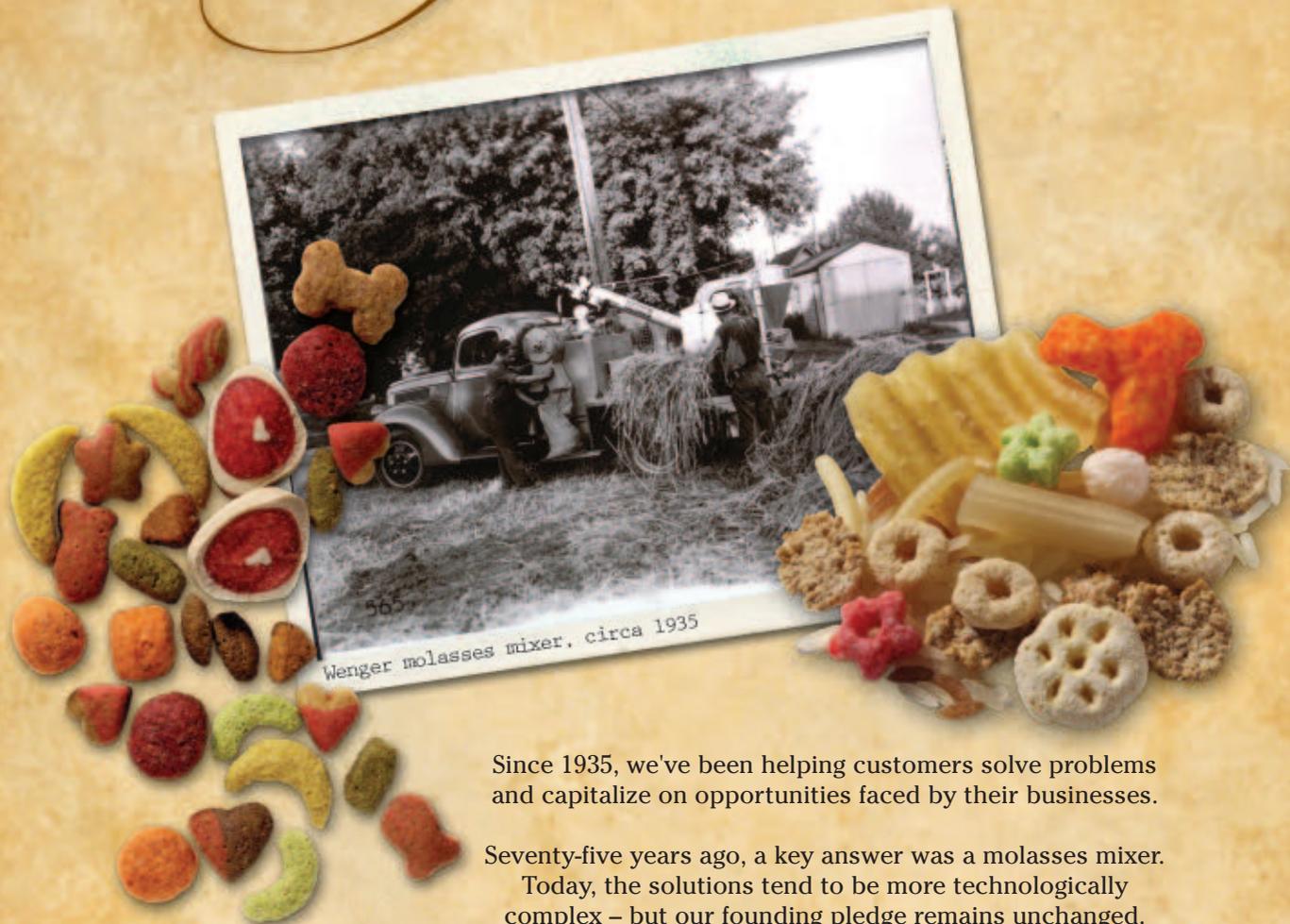
BEMIS FLEXIBLE PACKAGING—MILPRINT DIVISION • 3550 MOSER STREET • OSHKOSH, WI 54901 • WWW.MILPRINT.COM

©2010 Bemis Flexible Packaging-Milprint Division 1/10



BEMIS[®]

Assuredly...
innovation is our enduring legacy.



Since 1935, we've been helping customers solve problems and capitalize on opportunities faced by their businesses.

Seventy-five years ago, a key answer was a molasses mixer.

Today, the solutions tend to be more technologically complex – but our founding pledge remains unchanged.

At Wenger, we innovate to solve customer challenges.

And then we do it again.



Inventing the new original since 1935.

SABETHA, KANSAS USA 785-284-2133 INFO@WENGER.COM

USA

BELGIUM

TAIWAN

BRASIL

CHINA

TURKEY