CATERING TO THE CONSCIENTIOUS

Steve Marton, CEO of Halo, Purely for Pets, p. 24
No passport required.

Woven Poly Bags Made in the U.S.A.

Accept no imitations. Avoid the hassle of service and quality problems of imported bags. Call us today and you won’t have to call us later.

- Short lead times
- Dependable service
- Award-winning, quality product
- 10-color water-based flexographic printing
- FDA-approved / AIB certified
- Seamless or seamed
- EZ open closures
- Slider zipper closures

Coating Excellence International
CEI – America’s Sustainable Printer™

Visit us at
Petfood Forum USA
April 12-14, 2010

Contact us at wovenbags@coating-excellence.com or call 866-WVN-BAGS (866-986-2247)
super-tube.com | coating-excellence.com | Wrightstown, Wisconsin
Bring out the **Premium** in your pet!

They learn young!

Don’t wait to focus on your pet’s health and nutritional needs until it is too late. Growth is an important aspect in your pet’s life and it should start early.

At Trouw Nutrition we **focus** on premium products to develop your pet into the Madonna they aspire to be.

**Trusted Premium Nutrients = Premium Foods.**

**Premium Foods = Premium Pets.**

**Premium Pets = Premium Pet Parents.**

**Premium Pet Parents = Premium Business.**

115 Executive Drive, Highland, IL 62249  800.366.1357  www.trouwnutritionusa.com
Features

Catering to the conscientious  |  24
By Jessica Taylor
Halo, Purely for Pet’s holistic pet care approach drives the company to develop all-natural products with ingredients chosen to give pets happier, healthier lives.

Preview: Petfood Forum and Petfood Workshop 2010  |  26
Learn, connect and do business at these premier industry events.

Puzzling petfood  |  34
By Jessica Taylor
Interactive feeding techniques, toys and treats are the new, natural way to feed pets.

Too much of a good thing  |  40
By Sean J. Delaney, MS, DVM, DACVN
Our industry can provide consumer tools and use nutritional strategies to fight obesity in pets.

Columns

Something to Chew On  By Debbie Phillips-Donaldson  |  6
Petfood Insights  By David Dzanis, DVM, PhD, DACVN  |  46
Ingredient Issues  By Greg Aldrich, PhD  |  48

Departments

Industry News  |  10  
New Products  |  16  
Research Notes  |  50  
Market Place  |  52  
Advertisers’ Index  |  55  
Industry Calendar  |  56  

February 2010  Petfood Industry
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.

For more information call: 800.456.3447 or visit us at www.adf.com

In Europe, please contact: ADF® CIMA Nutrition rev: +32.55.61.7131 + Email: sales@adf.com

All ADF® products are EU Certified

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

Petfood-Connection: Why are we feeding our pets?

Daily Tweets
www.twitter.com/petfoodindustry

Stay Connected
www.companies.to/petfood-connection.com

Petfood Industry TV
www.youtube.com/user/petfoodindustrytv

Online exclusives

Q&A: More from Halo
Read the entire interview with Steve Marton of Halo, Purely for Pets.
www.petfoodindustry.com/HaloProfile.aspx

Article: Will work for food
Find out what Marty Becker, DVM, has to say about the benefits of interactive feeding.
www.petfoodindustry.com/FoodPuzzles.aspx

PowerPoint: When more petfood doesn’t equal success
Watch Dr. Sean Delaney’s presentation from Virtual Petfood Forum: Target on Nutrition.

EDITORIAL STAFF
Debbie Phillips-Donaldson, Editor-in-Chief
Jessica Taylor, Associate Editor
Copy Desk Staff
Ken Jennison, Managing Content Editor
Sue Roberts, Senior Content Editor
Tara Leitner, Senior Content Editor
Andrea Saladin, Associate Editor
Kathleen McLaughlin Milella, Community Manager/SEO Editor
Candi Teachman, Art Director

CORPORATE HEADQUARTERS
PETFOOD INDUSTRY, 303 N. Main St., Ste. 500, Rockford, Illinois 61101-1018 USA.
Tel: +1 815 966 5400, Fax: +1 815 966 6416.

CORPORATE OFFICERS
James W. Watt, Chairman
Gregory A. Watt, President/CEO
Bruce Plantz, Vice President, Director of Content
James Munch, CO/FOO
Joyce Neth, Vice President, Director of Insight, Research and development

PUBLISHING SERVICES
James Wessel, Circulation Director
For subscriptions, address changes, past copies—jwessel@wattnet.net
Jim Riedl, Production Manager
For advertising material, deadlines and processing—jriedl@wattnet.net

SUBSCRIPTION INQUIRIES/CHANGE OF ADDRESS
Contact the Circulation Department at 303 N. Main St., Ste. 500, Rockford, Illinois 61101-1018 USA. Tel: +1 815 966 5400, fax: +1 815 966 0513, E-mail: jwessel@wattnet.net. Subscription print edition prices: USA $84.00/yr, Canada $102.00/yr, Outside USA & Canada via Airmail $144.00/yr, $14.00 per copy unless marked. Digital edition sent by email: $30.00/yr. Prices in US dollars. Business or occupation information must accompany each subscription order. For change of address, contact the circulation department listed above and give BOTH old and new address.

PHOTOCOPY PERMISSION
Permission is granted by the copyright owner, Watt Publishing Co., provided the appropriate fee is paid directly to Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923 USA, tel +1 978 750 8400, fax +1 978 750 4470.

BULK REPRINTS
Contact FosterReprints, +1 866 879 9144 or www.fostereprints.com.

© Copyright 2010, Watt Publishing Co. All rights reserved.

February 2010 Petfood Industry
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
7 global trends help predict consumer behavior for 2010.

1. **Resilience:** Consumers have a new resolve thanks to their ability to adjust to the many changes dealt by the economy.

2. **Review/re-evaluation:** The recession has caused people to re-evaluate everything, including how they spend money. Mintel expects consumers to continue to search for the best values, meaning they are willing to purchase higher-priced products if convinced of the value and if engaged with the brand. Both “ifs” have implications for petfood, especially superpremium and niche products.

   Yet some consumers are still price sensitive, which has many more turning to private label products. Both Mintel and Packaged Facts predict this segment to grow for petfood, including in the US, which to date has not been a major market for private label petfoods. (With human food, Mintel says nearly four of 10 Americans now buy private label.)

3. **Accountability:** Consumer confidence declined significantly in 2009; this year people are still seeking proof and results behind marketing and label claims, plus transparency from marketers. Among the US petfood companies that recovered the most quickly and successfully after the 2007 recalls were ones that proactively shared their testing results and safety programs. Today more pet owners are demanding to see the research behind nutritional and other claims.

4. **Escapism:** Consumers will start to splurge a little this year after cutting back on vacations, gifts and other goodies. This could mean pet owners buying more treats for their furry friends.

5. **Media evolution:** The need for increased transparency meshes with the huge rise in the use of micro-blogs and social media such as Twitter and Facebook—Mintel reports four of 10 Americans have at least one social networking profile—which many petfood companies are already using. But with the landscape evolving so quickly, marketers must closely monitor how consumers are using these media and ensure their messages are hitting the right notes. Engagement and interaction are key, traditional advertising not so much.

6. **Ethical responsibility:** More consumers are responding to “ethical” messages and products. For petfood, this can mean niches such as sustainable, “green,” fair trade, locally grown, natural and organic. Growth rates in these categories have outpaced overall petfood market growth for several years now. On a larger scale, Mintel reports 90% of US consumers buy green products at least sometimes and nearly 40% of consumers say they’re still purchasing organic products despite the recession.

7. **Stability:** On the heels of a very scary period, consumers worldwide are turning toward moderation. Mintel predicts this will carry over to the types of products purchased. That should extend to petfood, as pet owners lavish care on that warm, furry, constant presence in their lives.

Debbie Phillips-Donaldson is editor-in-chief of *Petfood Industry* magazine. E-mail her at dphillips@wattnet.net.
DON’T GO WITH THE FLOW!

Geelen Counterflow®

world’s highest efficiency
world’s lowest downtime

New!

Swivel Valve Cooler MkII
For highest food safety standards

Visit us at
Victam Asia,
stand 901

Geelen Counterflow Holland
Geelen Counterflow USA
Geelen Counterflow Argentina
Geelen Counterflow China

info@geelencounterflow.com
www.geelencounterflow.com

Geelen Counterflow®
C O O L  A N D  D R Y!
Quality Ingredients  |  Sourcing  |  Logistics  |  Exceptional Service

3D Corporate Solutions: Included in our value-added service package is the ability to provide customers with proteins and fats when and where they are needed. We do this so pet food companies don’t have to invest time and resources into obtaining critical ingredients. We provide ingredient acquisitions, logistics, and arrange and coordinate shipments for customers all over the world.
No two pets are exactly alike.
No two pet foods are exactly alike.

Our solutions are as unique as the pet food manufacturers we serve.

Call it “animal magnetism” if you will. At 3D Corporate Solutions, we encourage and assist our teams to develop the most unique solutions for you using scientific innovation. Quality ingredients and exceptional service are – without question – part of the package.

Our work environment fosters creative thinking, and our innovative approach ensures you get the best customized essential proteins and fats for your trusted brand. Our plants’ in-house labs allow our experienced staff to test multiple combinations of new ingredients and devote their attention to your distinctive needs. We follow exacting standards and are leading the way in the industry by continuously developing new technologies. Science demands it.

3D Corporate Solutions

www.3Dcorpsol.com

**Pet Solutions:** Through protein conversion, we use only USDA-inspected chicken parts to make the meals and fats at our plant. No by-products are processed at this plant.

**Protein Solutions:** We provide spray-dried chicken, spray-dried turkey and other gently processed proteins, as well as other fresh and frozen specialty products. Only USDA-inspected ingredients are used.

For more information about how we can help you, please contact us.

601 13th Street, Monett, MO 65708  417.236.9602  customerservice@3Dcorpsol.com
Owner-pet relationships are what makes the petfood market continue to grow, even during tough economic times. And Petfood Forum will be full of sessions on how that bond between owners and pets is driving market growth—along with much more information. Join Joel Silverman, the keynote speaker for Petfood Forum 2010, April 12-14 in Chicago, to learn why relationships are what makes dog training work. For information on other speakers and to save on registration for this dynamic event, visit www.petfoodindustry.com/petfoodforum.aspx.

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
Black and White Nutrition and Health Solutions

At Novus, we are bringing 50 years of scientific knowledge, experience and understanding of animal health and nutrition to the petfood industry.

The Novus suite of products is based on solid science and a vast knowledge of animal nutrition. So, for black and white answers to your pets health and nutrition questions, call Vanessa Stewart at 1.888.568.0088 or visit www.novusint.com.

Novus Pet Nutrition • 20 Research Park Drive, St. Charles, MO 63304
CONFIDENT YOU’RE GETTING THE VERY BEST QUALITY?
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

Kemin® INSPired MOLEcULAR SOLUTIONS™
German cartel office searches petfood retailers

The German Federal Cartel Office (Bundeskartellamt), an independent authority whose task is to protect competition in Germany, has conducted searches at 15 companies in the supermarket, drugstore and petfood trade, including Fressnapf.

Saturn Petfood, Vitakraft and Mars Petcare along with its subsidiary Royal Canin said they were not included in the investigation.

INDUSTRY NEWS

NGFA, PFI to hold joint industries conference

The National Grain and Feed Association (NGFA) has joined forces with the Pet Food Institute (PFI) to present the Feed and Pet Food Joint Industries Conference on September 22-24 in Chicago, Illinois, USA. The conference will cover current and future trends in the animal feed and petfood industries, new product safety standards, ingredient outlook, sustainability and more. Program and registration materials will be posted in the coming months to www.jointindustriesconference.com.

Extruder Technology

* Screw elements, shafts, and barrels for co-rotating twin-screw extruders.

* All OEMs including Clextral, Buhler, Buss, Coperion, APV, Wenger and others.

* Quality meets or exceeds the OEM standard; ISO-9001 certified.

* Over 15,000 parts in stock for over 100 extruder types.

Dog food saves family in Haiti earthquake

A woman and her twin sons were saved during the recent Haiti earthquake by bags of dog food, according to her interview with CNN.

The family was shopping for cat food in a supermarket when the quake struck. The woman said that when she felt the supermarket falling down on her, she thought they were going to die. However, bags of dog food in the supermarket created what the woman described as a cave, which prevented the roof from crushing her and her sons.

C.A. Picard, Inc.  I  1206 E. Broad St., Elyria, OH 44035 USA  
phone: 440.366.5400  I  fax 440.366.5404  
www.capicard.com  I  hbuff@capicard.com

C.A. Picard, Inc.  I  1206 E. Broad St., Elyria, OH 44035 USA  
phone: 440.366.5400  I  fax 440.366.5404  
www.capicard.com  I  hbuff@capicard.com

February 2010
Protect well. **Spend less.**

It’s as plain as the nose on your face.

Protect both your product and your profitability – check out Ameri-Pac’s selection of high-quality, *affordable* antioxidants. Our OxyGon® and OxyBlock® antioxidant lines include both natural-source and traditional formulations, and are available in both liquid and powder forms. Our products are backed by experienced, trained technical support and unbeatable customer service.

**Isn’t it time you spent less?** Call Ameri-Pac.
Cake for dogs
Puppy Cake offers Fifi’s Favorite Carob Cake Mix and Frosting featuring whole wheat flour for energy and carob and honey powder for palatability. The yogurt in the frosting is designed to aid digestion. An egg, vegetable oil and water are added to the mix, which can be baked or microwaved.

Puppy Cake LLC
+1.888.859.2253
www.puppycake.com

Shredded formula
Nestlé Purina PetCare Pro Plan offers the Shredded Blend Formula—a mix of tender and hard kibble. The product line contains 85% savory hard kibble and 15% shredded pieces, according to the company. Formulas are Beef & Rice, Chicken & Rice and Natural Lamb & Rice.

Nestlé Purina PetCare Co.
+1.314.982.1000
www.proplan.com

Advantage Extru-Tech®
Reduce energy consumption 25% while optimizing petfood quality and volume.

Reduced energy consumption. Higher production volume. Improved finished product quality. They’re all typical comments of petfood producers that have consulted with Extru-Tech® to achieve best in market process solutions.

At Extru-Tech, we’re determined to elevate the industry’s production to higher levels, using less energy. By utilizing our collective resources, we’re engineering the next generation of petfood processing today. 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

Get more
To feature your new product in Petfood Industry, contact Tara Leitner, Tel: +1.815.966.5421, tleitner@wattnet.net.
Join Petfood Industry magazine and your peers from around the world at the premier event of the petfood industry. Register online at www.petfoodindustry.com/petfoodforum.aspx or send in the form on the following page.

LEARN THE LATEST INDUSTRY INFORMATION TO HELP GROW YOUR BUSINESS

Connect with key decision-makers from the petfood industry, market your goods and services, grow your business and learn about issues affecting the industry.

NEW! EXECUTIVE ROUNDTABLE—WHY IS SAFETY THE MOST CRITICAL ISSUE FOR THE PETFOOD INDUSTRY?

Join our panelists as they discuss petfood safety from a strategic perspective. Confirmed panelists include Lafe Bailey, VP of Wenger Manufacturing; Duane Ekedahl, president of the Pet Food Institute; Jim Marsden, PhD, Regents Distinguished Professor, Food Safety and Security, Kansas State University; and Anegie Thompson, PhD, President of Thompson Pet Tech.

Attendees can participate in interactive sessions about the latest petfood trends and topics from industry experts, including:

- Petfood market outlook 2010-2011—David Lummis, Packaged Facts
- Survey: state of the animal supplement, functional ingredient and treats market—Patrick Rea, publisher and editorial director, Nutrition Business Journal
- An outsiders’ view of petfood: “human food” nutritionists weigh in—Marion Nestle, PhD, New York University, and Malden Neschim, PhD, Cornell University
- And many more!

Also, enjoy a keynote presentation by world-renowned dog trainer Joel Silverman, host of Animal Planet’s Good Dog U. Joel will further discuss the important role the human-pet bond plays in his training methods.

NEW! EXECUTIVE ROUNDTABLE—WHY IS SAFETY THE MOST CRITICAL ISSUE FOR THE PETFOOD INDUSTRY?


Save on registration by signing up before February 15, 2010—save even more if you register for both events!

To register, fill out the back of this page or visit www.petfoodindustry.com/petfoodforum.aspx.
Attendee Registration Form

Or register online at www.petfoodindustry.com/petfoodforum.aspx

Petfood Forum
April 12-14, 2010

Petfood Workshop
April 14-15, 2010

Hyatt Regency, O’Hare Hotel • Chicago, Illinois USA

Registration includes all conference sessions, a light breakfast, generous buffet lunch and coffee break. Please type or print CLEARLY, IN CAPITAL LETTERS (as you would like it to appear on your name tag):

Name (last, first) ___________________________________________________________________________________________

Job title __________________ Company name _________________________________________________________________

Address ____________________________________________________________ City ________________________________

State/province __________________________________________ Zip/postal code__________ Country ________________

Phone __________________ Fax ___________________ E-mail ______________________________

URL _______________________________________________________________________________________________________

Additional attendees __________________________________________________________________________________________

_________________________________________________________________________________________________________

Organizational function (e.g., marketing, management, R&D, etc.): ____________________________________________________________

Industry segment (e.g., manufacturer, supplier, government, etc.): ____________________________________________________________

Product segment (e.g., dry, wet, treats, etc., or equipment, ingredients, etc.): _____________________________________________________

Do you subscribe to Petfood Industry magazine? ☐ Yes ☐ No

Method of payment: ☐ Check ☐ Money order ☐ MasterCard ☐ VISA ☐ American Express ☐ Discover

Name on credit card __________________________________________ Card number __________________

Signature ___________________________________________________________ Expiration date ___________________

Please return this form with full payment (payable to Northern Illinois University) to:

Petfood Forum / Petfood Workshop 2010
C/o Registration Office
Outreach Services
Northern Illinois University
DeKalb, Illinois, USA 60115
Fax: +1.815.753.6900

NOTE: Registrations will not be processed without payment; rate is determined by date payment is received. Prior to February 15, 2010, attendee registration fees are refundable minus a cancellation fee; contact Kathy Syversen at ksyversen@niu.edu or Tel. +1.815.753.7922. Substitution of registered personnel is available at no charge. WATT Publishing Co. reserves the right to substitute speakers and change schedule as necessary. If anyone in your party requires special assistance, please contact us.

PLEASE MAKE HOTEL RESERVATIONS DIRECTLY WITH THE HYATT REGENCY O’HARE HOTEL
In the US, Canada and territories, call +1.800.233.1234. All others, call +1.847.696.1234. Or visit https://resweb.passkey.com/Resweb.do?mode=welcome_qi_new&groupID=1511883. Be sure to identify yourself as a Petfood Forum or Petfood Workshop 2010 participant prior to March 24, 2010, to receive our special group rate. Room availability is limited; reservations will be handled on a first come, first served basis.
Meat snacks
Loving Pets’ Gourmet All-Natural Premium Meat Snacks contain no fillers or preservatives and are antibiotic and hormone-free, according to the company. Glucosamine and chondroitin are added for joint health. Flavors include chicken, beef, duck, lamb and pork.

Loving Pets Inc.
+1.866.599.7387
www.lovingpetsproducts.com

Angus beef treats
Free Range Dog Chews offers the Grass-Fed Angus line of dog treats. The treats come from beef cattle raised in Argentina, fed an all-natural grass diet, according to the company. The line includes bully sticks, braided steer sticks, lung, Paddywack, cow tails, tripe springs and twists and beef trachea.

Free Range Dog Chews Inc.
+1.586.752.3040
www.freerangedogchews.com

Superfoods dog formula
Nutro Ultra food for dogs with superfoods is designed to promote a long and healthy life. The reformulated recipe has the company’s Ultrassential superfood blend, including pomegranate, blueberries, pumpkin and carrots. The food does not contain wheat, ground yellow corn or artificial flavors or colors, Nutro says.

The Nutro Co.
+1.800.833.5330
www.nutroproducts.com

Lobster dog treats
Saltwater Marketing’s Maine-Catch Saltwater Products offers lobster dog treats, which are high in protein, the company says, and made from 23% dried lobster meal. The treats come in an 8 oz. size bag and are available 15 bags to the case.

MaineCatch Saltwater Products
+1.207.321.2109
www.mainecatch.net

Empyreal® 75 gives you more because it gives them more.

Empyreal 75 gives you:

Food Safety
Empyreal 75 corn protein concentrate provides pet food manufacturers with a minimum of 75% (82% dry basis) consistent, pure, safe source of protein for dog and cat diets. It is:

- A natural protein source, no preservatives added.
- Produced in a food plant from U.S.-sourced grain.
- A “patented process,” pasteurized and washed, to destroy bacteria and reduce harmful levels of mycotoxins and other potential contaminants.
- Transported in dedicated fleet of trucks and rail.
- Certificate of Analysis issued for every shipment to ensure quality, food safety, and security.

Certified High Quality—Credentials
Empyreal 75 is backed by an impressive list of credentials. These include:

- Meets AAFCO definition for both corn protein concentrate and a natural ingredient.
- Gluten-free.
- Produced in an AIB-inspected facility.
- GRAS status.
- Kosher and Halal certified.

Empyreal 75 corn protein concentrate is, literally, in a class by itself. To learn more, visit empylear75.com or call 866.369.5498.

© 2009, Cargill Incorporated. All rights reserved. Empyreal is a trademark of Cargill Corn Milling.
For Consumers

Holistic puppy recipe
Holistic Select from Eagle Pack Pet Foods offers the Nourish Puppy Health Anchovy, Sardine & Chicken Meals Recipe. The levels of protein, fat and calories are specialized for growing puppies. DHA is included to support brain development, and an increased amount of protein is aimed at healthy muscle growth.
Eagle Pack Pet Foods Inc.
+1.800.225.0904
www.holisticselect.com

Cat food line
Pro Pac Superpremium Cat Food from Midwestern Pet Foods is a line of formulas with chicken and rice based recipes. The formulas are designed to promote a healthy skin and coat, bright eyes and strong muscles, bones and teeth. Varieties include Adult Cat, Hairball Reduction Formula, Kitten and Low Fat Cat. Canned food and treats also are available within the line.
Midwestern Pet Foods Inc.
+1.812.867.7466
www.propacpetfood.com

Beef and zucchini dog food
Addiction’s Steakhouse Beef and Zucchini Entrée features New Zealand free-range beef and a grain-free recipe for dogs of all lifestages. Other ingredients include potatoes, carrots, papayas and spinach.
Addiction Foods NZ Ltd.
+65.6273.8981
www.addictionfoods.com

Capture the Power: Buhler Aeroglide.
Moisture uniformity, sanitation, efficiency and reliability. Aeroglide driers and coolers provide these critical elements to pet food producers around the world.

Buhler Aeroglide
100 Aeroglide Drive, Cary NC 27511 USA
Tel +1 919 851 2000, Fax +1 919 851 6029
sales@aeroglide.com, www.aeroglide.com/petfood

The solution behind the solution.
HCT solution
Bruker Daltonics offers a high-capacity ion trap HCT solution for the detection and quantification of melamine and cyanuric acid by food safety laboratories. The solution is capable of detecting melamine in various matrixes below concentrations required by food safety and other regulatory authorities worldwide, including the US Food and Drug Administration, according to the company.

Bruker Daltonics Inc.
+1.978.663.3660
www.bdal.com

Dispensing closure
Weatherchem offers the LiquiFlapper closure with a teardrop-shaped orifice and sharp cut-off lip to provide controlled directional flow of liquids. It is designed for clean, even flow and consists of one piece with a hinge.

Weatherchem Corp.
+1.800.680.3412
www.weatherchem.com

Analysis system
Foss offers the Kjeltec 8000 series, a range of solutions for Kjeldahl analysis, providing network facilities for improved traceability. The Kjeltec range, with a fully automatic Kjeltec 8400 analyzer and smaller 8100 and 8200 distillation units, is designed for safety and high performance, according to the company.

Foss
+1.952.974.9892
www.foss.dk

Vibratory screener
Kason Corp. offers a vibratory screener that discharges oversize particles 360 degrees around the periphery of a circular screening deck. The screener is a 60-inch diameter Vibroscreen model, intended for screening wet or dry bulk materials containing a large percentage of oversize fractions. A range of accessories is available, including clean-
For Manufacturers

in-place spray heads, anti-blinding devices, articulated lids for rapid screen changes and an automatic long-term lubrication system for gyratory motor bearings.

Kason Corp.
+1.973.467.8140
www.kason.com

Carrots

Marshall Ingredients has partnered with a baby carrots processor to produce carrot pieces that are 100% US grown and processed, according to the company.

Marshall Ingredients
+1.315.394.1760
www.marshallpet.com

Shaft coupling

Mayr Corp. offers the Primeflex steel bellows coupling. The bellows are connected to the hub components and the shaft-hub connections. It can be plugged in for easy installation and disassembly. The steel bellows coupling compensates for axial, radial and angular shaft misalignments.

Mayr Corp.
+1.201.445.7210
www.mayr.de/en

Headspace analyzer

Mocon Inc. offers the Pac Check Model 650 EC benchtop dual oxygen (O₂) and carbon dioxide (CO₂) headspace analyzer. The analyzer is designed for applications in which CO₂ is used to minimize microbial activity or enhance products to meet shelf life objectives. It can measure both O₂ and CO₂ concentration ranges from 0% to 100% in rigid, semi-rigid and flexible packages.

Mocon Inc.
+1.763.493.7231
www.mocon.com

Stick packaging machine

WeighPack offers the XPdius Junior Elite VFS for stick packaging. The machine delivers up to 70 packs per minute on the one-up model or 140 packs per minute on the two-up model, according to the company. A single tube model can handle up to 5.5-inch wide bags and the twin model up to 2.75-inch wide bags.

WeighPack Systems Inc.
+1.514.422.0808
www.weighpack.com

Water temperature control

Mokon offers the Hydrotherm circulating water temperature control system line for heating capacities from 3 kW to 24 kW. Hydrotherm comes with stainless steel components, including the pump, heater canister and pump suction manifold. The systems are available in power ratings from 208 to 600 volts, pump sizes from 1/2 HP to 3 HP and flow rates from 15 gpm to 60 gpm. The line features microprocessor-based temperature control.

Mokon
+1.716.876.9951
www.mokon.com
Track down new trends – from all over the world!

Discover the latest products and innovations for pets – Interzoo 2010 presents the widest range worldwide!

- 1,400 international exhibitors
- 89,000 m² gross display area
- 37,000 trade visitors

Visit the industry’s leading international exhibition – Interzoo 2010!
IT ALL STARTED with a cat named Spot. As an adult, Spot became a sickly cat, plagued by digestive problems, skin irritations, excessive shedding and an unpleasant odor, according to www.HaloPets.com.

Andi Brown, founder of Halo and owner of the troubled feline, began reading the labels on her cat’s food and studying cats’ nutritional requirements. Brown learned that the quality of nutrients a pet ingests has a direct correlation to the animal’s health. After trying various premium petfoods, Brown finally ended up developing a recipe—later to become Halo’s signature product, Spot’s Stew—for a homemade stew full of all-natural fresh chicken and vegetables.

According to Halo, Brown’s new diet for Spot had astonishing results: a noticeably healthier skin and coat, weight loss and an improved digestive system.

Brown realized that the cat food she had fed Spot contained ingredients such as corn, wheat, rice, by-products, ethoxyquin, BHT and BHA, and she started to question what nutritional value such ingredients had.

“Halo, Purely for Pets has been our own brand since 1986,” says Steve Marton, CEO of Halo. “The Halo brand has grown to include natural food for dogs and cats (both wet and dry), treats, supplements and grooming products.” Since Halo’s inception, Brown has become an active advocate for natural ingredients in the world of pet care products. She recently published her first book, The...
Whole Pet Diet: Eight Weeks to Great Health for Dogs and Cats (Ten Speed Press).

“HALO PRODUCTS HAVE the best ingredients for dogs and cats. Plain and simple, that’s what we strive to be known for,” explains Marton. “That’s why Ellen DeGeneres became a part owner of our company. That’s why she spreads the word.” In 2008, Halo announced that talk show host DeGeneres had joined as co-owner as the company was expanding its product line and retail presence in the US market, going into chains such as Whole Foods and Petco. “This is a defining moment in the history of Halo,” said company president Alan Kerzner at the time of the announcement. “We’re delighted to have Ellen join our family at this time of exciting growth.”

“That’s why similarly passionate pet owners do everything in their power to spread the word, too,” continues Marton. “As more consumers are reading ingredients labels—and understanding what the ingredients are—our sales improve. For example, consumers are just starting to understand ingredients like chicken meal, which is a rendered meat.”

Does that mean it’s terrible for animals? “Certainly not,” says Marton. “But consumers who want the best ingredients for their pets prefer ingredients like real chicken, eggs and pea protein. Every Halo ingredient is a real, natural ingredient that consumers recognize and understand. Every meat we use can also be sent to make human food products.”

This nutritional transparency—all of Halo’s product ingredients are available on its website, and in late 2008, the company released the Spot’s Stew recipe for consumers to re-create for their pets at home—has garnered the company a loyal, fastidious following. Not to mention the company’s promise to its consumers, located on its products and website: “Halo products will produce vibrant, happier, healthier pets—inside and out. We guarantee you’ll see the results.”

According to Marton, three things have driven Halo’s growth since 1986:

- The holistic, natural ingredients in its products;
- Strong partnerships with retailers like pet specialty and natural food stores; and
- The trust and passion of its consumers.

“This year we’ve added two exciting new product lines: Halo Healthsome treats and Halo HolistiClean stain and odor remover,” Marton shares. “The Healthsome treats are exceeding expectations and complement our award-winning Halo Liv-a-Littles protein treats to provide everything consumers need for healthy treating. HolistiClean is launching as we speak.”

**EXTENSIVE STUDY AND** the input of nutritional experts are the backbone of Halo’s healthy dog and cat food, nutritional supplements, herbal grooming supplies and treats. “Our biggest opportunity is education,” explains Marton. “As consumers—and even retailers—learn more about ingredients, Halo stands out. It’s exciting to see a worldwide learning curve showing a growing care for animals.”

So what’s next for the petfood company with the holistic approach, celebrity co-owner and fan-obsessed Twitter page? “We’re very excited about the future as more and more people think of their pets as members of their family,” enthuses Marton.

“I think you can look for expansion of our offerings in food, treats, supplements and grooming. Also, as new natural ingredients are discovered with health benefits for humans, you’ll see the best find their way into Halo products.”

As consumers know more, they will expect more. Halo, Purely for Pets welcomes this pet parent enthusiasm, hoping to follow the trajectory of the human food industry with higher-quality, natural products.
As the economy regains its footing, the petfood market can breathe a sigh of relief for weathering the storm. Now’s the time to capitalize on the industry’s historic strength and look ahead to future growth.

Petfood Forum is the ideal place to start, because this is where the industry comes together to network, do business, learn from one another and enjoy the company of fellow petfood professionals. This year’s event, scheduled for April 12-14 at the Hyatt Regency O’Hare near Chicago, Illinois, USA, promises plenty of opportunities to do all that.

First, keynote speaker Joel Silverman—author, TV host and dog trainer—explains his Companions for Life philosophy and how that translates to not only working with pets but also how petfood manufacturers can communicate with pet owners.

You’ll also get a state of the industry report from market expert David Lummis of Packaged Facts, plus hear the latest on safety from a strategic perspective during a roundtable of industry executives, including representatives of leading petfood manufacturers and suppliers.

Moderators Julie Lenzer Kirk and Greg Aldrich, PhD, will guide you in learning the latest on nutrigenomics, prebiotics and probiotics, how to balance nutrients, what human food experts think of petfood, how to use HACCP, high pressure processing and the appropriate equipment to ensure safety, all about convenience trends in packaging, building brand preferences and much more.

Plus, you’ll find information from industry experts during a poster reception featuring research on kittens’ taste and smell preferences, spray-dried plasma, biogenic amines, liquid direct fed microbial and more. (Visit www.petfoodindustry.com/forum2010posters.aspx.)

Immediately following Petfood Forum, on April 14-15 also at the Hyatt Regency O’Hare, Petfood Workshop: Hands-on Nutrition will give you some of the keys to understanding petfood: the science behind companion animals’ nutritional needs and the most beneficial, efficient and cost-effective ways to formulate ingredients into a product that can be processed, packaged and sold.

In this interactive symposium, pet nutrition experts will share their insights during hands-on sessions:

- Ask the nutrition experts: roundtable of nutritionists answering your specific questions;
- Basics of feline and canine nutrition;
- Key ingredient groups and how they provide nutritional benefits;
- Processing considerations for petfood ingredients; and
- An overview of formulation.

On the following pages, you’ll find scheduling, speaker and topic information as of press time. For updates, bookmark www.petfoodindustry.com/petfoodforum.aspx, and watch for the March issue. If you have specific questions, please contact Ginny Stadel, gstadel@wattnet.net or +1.815.966.5591.

Register online!
To register for Petfood Forum and Petfood Workshop, visit www.petfoodindustry.com/petfoodforum.aspx. Register by February 15 to save up to 15%; save even more if you register for both events!
Eight out of ten pet food buyers are women. It’s about time someone got a handle on that.

The Peel Grab ‘n Go Handle Bag was designed to be carried.

Until now, most handle bags have simply had hand-holes punched out of the top or side. But if you’ve ever seen shoppers struggle to carry them, or seen them break, you’ll appreciate the innovative new Grab ‘n Go Handle Bag. With a comfortable handle that’s engineered into the side of the bag, shoppers will find it easier to carry, easier for pouring and easier to store. And it’s torture tested to maintain its integrity through even the roughest treatment. Choose the new standard from Peel.

905.456.3660
sales@peelplastics.com
www.peelplastics.com

What’s outside counts too.
UNDERSTANDING CATS MEANS IMPROVED CAT FOOD PALATABILITY.

Ever wonder why cats pounce? Or why they're entranced for hours by a piece of string? So do we. AFB is committed to improving its knowledge of cats. Because understanding how cats think is a key step in helping our customers develop products to satisfy some of the most critical palates in the animal kingdom.

Working closely with pet food manufacturers, we help them reach their objectives in palatability performance and product development.

To learn more, contact AFB International or visit www.afbinternational.com.
AT AFB, IT’S ALL ABOUT THE NEXT GENERATION.

Ever wonder why cats pounce? Or why they’re entranced for hours by a piece of string? So do we.

UNDERSTANDING CATS MEANS IMPROVED CAT FOOD PALATABILITY.

AFB is committed to improving its knowledge of cats. Because understanding how cats think is a key step in helping our customers develop products to satisfy some of the most critical palates in the animal kingdom.

Working closely with pet food manufacturers, we help them reach their objectives in palatability performance and product development.

To learn more, contact AFB International or visit www.afbinternational.com.
Monday, April 12
1:00-7:30 pm Registration
5:30-7:30 pm Opening reception
7:00 pm-12:00 am Petfood Forum Party Zone

Tuesday, April 13
7:00-8:00 am Breakfast
9:00 am-6:30 pm Exhibits open
8:00-9:15 am
Keynote—Joel Silverman, dog trainer, host of Animal Planet’s Good Dog U and author of What Color Is Your Dog? demonstrates how to build relationships with pets based on their personality.
9:15-9:55 am Break
10:00-10:40 am
General session: Petfood market outlook 2010-2011—David Lummis, Packaged Facts, explains that while the US pet market remains strong and opportunities abound, so do challenges for petfood marketers. Find out the potential pitfalls as well as trends to watch for.
10:45-11:45 am
General session: Executive roundtable—Why is safety the most critical issue for the petfood industry? Panelists include Lafe Bailey, VP of Wenger Manufacturing; Duane Ekedahl, president of the Pet Food Institute; John Kuenzi, president of CF Foods; Jim Marsden, PhD, regents distinguished professor, food safety and security, Kansas State University; and Angele Thompson, PhD, president of Thompson Pet Tech. They and other industry leaders discuss petfood safety from a strategic perspective.
11:45 am-12:30 pm Lunch
12:30-1:30 pm Visit exhibit hall
1:30-2:10 pm
Nutrigenomics: recent advances in dogs and cats—Kelly Swanson, PhD, University of Illinois, explains the basic concepts of nutrigenomics, how the science may be applied to petfood and provides recent pet-related examples.
Convenience trends in petfood packaging—Alexander Mikolasek, Mondi Packaging, explores why convenience has become so important to pet owners, plus some innovative concepts in flexible packaging.
2:15-2:55 pm
Prebiotic and probiotic supplements in petfood: impact on immunity—Sara Cutler, Kemira Nutraceuticals, addresses the expanding world of pre- and probiotic supplementation and shares the latest research.
Dry petfood manufacturing and the carbon footprint—Jacques Wijnraet, Tema and Partners, offers options for reducing energy and inefficiencies in the dry production process while also diminishing carbon dioxide emissions.
2:55-3:30 pm Break
3:30-4:10 pm
An outsiders’ view of petfood: “human food” nutritionists weigh in—Marion Nestle, PhD, New York University, and Malden Nesheim, PhD, Cornell University, look at the petfood industry from the perspective of professors of animal and human nutrition, presenting recommendations for the industry, government and consumers.
Controlling contaminants using high pressure processing—James Mersland, PhD, Kansas State University, explains an upcoming technology, high hydrostatic pressure, for controlling pathogens in cooked and raw petfood products.
4:15-4:55 pm
Sustainability and CSR: from whim to a matter of strategy—Jan Hoijtink, consultant, discusses corporate social responsibility, which has transformed from an ideal for do-gooders to a strategy for world and market leaders. What does it mean for your company’s future?
Impact of process hardware on petfood safety—Galen J. Rokey, Wenger Manufacturing, explores key equipment that can directly impact safety, plus how to use sanitary design and recycle under-processed material to reduce product and dust accumulation and emissions.
5:00-6:30 pm Reception
6:15-7:15 pm Poster reception
7:00 pm-12:00 am Petfood Forum Party Zone

Wednesday, April 14
7:00-8:00 am Breakfast
8:00 am-1:00 pm Exhibits open
8:00-8:40 am
Making private label superpremium petfoods competitive—Serge Baute, Mondou Ltd., discusses how large retailers are developing their own superpremium lines. How can they compete nutritionally and economically with national brands?
HACCP: where did we go wrong?—David Rosenblatt, DVM, Sher Consulting and Training, shares the essentials on HACCP to better understand why food safety measures sometimes fail, plus how to identify and correct weaknesses in your own safety program.
8:45-9:25 am
Petfood and the importance of a balanced diet—Karen Wedekind, PhD, Novus International, explores the detrimental effects of excess protein, macro- and micro-nutrients and how petfood formulations should be balanced rather than driven by palatability and niche marketing concepts.
US regulatory update—David Dzanis, PhD, Regulatory Discretion Inc., explains new FDA regulations for petfood labeling, processing and ingredients and potential new AAFCO rules for calorie content statements and carbohydrate-related claims.
9:30-10:10 am Break
10:15-10:55 am
Marketing petfood with emotional firepower: how to build brand preference and sales—Bob Wheatley, CEO, Wheatley & Timmons, shares best practices in building brand equity and a compelling value proposition and understanding the emotional triggers that drive purchase decisions.
Mycotoxin control in grain-based ingredients—Gene Peters, PhD, and Don Shandera, PhD, Cargill, discuss key challenges and opportunities in controlling this common petfood contaminant, including during grain screening, processing, measuring and testing.
11:00-11:40 am
Surveys: state of the animal supplement, functional ingredient and treats market—Patrick Rea, publisher and editorial director, Nutrition Business Journal, presents proprietary research on animal nutrition market size estimates, reviews emerging product trends and forecasts market expansion.
Profitable moisture and water activity control—John Robinson, Drying Technology Inc., explains how to safely maximize moisture control during petfood drying to prevent or recover significant financial losses.
11:45 am-1:00 pm Lunch
2:30-3:30 pm Poster reception
3:30-4:15 pm Break
4:15-5:00 pm
The importance of a unique personality—Good Dog U and author of What Color Is Your Dog? demonstrates how to build relationships with pets based on their personality.
5:00-6:30 pm Reception
6:15-7:15 pm Poster reception
7:00 pm-12:00 am Petfood Forum Party Zone
Asia is the one of the fastest-growing areas for petfood in the world. Euromonitor International projects petfood sales to increase 17% through 2015 – and that’s in addition to the 15% growth Asia has seen in the past five years!

NETWORK WITH NEW CUSTOMERS AND SUPPLIERS
As part of Victam Asia 2010, Southeast Asia’s largest agrifeed event, Petfood Forum Asia 2010 is the ideal gathering place for the increasing number of petfood professionals seeking knowledge and networking. Meet face-to-face with new companies entering this developing market and see how you can grow your business in Asia.

LEARN ABOUT GLOBAL TRENDS
Petfood Forum Asia will feature recognized experts, including noted companion animal nutritionist George C. Fahey, PhD, of the University of Illinois, who will share insight on the latest industry topics and trends including nutrition, best practices, food safety and more.

NEW SPEAKER ADDED! Riders on the storm. Jean-Jacques Vandenheede, senior retail industry analyst and consumer packaged goods expert for ACNielsen Europe, shares data and trends influencing the sales and growth of consumer goods, including petfood, in Asia-Pacific and globally. He explains how consumer goods have weathered the rough economy well and that there’s much reason for optimism.

Educational workshops include information on:

- **All-breed versus breed-specific diets for dogs** – Anton C. Beynen, PhD
- **Nutraceuticals and immune function** – David Thomas, PhD
- **Impact of process hardware on petfood safety** – Galen Rokey
- **How to save energy in your processing plant** – Enzhi (Michael) Cheng, PhD, and Will Henry
- **Ensuring freshness in petfood ingredients** – Jim Mann

Victam Asia 2010 brings together exhibitors, conference delegates and visitors from the animal feed, aquafeed, petfood and grain processing industries. The show also features conferences such as FIAAP Asia 2010, GRAPAS Asia 2010 and the Biomass Conference. For more information, visit [www.victam.com](http://www.victam.com).
Attendee Registration Form
Or register online at www.petfoodindustry.com/petfoodforum.aspx

Petfood Forum Asia
March 3, 2010 • Queen Sirikit National Convention Center • Bangkok, Thailand

Registration includes all conference sessions, a light breakfast, generous buffet lunch and coffee break.
Please type or print CLEARLY, IN CAPITAL LETTERS (as you would like it to appear on your name tag):

Name (last, first) ___________________________________________________________________________________________
Job title ______________________________ Company name ___________________________________________________________
Address __________________________________________________________ City ______________________________
State/province __________________________ Zip/postal code________________________ Country ______________________
Phone ______________________________ Fax __________________________ E-mail ____________________________
URL ______________________________________________________________________________________________________

Additional attendees __________________________________________________________________________________________
________________________________________________________________________________________________________

Organizational function (e.g., marketing, management, R&D, etc.): __________________________________________________________
Industry segment (e.g., manufacturer, supplier, government, etc.): __________________________________________________________
Product segment (e.g., dry, wet, treats, etc., or equipment, ingredients, etc.): _____________________________________________________

Do you subscribe to Petfood Industry magazine? ☐ Yes ☐ No

Method of payment: ☐ Check ☐ Money order ☐ MasterCard ☐ VISA ☐ American Express ☐ Discover
Name on credit card ______________________________ Card number ______________________________
Signature __________________________________________________________ Expiration date _________

Please return this form with full payment (payable to Northern Illinois University) to:

Petfood Forum Asia 2010
c/o Registration Office
Outreach Services
Northern Illinois University
DeKalb, Illinois, USA 60115
Fax: +1.815.753.6900

NOTE: Registrations will not be processed without payment; rate is determined by date payment is received. Prior to January 18, 2010, registration fees are refundable minus a US$50 cancellation fee; after January 18, no refunds are available. Substitution of registered personnel is available at no charge.
For more information, please contact Kathy Syversen at ksyversen@niu.edu or Tel. +1.815.753.7922.

Petfood Forum Asia 2010 is held in conjunction with Victam Asia 2010. Registration to Victam Asia is free if made online at www.victam.com prior to March 3, 2010. For information on hotels and travel packages, please visit www.victam.com.

For information on exhibiting, contact Victam or Ginny Stadel at gstadel@wattnet.net or Tel: +1.815.966.5591.
Wednesday, April 14
12:00-2:00 pm Registration
2:00-3:00 pm General session: Products and ingredients driving today’s global petfood market—Lee Linthicum, Euromonitor International, shares key nutrition and ingredient trends affecting the development of petfood products.
3:00-3:20 pm Break
3:20-4:35 pm First round of breakout sessions (each an interactive workshop on a key area of nutrition):
- Basics of feline and canine nutrition—Kelly Swanson, PhD, University of Illinois, covers the metabolic similarities and differences of cats and dogs, and how they relate to current nutrient recommendations.
- Key ingredient groups and how they provide nutritional benefits—Sean Delaney, DVM, MS, ACVN, and Sally Perea, DVM, MS, ACVN, Natura Pet Products, discuss the key ingredient groups for providing essential nutrients and maintaining health in pets, including how to use them in petfoods to provide additional nutritional benefits.
- Processing considerations for petfood ingredients—Galen Rokey, Wenger Manufacturing, reviews major petfood ingredients and how they affect the extrusion process, focusing on processing parameters and their impact on ingredient properties and nutritional contributions.
- Overview of formulation—Andy Watland, Creative Formulation Concepts, provides an overview of key petfood formulation concepts, including a hands-on demonstration on how to use formulation software.
4:40-5:55 pm Second round of breakout sessions (attendees rotate among the four rooms)
6:00-7:00 pm Reception

Thursday, April 15
7:00-8:00 am Breakfast
8:00-8:40 am General session: Regulatory requirements for substantiating nutritional adequacy—David Dzanis, DVM, PhD, Regulatory Discretion Inc., explains the accepted methods for properly substantiating adequacy: formulating to meet established nutrient profiles, conducting feeding trials or using “product family” criteria.
8:40-9:25 am General session: Ask the nutrition experts panel—direct your specific nutrition questions to experts including Greg Aldrich, PhD, Pet Food & Ingredient Technology; Brittany Vester Boler, PhD, University of Illinois; Serge Boutet, Mondou Ltd.; Kerry Cramer, PhD, Trouw Nutrition; and Thomas R. Willard, PhD, TRW Consulting.
9:25-9:50 am Break
9:50-11:05 am Third round of breakout sessions (attendees rotate among the four rooms)
11:10 am-12:25 pm Fourth round of breakout sessions (attendees rotate among the four rooms)

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.
Online extra!
Watch multiple videos of puppies interacting with feeding puzzle toys at www.animalbehavior.net/Visitors/ProductVideo_CaninePuzzleToys.htm.

Many pet owners are beginning to feed all food from puzzles instead of bowls and reporting great success on consumer websites and blogs.

Puzzling petfood
Interactive feeding techniques, toys and treats are the new, natural way to feed pets

According to Marty Becker, DVM, dogs and cats are in the habit of chowing down whatever has been put in their bowls—leaving them bored, overweight and acting out with behavioral problems. By using food puzzles to feed their pets, consumers allow the dog or cat to work for its food and feel more satisfied, both physically and emotionally, attests Becker. This trend may also provide new product development and marketing ideas for petfood manufacturers.

“Way back before they embarked on their life of leisure in our homes, canids got their food the old-fashioned way—they earned it,” says Becker, discussing the change in the way domestic dogs eat. “Swift, strong, and rugged, these canine ancestors spent many hours each day pursuing prey in a never-ending quest to fill their rumbling...
No matter what your bag, we’ve got you covered.

With 60 years of manufacturing experience in Flexographic printing, Laminating, Bag and Pouch conversion we have your needs covered. It is no surprise North State Flexibles offers extensive pouch and bag product lines to meet your many packaging needs. Being a early pioneer of Doyen, Round bottom, Gusseted bags and Pouches, today we offer a wide range of products for point of purchase impact including 150 line process printing for optimum graphic impact.

- Reclosable Press-To-Close (PTC zipper)
- New Side Gusset Pouches (Fill through or Fill behind)
- Round Bottom Bags and Pouches
- Doyen Standup Pouches

- Solventless Laminating
- Barrier Films and Laminates
- 10 Color Gearless Presses
- Total Capability In-House Prepress

North State Flexibles LLC
2619 Phoenix Drive
Greensboro, NC 27406

336 644-4132  Brenda Garim
brenda.garim@nstatepkg.com
336 292-8467 fax

w w w . n s f l e x i b l e s . c o m / p e t c a r e

Count on the experts of North State Flexibles to deliver packaging that stands out in the retail environment.
According to Kong, maker of petfood puzzle toys, treats, pastes and other products, interactive feeding can affect multiple areas of a pet’s life. "Bellies. Getting food took skill and cunning, utilizing the brain as much as physical attributes."

In the wild, canids like wolves and foxes spend about 60% of their waking hours attempting to obtain food. This produces physical exercise and mental stimulation. Feeding a dog its entire day’s food in one sitting without any effort or stimulation effectively short-circuits nature’s design, according to AnimalBehavior.net, a web-based service that helps consumers with their pets’ behavioral problems. This under-utilization also leaves them feeling bored and more prone to develop psychological problems. “Boredom often leads to dumb, fat, frustrated pets,” says Dr. Rolan Tripp, the founder of AnimalBehavior.net. “Dogs weren’t bored when they had to work for food.”

The question now becomes, how can pet owners substitute something else to obtain that physical and mental stimulation? The best answer is to start feeding from petfood puzzles and allow hunger to be the motivation to play and eat, claims Becker. Many pet owners are beginning to feed all food from puzzles instead of bowls and are reporting great success on consumer websites and blogs.

**What are petfood puzzles?** Such a puzzle is any toy or object that can contain food and requires the pet to work to find a way to obtain the food. The reason for pet parents to feed from petfood puzzles instead of bowls is to entertain and occupy the pet’s mind, keeping it quiet and focused instead of jumping, scratching, barking or biting.

The most common food puzzles, and perhaps some of the first on the market, are the Kong branded toys. The company makes products for puppies, dogs, and cats, with a variety of designs to suit different needs and preferences.
adults and senior dogs, as well as toys and treats made for toy to giant breeds. There are Kongs with dry kibble inside, Kongs with frozen canned food that slowly melts and Kongs with an inch of peanut butter smeared just inside the opening. The award-winning Kong Stuff-A-Ball is a natural rubber treat-dispenser and dental toy. As the dog rolls, bounces or chews the Stuff-A-Ball, it will periodically release food or treats. The resulting rewards ensure longer, enriching playtimes, according to www.KongCompany.com. When used as directed, the Stuff-A-Ball will engage and stimulate the dog while reducing boredom, destructive behaviors, and separation anxiety. There are many other brands and types of food puzzles available. Other options Tripp recommends include:

- **Buster Cube**—a hollow, large dice made out of hard plastic. www.bustercube.com;
- **Busy Buddy Toys**—wide variety of treat-dispensing toys, as well as toys for cats. www.busybuddytos.com;
- **Canine Genius**—durable, chewable, configurable puzzles that you can stuff with tasty treats. www.caninegenius.com;
- **Crazy Ball**—rubber rolling ball that’s big dog tough. www.nylabone.com; and
- **Molecuball Treat Ball**—soft vinyl is quiet on the floor and easy to hide around the house. www.ourpets.com.

**FOOD PUZZLES VARY** in the difficulty of getting the food out, and some are adjustable and need to be customized to the dog’s weight and personality. For starters, Tripp recommends starting with easy food puzzles for dogs that are thinner, easily frustrated or just learning the new concept. For overweight or clever dogs, harder food puzzles like linked Canine

Not all dogs and cats benefit from food puzzles, so consumers should consult a veterinarian before changing the way their pets eat. Petfood puzzles are most beneficial for pets that are healthy, pored and active.
Behavior benefits

Interactive feeding devices can help address several pet behavior and health problems:

- **Boredom and depression**—interactive feeding will provide the pet with hours of physical and mental stimulation. Using a toy containing treats to play fetch or hide-and-go-seek will further cement the pet-human bond.

- **Destructive behaviors**—many inappropriate behaviors, such as chewing, can be remedied or prevented through positive replacement strategies. When a pet is engaged or about to engage in a negative behavior, substitute that behavior with a positive behavior and reward the pet.

- **Separation anxiety**—hiding petfood puzzles around the house or yard will distract a pet from the stress of its owner leaving. This is also an effective way to fill the pet’s time alone with appropriate, stimulating play.

- **Dental care**—random and repeated use of interactive feeding methods will produce positive reinforcement and bonding, resulting in more chewing. As the cat or dog chews, its teeth will repeatedly penetrate the toy, producing an effective and thorough dental cleaning.

- **Obesity and lethargy**—use of unrestrictive, self-feeding methods can allow pets to overeat, quickly leading to obesity and its associated diseases. The controlled food release compels dogs to eat slowly, allowing them to feel full before overeating.

Genius or the Buster Cube are recommended. Consumers can also hide a pet’s food around the house by sneaking a puzzle like the Molecuball under a bed, or behind a sofa.

**Online exclusive!**

Read more about what Marty Becker, DVM, has to say about the benefits of interactive feeding in his article “Will Work for Food” at www.petfoodindustry.com/FoodPuzzles.aspx.

**Animal behaviorist and** animal training publisher Ian Dunbar, PhD, MRCVS, says that by not allowing pets to pursue and earn food, we steal their life. “Without a doubt, regularly feeding a new puppy...
Behaviorists call this food motivated exercise “constructive discontent.”

(or adult dog) from a bowl is the single most disastrous mistake in dog husbandry and training. Within seconds of gulping, the poor dog now faces a mental void for the rest of the day with nothing but long, lonely hours to worry and fret or work itself into a frenzy,” says Dunbar.

Watching a pet work so hard to eat can often have consumers worried they may be frustrating the animal. Behaviorists call this food motivated exercise “constructive discontent.” Dr. Tripp says, “We can treat boredom using constructive discontent (hunger) to expend energy and stimulate intelligent problem solving, resulting in pets that are physically healthy, smarter and more emotionally fulfilled.”

Providing an enriching and stimulating environment is an important factor in raising a healthy, well-adjusted pet. Although feeding an animal by bowl at regular intervals will satisfy the animal’s nutritional needs, it does nothing to address the animal’s psychological and intellectual needs. Adding interactive feeding sessions to a pet’s normal feeding schedule will be a rewarding and educational experience.
In developed countries, as much as 40% of the pet population may be overweight or obese.

Too much of a good thing

By Sean J. Delaney, MS, DVM, DACVN

Our industry can provide consumer tools and use nutritional strategies to fight obesity in pets

In developed countries where commercial food provides the majority of a dog’s or cat’s calories, overweightedness and obesity may affect as much as 40% of the pet population. No other health concern presents as many challenges and opportunities to the petfood industry.

Consider how prevalent obesity has become in the human population. How does that translate to our pets? A study examining nearly 15,000 US

Powerful proof

Many of us in the petfood industry are focused on making products that try to improve lifespan as well as quality of life. The only thing that’s been definitively shown to do that from a nutritional as well as medical perspective is caloric restriction.

A very impressive study, conducted over 14 years, looked at Labrador Retriever littermates randomly separated into two groups that received the same living conditions, care, exercise level and food (Lawler et al., 2008). With the experimental group, the amount of calories they consumed was restricted by 25% to ensure the dogs remained lean compared with the control group, which was allowed to become about 10-20% overweight.

The dogs that were kept lean lived almost two years longer than the control group. Equally profound is that clinical signs of some of the chronic diseases that we see in older pets, such as osteoarthritis, were much delayed.

This has not been studied in cats, but it’s been true in all species studied so far, including monkeys, worms and rats.
canine patient records from 1999 to 2004 showed 21.6% of the dogs were overweight and 14.8% were obese—a total of 36.4% (Weeth et al., 2007). In France, out of 385 cats studied, 19% were overweight and 7.8% obese—a total of 26.8% (Colliard et al., 2009).

Part of the challenge in fighting this problem is that many pet owners have difficulty recognizing when their animals are overweight. This means we need to provide some tools.

Body conditioning was developed by Nestle Purina PetCare for companion animals and has been validated in scientific studies correlating to fat mass and body mass. On this scale (Figure 1), an animal with an ideal body weight has a visible abdominal tuck and waistline, and if you were petting the animal, you’d be able to readily feel its ribs.

To make consumers aware of appropriate body conditions, the industry has an opportunity to do some education, and the most prominent place is on packaging—not just showing the chart but also providing descriptions and feeding recommendations based on body conditioning.

Feeding guidelines are not foolproof because energy requirements vary tremendously among pets. Our industry is very good about providing species-specific values for different weight ranges and lifestages, but these usually don’t have volume ranges. Generally people will think their animals are hungry and feed more, not aware they’re feeding an excess of calories.

We have to consider volumetrics, in which people associate the amount of calories with volume. Consider two dry petfoods, 1 cup each, with the first food having 220 kcal and the second, 634 kcal.
OBESITY

That's almost a threefold difference. If a consumer simply feeds the same volume regardless of the food's energy density, there's increased potential to overfeed.

We can help pet owners with portion control by providing such calorie information. In North America, this is usually by cup (volume); you could also provide it by unit of mass (kilograms) and may want to include both if your products are sold globally.

The Association of American Feed Control Officials (AAFCO) has been weighing a proposal for several years to require calorie information on petfood labels in the US. Most industry trade groups oppose it. The American College of Veterinary Nutrition supports it, as does the American Veterinary Medical Association representing 50,000 veterinarians. If vets try to use current intake of food as a basis for where an animal's real energy requirements lie, it becomes very challenging without calorie information.

Besides providing these tools, petfood manufacturers can follow one or more nutritional strategies.

LOWER ENERGY DENSITY. The premium and superpremium petfoods that have become so popular generally have higher energy density and fat. To lower density, you can use a variety of mechanisms, though each presents challenges:

- Higher fiber provides volume and mass without providing calories. Large amounts of soluble fibers are usually avoided due to the concern of loose stools. Consumers may perceive fibers on the ingredient declaration as filler, even though

Feeding guidelines are not foolproof because energy requirements vary tremendously among pets.
they are potentially costly. There’s also a great deal of debate about fibers’ satiety effect.

- Lower fat decreases the energy density because fat delivers more energy per gram. Higher fat foods are generally more palatable, so lower fat may affect palatability.
- Higher moisture provides volume and mass while decreasing energy density. With wet petfoods, you can increase water from 75-85%, which can be very effective, especially for a single feeding because such a large volume fills the gut. Multiple feedings throughout the day would negate some of the effects, and there are questions about satiety.
- Expansion of dry kibble provides increased volume without affecting mass. More expanded kibble has air pockets and feels lighter. There’s debate over whether this affects palatability, but probably not. The satiety effect is unknown. This may be more of a helpful tool for pet owners in terms of portion control, because they don’t perceive they’re feeding less.

Note that AAFCO regulations determine whether you can label or market products as “lite,” “reduced calories” or “lower fat” as well as how a product with moisture over 78% is labeled.

L-Carnitine. While not an amino acid, this ingredient is involved in fat metabolism, and its benefits in reducing energy and calories are well supported (Roudebush et al., 2008).

Other nutrients backed by published literature (though with varying levels of support) include conjugated linoleic acid, which comes mainly from dairy or meat ingredients and has potential to keep animals

No other health concern presents as many challenges and opportunities to the petfood industry.

A “NOSE” for Quality

Visit us at www.mpbio.com/safetest for just better information, education & deals.

North America, Tel: 1.800.848.1163 • Asia Pacific, Tel: 65.6775.0006 • Europe, Tel: 00.33.3.88.67.54.44 • safetest@mpbio.com
Leaner; vitamin A at higher levels than normally used; and diacylglycerol. These ingredients fall into the generally recognized as safe (GRAS) category, meaning they’re usually accepted for use in pet foods.

**Nutrient enhancement.** The concept is to add each essential nutrient above required minimum value, which allows you to restrict calories without creating nutritional deficiencies. The level of caloric restriction is proportional to the enhancement:

* x = 100/(%/100), where x = level of restriction supported;
* Thus, 125% enhancement supports 80% restriction (100/(125/100)=80).

Caloric restriction without enhancement can result in nutrient deficiencies. Petfoods formulated according to this concept have evolved from veterinary/therapeutic lines to over-the-counter products.

**LOWER CARB/HIGHER PROTEIN.**

Though not an official definition, “low carb” typically means less than 20% by difference as fed for dry foods. (Carbohydrate claims are currently under review by AAFCO.) These types of dry foods can be very technologically challenging to produce because you’re reducing the ingredients that bind others together. Challenges with energy density might also arise because the products have higher fat content.

Many of the lower carb petfoods are also “grain free,” using ingredients like potatoes, peas or tapioca as the main source of starch. Occasional concerns are raised regarding the higher protein and mineral content of these foods, but research has shown the approach to be safe (Liu et al., 2009; Vester et al., 2009).

Dr. Delaney is senior executive VP, chief nutrition, scientific and medical officer and director of special projects for Natura Pet Products.

---

**Get more online**

For more information on GRAS ingredients, see Dr. David Dzanis’ column at www.petfoodindustry.com/InsightsGRAS.aspx or an article by Jarrod Kersey of the American Feed Industry Association at www.petfoodindustry.com/GRAS-AFIA.aspx.

---

**Measurement and Control of Water Activity in Pet Food Products**

Register today for “Measurement and Control of Water Activity in Pet Food Products,” an online seminar that will broadcast February 25, 2010 at 10am Central.

Join Brady Carter from Decagon Devices, in a discussion on water activity and how it affects product safety.

This educational seminar will also highlight:

- the influence of water activity on chemical reactions and moisture migration
- methods for measuring water activity and techniques for obtaining accurate measurements
- the effect of water activity on microbial growth and its practical application in determining shelf stability
- and much more!

To register visit: www.petfoodindustry.com/webinars.aspx

---

Dr. Delaney is senior executive VP, chief nutrition, scientific and medical officer and director of special projects for Natura Pet Products.
Petfood Industry Strategic Consultants (PISC) can help your company chart a successful new road map! To begin your journey, please sign up at http://i.nl02.net/watt001/ to get connected with one of the consultants in the PISC network.

**What is PISC?** PISC is a non-exclusive NETWORK of current petfood-specific industry consultants poised to offer you and your company expertise in:
- Retail expansion & site analysis
- Regulatory compliance
- Labeling requirements
- Market intelligence
- Qualitative auditing
- Marketing & communications activities
- Organizational design and structure
- Value message creation
- Leverage of product features and benefits
- Other services as needed!

PISC is a different kind of consulting service in that our team will adapt our services to fit your organization’s specific challenges and initiatives.

In delivering plans and programs to fit your needs, we will make sure to strive for optimal quality in our deliverables…all in balance with cost efficiency and timeliness…and with results that are measureable!

For more information, please contact pisc@wattnet.net or +1.815.966.5411, or sign up at http://i.nl02.net/watt001/ so we can contact you immediately to discuss your needs and objectives.

Tel. +1.815.966.5411
pisc@wattnet.net

**Petfood Industry Strategic Consultants**
Because the longer term starts today!
Many in the industry have been eagerly waiting for news from the US Food and Drug Administration (FDA) on a variety of petfood-related matters:

- As this issue goes to press, there has been nothing publicly proposed regarding new federal regulations for petfood labeling as mandated by the FDA Amendments Act of 2007 (FDAAA);
- It is hoped the pilot program to accept GRAS (generally recognized as safe) notifications for petfood ingredients will begin soon; and
- Guidance documents regarding “therapeutic diets” (for lack of a better term at this time) and use of glucosamine and chondroitin sulfate in pet products still appear on FDA’s “under development” list.

Despite the lack of news on those issues, FDA has announced several items on its website that affect petfood.

**Pet health and safety widget:** FDA has developed a computer application that interested parties are free to install on their websites to display information directly from the agency. According to FDA, all that is required to accomplish this is to copy the html code from FDA’s website and paste it on your own homepage or blog. No maintenance is required; once installed, FDA will update the content automatically.

Once the widget appears on your website, the viewer can click on either “tips” or “updates.” One of the current tips included in the widget is how to report a petfood complaint to FDA. However, the tips also include non-petfood topics, such as purchasing pet drugs online. Current updates include information on petfood labeling, heartworm disease, and animal drug safety. Previous updates included notices of petfood recalls.

**Petfood early warning system:** Among other things, FDAAA mandated that the agency establish an early warning and surveillance system to identify adulteration of petfood and outbreaks of illness associated with petfood. In a recent Federal Register Notice, FDA announced the intent to help accomplish this requirement through incorporation of a petfood complaint questionnaire into the MedWatchPlusPortal and Rational Questionnaire Initiative.

This will be part of a larger electronic system to collect and process adverse event reports for all FDA-related products. Proposed questions include requests for information about the petfood product, when it was purchased, how it was used and what effect its use had on the animal.

**AFSS framework:** A new draft for the Animal Feed Safety System (AFSS) recently has been

---

Dr. Dzanis is a writer and consultant on nutrition, labeling and regulation. Tel: +1.661.251.3543; E-mail: dzanis@aol.com.
added to FDA's website. The system is intended to help protect human and animal health by ensuring the safety of animal feed (including petfood). The current draft framework identifies the following major components of AFSS:

- Ingredients and the approval process;
- Limits for feed hazards;
- Process control for the production of feed ingredients and mixed feed;
- Reporting of unsafe feed;
- Regulatory oversight; and
- Education and outreach.

Within each component, gaps in the current system are identified. FDA then explains how it intends to address these gaps to better provide for distribution of safe feed in the US. For example, FDA has established a risk-ranking method of identifying feed hazards to assist the agency in setting priorities and directing resources.

**Online resources**

Pet health and safety widget, [http://www.fda.gov/AnimalVeterinary/ResourcesForYou/ucm192894.htm](http://www.fda.gov/AnimalVeterinary/ResourcesForYou/ucm192894.htm)


AFSS framework, [http://www.fda.gov/AnimalVeterinary/SafetyHealth/AnimalFeedSafetySystemAFSS/ucm196795.htm](http://www.fda.gov/AnimalVeterinary/SafetyHealth/AnimalFeedSafetySystemAFSS/ucm196795.htm)

**Reportable Food Registry:**

This requires manufacturers to promptly report on instances of petfood contamination where there is reasonable probability of a serious adverse effect on health. It became effective on September 8, 2009, but FDA indicated the intent to exercise enforcement discretion for an additional 90 days. That grace period has now expired, so it is imperative that manufacturers report as required or face potentially serious consequences.

---

**Carniking™**

These days we’re not just taking better care of ourselves, we’re taking better care of our pets, too.

Carniking™ from Lonza contains pure L-Carnitine.

L-Carnitine is proven to:
- Support healthy cardiac function
- Improve muscle force
- Convert fat into energy
- Support healthy hepatic function
- Ensure optimum energy metabolism for all life stages

Provide your customers with a product that will improve the quality of life of their companion animals. They’ll love you for it.

Lonza Inc., Allendale, NJ USA, Tel +1 800 965 7426, carnitine@lonza.com, www.carniking.com
In the search for new, high quality raw material sources with consumer appeal and a solid nutritional pedigree, pulses are one class of ingredient that the petfood industry has all but completely overlooked. Is that because of limited availability, poor acceptability by the pet, misperceptions about acceptable ingredients for pets or some other intrinsic nutritional or health issue?

Direct answers may be hard to find. But given that we are facing issues regarding the availability of quality ingredients and a shrinking list of alternatives, maybe it is time we explored this class of ingredients to see if they provide options worth considering.

Pulses are the dried seeds found in pods of leguminous plants. These legume seeds include various dry beans from the Phaseolus and Vigna genus (e.g., pinto beans, navy beans, kidney beans, black beans) along with lentils, peas, chickpeas (also known as garbanzo beans), field beans, cow peas and several minor families. Pulses do not include seeds grown for oil production such as peanuts and soybeans, “greens” such as fresh or succulent peas and green beans or leguminous forage seeds such as clover and alfalfa.

Pulses are grown on each of the continents with arable land and in about every type of climate and soil. There are at least 11 primary pulses recognized and a multitude of varieties or accessions within each group.

Global production exceeds 40 million metric tons annually, with India, Canada, Brazil and China being the largest producers. The dry beans make up nearly half the annual production, peas about 25% of the mix, chickpeas around 20% and lentils less than 10% (Food and Agricultural Organization of the United Nations, 2006).

These ingredients contain about twice as much protein as grains (approximately 20-25%) and have been described by some as “the poor man’s meat” because of their quality amino acid profile. As it relates to cat and dog nutrition, the sulfur amino acids, methionine and (or) cysteine, are the first-limiting amino acids.

With the exception of chickpeas, most pulses are low fat. However, the fat is rich in the nutritionally important linoleic (C18:2n6) acid with small amounts of omega 3 linolenic (C18:3n3) acid as well. The ash (mineral) content of pulses is two to three times that of common grains like wheat and corn, but relative to protein level, pulses carry half to a third of the “ash penalty” compared to rendered animal protein meals.

Regarding minerals, pulses are rich in potassium and phosphorus, but bioavailability can be an issue. Pulses are also a rich source of fiber, ranging from 10-25% total dietary fiber.

The starch content ranges from 30-60% depending on the variety. The starch found in pulses has been characterized as slowly digested (Bednar et al., 2001), which may benefit glucose-insulin metabolism in both dogs and cats (de-Oliveira et al., 2008; Carciofi et al., 2008).

Like other plant-based ingredients, pulses are known to possess a number of compounds that can affect their utilization. For the most part, these are active plant defenses against predation by microbes and insects. In large doses, they can negatively affect nutrient usage in mammals, but some have the potential to be beneficial under the right circumstances (Champ, 2002).
The list includes digestive enzyme inhibitors such as trypsin inhibitors and amylase inhibitors, lectins (phytohaemagglutinins) that can agglutinate red blood cells, phytates and oxalates that impede mineral utilization, various phenolic compounds with flavor, digestive, antioxidant and physiological effects (e.g., tannins, lignins, isoflavones, lignans) and saponins with emulsifying properties. These may sound unhealthy, but to put this in perspective, these compounds appear in many common food and petfood ingredients.

Further, the protease inhibitors and lectins are denatured by heat treatment so they aren’t an animal health issue in processed petfoods. For diets with a large amount of pulses, accounting for available phosphorus and supplementing accordingly is the most direct work-around to the phytate issue. Conversely, phytate-bound phosphorus could be a route to restrict phosphorus in kidney diets. Oxalate content of pulses is around one-fiftieth of that found in spinach, so it is not a real issue outside of an oxalate-urinary tract health diet for cats. The phenolics like tannins are a tenth of that found in sorghum and isoflavones a hundredth of that found in soy, so the dose is inconsequential even if a physiological effect were desired.

While these are certainly things to keep in mind from a customer relations and education perspective, the biggest hurdle to using pulses in petfoods is the sub-fraction of fiber that gets blamed for flatulence—specifically the oligosaccharides raffinose, stachyose and verbescose. The sum of these is about 2.5-5% of dry matter (Canadian Grain Commission, 2004). They have been linked in veterinary literature with gas production (mostly hydrogen sulfide) via fermentation in the colon (Roudebush, 2001).

The content varies with type of pulse, variety and growing conditions, and animal response varies with individual. But less is better, so selecting the right pulses, along with adequate evaluation, are key.

A HEAVYWEIGHT, FOR YOUR LIGHT WEIGHTS

Get the little things right every time with the Beta Raven MicroMaster™, the most accurate micro-ingredient scaling system available. Premix and hand-add methods are lightweights by comparison.

Roll over, funnel hopper or loss-in-weight models available.

For your lightweight jobs, get the heavyweight champ—Beta Raven MicroMaster™—in your corner.

800-552-2382 | WWW.CPMROSKAMP.COM
ST. CHARLES, MISSOURI
Research Notes

Amino acids and taurine in cats eating prepared diets

The objective was to establish comprehensive reference ranges for plasma amino acid and whole blood taurine concentrations in healthy adult cats eating commercial diets. Among the 120 cats in the study, a significant difference in amino acid concentrations on the basis of sex was apparent for multiple amino acids. There was no clear relationship between age, body condition score, body weight and dietary protein concentration and amino acid concentrations.

Key concepts

- **Amino acids and taurine in cats eating prepared diets**
  (JAVMA 239(10):1193. doi: 10.2460/javma.235.10.1193) Dietary protein concentration and ingredients were not directly associated with plasma amino acid or whole blood taurine concentrations.

- **Effects of macronutrients on working dogs**

Differences in amino acid concentrations were detected for various dietary ingredients, but the relationships were difficult to interpret. Dietary protein concentration and dietary ingredients were not directly associated with plasma amino acid or whole blood taurine concentrations.


Effects of macronutrients on working dogs

The aim was to compare the effects of diets varying in proportions of macronutrients on the digestibility, post-prandial endocrine responses and large intestinal fermentation of carbohydrate in working dogs. Two test diets—one low-carbohydrate, high-protein and one high-carbohydrate, low-protein—were fed to 12 adult Harrier Hounds.

Diet 1 appeared to offer advantages, including higher apparent nutrient digestibility, slower release of glucose into the bloodstream and reduced large intestinal fermentation of carbohydrate. A low-carbohydrate, high-protein diet may benefit specific groups of dogs, including working dogs subjected to prolonged bouts of exercise requiring a sustained energy source or those with diabetes mellitus requiring better glycemic control.

DON’T MISS OUT ON 2010 PETFOOD FORUM EVENTS!

Register today at www.petfoodindustry.com/petfoodforum.aspx!

Act now—next opportunity to attend petfood market presentations in Asia is not until 2013.

March 3, 2010, Bangkok, Thailand

PetfoodForum Asia

PetfoodForum

PetfoodWorkshop

Enjoy early bird savings through February 15!

Save 15% on registration for Petfood Forum 2010.

April 12-14, 2010, Chicago, Illinois, USA

Save an additional 20% if you register for Petfood Workshop 2010, too!

April 14-15, 2010, Chicago, Illinois, USA

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

for further information call Mitch Skop at 201-246-1000, or email sales@pharmachemlabs.com.

Fortify your Pet Food with 2 new forms of Omega-3

- Dry Omega-3 Fish Oil Powder is standardized to 9% EPA and 6% DHA.
- Omega-3 Chia Seed is one of the richest sources of essential fatty acids, and has a higher ORAC value than fresh blueberries.
- Both have outstanding stability & solubility for dry pet food applications.

Pharmachem Laboratories
Ingredients

NORTHERN NUTRACEUTICALS INC.
OFFERS PREMIUM OMEGA 3-6-9 PET FOOD INGREDIENTS
BORAGE OIL 20-22% GLA
CERTIFIED ORGANIC:
Flaxseed Oil 50-55% ALA - Milled Flaxseed - Hempseed Oil
www.northernnutra.ca  northernnutra@sasktel.net
Contact Kevin tel: 306 872 4820

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

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

Arkansas Rice Mills, LLC
PO. Box 2998 • Jonesboro, AR 72402
WE ARE THE MILL!
White Rice
Brown Rice
Full Fat Rice Bran
Specialty Products
Rice Hulls
Tel 870-268-7500  Fax 870-268-7501
www.arkansasricemills.com

MARKETPLACE

LANSING TRADE GROUP, LLC
“Your partner for ingredient sourcing, processing and supply”
WHITE POTATO
SWEET POTATO
www.lansingtradegroup.com
Isaac Matthews
imathews@lansingtradegroup.com
419-897-3186
www.lansingtradegroup.com

TOMATO POMACE
High Quality
LaBudde Group
262-375-9111

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

Arkansas Rice Mills, LLC
WE ARE THE MILL!
White Rice
Brown Rice
Full Fat Rice Bran
Specialty Products
Rice Hulls
Tel 870-268-7500  Fax 870-268-7501
www.arkansasricemills.com
MARKETPLACE

**ARISTA INDUSTRIES, INC.**
557 Danbury Road, Wilton, CT 06897
www.aristaandindustries.com

Tel: (269) 672-5123
Fax: (269) 672-9000

**MARSHALL INGREDIENTS**

Your Source for Natural Ingredients

Producing High Quality, Dehydrated Fruit and Vegetable Ingredients for Pet Food Manufacturers!

Specializing in Alternative Fiber Sources.
Apple, Blueberry, Carrot, and Cranberry.

100% Natural No Preservatives
1-800-796-9353

5740 Limekin Rd. • Wolcott, NY 14590
Ph: 315-594-1760 • Fax: 315-594-1956
www.marshallingredients.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:
- 1 613 849-2031 (PH)
- DAFELS@WECOM.COM
- WWW.WILBUR-ELLISFEED.COM

**NATIONAL RICE COMPANY**

Brown Rice Organic Rice Brewers Rice Bran Rice Hulls Rice Protein

John Welisch
www.nationalrice.com

**Petfood Industry**
February 2010

Visit www.ptfood.com for our complete product listing!
Used Equipment

**FOR SALE**

Reconditioned Cooking Extruders & Dryers
Single & Twin Screw Designs
*CLEXTRAL* • *WEGNER* • *EXTRU-TECH* • *AEROGlide*

EXTRU-TECH, INC.
100 Airport Road
Sabetha, KS 66534

Phone: 785-284-2153
Fax: 785-284-3143
Attn: Equipment Sales Group

---

Packaging

**FAWEMA North America**

Bag Packaging Equipment

FAWEMA North America
615 Sherwood Pkwy, Mountainside, NJ 07092
Tel 908.231.1145 • Fax 908.232.5562
w.vandenheuvel@fawema-northamerica.de
www.fawema.com

---

Equipment

**DIE ROLLS**
800.343.7655
weidenmiller.com

---

Testing

**New Technology Inc.**

11063 Highway 59 North, Gravette, AR 72736
Telephone: 479-767-4773 Fax: 479-767-9957
1-800-684-0442
Home page: www.newtechnology.com

---

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

HOSOKAWA BEPEx

4445 Malone Road • P.O. Box 18844
Memphis, Tennessee 38118
Tel: 901-531-6100 • Fax: 901-531-6105
e-mail: Contact@hosokawa-ch.com

---

**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
e-mail: dowatts@aol.com
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://watt.netline.com/essentiallypet
**Industry Calendar**

- **Packaging Conference**, February 8-10, 2010, ARIA Resort, Las Vegas, Nevada, USA. Please visit [www.thepackagingconference.com](http://www.thepackagingconference.com) or e-mail info@plastictechnologies.com for more information.

- **Innovations in Continuous Processing** Webinar, February 10, 2010. Register online at [www.ktron.com/webinars](http://www.ktron.com/webinars) or e-mail info@ktron.com for more information.

- **Zoo Russia Professional**, February 18-21, 2010, Hall 1, Crocus Expo, Moscow, Russia. For registration information, please e-mail nviongradova@astigroup.ru or visit [www.zoorussia.ru](http://www.zoorussia.ru).


**Get more**

Find more petfood, pet and feed industry events at [www.petfoodindustry.com/EventCalendar.aspx](http://www.petfoodindustry.com/EventCalendar.aspx).

**Event Calendar**

<table>
<thead>
<tr>
<th>S</th>
<th>M</th>
<th>T</th>
<th>W</th>
<th>T</th>
<th>F</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
</tr>
<tr>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
</tr>
<tr>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
</tr>
<tr>
<td>28</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**February**

- **AFMA Forum**, March 2-5, 2010, Sun City, North West Province, South Africa. For more information, e-mail admin@afma.co.za or visit [www.afma.co.za/Forum2010.htm](http://www.afma.co.za/Forum2010.htm).


- **AFIA Purchasing and Ingredient Suppliers Conference**, March 8-12, 2010, Hilton Palacio Del Rio, San Antonio, Texas, USA. For more information, e-mail afia@afia.org or visit [www.afia.org](http://www.afia.org).


- **Better Process Control School on Wet Petfood Production**, March 29-April 1, 2010, Department of Food Science, Chapman University, Orange, California, USA. More course information is available at [www.chapman.edu/enhance](http://www.chapman.edu/enhance) or e-mail vascolech@chapman.edu.
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.
We could talk all day about our research and development.

But we’d rather talk about yours.

Whether you’re challenged with dreaming up new product ideas, perfecting recipes, or refining production techniques, the Wenger Technical Center will help you excel. We offer more knowledge and skill in all aspects of extrusion and drying technology than anyone. We’ll help you plan projects, develop prototypes, engineer processes, and perform lab analysis — more quickly, more efficiently, and more profitably.

Talk to Wenger today and surround yourself with unrivaled resources for exceeding your processing goals.