

# Petfood goes

Solar roof at Cardinal Laboratories, p. 20

### Live long, live strong

AL SALAN BURNER

Extrusion elevation: the latest technology

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Volume 51. Number 12



Petfood goes green

By Debbie Phillips-Donalds

Manufacturers and suppliers are opening or retrofitting sustainable facilities.

### **28** Aller's recipe for success

Combine a commitment to petfood with an emphasis on quality and a focus on premium and superpremium private label.



### **34** Live long, live strong

From puppy to senior to everything in between, lifestage petfoods target immunity and lifespan of cats and dogs.

### **38** Extrusion elevation:

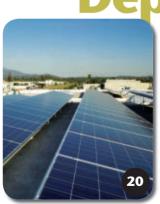
### the latest technology

Bv lessica Tavlor

The newest drying, cooling and extrusion products promise sanitation, faster turnaround and improved palatability.

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On the cover: A solar array provides 100% of the power for Cardinal Laboratories' facility in Azusa, California, USA.

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### **Online exclusives**

Article: The greening of petfood Read more about sustainable facilities built or retrofitted by petfood manufacturers and suppliers. www.petfoodindustry.com/ petfoodgoesgreen.aspx.





### Research: Antioxidant for lifestage formulas

Find out the latest on lutein from Dr. Anna Sutton of Kemin. www.petfoodindustry.com/ LuteinLifestages.aspx.

### Article: Bulk density and palatability

Dr. Mukund Parthasarathy explains his holistic approach to petfood palatability and bulk density of extruded products. www.petfoodindustry.com/ BulkDensity.aspx.



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### Something to Chew On <u>comments</u> By debbie Phillips-donaldson Petfood still growing

hat a relief! We made it through this difficult year. As the latest data from Euromonitor International shows, the petfood industry has weathered the economic storm better than most and is even still growing. Euromonitor says global sales of dog and cat food will reach US\$52 billion this year, up from US\$49 billion in 2008.

The year over year growth, however, was just 0.6%, quite a decline from the heady rates of recent years. According to Euromonitor's projections, the industry will need to cope with that slower growth for a while longer.

#### **Crashing to earth?**

From 2004 through this year, global sales of dog and cat food grew nearly 30% overall (Figure 1). But Euromonitor predicts global sales will grow just 13% over the next five years, with high growth regions like Eastern Europe and Latin America crashing to earth, at least relative to the stratospheric heights they enjoyed the previous five years. Only Asia Pacific will grow slightly more through 2014 than it did in the previous five years.

The decline becomes clearer when you compare compound annual growth rates

But the industry's growth rate is definitely slowing.



— Debbie Phillips-Donaldson

(CAGRs) for dog and cat food (Figure 2). Two years ago, when Euromonitor looked back at the previous five years (2002-07), it measured CAGRs such as 7% globally and for Western Europe, 24% for Eastern Europe, nearly 16% for Latin America and nearly 5% for North America.

In just two years, CAGRs (2004-2009) fell to 5% globally, 15% for Eastern Europe, 12% for Latin America and a huge drop to just under 3% for Western Europe. Only North America stayed the same.

Projecting the next five years, Euromonitor says global and North America CAGR will be only 2.5%, with Eastern Europe falling to just under 8%, Latin America to just under 4% and Western Europe and Australasia to downright scary rates below 1%. Asia Pacific's

### Figure 1. Sales of dog and cat food by region, 2009-2014

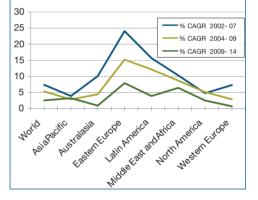
According to Euromonitor, growth of dog and cat food sales will decline globally and in every region except Asia Pacific.

	Sales in US\$ millions		% total growth	
Region	2009	2014*	2004-09	2009-14*
World	\$52,198	\$59,198	29.55	13.41
Asia Pacific	\$5,101	\$5,980	15.12	17.23
Australasia	\$1,609	\$1,684	24.30	4.63
Eastern Europe	\$3,051	\$4,462	103.27	46.24
Latin America	\$6,318	\$7,653	77.67	21.13
Middle East and Africa	\$492	\$672	51.74	36.53
North America	\$19,211	\$21,738	28.51	13.16
Western Europe	\$16,416	\$17,009	15.33	3.61

\*Projections by Euromonitor International

### Figure 2. Compound annual growth rate by region

The CAGR for dog and cat food sales has slowed in the last two years and will decrease further in most regions through 2014, Euromonitor says.



CAGR will grow slightly, from just under 3% now to 3.2% through 2014.

### **Silver linings**

Still, some growth is better than none. And with reports of strong US pet trade shows this fall and robust preliminary numbers from 2010's global events such as Victam Asia and Interzoo (see www. petfoodindustry.com/ListNews.aspx), we can truly look forward to the new year.

Phillips-Donaldson is editorin-chief of Petfood Industry magazine. E-mail her at dphillips@wattnet.net.

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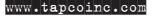
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### **Industry News**

### **Quick hits**

The Lanly Co. announced the addition of Martin F. Marincic to the position of director of sales and marketing.

>

- Premier Research Labs' plant in Austin, Texas, USA, completed a successful GMP audit.
- Natura Pet Products added Lisa Nicholson as its mid-Atlantic territory sales manager.
- D.D. Williamson announced the promotion of Katie Price to customer support chemist in the Global Support Center.

Euromonitor has released its most recent market reports, Pet Food and Pet Care in Egypt and Pet Food and Pet Care in Malaysia.

>

United Food and Commercial Workers International Union Local 75 agreed to buy the former headquarters of Iams-Eukanuba in Vandalia, Ohio, USA.

# Petfood Forum

### Dr. George Fahey to headline Petfood Forum Asia

Sponsored by *Petfood Industry* magazine and in conjunction with Victam Asia, Petfood Forum Asia connects key professionals from around the world in one of the fastest-growing markets to learn about trends affecting industry growth. Attendees will learn valuable information from industry experts to help them grow their businesses. And if you register by January 18, you'll receive a 20% discount.

George Fahey, PhD, of the Department of Animal Sciences at the University of Illinois and a noted expert in companion animal nutrition, heads the list of expert speakers. During Petfood Forum Asia, he'll present research on the importance of fiber (in the form of fermentable carbohydrates) to feline health.

The speaker and topic line-up for this March 3, 2010, event is dynamic and educational. Get the latest information and research from more speakers such as:

- Anton Beynen—All-breed versus breed-specific diets for dogs;
- **Galen Rokey**—Impact of process hardware on petfood safety;
- David Thomas, PhD—Effect of nutraceutical ingredients on the immune function of cats;
- Enzhi (Michael) Cheng, PhD, and Will Henry—Critical processing issues in today's production environment;
- Jim Mann—Ensuring freshness: managing biogenic amines in petfood ingredients; and
- > Hot industry trends leading petfood growth in Asian and global markets.

Petfood professionals can register now to receive an early bird discount. For more information or to register for Petfood Forum Asia, log on to www.petfoodindustry.com/ petfoodforum.aspx. Register before January 18, 2010, and receive the early bird rate, only US\$245—a 20% savings from the US\$295 registration fee.

Attendees can also check out the many exhibits at Victam Asia, one of the largest feed events in the world, scheduled for March 3-5, 2010, at the Queen Sirikit National Convention Center in Bangkok, Thailand. For more information, visit www.victam.com.



### Menu Foods sees positive third quarter

Menu Foods Income Fund announced results for the third quarter that ended September 30, including EBITDA (earnings before interest, taxes, depreciation and amortization) of CA\$7.4 million (US\$7.07 million), a 93% increase over the same quarter last year.

"Our strong third quarter performance continues the trend begun in the first quarter of 2009 and marks the first time since 2006 that Menu has had three consecutive profitable quarters," stated Paul Henderson, president and CEO of Menu Foods.

Menu Foods also generated almost CA\$10 million (US\$9.55 million) in cash from operations and was able to reduce its bank indebtedness by CA\$8.5 million (US\$8.12 million) and finance CA\$1.5 million (US\$1.43 million) of capital expenditures undertaken during the third quarter.

In *Petfood Industry*'s September issue, O Organics was mentioned in the article "Riding out the recession." O Organics petfood is sold in Safeway, Albertsons and other retailers nationwide, and not Walmart, as the article states. *Petfood Industry* regrets this error.

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### Petco promotes organic petfood via e-mail

Petco's marketing approach now includes monthly e-mail messages about its products and services, including information about organic petfood and coupons for the products.

Petco followed up its recent e-mail campaign by hosting in-store nutrition seminars to educate customers on the benefits of an organic pet diet.



### Eukanuba showcases prebiotic line

Eukanuba, which is celebrating its 40th anniversary this year, showed off its prebiotic line of petfoods at the 2009 Meet the Breeds Convention at the Jacob Javits Center in New York, USA.

"Prebiotics feed the good bugs in the intestine system," said Eukanuba's Jason Taylor.

Taylor said the food is good for both dogs and cats, and is not breed specific.

For information on future events in the pet industry, visit www.petfoodindustry.com/EventCalendar.aspx. Want your event promoted? Send information to Jessica Taylor at jtaylor@wattnet.net.





### Register now for Petfood Forum 2010 **Petfood Forum** and learn from the experts

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petfoodindustry. c o m / p et f o o d forum.aspx by February 15, 2010, to save up to 15%!

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 other important topics:

- State of the industry report— David Lummis, Packaged Facts;
- Update on nutrigenomics— Kelly Swanson, PhD, University of Illinois;
- Survey: state of the animal supplement, functional ingredient and treats market—Patrick Rea, Nutrition Business Journal;
- Dry petfood manufacturing and the carbon footprint—Jacques Wijnoogst, consultant
- Marketing petfood with a higher purpose: harnessing the niche nation —Bob Wheatley, CEO, Wheatley & Timmons;
- An outsiders' view of petfood: "human food" nutritionists weigh in—Marion Nestle, PhD, New York University, and Malden Nesheim, PhD, Cornell University;
- Petfood and the importance of a balanced diet—Karen Wedekind, PhD, Novus International;
- Prebiotic and probiotic supplements in petfood: impact on immunity—Sara Cutler, Kemin Nutrisurance;
- Sustainability as a business and survival—strategy—Jan Hoijtink, consultant;
- Convenience trends in petfood packaging—Alexander Miko-

lasek, Mondi Packaging; and Making private label superpremium petfoods competitive in a crowded market—Serge Boutet, Mondou Ltd. If you also register for the followup symposium, Petfood Workshop: Hands-on Nutrition, you'll save 20%! Visit www.petfoodindustry.com/ petfoodforum.aspx.

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#### News >

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**Firm fined £100,000 for employee death.** UK petfood company Butcher's Pet Care Ltd. was fined £100,000 (US\$168,300) for the death of an employee due to the company's breach of health and safety regulations, according to the BBC.

John O'Connor, 38, from Rugby, Warwickshire, was crushed to death in 2003 when he climbed into a palletizing machine to clear a blockage.

The machine should have had a system to prevent anyone gaining access until the power was shut off, according to health and safety regulations.

**Early check-in for Interzoo 2010 exhibitors.** Interzoo will require exhibitors to check in early to Interzoo 2010 to make sure the importation of petfood from exhibitors' countries into the European Union and Germany is allowed.

Interzoo also reminds exhibitors that food for pets and ornamental fish, which contains animal by-products, may only be imported from listed third countries, Sri Lanka, Japan and Taiwan.

Victam Asia 2010 coincides with other feed, petfood events. Victam Asia, to be held March 3-5, 2010, at the Queen Sirikit National Convention Center in Bangkok, Thailand, will host at least 150 international feed manufacturing companies. The trade show will be accompanied by three additional events, including Petfood Industry's Petfood Forum Asia.

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### International Safe Feed/Safe Food nears launch

The international version of the Safe Feed/Safe Food Certification Program is nearing implementation, according to the American Feed Industry Association (AFIA), the creator

and sponsor of the thirdparty-verified program that has run in the US since 2004 and has certi-



fied more than 350 livestock feed and ingredient facilities.

Representatives of the European Feed Additives and Premixtures Association (also known as FEFANA) recently met with AFIA in Arlington, Virginia, USA, to discuss details of the international version of the program.

The establishment of the International Safe Feed/Safe Food Certification Program was designed to help facilitate US trade with European feed and ingredient customers by providing a tool to illustrate compliance with the European Union's feed hygiene regulation, Regulation (EC) 183/2005, which requires certification to the hazard analysis and critical control points (HACCP) system.

#### The latest news NOW

PetfoodIndustry.com has the latest updates, news and event information. Petfood-Connection.com keeps the industry connected as professionals converse on regulations, global distribution, marketing and more!

### Holistic petfood brand adds more functional ingredients

Holistic Select from WellPet now offers recipes with Select Actives, functional ingredients found in nature.

The food follows the company's philosophy of preventing health problems in pets before they start. Select Actives are a combination of enzymes, probiotics, live micro-organisms, botanicals and phytonutrients. The recipes are for cats and dogs through all lifestages.

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### New on the Shelves

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**Find more new products** at www.petfoodindustry.com/ ListConsumerProducts.aspx. To submit products, contact Tara Leitner, Tel: +1.815.966.5421, Fax: +1.815.968.0941, tleitner@wattnet.net.



### **«** Dry, holistic dog formulas

Whole Earth Farms from Merrick offers holistic dry kibble formulas for puppies, adults and seniors. The products are designed to be value priced and have multiple protein sources, vitamins and minerals. Ingredients include buffalo, dried cranberries and blueberries, rosemary, sage and thyme. **www.merrickpetcare.com** 

### Jerky treats for dogs >>

Evanger's is offering a dog treat called Nothing But Natural jerky treats. The treats do not contain artificial colors, flavors or preservatives and use naturally raised poultry, game or meat, according to the company. The product comes in four varieties: Organic Chicken with Fruits & Vegetables, Natural Buffalo with Fruits & Vegetables, Natural Pheasant with Fruits & Vegetables and Natural Venison with Fruits & Vegetables. www.evangersdogfood.com





### **« Bulk dog treats**

Sojourner Farms offers boxed bulk dog treats, designed to be a costconscious option. Sojos' bone-shaped bulk treats are wheat and corn free, with no preservatives, according to the company. The treats come in two flavors: Chicken Parmesan and Pepperoni Pizza. **www.sojos.com** 

### Greens treats for cats >>

Available in Roasted Chicken, Deep Sea Tuna and wild Savory Salmon, Bell Rock Growers' semi-moist Pet Greens Treats for cats contain wheat grass to support healthy digestion. They contain no wheat gluten, artificial colors or flavors, according to the company. www.bellrockgrowers.com



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# Petfood goes Manufacturers and suppliers are opening or

hen our industry looks back at 2009, we might consider it the year of the greening of petfood, at least in the US. This year has seen the opening of several new or retrofitted US facilities—plants and office buildings, for manufacturers and suppliers—designed to be more environmentally friendly. Some have earned Leadership in Energy and Envi-

ronmental Design (LEED) certification from the US Green Building Council (USGBC, http://www.usgbc.org/).

Why the seeming boom in sustainable construction? While their green facilities build goodwill with communities and customers, these companies are not acting solely to get good PR or help save our planet. Rather, they're learning an equation already discovered by other organizations and in other parts of the world: green = green.

In other words, the sustainable features of these buildings make good business sense, too, especially in a troubled economy. Besides saving on energy usage and waste removal, such facilities are more efficient overall and are often eligible for tax credits or grants as governments encourage use of more



### Canidae: the answer is blowin' in the wind

On the wide flat plains in the center of the US, nearly constant wind turns 34 massive turbines comprising the Oklahoma Wind Energy Center (in Woodward). The power generated—50 megawatts at peak capacity—supplies 100% of the electricity for the plant where Canidae Pet Food manufactures its all-natural Snap-Biscuits and Snap-Bits dog treats.

Canidae says it saves about 1 pound of coal for every kilowatt-hour generated by wind. Besides this ecofriendly design, the state-of-the-art plant also employs many safety features.



# GREEN retrofitting sustainable facilities

### BY DEBBIE PHILLIPS-DONALDSON

sustainable energy sources.

The buildings shown here and on the next few pages are not intended to be a complete list of sustainable facilities; we realize more are out there or being planned for the near future.

If you know of others, please post information at www.Petfood-Connection.com/ group/sustainability or e-mail dphillips@wattnet.net.

#### **Online extra!**

To read more about each of these company's green initiatives, go to www. petfoodindustry.com/petfoodgoesgreen.aspx.

At the end of October, Cardinal Laboratories' manufacturing and distribution center in Azusa, California, USA, converted completely to solar power to manufacture its pet care products, including dog food and treats. The company claims to have not only the first completely solar-powered production facility in that city but also the first in the US pet industry.

Cardinal is now harvesting so much power from its solar collection system—

a white roof with 320 solar panels covering 5,440 square feet—that it is sending electricity back to its local utility and was able to install air conditioning for the first time, via a state-of-the-art, optimal efficiency air control system. Other energy-independent features include more efficient machines, new prismatic units to replace skylights and sensors to turn off lights when an area is vacated.

### Cardinal: off the grid





### Natura: eco-friendly in the office

Perhaps it's no surprise that a company called Natura—with brands of petfood such as California Natural, Karma and Mother Nature—would invest in a green building. That's exactly what it did with its new office in Davis, California, USA, opened in April. Environmentally friendly elements include: Pre-wiring for future solar panel

usage;

 Energy Star-rated equipment (a US governmental program, see http:// www.energystar.gov/);

 Bike racks to encourage employees to commute by bicycle;

 Low-emissivity windows to allow for natural lighting;

 Operable windows to allow for fresh air and natural heating/cooling;

 Motion sensors to automatically turn off lighting when not in use;

 Water conserving features such as drip irrigation and a bioswell for runoff water (photo above); and

 A video conferencing system between this office and the company's plant in Nebraska, to reduce employee air travel. Mars Petcare US has made strides for several years now to reduce its impact on the environment: expanding its plant's recycling systems, modifying packaging from paper to woven polypropylene and significantly reducing its solid waste, the company says.

But this year the company topped its own efforts to date with its new plant in Fort Smith, Arkansas, USA, opened at the end of September. The US\$80 million, 305,000-squarefoot facility earned LEED gold certification, a first for the company—and, Mars says, it's the first sustainable manufacturing facility in Arkansas and the first sustainable petfood plant in the world. It features water recycling and energy reduction programs as well as mechanisms to protect against erosion and light pollution.

### Mars: LEED certified in Arkansas





In May, Nestlé Purina PetCare celebrated the installation of a pilot solar energy array on its plant in Denver, Colorado, USA. The 467-panel, 100-kilowatt photovoltaic system, covering 21,000 square feet of the plant's roof, made the company the first manufacturer to use renewable energy to produce petfood, according to Nestlé Purina.

Though the system will provide only 1% of the facility's electricity needs, the local utility would emit nearly 300,000 pounds of carbon dioxide per year to produce the same amount of electricity, according to Nestlé Purina. (That amount of emissions is equivalent to what 23 cars would emit annually.)

Next up are solar arrays for two more Nestlé Purina plants—in Flagstaff, Arizona, and Maricopa, California one of which will be twice as large as the system in Denver. All these renewable energy systems will help the company work toward its global corporate goal of improving energy efficiency by 2% this year.



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### **Novus: going platinum**

Platinum certification is the highest LEED level awarded, and it's been achieved by fewer than 100 buildings in the US. One is the new global headquarters of Novus International, a supplier of animal (and now human) health and nutrition products based in St. Charles, Missouri, USA.

Opened in June, the US\$20 million, 20,000-square-foot building encompasses office space and the company's research center. Sustainable features include:

 The largest array of solar panels in Missouri (5,000 square feet);
 10% of materials from salvaged sources and 30% from recycled content, such as countertops made from recycled milk jugs and scrap aluminum and a fitness center floor made from recycled tires;



 An under-floor air distribution system for energy efficiency;
 Landscaping with native plants requiring no irrigation, saving thousands of gallons of water each year;
 A framework to grow a plant "canopy" for natural shading;

A storm water system to reduce

runoff; and
Skylights and floor-to-ceiling windows for natural lighting.

#### Video exclusive!

Watch Novus executives explain the company's sustainability program at www.wattagnet.com/9465.html.

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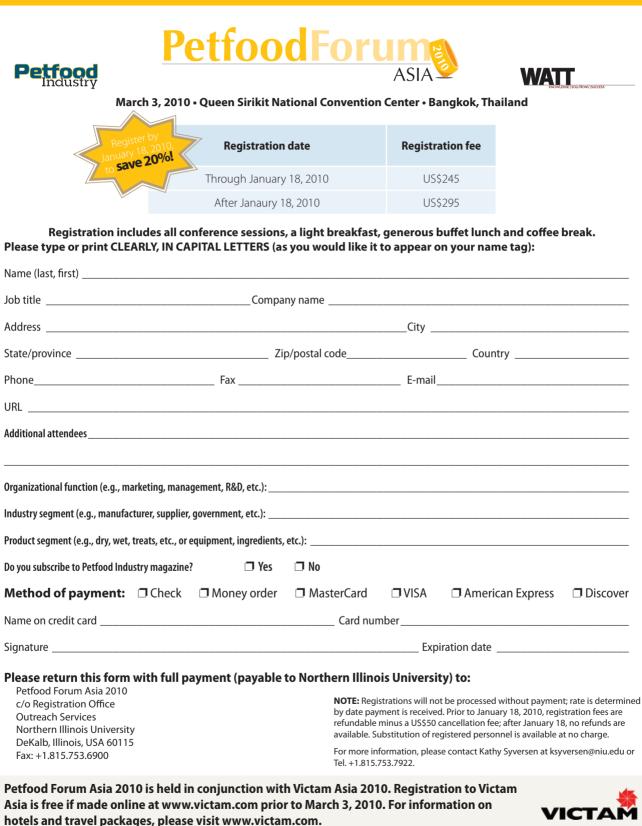
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# Aller's recipe for success

Combine a commitment to petfood with an emphasis on quality and a focus on premium and superpremium private label

BY STEFANIA PES

### **Business basics**

#### **Headquarters:** Fredericia, Denmark

Officers: Henriette Bylling, managing director/co-owner; Frederik Bylling, purchasing manager; Peter Sejersen, production manager; Arne Jacobsen, quality manager

**Brands:** All Cat/All Dog, Aktiv, Wildlife, Real Petfood, plus private label

**Distribution:** Denmark, Scandinavia, Poland, Germany, Turkey, Czech Republic, Estonia, Lithuania, Romania

**Facilities:** Fredericia, Denmark; St. Petersburg and Tver, Russia

Employees: 321 Website: www.aller-petfood.dk Aller, led by fourth generation family owner Henriette Bylling, is launching new private label products and its own brands, such as Real.

ncreasing consumer product awareness is a main driver in the growth strategy of Aller Petfood," says Henriette Bylling, managing director and co-owner. The Danish petfood company has been in existence since 1979, when it was established on the foundation of a longtime family business in feed production serving the local agriculture and global aquaculture markets.

Today, Aller Petfood consists of the initial Danish dry food factory and both wet and dry food factories in Russia, where Aller is currently a leader in the private label market—in fact, it is the only private label producer there of wet petfood pouches.

Bylling owns the company with her father, Povl Bylling, and brother, Frederik Bylling, who participate in the daily running of the Danish division while she manages the overall Aller Petfood organization. In the last few years, the family's vision has significantly impacted the company's direction.

"Through the years, the strategic key word at Aller has always been modernization, and we believe that today this matches with the ability to meet the consumer's increased product awareness," Bylling says. "For this reason, we believe the future lies in being quality focused."

### Cornerstone of quality

Aller's goal is to combine a more intense focus on quality for its existing and new premium and superpremium private label products, plus its own brands. The company is pursuing the goal with the help of ISO 22000 certification, which the Danish factory in Fredericia achieved in 2007. It was one of the first petfood facilities in Europe and globally to earn the certification, according to Bylling.

ISO 22000 is an international standard that defines the requirements of a food safety management system, originally developed to cover all components of the human food chain from "farm to fork." Over the past few years, recalls and safety-related issues have affected a variety of products including petfood, so consumers are now more concerned and attentive to what they eat and what they feed their pets. In addition, major food buyers, such as supermarket chains, are demanding safety assurances from their suppliers.

The increased demand for safe, high-quality food applies to the petfood industry as well, Bylling says. "By making a wholehearted effort to relentlessly improve the quality of our production, we will not only save resources, improve hygiene and have clearer workflows, but we will also be able to live up to customers' escalating quality



Real Petfood from Aller is a complete premium line for dogs and cats.

demands," she adds.

ISO 22000 is the cornerstone of Aller's quality policy. "Basically, you have to prove that your products are really premium or superpremium," Bylling says. "We are very proud of being able to offer not only a high-value standard line, but also real healthy premium and superpremium quality products. We do not want the consumer to pay for our marketing—we want them to be paying for our investment in our petfood products."

At the beginning of 2009, Aller took another important step. Since 2005, its Danish facility has used a quality management system based on the principles of hazard analysis and critical control points (HACCP) and the requirements of the ISO 9001 standard. Now that system is being implemented in Aller's Russian facilities to increase operating efficiency by distinctly identifying the company's processes and interrelations among them.

### Looking east-and farther

Because Aller's domestic market (Denmark and Scandinavia) is very mature in terms of petfood development, as is most of Western Europe, it isn't realistic to continue to grow only in that area

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### **Building on heritage**

The history of Aller can be traced back to the Vikings, when Aller Moelle built an old water mill that established the company's position as the agricultural supplier to the local area. In the early 1900s, the first Bylling generation took over the management and ownership of the mill. Through the years, the family expanded the business with aquaculture and petfood divisions; Aller Petfood was founded in 1979 and today is owned and run by the fourth Bylling generation.

Earlier this year, the family decided to sell Aller Moelle A/S—the feed mill serving the Danish market—and focus on petfood manufacturing. That is the side of the business that showed the best global prospects for the future, according to Henriette Bylling, managing director and co-owner of Aller: "Yes, we have strong emotional links to the mill, which is actually our heritage. But in business you have to look from the past to the future. The potential in the international petfood market demonstrates that this is where our energies should lie."

with its own brands.

Aller >

So Aller decided to explore opportunities in Eastern and Central Europe using Poland as a test, initially with a sales office and later through an agreement with Poland's largest distributor. These tests were successful, opening the doors to try other countries such as Romania, Estonia and the Czech Republic.

"Also, we are looking at offering our high-quality private label products," Bylling says. "Our export manager is specifically dedicated to establishing cooperation with distributors and private label customers in Central and Eastern Europe. We have experienced exciting results so far, and we still see great opportunities in these relatively new markets.

"We will keep looking east in the future," Bylling continues. "But we also see great opportunities in other markets, such as South America and the Caribbean. As in the previous 88 years of the company's existence, we continue having an open mind to the numerous opportunities in the market."

Stefania Pes is a writer for Mediatic (www.mediatic.it).

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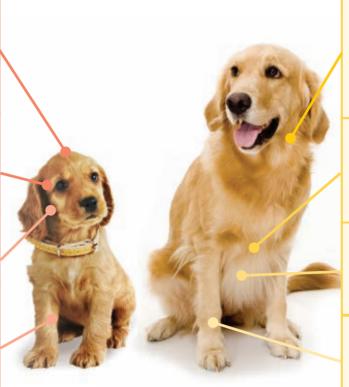
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# Live long, live strong

From puppy to senior to everything in between, lifestage petfoods target immunity and life span of dogs and cats

BY JESSICA TAYLOR

and senior foods are more about marketing than nutrition, these formulas represent the efforts of premium manufacturers to develop foods that best meet the needs of pets throughout their lives.

Many dog and cat foods on the shelves are labeled 100% complete and balanced for all lifestages. By altering the amount fed per pound of body weight, pet owners can deliver the right amount of nutrition for each lifestage; but with lifestagespecific petfoods, additional calories for growth, minerals and protein, targeting critical areas such as joints and sight, are already a part of the formula.

### Dogs and cats have different needs

A pet's dietary needs change over the course of its life, from birth to adolescence to adulthood to old age. A lifestage diet is one that is tailored to meet the different nutritional needs as a pet ages.

#### Kittens and puppies

Puppies need nearly four times the energy that adult dogs do, and they need extra protein to help build new tissue. So an energy-rich diet including protein, fat, calcium and phosphorous is important during this phase.

Puppies' needs also vary according to breed. Toy and small breed dogs need

higher levels of these nutrients, while large breed dogs need less to control their growth rate, and medium-sized dog breeds are between the two. Too little or too much of these nutrients can cause problems with canine skeletal structure and possibly lead to obesity.

Kitten food should be high in easily digestible animal protein and other important nutrients, such as fiber, essential vitamins and minerals and taurine. an amino acid found in chicken and fish sources. Kittens are developing their immune systems, and adequate protein is essential for the development and ongoing maintenance of a nimble defense system. Kitten foods are also slightly higher in certain minerals like calcium and phosphorus for bone growth and development.

According to veterinarian Cori

Gross, DVM, a VPI Pet Insurance field veterinarian, there is evidence suggesting that adding DHA-an essential fatty acid that improves brain development and is mandatory in human baby formula-to puppy or kitten food can actually make animals smarter

## Adolescent and adult dog years

The recommended time to switch a dog's diet to an adult food formula is ideal when the dog is close to its adult height, approximately at 2 years of age. An adult diet that is tailored for this dog lifestage will depend on the breed and its level of activity. Many veterinarians recommend that a dry food diet is best to help keep teeth healthy-and for larger breeds, to provide more caloric density.

According to Gross, the average dog

should eat food containing:

- ▶ High-quality, animal-based protein for muscle maintenance:
- ► Fiber for a healthy digestive tract;
- > Essential vitamins and minerals for the immune system;
- ► Vitamin-rich fish oils for a healthy coat and skin and for overall health; and
- ► Healthy grains for energy.

## Adolescent and adult cat years

Veterinarians recommend transitioning kittens to adult food at about 9 months of age. Holistic petfood blogs often suggest blending dry cat food with canned food for a well-rounded meal. Cats are strict carnivores so the food should contain a high level of easily digestible protein. Fat is also important for needed calories.

#### **Online Exclusive!**

Read the latest research from Kemin's Dr. Anna Sutton on lutein, an antioxidant supplement that may be perfect for lifestage petfood formulas. Visit www.petfoodindustry.com/LuteinLifestages.aspx.



## **Questions from consumers**

Pet parents always want what's best for their furry family members but need the basics on lifestage nutrition before they buy. Here are some commonly asked consumer questions gathered from various blogs and the best way to answer them.

- What should I feed my puppy or kitten? Premium puppy or kitten food is important because it is high in protein and calcium. Many premium foods are supplemented with DHA. This essential fatty acid is important for brain development and overall health.
- 2. What's the difference between small breed puppy foods and large breed puppy foods? The main difference is that small breed puppies have higher metabolisms and special growth rates and their foods are created to meet those needs. On the other hand, large breed foods are formulated to promote a slower growth rate, which will allow for healthy bone and joint development in large and giant breeds.
- 3. When should my puppy/kitten change to adult food? Always follow your vet's recommendations when it comes to your pet's development. A good rule-of-thumb is to change to an adult food at about 12-14 months of age or when the pet reaches 80% of its adult size.
- 4. What should I feed my large breed dog? If you have a dog that is 50 lbs. or larger, it is recommended that you feed a large breed formula. This food has lower fat and protein levels and a larger kibble size. Many large breed formulas also have higher levels of glucosamine and chondroitin for joint health.
- 5. At what age should I switch my dog/cat from an adult to a senior formula? For most dogs and cats, senior foods should be introduced at about 7 years of age. Large and giant breed dogs should be switched at 5 years of age. Today's senior foods are formulated with added protein to meet older animals' unique nutrition requirements.

Adult cat food should also contain:

- Vitamin A from liver, kidney and other organ meats, and niacin for healthy growth;
- Essential fatty acids for healthy skin and fur; and
- Taurine for healthy eyes and heart muscle.

## Senior pets

Dogs and cats are living longer than they did several decades ago. They are better vaccinated and receive routine veterinary care. Therefore, they also are getting better nutrition.

A senior pet is one considered to be in the last third of life and undergoes physiological changes that can be impacted through diet.

Obesity can become an issue. Kidney failure is not uncommon. Senior dogs need a diet lower in calories, protein and fat and one higher in fiber, as most are not as active as they once were.

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Since the commercialization of petfood, improved techniques for processing petfoods and treats have resulted in the expansion of the petfood supply by prolonging shelf life, preventing spoilage and increasing the variety of food products available. The latest extrusion, drying and cooling developments from companies like Clextral, Wenger and Aeroglide continue to focus on these very advancements,

#### Online extra!

Read an article by Dr. Mukund Parthasarathy, who has developed a holistic approach to petfood palatability to resolve issues related to the bulk density of extruded products. www. petfoodindustry.com/BulkDensity.aspx. hoping to continue to improve overall petfood quality for consumers and their pets. The question is: Which technology is right for your manufacturing line?

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The newest drying, cooling and extrusion products promise sanitation, faster turnaround and improved palatability for petfoods and treats

BY JESSICA TAYLOR

Sure, manufacturing technology keeps getting better, but what exactly can these products do for your specific petfood or treat line?

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operating parts for sanitation and maintenance. Take, for example, a simple clamp system that unlocks the barrel from the lantern to allow immediate barrel access for reconfiguration or dismantling. Clextral attests that the oversized lantern opening allows quick access to the bearing block and shaft coupling.

## 2 Single/multipass conveyor dryers/coolers (www.aeroglide.com)

Maximum drying results with a small footprint, for products that can tolerate repositioning, is one of the many things Aeroglide's single and multipass dryers offer.

With these dryers, conveyor beds are stacked one above the other in a single insulated enclosure. The ultimate for maximizing capacity in the least amount of floor space, these multipass conveyor systems provide multiple product turnovers for uniform thermal processing, Aeroglide says.

## **Online exclusive!**

Read candid Q&A from two extrusion and drying experts at Clextral. Where do these industry insiders see the future of petfood extrusion heading? www.petfoodindustry.com/Clextral.aspx.



The systems can be configured to run at the same temperature throughout or with sequential heat zones allowing precise control of temperature, process air humidity and airflow throughout the process.

According to Aeroglide, it was the first company to offer a sequentially zoned dryer to the petfood industry. Providing the ultimate in zone temperature control, this system maximizes production per square foot of floor space, while still protecting the product from excessive temperatures. New technologies to help petfood manufacturers optimize their process include the AeroFlex adjustable feeder and advanced controls.

## Swivel Valve Cooler Mkll (www.geelencounterflow.com)

The new Swivel Valve Cooler MkII from Geelen Counterflow has been designed for customers with very high food safety requirements where frequent cleaning and inspection are necessary, even if the risk of cross contamination is small to begin with. The main advantage

of the improved cooler design is that it enables fast and effective cleaning, inside and outside. with а minimum of cleaning residue. according to Geelen.

The hood of the cooler has been redesigned to avoid h o r i z o n t a l surfaces inside and outside.

Geelen's Cooler minimizes the risk of cross contamination between different products.

The redesigned

swivel valve

discharger on

There are no ledges where cleaning water can stay behind. All external stiffening bars are in stainless steel. The air exhaust has no horizontal surfaces so there is no risk of product accumulation. The bin

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walls contain giant doors that allow the side of the cooler to be completely opened for fast cleaning and inspection. The redesigned swivel valve discharger minimizes the risk of cross contamination between different products.

## Rotante Dryer (www.clextral.com)

Clextral's Rotante dryer, with new technology, achieves uniform drying for a wide range of high value and hardto-dry products while achieving exceptional energy efficiency, the company says. Additional advantages of this innovative design include product changeover in less than three minutes, real-time recycling of fines generated in the drying process, simplified cleaning and reduced maintenance.

The Rotante has a unique design that conveys product through a continuous



## Thermal processing equipment advancements

Sure, manufacturing technology keeps getting better, but what exactly can these products do for your specific petfood or treat line? Aeroglide and Geelen Counterflow break it down:

> Single pass conveyor dryers and coolers offer enhanced process control and gentle handling for fragile petfood products;

> Multipass conveyor dryers and coolers provide efficient drying while maximizing your process floor space;

> **Dual plenum dryers** allow for unmatched product moisture uniformity and dryer accessibility for cleaning;

- ► Inline airflow dryers are designed for baked pet treat products with low evaporative load;
- > Vertical coolers fit the petfood processor's need for extruded petfood cooling needs;
- **Batch dryers** have counterflow decks that are perfectly suitable for drying and cooling of smaller batches of product; and

► **Continuous dryers** use on-line microwave moisture sensors that make sure the target moisture percentage is automatically achieved, under all circumstances.

Advanced control packages include humidity control, evaporation control, product tracking, energy monitoring, product moisture control and other tailor-made options.

rotation to ensure uniform airflow on all product surfaces, thus eliminating product over-heating or unequal moisture distribution that can lead to rejected product and lost profits.

The Rotante has a unique design that conveys product through a continuous rotation to ensure uniform airflow on all product surfaces. Why is the Rotante so energy efficient? According to Clextral, several factors contribute to the high energy efficiency of this dryer: Product

#### Online extra!

See what Paul Tedman of Extru-Tech Inc. has to say about the cooling of extruded, dry petfoods and what technology works best. www. petfoodindustry.com/Cool.aspx.

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is distributed in thin layers that require lower air velocity; process air temperatures and humidities are independently controlled in multiple zones to achieve optimal drying for each product; and the dryer has reduced interior volume to minimize process air quantities.

#### 5 C2TX Conical Co-Rotating Twinscrew Extruder (www.wenger.com)

Wenger's new C2TX generates compression continuously. The co-rotating conical screws have a special profile that

#### Check it out!

Geelen Counterflow has interactive flowsheets available on the batch drying method vs. the continuous drying method. View the useful charts in-depth at www.geelencounterflow.com/ flowsheets/flow\_vdc1.htm and www. geelencounterflow.com/flowsheets/ flow\_vdb6.htm.



Wenger's new C2TX conical corotating twin screw extruder generates compression continuously.

kneads the ingredients as they're forced through the extruder. Conical intermeshing co-rotating screws provide natural compression from the low density of a preconditioned recipe at the extruder inlet to the dense dough mass at the screw discharge.

With less material in the C2TX extruder barrel than in the barrel of a conventional single or twin screw extruder, the C2TX cooking extruder is extremely responsive to screw speed change, recipe moisture, recipe temperature and cooking in the preconditioner, says Wenger. Changes in final product density, color, cell structure and surface texture are present only seconds after making a change in a process variable. Changing processing conditions will result in immediate changes in product density without changing the extruder die.

#### Maxxim Extrusion Systems (www.extru-techinc.com)

Extru-Tech Inc. recently announced the introduction of the new Maxxim Series Extrusion Systems. The new line of enhanced single screw extruders are capable of 20-30% production rate increases over previous models with the same barrel diameter, according to the company. Extru-Tech's inline drive system has been re-engineered to handle up to 600 hp compared to 350 on previous models. In addition, many ongoing improvements have been made to the barrel design, including changes to the screw profiles and the ribbing design

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in the sleeves.

Other improvements include a screw support assembly that eliminates metal to metal wear. This assembly also allows for thermal expansion, which occurs as the screws are heated up to operating temperature.



The new line of enhanced single screw extruders, Maxxim Series from Extru-Tech Inc., are capable of 20-30% production rate increases over previous models.



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## Petfood Insights By David A. DZANIS, DVM, PhD, DACVN

## **Ethoxyquin redux**

was with the US Food and Drug Administration (FDA) in the early 1990s when the debate regarding the preservative ethoxyquin was at its peak, so I became intimately involved with the issue. The controversy never totally went away, but lately there has been a resurgence of discussion and concern among the pet-owning public, particularly pertaining to the presence of undeclared ethoxyquin in petfood formulations.

#### The history

Ethoxyquin is an approved food additive that helps prevent rancidity of fats and degradation of fat-soluble vitamins in animal feeds. As a very effective antioxidant preservative, it was used without apparent safety concerns for decades until reports of adverse effects were received from dog owners. FDA could not find a scientific basis to substantiate the purported health consequences (Dzanis, 1991).

Further investigation did find that consumption of a test food containing ethoxyquin at the maximum inclusion rate resulted in hemoglobin-related The most recent public concern is that ethoxyquin may have been incorporated through ingredients.



## — David Dzanis

effects were observed.

In response to these findings, FDA asked the industry to voluntarily reduce the maximum inclusion rate in final dog food formulations from 150 ppm to 75 ppm. However, the codified regulations were never amended to reflect this directive. Despite the lack of a scientific basis or any regulatory action, most petfood companies, in the face of public pressure, removed the ingredient from all dog and cat food formulations.

#### New concern: fish meal

Some, but not many, petfood labels declare ethoxyquin today, so it is often assumed not to be present in petfoods

## **Right now, consumer advocates** are asking manufacturers about the preservation of fish meal in their products.

pigment accumulation in the liver and slightly elevated liver enzymes in lactating bitches (i.e., dogs eating the largest amounts on a body weight basis). Both effects were reversible on removal of the ethoxyquin. No other adverse if undeclared. However, the most recent public concern is in regard to ethoxyquin that may have been incorporated indirectly through a food's ingredients, particularly fish meal.

The high polyunsaturated fatty acid

content of fish meal leaves it susceptible to spontaneous combustion if inadequately preserved. In fact, a US Coast Guard regulation [46 CFR 148.04-9] requires the addition of ethoxyquin to all fish meal transported by ship in bulk. Presumably, this regulation does not apply to domestic product not shipped by sea.

There is another document on the Coast Guard's website regarding an international agreement that allows BHT to be used in place of ethoxyquin, as well as an exemption from any requirement for an antioxidant if the product can be documented not to have self-heating properties (see http://www.uscg.mil/ imo/msc/docs/msc85-report-add-2.pdf, pp.187-188).

Therefore, not all fish meal on the market necessarily contains ethoxyquin, though likely much of it does. Even when ethoxyquin is not used as a preservative, residual amounts in the product from carryover are still possible.

#### Not wholly accurate

It has been asserted that when ethoxyquin is added indirectly, the regulations do not require it to be declared on the petfood label. That is not wholly accurate. For a labeling exemption as an "incidental additive" to apply, the level in the final product would have to be low enough to where it no longer had any technical or functional effect [21 CFR 501.100(a)(3)(i)]. Considering that fish meal processors may add 1,000 ppm or more, the residual amount of ethoxyquin in the petfood still could be functional, hence would have to be declared.

Also, FDA regulation 21 CFR 573.380 expressly specifies that any animal feed containing ethoxyquin must declare it, which is unique language compared to the codified requirements for other approved food additives. That statement can be interpreted as superseding any labeling exemption. In fact, if memory serves me, in the 1990s FDA did advise that ethoxyquin must be declared whether added directly or indirectly, irrespective of source or level.

#### **Prudent action**

Considering the known significant health consequences of eating rancid fats, I personally would prefer ethoxyquin to be used in my dogs' food than not. However, I doubt most consumers share that viewpoint. To many, even a trace of ethoxyquin is too much. Particularly for those manufacturers that make a point of extolling the "ethoxyquin-free" status of their products, a finding of ethoxyquin at any level in their petfoods would likely be viewed as grossly disingenuous.

Right now, consumer advocates are asking manufacturers about the preservation of fish meal used in their products. It won't be long until some of these groups start collecting samples of petfoods for ethoxyquin analysis of their own. Therefore, it would appear very prudent for manufacturers to routinely test their products in support of any "no ethoxyquin" claims. Any finding above the sensitivity of the test should be investigated. If the fish meal is not the source, other potential sources oils, other meals, premixes—should be considered.

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

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## Ingredient Issues | *nutrition*

## The 'catch me if you can' **B** vitamin

recent recall regarding cat food suspected of being low in thiamine (vitamin B<sub>1</sub>) brings to light something that the regulatory agencies, ingredient suppliers and food industry (including petfood) have taken for granted for years-that all issues regarding vitamin losses from harvest to consumption have been conclusively modeled and addressed. Not so.

With the introduction of new ingredients, processes and packaging techniques, ongoing research regarding vitamin carry-through to the end product is needed. Unfortunately, in all too many cases, vitamins have become commoditized, low-margin ingredients relegated to the Chinese production model and are incapable of supporting the necessary food application research.

Case in point: It has been more than a decade since retention studies have been conducted on extruded petfoods, and no published data from this same timeframe are readily available in which canned petfood or baked foods were evaluated. It is unfortunate when any product in the market is less than stated; but, in the case of thiamine, there may be some unexpected food chemistry at fault.

## Health and chemistry

Thiamine was the compound in rice bran discovered by Umetaro Suzuki (1910) to be the cure for the disease beriberi. It was isolated as a water soluble crystal in 1926, and its chemical composition and procedures for synthesis were described by R.R. Williams in 1933. In the ensuing years, most of the research on this compound focused on requireThiamine, an essential ingredient for cats and dogs, can be lost during typical petfood **production.** — Greg Aldrich



ments and routes of fortification.

Deficiencies in broad populations have been all but eliminated, but isolated cases occur periodically; for example, in 2003 there was a report of thiamine deficient infant formula in Israel. Petfoods are no different: Besides the recent recall case, there have been several reports of thiamine deficiencies in cats and dogs fed commercial foods (Loew et al., 1970; Baggs et al., 1978; Davidson, 1992; Singh et al., 2005).

In pets, thiamine deficiency is a serious concern because it can lead to anorexia, cognitive impairment, incoordination, convulsions and even

> In the case of thiamine, there may be some unexpected food chemistry at fault.

death. Cats seem to be more affected than dogs-possibly because their requirement is four times that of a dog. The time course of the deficiency disease occurs over many weeks, so it can be difficult to pinpoint a food until the affected animal is examined by a veterinarian.

#### Worst-case B vitamin

Thiamine—the molecule {3-[(4-amino-2-methyl-5-pyrimidinyl) methyl]-5-(2-hydroxyethyl)-4-methylthiazolium chloride} once called aneurin (Merck, 2001)-is a substituted pyrimidine linked via a methylene bridge to a substituted thiazole. Because of its structure, it has a complex chemistry that allows it to be involved in both oxidation and reduction reactions. In the body, thiamine functions as a critical coenzyme in carbohydrate and amino acid metabolism (for various alpha-keto acid dehydrogenases, decarboxylases, phosphoketolases and transketolases) and has a non-coenzyme function in nervous tissue.

All plant and animal tissues contain thiamine, so it is present in all unprocessed foods. Thiamine pyrophosphate (also known as thiamine diphosphate) is the predominant form, with the mono- and tri-phosphate forms occurring to lesser degrees. Rich sources of thiamine are yeast, bran, whole grains, pulses, nuts and organ meats. Eggs, meats, vegetables and fruits contain intermediate amounts; fish, polished rice and milk are poor sources.

## **Challenges in petfood**

In typical petfood ingredients, even the rich sources, thiamine levels are insufficient to meet dietary requirements (especially in cat foods) so fortification is commonly necessary. That is where the challenge begins.

The two common forms available for supplementation are thiamine hydrochloride and thiamine mononitrate. The hydrochloride version is slightly hygroscopic and more prone to sacrifice, so mononitrate is the more common source of thiamine in vitamin premixes.

Since most commercial petfoods are produced by some form of thermal process—extrusion, canning or baking—thiamine can be lost. The thiamine present within plant and animal tissues is less susceptible to destruction; however, supplemental thiamine sources are not protected. In addition, thiamine is the most heat labile of the B vitamins.

## Attacked from all angles

Thiamine can be lost due to simple leaching into the surrounding aqueous media (e.g., canned vegetables) or destroyed by elevated heat, high water activity (> 0.4), increasing alkalinity (pH 5 and higher), sulfate trace minerals and sulfite preserved meats, which cleave thiamine at the methylene bridge. Thiamine is oxidized by ultraviolet and gamma irradiation and degraded by thiaminase enzyme activity found predominately in shellfish, fish viscera and some bacteria (e.g., *Bacillus thiaminolyticus*).

Polyphenols such as cinnamic acid, flavonoids and tannins common in some popular antioxidant-containing herbs and berries disrupt the thiamine molecule via nucleophilic attack. Yet losses due to freezing (thawing losses can occur) or freeze-drying are minimal. An acidic environment and the presence of reducing substances such as ascorbic acid, glutathione, cysteine and some proteins can be protective.

In model retort systems, sacrifice due to alkaline pH can approach 90%; high temperature and high shear extrusion can push sacrifice upward of 81%. Losses in puffed grains can approach 99% and from gamma irradiation may be nearly 60%.

Vitamin suppliers for petfood applications report that sacrifice through extrusion (6-50%) and drying (1-39%) varies according to process temperature and that an additional 4-4.5% can be lost each month thereafter (Coelho, 2003). However, based on the food processing literature, this may not capture the extremes or full extent of the losses.

## **Elevate fortification**

Until we better understand more of the details that may affect thiamine sacrifice, higher levels of fortification than previously proposed may be necessary. Given there are no real safety concerns regarding elevated dosages of thiamine in either the cat or dog, and sacrifice can exceed 90%, fortification in vitamin premixes should probably exceed 10-fold requirements and would likely be safe at 100-fold (e.g., the cat requires 5 mg/kg, so at 500 mg/ kg, if sacrifice is 99%, the requirement is still met).

Further, validation of thiamine levels after processing (lab costs of about US\$100) would be a wise investment to verify that the process, ingredients and storage conditions are not placing undue sacrifice on this important vitamin.

Dr. Greg Aldrich is president of Pet Food & Ingredient Technology Inc., which facilitates innovations in foods and ingredients for companion animals.



# Market Report **10 for 2010**

or the US petfood industry, 2007 was dominated by the spring petfood recalls and subsequent fallout, while the economic recession overshadowed 2008 and 2009. Challenging years for petfood, in other words, and yet through it all the market has maintained respectable growth. What does the future hold? From the pet market experts at Packaged Facts, here are 10 trends to bet on in 2010.

## Bang for the buck

While consumers are expected to loosen their purse strings in the coming year, they will likely also continue to apply value criteria they adopted to weather the economic storm. For product marketers and retailers alike, offering more "bang for the buck" by combining money-saving opportunities with additional product benefits will be an essential strategy throughout 2010.

#### Online extra!

For information on the Reportable Food Registry, read Dr. David Dzanis' September column at www. petfoodindustry.com/Insights0909.aspx.

## **Tapping pent-up** demand

During the 2009-10 and 2010-11 holidays, many US pet owners will be ready for a little splurge, both to make up for lost time and to appease their guilt over having cut back on those pricy biscuits Princess does so adore. Gift and holiday formats will therefore be all the rage, both for functional and indulgence products looking to cash in.

## **Product** safety

As part of the Food and Drug Administration (FDA) Amendments Act of 2007, FDA has launched a Reportable Food Registry requiring feed (including petfood) companies to report incidents of adulteration. Given this development and the steady stream of smaller recalls during the past couple years, product safety will remain top of mind in the petfood market in the coming year and beyond.

## Ethical marketing

Sales of ethical products sustainable, "green," fair trade, humane, organic, etc.—are forecast to hit US\$38 billion in 2009, according to Packaged Facts' "Ethical Products 2009" report. With top petfood players already leading this trend (see p. 20), ethical product marketing and corporate positioning will be a pet market mandate by the end of 2010.

## **S**Organic and natural

The term "organic" dovetails with most ethical claims, and many consumers view organic products as purer and safer. Thus, although overall US organic sales moderated in 2009 due to consumer cutbacks, the future for organic petfood remains bright, with double-digit annual sales gains expected to continue. "Natural" as a claim still has legs, too, in part because it defines the more nebulous "superpremium" in a way consumers can easily understand.

What does the future hold for petfood? Here are 10 trends to bet on in 2010.

#### Cause marketing

Cause marketing in the pet marketusually equates to support of pet adoptions, shelters, animal rescue efforts and so on, allowing marketers and retailers to simultaneously help pets and build consumer goodwill. Despite Americans' heightened price sensitivity, expect cause-related marketing to pick up even more steam in 2010 since it represents a potent way to help pet owners justify less essential expenditures.

## The pet specialty gauntlet

The economic recession coupled with the relatively low gas prices of the past several months has been a perfect storm for Walmart. Combine that with the company's "same brands as pet specialty but better prices" advertising push, and the writing is on the wall. Packaged Facts believes the brightness of the pet specialty channel's future is closely linked to its ability to brand itself as the pet health channel and weed out brands that blur channel lines. Also, look for new spins on private label, including:

- Brands that license famous names and become exclusive to a given retailer; and
- Closer relationships between retailers and marketers.

## Thinking small (animal)

During 2010 pet retailers will look to attract those households that may be holding off on larger animals while still wanting to keep the kids happy. Promoting small animals, birds and reptiles also makes sense from a longerterm market perspective, since these animal types are often the market entry point for lifetime pet owners.

## **Consolidation via**

Directives issued recently by Procter & Gamble CEO Robert McDonald have placed (once again) Iams in the divestitures speculation spotlight. The acquisition of Iams by Del Monte would put the latter company in a dead heat with Mars for the number two spot in the US petfood market, while a Mars acquisition of Iams or Hill's would put Mars within swinging distance of Nestlé Purina in the US.

#### **1 O Spotlight on human health** During Petfood

Forum 2009 in April, Marty Becker, DVM, author of *The Healing Power of Pets*, documented some of the many amazing positive effects of pet ownership on human health. This correlation is also a thrust of the American Pet Products Association and the Delta Society. By the end of 2010, this message will begin to make its way into major media advertising citing scientific studies, giving pet ownership and the related products a sizable boost.

Information provided by Packaged Facts (www.packagedfacts.com) based on reports including Senior, Weight Management and Special Needs Pet Products in the US (October 2009).

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## **Research Notes**



#### Influence of protein based on dog size

(J Anim Sci. 0: jas.2008-1666v1-jas.2008-1666. PubMed ID: 19854997) Wheat gluten was proven to be a suitable protein source for modulating fecal quality in dogs, particularly in sensitive breeds. Poorer fecal quality in large sensitive dogs can be related to greater digestibility and greater fecal electrolyte concentrations but not to fecal osmolarity.

## Influence of protein based on dog size

This study assessed the effects of protein source and content to determine whether greater digestibility and lower fecal osmolarity and electrolyte concentrations are associated with improved fecal quality in dogs differing in body size and digestive tolerance.

Twenty-seven healthy female dogs

were divided into four groups according to body weight and digestive tolerance: small, medium, large tolerant and large sensitive. Five diets varying in protein source and concentration were tested.

Fecal score and moisture were lower and overall digestibility was greater for wheat gluten than poultry meal diets. Large dogs had the highest fecal scores and moisture and the greatest overall digestibility. Osmolarity was lower for wheat gluten-based diets and was not affected by dog size. Fecal electrolyte concentration varied mainly with dog group and was greater in large sensitive compared with small dogs.

Wheat gluten was proven to be a suitable protein source for modulating fecal quality in dogs, particularly in sensitive breeds. Poorer fecal quality in large sensitive dogs can be related to greater digestibility and greater fecal electrolyte concentrations but not to fecal osmolarity. **Source:** J. Nery *et al.*, 2009. Influence of Dietary Protein Content And Source on Fecal Quality, Electrolyte Concentrations, Osmolarity and Digestibility in Dogs Differing in Body Size. *J Anim Sci.* 0: jas.2008-1666v1-jas.2008-1666. PubMed ID: 19854997

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- Impact of process hardware on petfood safety-Galen J. Rokey, Wenger Manufacturing
- HACCP: where did we go wrong?— David Rosenblatt, DVM, Sher Consulting
- Petfood and the importance of a balanced diet—Karen Wedekind, PhD, Novus International
- And many more!

Also, enjoy a keynote presentation by worldrenowned 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.

## PetfoodWorkshop

## APRIL 14-15, 2010

Hyatt Regency O'Hare

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Pet nutrition is one of the key drivers of new product development. Immediately following Petfood Forum, Petfood Workshop will provide attendees with an opportunity to participate in interactive sessions focusing on this important staple of petfood manufacturing. In addition to general sessions on product and ingredient trends, regulatory issues and communicating with consumers on pet nutrition, interactive breakout sessions will give you hands-on learning about:

- Feline and canine nutrition basics
- Key ingredient groups and their nutritional benefits
- Processing considerations for petfood ingredients
- Formulation overview

For more information on Petfood Forum 2010 and/or Petfood Workshop: Hands-on Nutrition, visit www.petfoodindustry.com/ petfoodforum.aspx



on registration

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

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## **PetfoodForum**

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Register by	Registration date	Petfood Forum only	Petfood Workshop only	<b>Petfood Workshop</b> (discounted rate if also registered for Forum)
Register by February 15, 2010, fo <b>Save 15%!</b>	Through February 15, 2010	US\$905	US\$675	US\$530
	After February 15, 2010	US\$1,045	US\$785	US\$625

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):

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## **Product News**

## **Goat milk additives**

Mt. Capra Products offers Caprotein and Capra Mineral Whey additives. Caprotein is a goat milk protein powder combining whey and milk proteins plus amino acids and is lactofermented to assist digestion and absorption. Capra Mineral Whey is a mineral replacement containing goat milk whey, with more than 20 naturally occurring minerals, according to the company.

> Mt. Capra Products +1.800.574.1961 www.mtcapra.com



multiple product infeed configuration to stage and position incoming products for palletizing. The system includes a Fanuc M410iB–160 robot positioned to place two products on two pallet locations in addition to handling multiple pallet styles.

**StrongPoint Automation** 

+1.519.624.1255 www.strongpointautomation.com

## **Beef stock**

Proliant B1301 spray-dried beef stock is a high-protein product derived from the broth obtained by cooking beef adhering to edible beef bones. No MSG, salt or carriers are added to this meat product, according to the company. The stock is produced under USDA inspection and is spinal cord free. It is low in fat and highly soluble.

> Proliant Meat Ingredients +1.515.289.7668 www.proliantinc.com

#### **Calibration package**

Mocon Inc. offers the Cal-Smart, one-button calibration hardware and software package. The system is available



## Don't miss early bird savings on 2010 <u>Petfood Forum</u> events

**High capacity palletizer** 

StrongPoint Automation offers its High Capacity Palletizer for RSC cases. The fully automated system incorporates a

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## PetfoodWorkshop

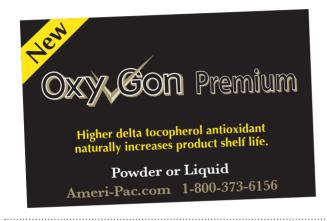
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April 14-15, 2010, Chicago, Illinois, USA on many of the company's Pac Check series oxygen, carbon dioxide and carbon monoxide headspace analyzers. Cal-Smart uses ambient air and electronic controls to perform a two-point calibration.

#### **Mocon Inc.** +1.763.493.7231 www.mocon.com

## **Bulk bag fillers**

The model C1-2 Spirofil Bulk Bag Filler from Spiroflow Systems provides a solution for users wishing to fill bags



by weight, whether for internal production requirements or to meet NTEP approval for resale. It is designed to ensure bags are filled in a dust-free manner, without spillage, to the desired weight.

> Spiroflow Systems +1.704.291.9595 www.spiroflowsystems.com

#### **Compact wrapper**

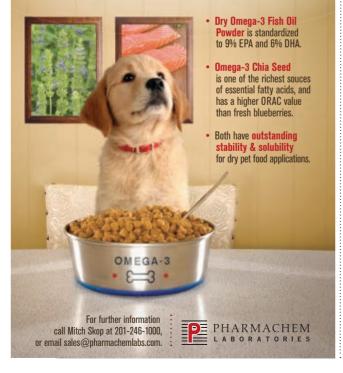
The Texwrap Model 2010 2-Belt Side Seal with pneumatic head is a compact wrapper capable of running a variety of product sizes. Maximum film speed is 100 feet per minute. The model features a color touch

screen with setup product memory, machine diagnostics and tool-less changeover.

> Texwrap Packaging Systems +1.636.239.7424 www.texwrap.com



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## Wenger Industry Poll Add your input to the dialogue.

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



# The mirror test for your petfood business

## Do you often look in the mirror and think:

- I have all of the experience I need because I've been in this industry long enough to know that I don't regret any mistake I've ever made!
- I'm certain I have an accurate external view of my business; I don't need any market intelligence because I have all the data I need, PLUS I'm an expert in understanding all of the special nuances associated with doing business in many different geographic or cultural regions of the world.
- I believe through globalisation all consumers are becoming alike, so my way of doing business will be a roaring success in each country I try to enter.
- I've never missed a new opportunity, so unlike others I never have to say: "why didn't I think of that first?"
- My business is running as smoothly as it can, or is it that I usually tune out the things I don't like to be confronted with.
- I'm certain that I talk to my customers in a way they easily understand and that can fulfil their needs – No one does this better than me and my organization.
- I have my team of internal experts; they know what I need to know.

#### **Results of the mirror test for your petfood business:**

If all of the above is true, why am I still "part of the pack" rather than "leading the pack?" Perhaps if your mirror reflects the slightest doubt – AND WE HAVE NO DOUBT THAT IT WILL – it's now time to contact us for solutions you can bank on. You have nothing to lose and can satisfy your own curiosity. And, you might find that you'll win big this time around!

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