

www.petfoodindustry.com

Top Why they lead the industry

Industry leaders share their insights

Benefiting from novel ingredients



A unique network of sales and industrial facilities (11 plants)

The worldwide **palatability** company

SPF North USA Phone +1 715 926 3841 sales@spf-usa.com

SPF South USA sales@spf-usa.com

SPF Argentina Phone +54 34 884 61 888 consultas@spf-argentina.com.ar

**SPF** Colombia sales office

For The Andean Countries

Phone 00 57 1 341 7003 sales@spf-colombia.com

SPF Do Brasil Phone +55 19 3583 9400 infos@spfbrasil.com.br

SPF México Phone +52 442 221 57 62 info@spf-mexico.com

#### Pacific - Asia

SPF Australia Phone +61 2 4964 4399 contact@spfaus.com

SPF China sales office Phone +86 21 52 39 29 76 contact@spf.com.cn

SPF France, Head Office SPF United Kingdom and Research Center Phone +33 (0)2 97 93 80 80 contact@spf-diana.com

SPF España Phone +34 973 18 42 04 informacion@spf-espana.com

Phone +44 1302 391 026 info@spf-uk.co.uk

**SPF** Hungary Phone +36 30 63 60 774 spf@spf-hungary.com

www.spf-diana.com

## Lesson #1: The customer is <u>always</u> right.



#### Lesson #2:

## Always give your customer a quality solution.

- Oxy Gon, our natural-source antioxidants are available in both liquid and powder form
- Oxy Block, our synthetic antioxidants are available in both liquid and powder form
- Both are also available in standard and "Non-GMO" formulations.
- Learn how Ameri-Pac can provide the right solution for YOU!





816.233.4530 www.Ameri-Pac.com St. Joseph, Missouri







By Jenny Kvamme, DVM, and Debbie Phillips-Donaldson

Why these companies lead the global petfood industry in sales, arowth and innovation.

### **28** Industry leaders talk By Tim Phillips, DVM

Scott, Wigger, Thompson and Futagami share their insights.

#### Benefiting from novel ingredients By Tim Phillips, DVM

Which ones can work marketing magic for your brands?



The petfood market in 2010.

### Petfood Insights By David Dzanis, DVM, PhD AAFCO misrepresented by websites replete with errors.

#### Probiotics/direct fed microbials present challenges.

#### **40** European Report By Peter Best International petfood partnership in Romania.

#### 42 Market Watch By Huntley Manhertz, PhD

Brick and mortar vs. Internet store dynamics.

#### **50** Something to Chew on By Debbie Phillips-Donaldson

Looking east to grow the market.

8 — Industry News

**45** — Product News

**16** — New on the Shelves

**46** — Market Place

**43** — Research Notes

**44** — Meeting Planner

**49** — Advertisers' Index

On the cover: Rudy the cat and Buffy the dog with products from the top petfood companies

in the world.

Photo by John Grossman

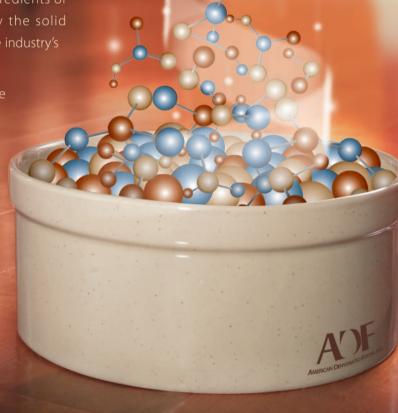
PETFOOD INDUSTRY (ISSN 0031-6245) is published monthly by Watt Publishing Co., 122 S. Wesley Ave., Mt. Morris, Illinois 61054-1497 USA. All rights reserved. Reproduction in whole or part without written permission is strictly prohibited. PETFOOD INDUSTRY and its logos are registered trademarks of Watt Publishing Co. POSTMASTER: Send address changes to: PETFOOD INDUSTRY, 122 S. Wesley Ave., Mt. Morris, Illinois 61054-1497 USA. Periodical postage paid at Mt. Morris, Illinois 61054-1497 and additional post offices. Canada: Canada Post International Publication Product Mail Code 1686232.

## We have petfood ingredients down to a science!

Developing unique science-based technologies and supplying novel products tailored to meet the specific needs of the petfood industry has been ADF's mission for over 25 years. Our expertise in processing has provided the petfood market with a consistent supply of high quality protein ingredients. Along the way, our focus has always centered on ingredients of uncompromising quality backed by the solid application of science and the skill of the industry's

Creating a brand your customers will love means formulating with ingredients you can trust. And that trust begins with protein ingredients from ADF.

finest customer care team.



AMERICAN DEHYDRATED FOODS, INC.

ADF has a complete line of spray-dried protein products for your petfood formulations:

GRANULATED EGG | COOKED CHICKEN MEAT | LIVERS (CHICKEN, PORK) | ALLERGEN-FREE PROTEINS | BROTHS | COMBINATIONS OF PROTEINS |

ADF's comprehensive range of products also includes EXTRUDED PROTEIN COMPLEXES and HIGH QUALITY LIQUID CHICKEN FAT

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

SUPERIOR A BRATING

#### The petfood market in 2010

emarkable shifts in buying behaviors are occurring in the petfood market worldwide. These shifts are diverse and encompass a wide range of geographic markets and product categories. But, notes Euromonitor, they have two primary, inter-related trends in common: pet humanization and an increasing interest in pet nutrition and health.

These two trends stem from:

- ➤ Economic progress;
- ➤ Demographic changes;
- ➤ Changing government positions; and
- ➤ New media attitudes.

Also, the two primary trends are being encouraged by manufacturers' efforts to generate growth through product innovation and new marketing strategies, particularly in mature core markets.

Euromonitor's November 2006 report, The World Market for Petfood and Pet Care Products (www.euromonitor. com), includes several speculations as to what the industry will look like in 2010, including:

➤ North American and Western European shares will drop. In 2010, these markets will remain the most valuable, accounting for 72% of the global value of petfood and pet care products. However, this will be down from 75% in 2005. The effect

The two primary trends are being encouraged by manufacturers' efforts to generate growth.



— Tim Phillips

- of market maturity is expected to be compounded by intense pricing competition in the retail environment.
- **Segments will blur.** By the end of the forecast period, the lines between the premium and mass market segments are likely to have become extremely blurred. Major manufacturers in the mid-priced segment, including world leaders Nestlé and Mars, are increasingly looking to reposition their core, mid-priced brands with a more premium-oriented image.
- > Functional products will boom. By 2010 demand for health-oriented products is expected to have developed significantly in terms of sophistication, encouraged by manufacturers' efforts to generate growth in mature markets through product innovation. Functional petfood and pet products targeting specific conditions and bodily systems are likely

- to be widely available, especially as health-oriented innovation increasingly enters the mass market.
- ➤ Pet humanization will increase in influence. This will be spurred by reduced household sizes and the erosion of traditional community bonds. The increasing tendency to perceive pets in anthropomorphic terms is leading manufacturers of petfood and pet care products to increasingly track trends in human product types.
- ➤ Shares of emerging markets will climb. Emerging markets will account for a significantly higher proportion of global petfood and pet care products' value sales in 2010. Markets such as China and Russia are set to see strong growth, driven by rising disposable income, improved distribution and changing consumer attitudes toward domestic animals.

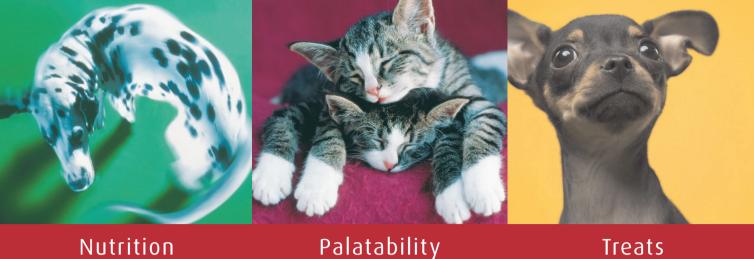
food and pet care products market will grow 15.1%, from US\$58.2 billion in 2005 to US\$67.0 billion by 2010. Global petfood (dog, cat and other) sales will grow 14%, from US\$45.2 billion in 2005 to US\$51.5 billion by 2010.

Petfood sales up 14% Euromonitor predicts the global pet-

Dr. Phillips is the editor of Petfood Industry magazine. He can be reached at Tel: +1.815.734.5644. E-mail: tphillips@wattnet.net.

Sales forecasts by reg	jion		
Region	2005	2010	%Change
Western Europe	\$21.4	\$23.5	10.1%
Eastern Europe	1.6	2.7	72.9
North America	22.2	24.7	11.3
Latin America	3.9	5.5	40.2
Asia Pacific	7.0	7.9	13.8
Australasia	1.7	2.0	17.4
Africa/Middle East	0.56	0.69	22.9
World	\$58.3	\$67.0	15.1%

Forecast sales of petfood and pet care products: Value US\$billion 2005 vs. 2010. Source: Euromonitor International.



## Satisfaction for pets Business for you

Fresh raw materials, innovative solutions and quality products are just some of the ways BHJ Pet Food helps you satisfy pets. And we keep you satisfied with reliable service, tailor-made solutions and just-in-time deliveries. It's a combination that translates into good business for your company.

BHJ Pet Food specializes in three product areas: animal by-products and meat blends for nutrition, digests for palatability, and treats.

Have a special request? Just let us know.

After all, our business depends on your satisfaction.



Fresh raw materials Innovative solutions Iust-in-time

when you are looking for real value

#### **Industry News**

#### US/Canadian trade meeting held

The Pet Food Institute (PFI), in conjunction with the Pet Food Association of Canada, recently brought together representatives from both the US and Canadian petfood industries to meet with officials from USDA Animal and Plant Health Inspection Service and the Canadian Food Inspection Agency to share concerns on the possible trade disrup-



tions associated with each government's rules to combat BSE. Canada is the US's largest trading partner for petfood, with 2005 US exports reaching US\$338 million. Thus, rules currently under consideration in Canada that would require individual health certificates for each petfood shipment are causing concern to industries on both sides of the border.

"This was a wonderful opportunity to attempt to harmonize requirements where possible and reduce the fiscal impact of the final rules on both the respective governments and the industry," said PFI vice president of technical and regulatory affairs, Nancy Cook. "We very much appreciate the willingness of the agencies to come together and meet with us to help work through these issues."

Representatives from other groups with members interested in petfood trade included the American Pet Products Manufacturers Association and the American Feed Industry Association. Look for further information on this meeting and other regulatory issues in the February issue of *Petfood Industry*.

#### **Knowledge yields profits**

Petfood Forum 2007, April 16-18, will be in Chicago, Illinois, USA. It is the place for petfood professionals to most effectively gain knowledge about the petfood industry. At Forum, you will benefit from face-to-face contact with symposium speakers, suppliers and your professional peers. You will find useful ideas and contacts that can yield profits for your company.

Here is a partial list of topics and speakers. For a complete list, go to www. wattnet.com/petfoodforum.

Nutrition & regulatory sessions

Dog Journal.

PETFOOD Forum

Scrutinizing superpremium

petfoods Nancy Kerns, Whole

 Genomics—customized diets Keith Murphy, DVM, PhD, Texas

A&M University;

- New and significant global regulations
   Terry Plant, regulatory consultant;
- Cognitive palatability testing Joseph Araujo, PhD, CanCog Technologies;
- Obesity prevention Sean Delaney, DVM, Davis Veterinary Medical Consulting;
- US regulatory report David Dzanis, DVM, PhD, Dzanis Consulting;
- Nutrition for skin and gut health Sally Perea, DVM, Davis Veterinary Medical Consulting; and
- Innovative treats Ken Meyers, CEO of Chomp Inc.

For details and to register, go to www.wattnet.com/petfoodforum or contact Marcia Riddle (attendees) at E-mail: mriddle@wattnet.net; Tel: +1.815.734.5633 or Ginny Stadel (exhibitors) at E-mail: gstadel@wattnet.net; Tel: +1.815.734.5691.

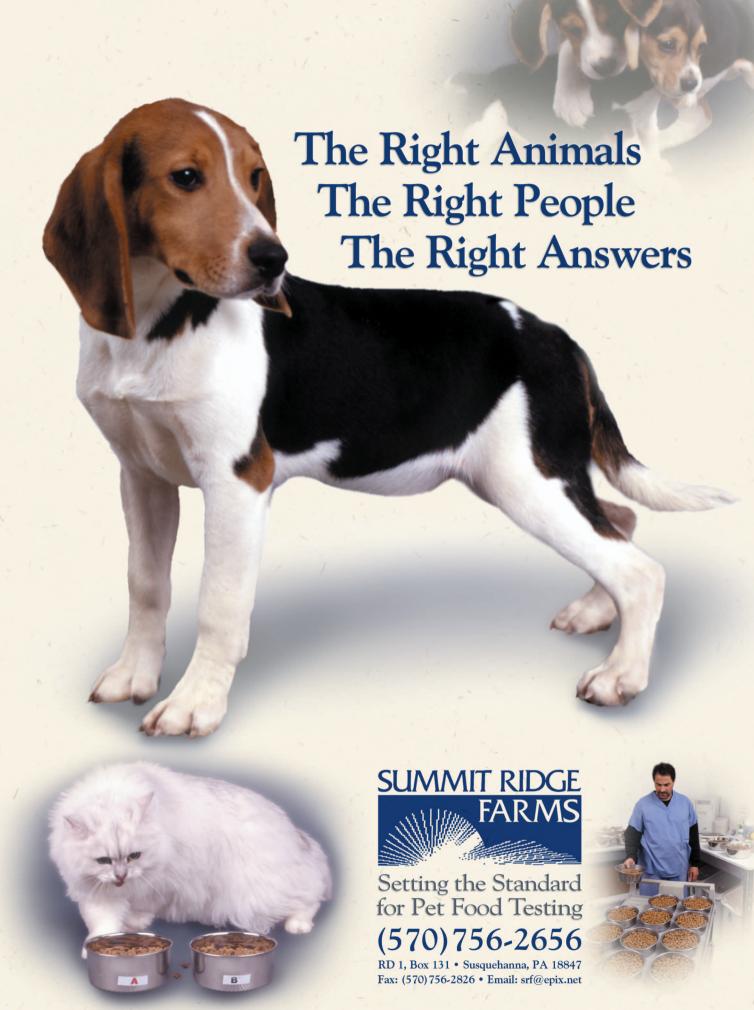
#### Marketing & production sessions

- Executive roundtable Doug Cahill, Mars; Ladd Hardy, Nutro; Marcel Blok, Breakthrough; and Brian Connolly, Castor & Pollux;
- In-depth, exclusive market research David Lummis, Packaged Facts;
- Popular functional ingredients Greg Aldrich, PhD, Pet Food & Ingredient Technology;
- Production—what's new and innovative Sajid Alavi, PhD, Kansas State University;
- The future of petfood retailing Jon Haupton, Willard Bishop Consulting;
- Global sales trends Elizabeth Higgins, Euromonitor; and

Rinaldo Franco Spa celebrates 50th anniversary



Rinaldo Franco Spa, an Italian pet accessories business, celebrated its 50th anniversary recently. Rinaldo Franco Spa, founded in Milan in 1956, was one of the first companies to enter the Italian pet accessory trade.



#### **Wal-Mart continues** commitment to reduce packaging

Wal-Mart Stores Inc. recently announced plans to continue its commitment to reducing packaging across its global supply chain by 5% by 2013. Wal-Mart's packaging scorecard is a measurement

tool that allows suppliers to evaluate themselves relative to other suppliers, based on specific metrics. The metrics evolved from a list of favorable attributes known as the "7 R's of Packaging:" remove, reduce, reuse, recycle, renew, revenue and read.



Suppliers will receive an overall score relative to other suppliers, as well as relative scores in each category. On February 1, 2007, Wal-Mart will share the scorecard with its global supply chain of more than 60,000 suppliers. As of February 1, 2008, Wal-Mart will begin using the scorecard to measure its entire supply chain.

#### If your emulsifier leaves bone chips, call us immediately at 313-873-1800.

If your emulsifier struggles with ingredients at 20°F and colder,

call us immediately at 313-873-1800.

If your people need to dismantle and clean your emulsifier frequently, call us immediately at 313-873-1800.

If your emulsifier cannot output 500-2,000 lbs. / minute and you need this kind of capacity,

call us immediately at 313-873-1800.

The Pappas 225 DPE Emulsifier features our unique "floating knives." It is equally capable with the driest or wettest of input. Remember, we're stainless steel, sanitary, heavy duty, low-maintenance and made in the USA.



#### Nestlé to buy Green's for USS107 million

Nestlé SA has agreed to buy Australia's Green's Foods Ltd. for US\$107 million to gain a larger slice of Australia's petfood market. Green's petfood business sells Supercoat dog and cat foods. As part of the deal, Green's will sell its consumer food unit and its stake in house-brand dog food label Bestcare to Guinness Peat Group Plc. and CVC Capital Partners Ltd. The deal is expected to be complete by March 2007.

#### **Provimi buys French** private label company; releases sales figures

The Provimi Group recently acquired the assets of SESA, a private label petfood company in France. The production assets of SESA have been acquired by the newly created entity Provimi Pet Food France. The production facility is located in Sens, southeast of Paris.

The company was founded in 1992 and employs around 60 staff members. It produces both dry dog and cat food and semi-moist dog food.

The Provimi Group also recently announced its turnover for the first nine months of 2006. Sales increased by 14.6% to EUR1.3 million (US\$1.7 million). Volumes and sales showed an increase in almost all regions, with particularly strong growth in North America, developing and emerging countries and European petfood operations.

#### Other companies try to be a jack of all feeds.





## Our team and plant are masters of one and focused on petfood only.

Trouw Nutrition's companion animal team and production plant are totally focused on your business.

Our nutritionists think outside the box, searching for new and unique concepts, products and ingredients that give you a competitive edge. Products like OPTIMIN® chelated minerals, inulin, FOS and egg biologics ... products that contribute to improved health, hair coat, hoof quality and better reproductive performance.

We have the only AIB-certified and humidity-controlled, fully dedicated petfood blending facility in North America. It is totally antibiotic free, certified for production of organic blends, and no restricted-use proteins are allowed in the facility, which is completely free of livestock feeds.

When food-grade quality is essential, turn to Trouw Nutrition. We're focused on companion animals — and you.

For information, contact:

Highland, Illinois

800-255-3582 • www.trouwnutritionusa.com

**AIB Food Safety superior rating** 







Innovation. That's How. That's Trouw.

#### **Beneful wins Pack Expo** Selects awards

Pack Expo International attendees recently elected the package developed for Beneful Prepared Meals as the winner of the inaugural Pack Expo Selects awards program. The Selects program was comprised of a special display and

electronic voting system that allowed tradeshow attendees to recognize the year's most innovative packaging designs

by voting for their favorite nominee.

Each of the 15 finalist packages were

developed. signed, converted or produced by one or more Pack Expo International 2006 exhibitors. Contributing exhi-

> bitors to the Beneful Prepared Meals product include Alcoa Packaging, Hans Rychiger AG, PDC International Corp. and Printpack Inc. The Meow Mix Market Select wet cat food cup appeared as one of the top five finalists for the award.

#### Columbia Machine announces new president and CEO

Columbia Machine Inc. has announced the appointment of Rick Goode as its new president and CEO, effective October 1, 2006. Goode has 11 years of experience with the company, most recently as executive VP.

#### Fancy publications name their top product award winners



Chomp Inc.'s new training product, Sniffers101, has been awarded a Best New Product Award from the editors of *Dog* Fancy magazine. Sniffers101 was one of nine products chosen and the only consumable pet product selected as a winner for this publication. Sniffers101 was cited for its product innovation and creativity.

Each year, Cat Fancy magazine chooses the winners of their Editors' Choice Awards. Castor & Pollux Pet Works was chosen to receive its third and fourth awards in 2006. The award was given to the company's new Organix organic canned feline formulas and the new Natural Ultramix Adult Feline Indoor Formula.





Research has shown the use of Omega Protein's® menhaden fish meal and fish oil in a pet's diet can benefit their appearance and health in many ways including: a strengthened immune system, reduced inflammation, higher trainability and a

Special Select:® Menhaden fish meal, a proven stable and reliable source of amino acids used in quality pet food

Natural Nautic:<sup>™</sup> Menhaden fish meal now preserved with mixed tocopherals, the natural choice for providing these perfectly balanced amino acids.

Virginia Prime:<sup>™</sup> Refined menhaden fish oil, rich in EPA and DHA, long-chain Omega-3 fatty acids that are essential to

Omega Protein®, giving you the options to provide pet owners what they want most: healthy pets.

for the health of it





## Still using paper?

Make the Move from Paper to Plastic with Bulldog™ Pet Food Packaging for Superior Graphics, Re-sealability and Reduction of Infestation.



- Patented LaserTear® scoring technology creates precise scoring lines and custom 2-dimensional tear paths
- 10-color printing creates superior, eye-catching graphics
- Advanced film technology resists denting and creasing for better shipping, stocking and end-use performance
- Gas-flushing and vacuum-packaging technologies improve food safety and increase consumer appeal
- Bulldog patented films are developed and supported by dedicated pet food R&D teams

#### **Experience Makes a World of Difference!**

A global supplier for more than 100 years and the leading domestic producer of retort pet food packaging, Alcan takes your packaging into the future. Contact us today for more information!

8770 West Bryn Mawr Avenue • Chicago, IL 60631 • p 773-399-8000 • f 773-399-8099 • www.alcanpackaging.com ©2006 Alcan Packaging













# WHEN YOU'RE TRYING TO SAVE THE OMEGA 3 FATTY ACIDS IN YOUR FISH OILS, HOOK UP WITH THE BIGGEST STABILITY AFICIONADOS AROUND.



Before fish oils became a mainstream source of omega 3 fatty acids in pet food, Dr. Bill Gamble, Tracy Tanner, and their fellow scientists at Kemin saw the trend in human nutrition and started researching this over-sized stabilization challenge. They knew oils from salmon and menhaden fish came with a very big catch — they are some of nature's most difficult to stabilize.

They spent thousands of hours running compositional analyses of rosemary extract to identify its active components. They ran hundreds of tests to measure the synergistic effect of various antioxidant combinations. They filled up more than a few gigabytes of computer storage space. After 3 years, they created the PARAMEGA brand, the first, all-natural antioxidant line that could reel in the rapid oxidative properties of highly unsaturated fat sources. Their discovery made it possible to

offer petfood diets that are both rich in omega 3 fatty acids and long on shelf life.

#### GONE FISHING. AGAIN.

Today, Bill, Tracy, and their brainy colleagues in the Kemin Innovation Center are using their ample brain cells to help customers maximize production output and efficiency by manipulating the interaction of several key variables. All we can divulge is they're very close to landing a big, big discovery.

#### BRAINS FOR HIRE.

If you have a problem that requires people with encyclopedic knowledge of things like delta:gamma homologue ratios, peroxide values, call Kemin today. We've got the biggest fish in stabilization chemistry.

CALL 877-890-1462, AFICIONADOS ARE STANDING BY. WWW.KEMIN.COM



#### New on the Shelves

Editor's note: Submissions and feedback are welcome. Contact Jenny Kvamme, Tel: +1.815.734.5637, Fax: +1.815.734.5649, E-mail: jkvamme@wattnet.net.









#### **« Real Food Toppers** whole food treats

Complete Natural Nutrition Inc. has announced the launch of a new line of whole food pet treats, Real Food Toppers. The treats are freeze-dried selections of meat, vegetables and fruit. The Toppers come in eight flavors including chicken breast, wild salmon, beef sirloin, beef liver, holiday (with turkey and cranberries), fish 'n chips (cod and potato) and more. Toppers can be fed as a dry treat or mixed into the daily diet.

www.realfoodtoppers.com

#### Pedigree Super Chew >>>

New Pedigree Super Chew is a long-lasting meaty treat for dogs, says the company. Super Chew provides an alternative to traditional chew toys such as bones and rope toys. The chew is made to be a highly digestible and nutritionally complete treat. It is fortified with vitamins A and E, calcium and phosphorus, while containing only 2% fat. www.pedigree.com



#### Slow-cooked taste in a can

Iams' Slow-Cooked canned recipes are available in Entrées, Chunks and Small Bites varieties for dogs and Entrées, Slices and Flakes for cats. Various flavor combinations, textures and formulas are available for every lifestage, according to the company. Iams says real broth is used in its Slow-Cooked canned recipes. www.iams.com

#### Sauce mix adds flavor and nutrition >>>

Complete Blend Dog Formula is the first in a new line of sauce mixes from Pet Nutrition Products. When completed, the line will include various formulations for both dogs and cats and will be designed to address every lifestage and activity level. According to the company, Complete Blend is a powdered mix of 100% fruits and vegetables that, when mixed with water, makes a nutritious and tasty dog food sauce. www.petnutritionproducts.com





#### Our added ingredient.

Today's technical feed formulations require research and testing data to back up ingredient performance claims. Our Gold Barr Service includes the latest research data available to serve all phases of the livestock, poultry and pet food industries. But that's not all. With Gold Barr Service we source products for you worldwide, then stand behind every ingredient order with a 50 year-plus reputation for prompt delivery!

For Gold Barr Service,
call toll-free to order:
Amino Acids, Buffers,
Direct Fed Microbials,
Enzymes, Flavors,
Milk Replacers, Minerals,
Natural Pigments,
Pelleting Agents, Phosphates,
Specialty Ingredients,
Vitamins and Surfactants.



#### Bill Barr & Co., Inc.

8725 Rosehill Rd. • Suite 101 • Lenexa, KS 66215 1-800-336-BARR • FAX (913) 599-0425

www.billbarr.com • email: Bill@billbarr.com

BY JENNY	KVAMME,	DVM,	AND
DEBBIE PH	HILLIPS-DO	DNAL	<b>JSON</b>

	h

SALES LEADERS					
Company	shar	rket e % 2005	(US\$ b	sales illions) 2005	2005 vs. 2004 retail sales %
Mars Inc.	25.4	25.2	9.94	10.26	3.2
Nestlé SA	24.1	23.7	9.45	9.65	2.1
Procter & Gamble Co.	6.8	6.9	2.68	2.82	5.2
Colgate-Palmolive Co.	6.2	6.2	2.42	2.54	4.9
Del Monte Foods Co.	3.6	3.5	1.4	1.43	2.1
Agrolimen SA	1.3	1.4	0.49	0.56	14.3
Nutro Products Inc.	1.3	1.3	0.51	0.54	5.1
Unicharm Corp.	0.8	0.8	0.31	0.32	3.2
Nisshin Seifun Group Inc.	0.5	0.5	0.21	0.22	4.7
Nippon Flour Mills Co. Ltd.	0.5	0.4	0.19	0.18	-5.2

Table 1. Market shares, approximate global dog and cat food sales (retail US\$) and percentage of change from 2004 to 2005. Figures for Mars include S&M NuTec LLC, acquired in 2006; figures for Del Monte include Meow Mix Co., acquired in 2006. Source: Euromonitor International.

## Why these companies lead the global petfood industry in sales, growth and innovation

<b>GROWTH LEADERS</b>			
Company	2000-2005 total growth %	2000- 2005 CAGR%	2000-2005 value growth (US\$ billions)
Provimi BV, Rotterdam, Netherlands, www.provimi.nl	55,778.2	254.4	57.6
Agrolimen SA, Barcelona, Spain, www.affinity-petcare.com	22,632.2	196.0	559.0
S&M NuTec LLC (division of Mars Inc.) McLean, Virginia, USA, www.mars.com		173.5	395.6
Palmera SpA, Lacchiarella, Italy, www.palmera.it	272.1	30.1	44.6
Nestlé SA, Vevey, Switzerland, www.nestle.com	125.6	17.7	5,375.0
Prosper de Mulder Ltd., Doncaster, UK, www.pdm-group.co.uk	111.2	16.1	23.5
Total Alimentos SA, Tres Coracoes, Browww.totalalimentos.com.br	azil, 99.5	14.8	63.6
Vitakraft-Werke Wührmann & Sohn, Bremen, Germany, www.vitakraft.de	93.5	14.1	54.1
V.I.P. Petfoods Pty. Ltd., Yatala, Queen: Australia, www.vippetfoods.com.au	sland, 80.3	12.5	27.2
Morando SpA, Andezeno, Torino, Italy, www.morando.it	71.7	11.4	18.5

hat the 10 companies profiled here led the petfood industry in 2005 is no surprise to anyone. After all, the members of this top group don't change much from year to year; typically only mergers and acquisitions affect who the players are and their position in the rankings.

But what about the stories behind the rankings and numbers? How have these companies achieved their elite status?

#### Dominating the market—again

In 2005, the most recent year for which complete data were available at press time, global dog and cat food sales amounted to US\$42.1 billion, according to Euromonitor International. As in past years, Mars Inc. and Nestlé SA dominated that market, grabbing 25.2% and 23.7% shares, respectively.

Table 2. Global leaders for dog and cat food sales by cumulative percentage growth, compound annual growth rate and value (US\$ billions), 2000 to 2005. Source: Euromonitor International.



Both figures reflect slight declines, even with the Mars percentage including the share for S&M NuTec LLC, the maker of Greenies treats acquired by Mars in 2006. But in terms of value (retail sales), both major players showed growth, driven by an increasing commitment to the premium segment, says Euromonitor in its November 2006 report, the *World Market for Pet Food and Pet Care Products*.

"The two leading players ... have established a truly global presence," the report reads. "Broad brand portfolios, with a strong focus on midpriced and economy brands distributed through mainstream grocery channels, have enabled the companies to build a strong consumer base in both developed and emerging markets. Indeed, the two companies have been instrumental in driving the development of dog and cat food sales in emerging regions through their extensive distribution networks and aggressive marketing activity."

#### Premiums, superpremiums rule

After Mars and Nestlé, market share and retail sales dropped significantly to number three Procter & Gamble Co. with its Iams and Eukanuba brands. It was followed closely by Colgate-Palmolive, parent company of Hill's Pet Nutrition.

Both companies have also achieved a global presence, Euromonitor says, but their focus on superpremium petfoods means their sales and growth lie mainly in developed markets more likely to have consumers with purchasing power. Fortunately for Iams and Hill's, such consumers have continued to trade up to more expensive foods for their pets.

At number seven, Nutro Products Inc. also increased sales due to its superpremium products, mainly in its US base. In between, Del Monte Foods Co. came in at number five and Agrolimen SA at number six. Agrolimen enjoyed the largest sales increase from 2004 of the top 10 manufacturers, riding geographic expansion in its native region, Western Europe.

Rounding out the top 10 were three Japanese companies: Unicharm Corp., Nisshin Seifun Group Inc. through its Nisshin Petfood division and Nippon Flour Mills Co. Ltd. through its Nippon Pet Foods. As the world's second largest market for pet products (behind the US), Japan saw significant growth thanks to pet owners' increasing interest in the nutritional value of petfoods, functional foods and human-style products, according to Euromonitor. However, the three companies profiled here had flat or declining shares of the global market.

#### A growing and innovative industry

Table 1 includes 2004 and 2005 market shares and retail sales for the top 10 companies. The 2005 retail figure is repeated in the profile of each company in

this article, but we've also included 2006 dat a where available.

Table 2 lists petfood company leaders in growth, while Table 3 (p. 20) lists innovation leaders as measured by new product development. Obviously, these two areas go hand in hand.

Most experts predict the petfood industry will continue to grow worldwide through at least 2010. Though growth is expected to be more sluggish in developed regions, it will continue because of ongoing trends affecting product development—more people treating their pets like human family members, higher disposable incomes and a desire for convenience, including with packaging.

In emerging markets, such as Eastern Europe, Latin America and China, growth is exploding and should continue at a rapid pace. As consumers in these markets increase their purchasing power, they are more likely to place value on pet nutrition, thus transitioning from table scraps and homemade meals to prepared petfoods. Simultaneously, petfood companies are expanding distribution into these areas, as are pet-related retail outlets.

All this promises a positive future for the entire industry, including the 10 leaders. Read on to find out what they're doing to shape that future for themselves.



**World headquarters:** McLean, Virginia, USA

Approx. 2005 global retail sales: US\$10.26 billion

**Officers:** Doug Cahill, president, Mars Petcare US

**Top brands:** Pedigree, Whiskas, Waltham, Cesar, Sheba, Kitekat

**New products:** Pedigree Super Chew, Greenies

**Websites:** www.mars.com; www. waltham.com; www.pedigree.com

Mars operates three core businesses (snack food, pet care and main meal food) in most parts of the world. Acquisitions was the name of the game in 2006, as Mars acquired S&M NuTec, maker of popular pet treats sold under the Greenies brand, and Doane Pet Care Enterprises Inc., previously known as the world's largest supplier of private label petfoods. Doug Cahill, president and CEO of Doane, was chosen to run Mars' North American pet care business in Nashville, Tennessee, USA, where Doane was headquartered. In late March 2006, Doane reported sales of US\$991.6 million for fiscal year 2005, down 5.7% from a year earlier. Doane's European business was sold to another party.

In the past year, a new easy-to-digest version of Greenies was released for adult dogs to help clean teeth and freshen breath. According to Mars, the formula is based on patent-pending science rooted in dog biology.

Nestlé SA (Nestlé Purina PetCare)

**World headquarters:** Vevey, Switzerland

Approx. 2005 global retail sales: US\$9.65 billion

**Officers:** W. Patrick McGinnis, CEO, Nestlé Purina PetCare; Terence Block, president, PetCare NA; Rock Foster, CFO

**Top brands:** Purina, Friskies, Alpo, Beneful, Fancy Feast, Mighty Dog, Pro Plan, Beggin' Strips, Busy Bone, Bakers, Felix, Winalot, Go Cat, Gourmet Gold, Vital Balance, Vitalife

**New products:** Beneful Prepared Meals, Fancy Feast Elegant Medleys, Purina ONE Natural Blends, Naturals by Purina Cat Chow brand

**Websites:** www.nestle.com; www.puring.com

Employees: 7,000

During the first nine months of 2006, net sales for Nestlé amounted to US\$5.69 billion (CHF72.2 billion), an increase of 9.1% over the same period in 2005. The PetCare segment achieved 6.9% organic growth. PetCare category sales were US\$4.36 billion (CHF5.53 billion). Growth in North America continues to accelerate.

According to Keith Schopp, vice president of public relations, the com-

pany's keys to growth include innovation based on humanization and a focus on the consumer. Growth was also strong in Europe, with strategic brands such as Bakers, Purina ONE, Gourmet and Beneful doing particularly well.

Many successful new products were launched by Nestlé Purina in 2006. One of the most innovative was Beneful Prepared Meals, a new family-style food for dogs with such eye appeal that it warranted innovative packaging to clearly show the product on the store shelf.

Nestlé Purina also released natural products, plus Fancy Feast Elegant Medleys wet cat food in a shelf-ready tray pack. This packaging eliminates the need for single-can stocking and improves the shopping experience, according to Nestlé.

Innovation leaders	
Company	New SKUs 2003-2006
Nestlé SA, Vevey, Switzerland, www.nestle.com	919
Mars Inc., McLean, Virginia, USA, www.mars.com	844
Procter & Gamble Co., Cincinnati, Ohio, USA, www.pg.com	323
Bravo Raw Diet, Vernon, Connecticut, USA, www.bravorawdiet.com	175
Del Monte Foods Co., San Francisco, California, USA, www.delmonte.	com 156
Drs. Foster & Smith, Rhinelander, Wisconsin, USA, www.drsfostersmith.	com 152
Petrapport Inc., North Bergen, New Jersey, USA, www.beefeaters.c	com 137
Inaba Pet Food, Yui, Shizuoka Prefecture, Japan, www.inaba.com	107
Castor & Pollux Pet Works, Clackamas, Oregon, USA, www.castorpolluxpet.com	79
Nisshin Seifun Group, Tokyo, Japan, www.nisshin.com	74
Qingdao Lihong Daily Products Co. Ltd., Qingdao, Shandong, Chir	na 72
Merrick Pet Care, Amarillo, Texas, USA, www.merrickpetcare.com	63
Unicharm Corp., Tokyo, Japan, www.uc-petcare.co.jp	61
Colgate-Palmolive Co., New York, New York, USA, www.colgate.co	m 59
Nutro Products Inc., City of Industry, California, USA, www.nutroproducts.com	59
Ahold, Amsterdam, Netherlands, www.ahold.com	54
Wilderness Foods Ltd., Mt. Maunganui, New Zealand, www.wildernessfoods.co.nz	52
Old Mother Hubbard, Chelmsford, Massachusetts, USA, www.oldmotherhubbard.com	50
Agrolimen SA, Barcelona, Spain, www.affinity-petcare.com	45
Natural Balance Pet Foods Inc., Pacoima, California, USA, www.naturalbalance.net	44

Table 3. Total number of new product SKUs for 2003 to 2006 from petfood manufacturers and marketers worldwide. Includes treats. Source: Datamonitor.

## Opportunity knocks:

## Don't miss the early bird discounts for Petfood Forum and Petfood Focus 2007

April 16-18 at the Hyatt Regency O'Hare Hotel, Chicago, Illinois, USA

#### Petfood Forum is the premier event for busy petfood industry executives like you.



It's the only conference that offers exciting and informative sessions, plus plenty of networking opportunities and access to other professionals in this fast-growing and dynamic field.

Learn about petfood marketing, production, pet nutrition and regulatory issues. Check out all the topics at www.wattnet.com/petfoodforum.

New for 2007! Three exciting general sessions:

- Retailing extra: Pet retailing executives explain all about what pet owners want and need.
- Leaders roundtable: Petfood company CEOs on where the future of the industry is headed.
- Future trends: Gain access to our exclusive in-depth market research and take a peek at what the global petfood industry will be like in five years.

#### Plus! Petfood Focus 2007: Treats

April 18-19, Hyatt Regency O'Hare Hotel, Chicago, Illinois, USA



This comprehensive educational program offers an in-depth look at the exploding market for pet treats. Learn about new products around the world, one company's success with treats, functional ingredients, production innovations, new packaging ideas, regulatory issues and more!



Register by January 25, 2007, to save up to 15%. Register for both events and save even more!

(Discounts for exhibitors, too!)

Turn the page or go to www.wattnet.com/petfoodforum.





## Registration Form Or register online at www.wattnet.com/petfoodforum



**Petfood Forum 2007** April 16-18, 2007 **Hyatt Regency O'Hare Hotel** Chicago, Illinois, USA



**Petfood Focus on Treats** April 18-19, 2007 **Hyatt Regency O'Hare Hotel** Chicago, Illinois, USA

Registration Date	Petfood Forum	Petfood Focus on Treats	also registered for Petfood Forum	
Prior to January 25, 2007	US\$795	US\$595	US\$470	
January 25 - March 15, 2007	US\$865	US\$630	US\$490	
After March 15, 2007	US\$955	US\$695	US\$560	
Choose your event(s):  Please type or print CLEARLY,	☐ Petfood Forum 2007 on ☐ Both Petfood Forum and IN CAPITAL LETTERS (as yo	d Petfood Focus	ocus on Treats only	
Name (last, first)**	-		_	
Address	(	City		
State —	Zip/postal code	Country/province -		
Phone	Fax	E-mail		
**For additional attendees, please u	se a photocopy of this form, or reg	ister online at www.wattnet.com/p	etfoodforum.	
Method of payment:	□ Check □ American Express	☐ Money order ☐ MasterC☐ Discover	ard □VISA	
Personal name on credit card _		. Card number ————		
Signature	Signature Expiration date			
Registration for Petfood Forum 2007 includes four meals, two receptions and three refreshment breaks; for Petfood Focus on Treats, one reception, one breakfast and one coffee break.				
Please return this form with full payment (payable to Watt Publishing Co.—Petfood Forum/Focus 2007) to:  Petfood Forum/Focus 2007  122 S. Wesley Ave.  Mt. Morris, IL 61054-1497 USA  Fax +1.815.734.5631  NOTE: Registrations will not be processed without payment. Rate is determined by date payment is received. Prior to March 15, 2007, attendee registration fees are refundable minus a cancellation fee; for more information, contact Marcia Riddle at mriddle@wattnet.net or +1.815.734.5633. Substitution of registered personnel is available at n 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.  Be sure to identify yourself as a Petfood Forum 2007 or Petfood Focus on Treats participant prior to March 30, 2007, to				
receive our special group rate. Room availability is limited; reservations will be handled on a first come, first served basis.				
Are you interested in exhibiting at Petfood Forum 2007?				
Please provide the following information:				
Name	(	Company name		
Telephone	Telephone E-mail			

Or contact Ginny Stadel at +1.815.734.5691 or gstadel@wattnet.net. For more information, visit www.wattnet.com/petfoodforum.

## Procter & Gamble Inc. (P&G Pet Care)

**World headquarters:** Cincinnati, Ohio, USA (P&G Pet Care: Dayton, Ohio, USA)

Approx. 2005 global retail sales: US\$2.82 billion

Top brands: Eukanuba, lams

**New products:** lams Smart Puppy, lams Small and Toy formulas, Slow-Cooked can recipes

**Websites:** www.pg.com; www.iams.com; www.eukanuba.com

As a company, Procter & Gamble (P&G) had net sales of US\$68.2 billion in the year ending June 30, 2006. This value was an increase of 20% versus the same period last year. The major brands produced are Iams and Eukanuba. Both brands include superpremium dog and cat foods and treats, with Iams sold worldwide in most channels (including grocery and mass merchandisers), while Eukanuba is sold exclusively in pet specialty stores and veterinary clinics in North America.

Net sales for the global business unit that includes the Pet Health, Snacks and Coffee segments were US\$4.38 billion for the year ending June 30, 2006. This is 6% of P&G's company sales, which was up 2% from the same period last year. Sales in Pet Health were down slightly due to strong competitive activity in North America and Western Europe, according to the company's annual report.

Colgate-Palmolive Co. (Hill's Pet Nutrition)

**World headquarters:** New York, New York, USA

Approx. 2005 global retail sales: US\$2.54 billion

**Officers:** Robert C. Wheeler, CEO, Hill's Pet Nutrition; Neil Thompson, president, Hill's International; P. Justin Skala, president, Hill's North America

**Top brands:** Hill's Science Diet, Hill's Prescription Diet

**Websites:** www.colgate.com, www. hillspet.com

Main plants/facilities: five facilities, plus more than a dozen offices worldwide

**Number of employees:** 2,500, more than 170 veterinarians

Founded in 1939 by a veterinarian, Hill's Pet Nutrition has been part of the global consumer goods powerhouse Colgate-Palmolive since 1976.

According to Colgate's 2005 annual report, Hill's increased unit volume by 4% that year and sales and operating profit by 6%. It did this via product innovation, including large breed and small bites extensions of its Science Diet Lamb & Rice Recipe line and Prescription Diet Canine j/d, based on the science of nutrigenomics. Data from Datamonitor show Colgate/Hill's ranking 14<sup>th</sup> globally in new product launches from 2003 to 2006 (Table 3).

Through the third quarter of 2006, Colgate reported all five of its operating divisions—pet nutrition, plus four geographic divisions of its oral, personal and home care products—experienced sales and profit increases. This was supported by record advertising spending, according to the *Colgate's World Fact Sheet* on the company website.

Robert Wheeler, CEO of Hill's, expects growth and new product development to continue not only for his company but also the petfood industry in general. "We will see the pace of product innovation continue," he told *Petfood Industry* last year. "As we learn more about the benefits of good nutrition, we will see an increase in products designed to keep pets healthy."

Del Monte Foods World headquarters: San Francisco, California, USA

Approx. 2005 global retail sales: US\$1.43 billion

**Officers:** Jeffrey M. Watters, senior VP, pet products

**Top brands:** 9Lives, Cycle, Gravy Train, Kibbles 'n Bits, Nature's Recipe, Reward, Skippy, Meow Mix, Alley Cat, Milk-Bone, Jerky Treats, Meaty Bone, Pounce, Pup-Peroni, Snausages

**New products:** Meaty Bone Denta Delicious, Snausages Roverolis, Canine Carryouts Pizza flavor, Kibbles 'n Bits Brushing Bites

**Plant locations:** Bloomsburg, Pennsylvania, USA; Lawrence, Kansas, USA; Decatur, Alabama, USA; Buffalo, New York, USA

Employees: 7,500

As a result of recent acquisitions, Del Monte has added the Meow Mix, Alley Cat and Milk-Bone brands to its pet products portfolio. Del Monte also produces private label petfood products. The company has market shares of 8.8% in the dry dog food category, 7.3% in wet dog, 4.5% in dry cat food, 19.6% in wet cat food, 38.8% in the chewy dog snack category, 11.8% in the biscuit/crunchy dog snack and 20% in the cat treats category. During fiscal 2006, Wal-Mart was Del Monte's top customer, representing approximately 30% of the company's gross sales and an even higher percentage of sales for the pet products business.

Pet products are primarily manufactured at four of Del Monte's production facilities, located in the US and American Samoa. The company also uses a limited number of third-party co-packers and re-packers located in the US and Thailand to supplement production capacity. The company operates a R&D facility in Terminal Island, California, USA, where it develops product lines and researches products for the petfood business.

Agrolimen SA (Affinity Petcare SA)

**World headquarters:** Barcelona, Spain

Approx. 2005 global retail sales: US\$562 million

**Officers:** Carlos Argenté, CEO/VP marketing; Franc Andreu, operations managing director; Francesc Blanch, VP R&D; Patricia Larumbe, VP business development

**Top brands:** Affinity, Ultima (UK), Rubadub (snacks/treats), Brekkies, Brekkies Excel (cat), Advance, Advance Veterinary Diets **New products:** Ultima, Advance Special Puppy Care, Advance Sterilized (12 new dog foods, 10 new cat foods, three new snack/treats)

**Websites:** www.affinity-petcare.com **Plant locations:** one plant in Spain, two in France

Employees: 720

Affinity offers a wide range of products, from special veterinary diets to superpremium foods. Despite its size, the company distributes its products within a limited area geographically, mainly the European Union (EU). Affinity operates in the EU as if it was a single country. This facilitates a limited cost structure and greater visibility to its customers, competitors and consumers.

Affinity is focused on organic growth in the EU. It is looking to expand selectively in markets with good potential. The company sees future growth opportunities through increased distribution. In the countries where Affinity is not a leader, increased advertising support is helping brands launched during the last three years to gain awareness and recognition with consumers.

In 2006, Affinity introduced 12 new dog foods, one new treat/snack product for dogs, 10 new cat foods and two new cat treats/snacks. A new brand, Ultima, was introduced to the UK market as Affinity's superpremium brand in the grocery channel. It is currently the third best-selling dry dog product in the grocery channel and is closing the gap as the second best-selling dry cat product in this channel.

According to Carlos Argenté, CEO/VP of marketing, "We strive to be known for taking care of the well-being of dogs and cats. In relation to our trade partners, we strive to be known for innovations and value creators. Where we are not leaders, we would like to be perceived as the challengers in the category."

Nutro Products Inc.
World headquarters: City of Industry, California, USA

Approx. 2005 global retail

sales: US\$536 million

**Officers:** David Kravis, CEO; Mike Satterwhite, executive vice president; Ladd Hardy, senior vice president, marketing

**Top brands:** Max Dog, Ultra Dog, Max Cat Gourmet Classics, Natural Choice Complete

New products: Ultra Large Breed dog food, Ultra Small Breed dog food, Natural Choice Whole Brown Rice & Lamb Senior dog food, Natural Choice Healthy Desserts dog treats, Natural Choice Small Bites Lite and Senior dog food, Max Cat Gourmet Classics Pouches

**Websites:** www.nutroproducts.com, www.ultraholistic.com

Main plants/facilities: Victorville, California, USA, and Lebanon, Tennessee, USA

Celebrating its 80th anniversary in 2006, privately owned Nutro Products Inc. has staked its success and continued growth on a commitment to the pet specialty channel. "Nutro creates a true partnership with pet specialty, working hard to provide retailers with the tools necessary to compete in a crowded marketplace with the best combination of people, products and marketing programs," says Margaret Goodall, director of marketing. "We work hard to help bring consumers into pet specialty stores, we educate store employees to speak knowledgeably about our foods, and finally, we make foods that perform, so consumers will continue to come back for more."

Other keys to growth cited by Goodall include using all-natural ingredients, making foods that pets enjoy and thrive on and staying abreast of research. New products from the company reflect all these elements, she says. For example, new small bites formulas are for dogs and cats that prefer a smaller kibble size, and large-breed dog foods provide for the different nutritional needs of specific breeds of dogs. Nutro also introduced what Goodall calls a unique system with omega-3 and omega-6 fatty acids.

With its focus on one channel, the company always finds it a challenge to

help bring consumers into pet stores, Goodall says. "Consumers are often swayed by the convenience of buying their pet foods at grocery stores. It is our job to educate them that pet specialty retailers continue to carry foods that use better ingredients and provide better performance," she explains.

Despite that challenge, Goodall says the company continues to outperform the average industry growth rate each year and expects continued strong growth for 2007, especially in its cat and holistic brands. "We believe cat owners are turning more and more to superpremium foods that provide their cats with superior nutritional value and performance," she says. "We have also seen a growing trend toward holistic foods for pets. We introduced our Ultra brand in 2004 to begin to meet the needs of this market. In 2006, Ultra began to really take off, and our expectations for 2007 are for us to continue to build our holistic business."

Unicharm Corp. (Unicharm PetCare Corp.)

**World headquarters:** Tokyo, Japan

**Approx. 2005 global retail** sales: US\$317 million

**Officers:** Toshio Takahara, chairman; Gumpei Futagami, president/CEO

**Top brands:** Aiken Genki Gin no Sara; Neko-Genki Silver Spoon

**New products:** Ginno Sara for dogs 7 years and older, Fukkura Dry dog food, Ginno Spoon Umino Gourmet cat food, Ginno Spoon Can cat food

Website: www.uc-petcare.co.jp Main plants/facilities: Itami Hyogo (petfoods) and Mie (pet care products)

Number of employees: 180

On a new product tear since 2003, Unicharm PetCare Corp. is a division of Tokyo-based Unicharm Corp., maker of baby, personal and hygiene products. In 2005 and 2006, the pet division continued its product development blitz with at least four new products, including extensions of lines that have captured 33% market share for gournet dog and cat foods.

To what does the company attribute this rapid growth? "We believe the key for growth is product development meeting needs in line with trends," says Gumpei Futagami, president/CEO of Unicharm. He explains that this focus also helps the company add value to existing products.

Unicharm differentiates itself from its competition by adhering to a firm strategy of researching consumer needs, conducting in-depth analysis to convert those needs into products, increasing the awareness of the products via marketing and advertising, and expanding sales. "We have accumulated and analyzed consumer data for the past 20 years and have been carrying out consumer tests," Futagami says. "For food we have an independent R&D team inside our factory, and we emphasize speed in converting needs into products. In terms of technology, recent palatability enhancing technology applied to our gourmet petfoods is unique."

Futagami says Unicharm has grown 13-14% annually since he became president in 2001, and he expects continued growth.

Nisshin Seifun Group Inc. (Nisshin Petfood Inc.)

**World headquarters:** Tokyo, Japan

Approx. 2005 global retail sales: US\$217 million

**Officers:** Osamu Shoda, chairman of the board; Hiroshi Hasegawa, president

**Top brands:** Run, Carat, Lovely **New products:** JPStyle dog food **Websites:** www.nisshin.com, www. nisshin.com/english/english36.html

**Plants/facilities:** 21 in Japan, Canada, US, Belgium, Germany, Netherlands, Singapore, Thailand, Indonesia, China

Under the Nisshin Seifun Group umbrella, Nisshin Petfood Inc. mar-

kets to predominantly Japanese pet owners. The parent holding company, which traces its roots in Tokyo to 1901, oversees other businesses as diverse as flour milling, foods, animal feed, pharmaceuticals and engineering.

In developing its petfood products, the company cites Japanese cultural trends such as an aging population and increasing single-person households. "For many, their pet is now an important member of the family and a life partner with which they have an emotional bond," according to the Nisshin website. The company keeps this "new level of emotional attachment in mind" with its product lineup, which includes Run dog foods, Carat cat foods and Lovely foods for small pets.

To capitalize further on the cultural changes, Nisshin launched a premium dog food, JPStyle, in February 2006, via mail order. The new product has contributed to increased dog food sales and is the centerpiece of a new company focus on premiums. Sales have also risen significantly for cat food, particularly dried and pouch products and foods for older cats, according to Nisshin financial statements.

In addition to products, Nisshin Petfood provides a pet advice and consultation service to its customers, which also allows the company to gather upto-the-minute feedback on pet owners' needs.

Nippon Flour Mills Co. Ltd. (Nippon Pet Foods Co. Ltd.)

World headquarters: Tokyo,

Approx. 2005 global retail sales: US\$183

million

Officers: Hiroshi
Sawada, chairman
and CEO; Masataka
Horikawa, director and
vice chairman; Wataru

Aosaki, president and COO

Top brands: Nippn, Vita-One

Websites: http://e-nippn.com
Plants/facilities: 12 plants plus
seven offices in Japan, one mill in
China, two mills plus one office in Thailand, three facilities in US

Also headquartered in Tokyo, the 110-year-old Nippon Flour Mills Co. Ltd., which claims to be the first industrial flour milling company in Japan to introduce western-style machinery, manufactures dry dog and cat foods under Nippon Pet Foods Co. Ltd. (NPF Japan). Besides petfoods and flour milling, Nippon manufactures and sells food ingredients; processed, frozen and health foods; and cosmetics. Most fall under the corporate Nippn brand.

Key to the company's success and competitive edge is its research and development. "NPF Japan has its own R&D center where 100 dogs and cats are bred," states the company's website. "Appetite, discharges and physical conditions are being monitored to collect effective data in developing safe and quality dog and cat foods."

The company also takes pride in its advanced manufacturing methods, claiming to have become, in 2001, the first petfood manufacturer to be certified to ISO 9001 (the international quality management standard). Though Nippon operates globally, its petfoods are marketed mainly in Japan. Company financial statements say sales of petfood products have increased greatly, though Euromonitor numbers show a sales decline in 2005. The company credits the rising number of pet lovers in Japan for growth. "Keeping pets has a positive effect on people, and the market for pet products is expanding." reads the financial statement.



### AFB and NuPetra have come together to meet



#### the needs of pet food marketers worldwide.

NuPetra and its BioFlavor® brand are now part of AFB, allowing us to enhance our responsiveness and fulfill all your current and future palatability needs.

**Broadened Product Line** 

**Expanded Production Capacity** 

Extended Research and Development Capabilities

A Clear Focus On The Future





## Industry talk

## Scott, Wigger, Thompson and Futagami share their insights

BY TIM PHILLIPS, DVM

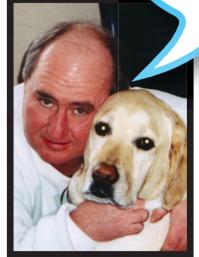
hat's the state of the petfood industry today, and where is it headed? *Petfood Industry* magazine recently asked several industry leaders for their insights. Here is some of what they had to say.

#### What's best inside Jim Scott, Old Mother Hubbard

Jim Scott Jr. is the CEO of Old Mother Hubbard in Chelmsford, Massachusetts, USA. He tells *Petfood Industry* that he is especially proud of the company's Wellness brand. Scott notes, "The brand was conceived about 10 years ago. My family has an 11-year-old Yellow Lab named Boomer. When he was about a year old, and we had three small children,

he had several health problems. Our veterinarian told me that the dog had serious health issues and probably would not live a long life."

Scott decided he wanted to see if a change in diet could help. He talked with his people about making the healthiest petfood possible. They brought in a PhD in animal nutrition, a holistic veterinarian and a PhD in human nutrition. "We came up with a diet," Scott remembers, "but



there were concerns about it costing too much. I did not want to worry about cost. I believed that if we made the right diet, one that would be best for the inside of the pet, we would sell it. That turned out to be true."

When asked to assess the state of the petfood industry, rather than repeat others' points about the humanization of pets and petfoods and the fragmentation of retail channels, he says, "The industry will become more fragmented as pet owners seek out customized dietary solutions for their pets.

That's why we believe that people who sell our petfoods should be trained to give proper advice to pet owners."

"He related to Boomer, instead of having a blank stare." —Scott

Regarding challenges he faces, Scott notes, "We get pressure to add products to increase shelf space, but we will not

play the 'real estate' game.

Any new products that we introduce must provide real dietary solutions for our four-legged friends. In doing that, we build a defensible and sustainable consumer franchise for the independent retailer. We also know we could turbo-charge palatability by using certain ingredients, but we are committed to do what's best for the inside of the pet."

To illustrate his point, Scott recounts a recent visit he and Boomer made to the hospital. They visited a young man who had sustained brain damage about six months before. According to the man's mother, it was the first time her son reacted to his surroundings. "He related to Boomer, instead of having a blank stare," says Scott. "That's just one example of the tremendous value of pets."

## Opportunity vs. regulations

Dr. Jürgen Wigger, Bewital

Dr. Jürgen Wigger is the general manager of the petfood company Bewital in Südlohn-Oeding, Germany. He notes that in

Western Europe, companies are not seeing much volume growth but are noticing a shift from leading brands to niche products. "One important reason for this," says Wigger "is the intense communication of pet owners via the Internet, leading to groups of customers with very specific requirements." This means smaller production batches and opportunities for medium-sized producers like Bewital.

In most Eastern European markets, Bewital is see-

ing strong volume growth. But, due to relatively low incomes there, the growth is mainly in economy products. Furthermore, the aggressive expansion of large, international grocery chains (Carrefour, Tesco, etc.) favors the

development of robust store brands. "Medium-sized

producers have to decide if they want to be in business with large grocery chains or maintain their niche strategy," says Wigger. "We have chosen the niche op-

tion. It will require patience and persistence, but we are confident this strategy will pay off in the long term."

Wigger went on to predict:

- The structure of markets will become more similar in different countries. Especially in larger cities, Bewital is seeing fewer differences between developed and developing countries.
- The overall size of the market will increase substantially due to the growth in less developed markets.
- The desire of customers to treat their pets especially well will lead to niche markets. Thus, the premium segment will have to have the flexibility to produce smaller batches.
  When talking about potential problems, Wigger cites:
- Poor products possibly damaging the image of industrial

"The structure of markets will become more similar in different countries."

-Wigger

More governmental regulations that will make it more difficult to explain product differences. "This could lead to a standardized petfood and the loss of any potential for value creation," he thinks.

Increasing protectionism making the international trade of petfood more difficult. For example, he notes, "European petfood producers have to obtain a registration opposing bioterrorism to export their products to the US. These restrictions create uncertainties for our international business."

petfoods.

## **Disease hurdles**Angelle Thompson, PhD, Thompson PetTech

Dr. Angelle Thompson is a product development and regulatory consultant based in Basking Ridge, New Jersey, USA. She tells *Petfood Industry* that movement of pet products worldwide will continue to face regulatory hurdles raised by diseases such as BSE, avian influenza and exotic Newcastle disease—even if there is no opportunity of transmission by petfood. Another potential problem is a dwindling fish population. "If predictions are correct," she says, "the petfood industry will have to look for additional sources of animal protein."

Thompson notes, "In the US, the industry is still growing and expanding its penetration into households around the world. In support of that expansion, petfood nutritionists, including myself, keep working to make foods that are

better at supporting our pets' longer lives."

What are her most difficult challenges? She says, "Complex petfood regulations vary from state to state. One of my jobs is to advise companies on best practices for regulatory compliance. The mar-

ketplace changes very quickly. Nutritional research takes time and regulations change slowly. It is a challenge to help companies meet market demands while simultaneously remaining in regulatory compliance."

Talking about change, Thompson points out, "While the big guys have gotten bigger through mergers and acquisitions, many new companies are entering the



"I'm impressed by the number of new entries."

—Thompson



#### Industry Leaders >

industry. Because my business serves companies that range in size from one-person to multinational corporations, I am frequently contacted by new companies just coming into the industry. I'm impressed by the number of new entries."

#### No zero-sum game Gumpei Futagami, **Unicharm Petcare**

Gumpei Futagami is the president and CEO of the Unicharm PetCare Corp. in Tokyo, Japan. He declares that Unicharm will not "play a zero-sum game, focusing on robbing market share from other companies." He says, "Unearthing new needs

and selling value-added products will expand the total market."

Futagami believes that, in the Japanese petfood market, these new needs are for healthy, premium products for:

- Small, indoor dogs;
- Overweight pets; and
- Older pets.

He says his company's challenges include "a steep increase in the price of raw materials and an increasingly high expectation of petfood safety."

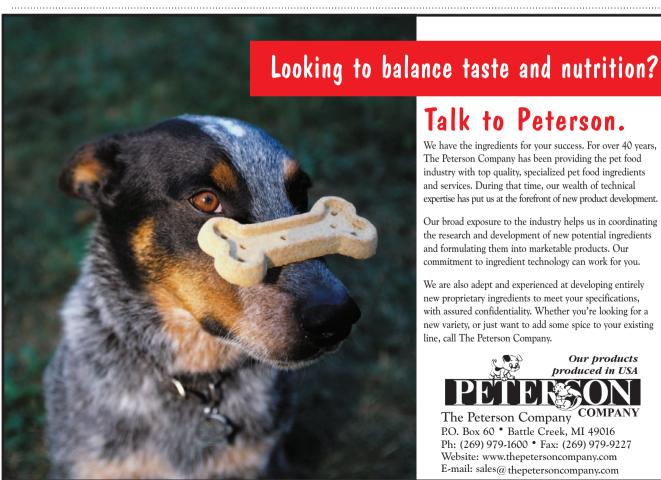
In Japan, pet ownership has been growing steadily, due to a



declining birth rate, an aging population and postponed marriages. In addition, baby boomers in Japan are reaching the age of 60. When they retire, they tend to be well-off financially. Futagami asserts, "I am firmly convinced I can continue to expand our company's pet care business in the future."

#### **More insights**

Glean more industry insights from the executive roundtable during Petfood Forum 2007 on April 18 in Chicago, Illinois, USA. Participants will be Doug Cahill, Mars; Ladd Hardy, Nutro; Marcel Blok, Breakthrough; and Brian Connolly, Castor & Pollux. For a complete list of Forum topics and speakers, go to www. wattnet.com/petfoodforum or contact Marcia Riddle at E-mail: mriddle@wattnet.net; Tel: +1.815.734.5633



#### Talk to Peterson.

We have the ingredients for your success. For over 40 years, The Peterson Company has been providing the pet food industry with top quality, specialized pet food ingredients and services. During that time, our wealth of technical expertise has put us at the forefront of new product development.

Our broad exposure to the industry helps us in coordinating the research and development of new potential ingredients and formulating them into marketable products. Our commitment to ingredient technology can work for you.

We are also adept and experienced at developing entirely new 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.



P.O. Box 60 • Battle Creek, MI 49016 Ph: (269) 979-1600 • Fax: (269) 979-9227 Website: www.thepetersoncompany.com E-mail: sales@thepetersoncompany.com

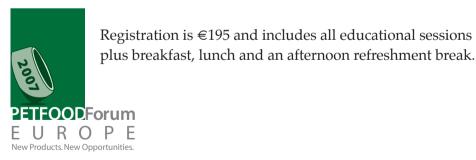
## New products + new innovations new growth opportunities at Petfood Forum Europe 2007

May 8, Jaarbeurs Halls, Utrecht, Netherlands

This conference will be the exciting petfood portion of the Victam International Conference—the world's premier agrifeed show. **Petfood Forum Europe** connects you with other leaders in the global petfood industry.

You will learn about:

- New and functional/healthy ingredients.
- Debate: nutrition and longevity.
- Advances in palatability testing.
- European sales trends.
- Niche markets.
- Production innovations.





To register, turn the page or visit www.wattnet.com/petfoodforum/forumeurope.cfm.





Registration Form (Or register online at www.wattnet.com/petfoodforum/forumeurope.cfm)



**Petfood Forum Europe 2007** Tuesday, 8 May, 2007 Jaarbeurs Halls Utrecht, Netherlands

Rate: €195.

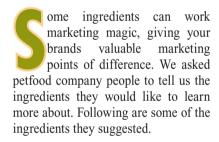
This includes all educational sessions plus breakfast, lunch and an afternoon refreshment break.

	-	you would like it to appear on your name tag):  Company name		
		City		
		Country/province		
		E-mail		
Additional attendees:				
Method of payment:	□ Check	☐ Money order ☐ MasterCard ☐ VISA		
	☐ American Express			
Personal name on credit card		Card number		
		Expiration date		
Petfood Forum Europe 2007 122 S. Wesley Ave. Mt. Morris, IL 61054-1497 USA Fax +1.815.734.5631		substitute speakers and change schedule as necessary. If you or anyone in your party requires special assistance, please contact Marcia Riddle at mriddle@wattnet.net or +1.815.734.5633		
Note: Please register separately if made online prior to May 8, 2		ww.victam.com. Registration for Victam International is free		
Be sure to also book your hotel	at www.hotelpartner.nl/victa	m soon!		
Are you interested in exh Please provide the following info	rmation:			
		Company name		
Telephone	I	E-mail		
Or contact Ginny Stadel at +1.815.734 For more information, visit www.wat		reg.cfm.		

# Benefiting from novel ingredients

Which ones can work marketing magic for your brands?

BY TIM PHILLIPS, DVM



#### Meats, fruits and vegetables

Greg Aldrich, PhD, of Pet Food & Ingredient Technology Inc., tells *Pet-food Industry* that a broad cross-section of nontraditional ingredients have become popular in dry petfood products, including:

- > Fresh meats:
- ➤ Whole bird parts like wings, necks and backs; and
- ➤ A wide array of fruits and vegetables.

They are predominantly fresh or frozen whole ingredients, or dried coproducts from the food industry. The demand for these ingredients often competes head-on with human foods. As ingredients in petfoods, they represent a whole new host of opportunities and challenges.

The most common fresh meats used are chicken and turkey. Much of this is purchased from meat intended for the hot dog market. Beef, lamb, pork and fish are also readily available with exotic meats like buffalo, kangaroo, venison and duck available on a more limited basis.

Most of these "hot dog meats" are the product from either normal trimming or mechanical deboning opera-

> Sometimes, the consumer's definition of quality has nothing to do with nutrition.

tions. Many times the nutritional information provided by suppliers of these ingredients lists only lean-to-fat ratios. A few suppliers will provide a chemical analysis, but this is often limited to protein, moisture and fat, and if you're lucky there might be some information on the ash and mineral content as well.

So how do petfood formulators find nutrient profiles for these items? While one could speculate using the traditional sources of nutrient composition available, such as the USDA National Nutrient Database for Standard Reference (www.nal.usda.gov/fnic/foodcomp/search), they only have data available for the "edible cuts." These data don't include information on some of the fatty portions or bone ash from some of the mechanically separated meats.

#### Whole bird parts

Whole bird parts have some similarities to the fresh meats in that they are derived from the edible meat market. They are a big part of the emerging



raw and home-prepared foods market. Commonly utilized parts include turkey and chicken necks, legs, backs and wings. They represent the less popular, though just as wholesome, portions of the bird that the people-food market doesn't value as highly.

In many raw prepared foods, these parts are ground and mixed with other components of the diet and served without further processing. While there are general concerns about microbial safety and choking hazards, the practice seems to be gaining more rather than less ground. The proponents of this practice contend that this form of diet is closer to what the animal is adapted to.

From a nutritional and formulation perspective the biggest challenge, much like with the fresh meats, is finding solid nutritional information from suppliers on these ingredients. As with the USDA or NRC sources of information, there isn't a great deal of data for these whole parts. Most tables report only the edible portions and don't include the bone (mineral) or connective tissue (amino acids) in their analysis. Further, the variability from one supplier and type of bird to the next can be immense. So, dialing in a complete nutrient profile can be guesswork at best. The one avenue for information can be found in a few reports by zoo nutritionists, because they've been feeding "whole prey" for years.

#### Fruits and vegetables

Fruits and vegetables like tomatoes, carrots, peas, apples, beans, spinach and many others are finding their way into more petfoods every day. While most of the fruits and vegetables used might not match exactly the partially digested paunch material from their wild prey, the intent is the same.

Determining the proper inclusion level for these fruits and vegetables can be a challenge, because, again, there isn't a great deal of nutrient profile information available. Finding nutritional information for these ingredients is easier than for that of the meats and parts described previously. However, tables of information available for hu-

man foods are often missing critical nutrient information, such as chloride, biotin, iodine and crude fiber.

The industry needs more publicly available information about the nutrient profiles for the preceding ingredients. Until that point, suppliers and petfood companies will need to conduct nutrient analysis on the individual ingredients, and researchers and nutritionists need to report their findings.

The industry needs more publicly available information about the nutrient profiles.

#### Custodial-care ingredients

Ed Mareth, cofounder of 3D Corporate Solutions, thinks today's pet owners have a strong inclination to purchase petfoods with exceptional quality and variety. He points out the need to design, build and manage products, programs and processes to meet a commitment to *custodial care* of raw material. He defines custodial care ingredients as those that "can be traced through a chain of custody that validates safe-handling procedures through the entire supply chain. They are never treated as a by-product."

Mareth continues, "It is our objective to meet our customers' demands for quality, consistency and novel ingredients." He believes customers are no longer satisfied with just lamb or chicken; they are looking for variety such as duck, rabbit or venison. This means programs upfront to address quality concerns long term.

"We believe," says Mareth, "that in today's competitive environment, excellent quality translates into brand loyalty." Without consistent, predictable products, no manufacturer can deliver petfoods that meet their customers' long-term expectation for quality—realizing that sometimes, the consumer's definition of quality has nothing to do with nutrition.

#### DHA stability questions

Al Cunniff from Advanced BioNutrition notes there is a growing demand for natural, fortified and functional foods in the petfood sector. Among those new products, omega-3 and more specifically omega-3 DHA fortified petfoods are especially popular.

DHA, or docosahexaenoic acid, is a fatty acid important for neural development of young mammals. Dietary DHA is critical for optimal neural development in puppies because DHA synthesis in the body is limited. Some studies indicate puppies nourished on diets with enhanced levels of DHA have improved trainability. Enriching treats with omega-3 DHA presents several challenges, most notably:

- ➤ The stability of the material used to deliver proper levels of DHA; and
- ➤ Its ability to withstand the manufacturing process.

The most popular source of DHA is fish oil, and it is most efficiently stabilized with ethoxyquin, a synthetic antioxidant. Ethoxyquin presents a challenge when formulating all-natural treats: Ethoxyquin is not allowed in raw ingredients even if the level would be minimal or absent in the final extruded product.

An alternative source of omega-3 DHA is available for companion animal nutrition, which offers the potential to be stabilized with a natural antioxidant package as opposed to using ethoxyquin. This alternative is from an algal source (*Schizochytrium sp.*) that is grown under GMP conditions. The resulting algal biomass contains a minimum of 20% DHA by weight.

A recent research project investigated the feasibility of formulating all-natural DHA enriched dog treats, using fish oil or algal biomass, stabilized with natural antioxidants. The goal was to:

- Formulate and evaluate the stability of the treats over time;
- ➤ Evaluate buyer perception of the

aroma of the treats formulated with fish oil or the algal DHA; and

➤ Measure the DHA stability over time in both formulations.

Results showed that the negative perception of the fish oil product rose over time. Unexpectedly, the negative perception of the algal product decreased over time. This trend is concentration-dependant. Bottom line: The dog biscuit formulated with the algal ingredient is more pleasant to the human olfactory sense over time.

#### Green mussel, sea cucumber

When is a petfood ingredient a *food*, and when is it a *food additive*? That question is important, says David Dzanis, DVM, PhD, because a food additive must be approved (or otherwise sanctioned by regulators) before it can be used in marketed products, while an ingredient with a history of use as food does not require pre-market approval.

Both New Zealand green mussel (NZGM) and sea cucumber are fre-

quently cited as "unapproved ingredients" (i.e., food additives) by state feed control officials. However, in both cases the ingredients have a long history of consumption by humans for their food functions (taste, aroma and nutritive value). In fact, both appear on the Food and Drug Administration's Seafood List as recognized human foods! Food is defined by law as "food ... for man or other animals." Therefore, it is unclear how the same ingredients can be food for humans yet deemed food additives when used in petfood.

Granted, neither NZGM nor sea cucumber has a history of use in petfoods specifically. However, neither do many, many other substances, such as fruits and vegetables, exotic meats and poultry and other seafood (e.g., lobster, shrimp). Yet, there appears to be little consternation about the latter's use in petfoods. Thus, to single out NZGM and sea cucumber as "unapproved" is inconsistent at best.

Also complicating the issue is the fact

that some have ascribed non-nutritive functions to NZGM and sea cucumber or have used them in human dietary supplement products. However, the inapplicability of the Dietary Supplement Health and Education Act (DSHEA) to animal products is simply irrelevant. DSHEA would only be material if the substance did not have a history of use in food. That's not the situation with these ingredients. So, as long as there's no non-food (i.e., drug) claims associated with their presence in a product, there doesn't appear to be a compelling regulatory reason to exclude NZGM or sea cucumber from petfood formulations.

#### Procurement

The goal of procuring ingredients, including novel ones, is to find suppliers capable of low-cost production of quality ingredients and delivery that meets production schedules. Procurement managers who follow best practices are usually successful in helping improve products and business profitability.



#### RAPID MYCOTOXIN & PATHOGEN TEST KITS WORLDWIDE

Selected by the USDA and AOAC-approved, VICAM test methods offer you proven results vetted by industry leaders. Time-tested service means an unparalleled commitment to onsite training, worldwide distribution, and commodity-specific protocols.

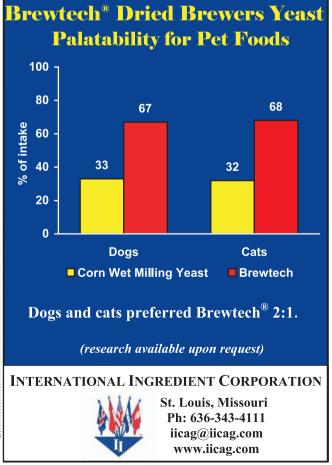
#### VICAM's test kits deliver:

- Accuracy Quantitative results
- Speed Results in minutes or hours
- Flexibility Fluorometric, HPLC, or antibody detection



For information on our rapid Aflatoxin, AflaOchra, AOZ, DON, Fumonisin, Ochratoxin, T-2, Zearalanone, and NEW WB test kits and Combination Columns, as well as our Microbiological line, call +1.617.926.7045, fax +1.617.923.8055, or e-mail vicam@vicam.com. Se habla español.

VICAM, 313 Pleasant St., Watertown, MA 02472 USA | www.vicam.com



#### Petfood Insights | regulations | BY DAVID A. DZANIS, DVM, PhD, DACVN

#### **AAFCO** misrepresented by websites replete with errors

ecause of its integral role in the regulation of petfoods, my commentaries frequently mention the Association of American Feed Control Officials (AAFCO). I presume that the reader understands the nature of the organization and its general functions. However, the briefest surf on the Internet reveals many misunderstandings, if not downright misrepresentations

about what AAFCO is and does. Because many of the same errors appear on multiple company and organizational websites, I don't wish to single out any of them by name. However, below are a few examples of what's out there.

#### What does AAFCO stand for?

Granted, the words making up the acronym "AAFCO" are not immediately intuitive. The most frequent error I observe is transposition of the first two "A"'s, i.e., "American Association of Feed Control Officials." However, I've also seen "Association of American Food Control Officials," "Association of Animal Feed Control Officials," "American Association of Feed Control Officers" and "American Association for Feed Control Officials."

Also commonly found is use of the incorrect acronym "AFFCO." I've even seen it used on a government webpage! If a company/organizational site can't even get the name right, how can you trust what else it says about AAFCO?

#### **AAFCO/industry collusion?**

Many sites want the reader to think AAFCO is a petfood industry organization, or at minimum, a puppet of the industry. Here are a few examples:

- ➤ "(AAFCO) ... is basically an industry group."
- > "AAFCO also consists of members from the petfood manufacturing industry."
- ➤ "Because many petfood manufacturers are on the roster of ... AAFCO ... (it) is protecting manufacturers, not your pet."
- ➤ "Today AAFCO's membership roster reads like a 'who's who' from the petfood industry."

And my personal favorite:

"(In) 1974 ... the petfood industry created a group called

A quick look at the AAFCO bylaws would confirm that

Many sites want the reader to think AAFCO is a petfood industry organization.



— David Dzanis

while it is not a government organization, membership is limited to government employees. True, representatives of industry associations can be acknowledged as committee advisors, or may be asked to serve on task forces or working groups under a committee. However, the same is true for representatives of consumer advocate organizations.

In any event, these participants remain non-members, and they cannot vote in any AAFCO committee, board or association matters. Anyone who thinks AAFCO "rubber stamps" the will of the industry has obviously never attended an AAFCO meeting. On the contrary, the meeting discussions are often quite adversarial, and it is a rare occasion when there isn't significant disagreement between parties, either between AAFCO and industry or among the different industry groups. In the end, though, it is AAFCO that makes the final ruling on the matters before it.

#### **AAFCO** definitions

Many websites love to cite some of AAFCO's less "appetizing" feed ingredient definitions as evidence of all the terrible things that are commonly used in petfood (except for the company site's sponsored product, of course). They often give the impression that petfoods are largely comprised of nothing but "food processing waste," "hydrolyzed poultry feathers" and "dried poultry litter." However, what they fail to mention is that if such an ingredient was included in a petfood, by law it would have to be declared by that exact name on the ingredient list. Frankly, I've never seen "unborn calf carcasses," "polyethylene roughage replacement" or "ensiled paunch" declared on a petfood label. The only rational conclusion one can reach is that petfoods simply don't contain these ingredients. However, that fact doesn't make as good a story.

A related controversy is the frequent assertion that the majority of commercial petfoods contain euthanized dogs and cats. In the effort to be completely forthright, regulatory officials cannot definitively exclude all possibility of that occurring. However, a person with knowledge and understanding of the different types of rendering facilities and use of products from these plants can reasonably surmise that the potential for that happening is very remote.

Websites ignore the ingredient name factor, too. Only a very few AAFCO-defined ingredients could conceivably contain materials from rendered pets, and use of those ingredients is rare nowadays.

#### **AAFCO** profiles/feeding trials

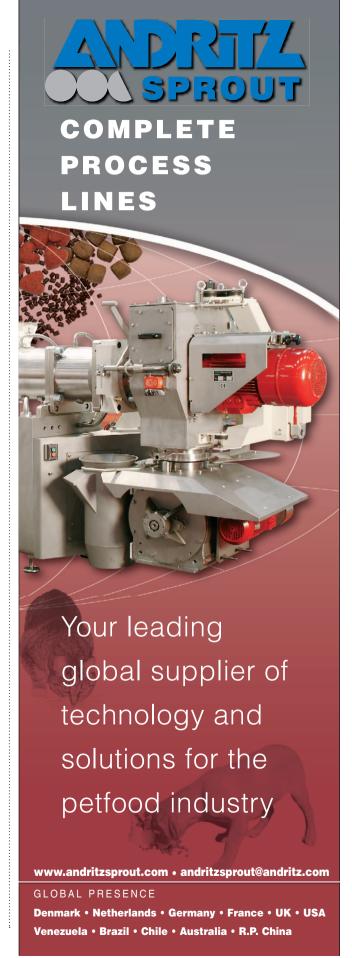
The websites that really rile me often involve disparagement of the AAFCO methods of nutritional adequacy substantiation. Constructive criticism is perfectly legitimate. In fact, I've made public comments about the methods' respective virtues and limitations myself. However, often the website's aim is to vilify the intentions of AAFCO and purpose of the profiles and feeding trials as regulatory tools. For example:

- ➤ "A food can be created from old leather boots, wood shavings and crankcase oil that will meet the technical requirements."
- ➤ "It is easy to see how a poor quality diet could be fed for only six months without seeing adverse health effects."
- ➤ "AAFCO was formed ... because the industry found NRC's regulations to be too restrictive and created its own procedures for claiming nutritional adequacy in petfoods. They also decided that instead of lengthy feeding trials, chemical nutritional analysis would be conducted to determine minimum nutritional requirements."
- ➤ "AAFCO believes that an organization with close ties to the petfood manufacturing industry is sufficiently qualified to alter nutrient profiles created by NRC scientists."

The most disingenuous aspect of such statements is when they precede claims for nutritional superiority of petfoods or recipes for home formulations that do not meet, or at least have not been reasonably documented to meet, AAFCO requirements. Some may be good, but I've seen many products and recipes that fail the sniff test outright. Frankly, if a food was so wonderfully nutritious, one would think it could breeze through the AAFCO substantiation requirements. For some websites, dismissing the merits of AAFCO seems easier.

Other sites disparage AAFCO with the assurance that a particular supplement will correct the deficiencies AAFCO doesn't address. Outside of glowing testimonials or long-winded promises, I am not aware of sites that offer explicitly detailed explanation of the scientific testing conducted that would supersede established AAFCO methodology.

Dr. Dzanis is a writer and independent consultant for the petfood and animal feed industries on matters related to veterinary nutrition, labeling and regulation. He can be reached at Tel: +1.661.251.3543, Fax: +1.661.251.3203, E-mail: dzanis@aol.com.



# Ingredient Issues | mutrition | BY GREG ALDRICH, PhD

# **Probiotics/direct fed** microbials present challenges

robiotics, or direct fed microbials, are an entire class of live microorganisms with a very complicated but intriguing story (Krestel-Rickert and Kisic, 2003). These microbes aren't necessary to the diet for palatability or processing purposes, nor do they contribute directly to the nutrition of the animal. Rather, they are a natural complement to prebiotic soluble fibers like inulin, beet pulp or soy hulls, which are intended to support the health of the lower gastrointestinal (GI) tract.

Instead of providing substrate to the indigenous flora in the colon, probiotics represent the adding of beneficial microorganisms to the colon. The pay-off can be the prevention and treatment of such diseases as diarrhea (Sauter et al., 2006). However, describing their benefit to the animal can border on a medical claim rather than nutritional fortification. This can be problematic when it comes to crafting a marketing message necessary to justify their addition and cost in commercial petfood. Unfortunately, like a vaccination they don't offer much in the way of outward or observable results. Issues also extend to determining which probiotic organisms to use and how to get them into the animal.

#### How they work

The mode of action for probiotics in the gut is described by microbiologists as "colonization resistance," which in a nutshell is a "good versus bad" proposition. More specifically, the probiotic organisms add to the population of miroorganisms in the hindgut (colon) to a level sufficient to To be effective, probiotics must be live and viable.

Grea Aldrich



tip the balance in favor of the "good guys." The net result is that the colonic contents (digesta) become more acidic, with a better mix of short chain fatty acids (the fuel of the cells lining the colon).

In addition, the good guys inhabit the "hiding places" along the gut wall and generally create an unfriendly environment for "bad guy" pathogens like E. coli, Clostridium and Salmonella. There is also some suggestion that probiotics can stimulate immunity (IgG and IgA) at the gut level in both dogs and cats (Benyacoub et al., 2003; Marshall-Jones et al., 2006).

To be effective, probiotics must be live and viable. They are by design intended to be transient through the gut, not taking up full residence, lest they become pathogenic themselves. Thus, they must be provided orally on a regular basis, the sort of delivery that best fits with their addition to the animal's daily diet. Functionally, they must also be able to survive acidic digestion in the stomach, enzymatic/ bile digestion in the small intestine and arrive intact in the large intestine to do their job.

For this reason, spore-forming anaerobes like Bacillus are often chosen (Biorge et al., 1998). Other organisms like Lactobacillus, Enterococcus, Bifidobacterium and Saccharomyces species are commonly proposed or tested. But this is an oversimplification of the dizzying array of candidate organisms that could qualify as probiotics.

#### Delivery challenges

Because food is provided daily, it makes good sense to add probiotics through this route. However, most gut-associated microorganisms and probiotic candidates are susceptible to heat treatment and, in general, petfoods involve some measure of sterilization and/or pasteurization. This makes it difficult to add them to foods with any hope of retaining them as live and viable. It certainly precludes mixing them with the raw ingredients prior to processing.

Canned food applications are disqualified due to the temperatures encountered during retorting. The elevated dry heat encountered with baking and the extremes in temperature and pressure of extrusion are too harsh to allow many, if any, probiotics to survive. While there have been several attempts to select probiotic organisms that will survive food processing (the so-called thermophiles), this has met with little real success. So, most petfood application is relegated to a post-processing coating of probiotics in a powder or liquid form to the outside of the kibble or treat.

This is fraught with problems as well, since adherence can be inconsistent and retention difficult. For example, in a recent report, 19 commercial petfoods purporting to contain probiotics failed one or more of the microbial guarantees (bacteria species. counts and/or contamination; Weese and Arroyo, 2003). Quality control practices are also challenging since few petfood production facilities are equipped with full-scale microbiology labs to validate the application of the probiotics. Further, efforts to understand the viability of these organisms for the full extent of a product's shelf life are lacking in the literature.

Supplements that contain the required amount and type of probiotics might be the answer and would certainly provide a more regulatory compliant vehicle for their delivery; however, everyday administration can be a problem.

#### Gaps and needs

Most of the probiotic research has been conducted with very small subpopulations of healthy dogs and cats. While deductive rationale for their benefit have been offered as a result of these trials, there is no clear-cut direct or clinical evidence that the constant use of probiotics reduces the incidence of disease in dogs or cats. A great deal of research is currently being published in an attempt to better define the right probiotics and their application for pets and man. However, while much of this is very good work, from a broader perspective the general direction is being driven by a "supply side" attempt to justify one microorganism over another.

The greater pet-owning community would benefit from a longer-view evaluation of the merits surrounding probiotics in pet diets, rather than getting bogged down in the short-term minutiae. This is because probiotics, though challenging to administer and to directly observe their effects, hold promise as a dietary component for the

animal's GI health and stability.

Dr. Greg Aldrich is president of Pet Food & Ingredient Technology Inc., which facilitates innovations in foods and ingredients for companion animals. Tel: +1.785.271.0238, Email: aldrich4@cox.net.

# Want more nutrition information?

Subscribe to Petfood Industry's free monthly newsletter, **Nutrition News.** E-mail petfoodnutrition@wattnet.net.

# IMPROVE QUALITY WHILE MAXIMIZING CAPACITY.

- Extrusion Systems
- Horizontal Dryers & Coolers
- Vertical Coolers
- Feeding Systems
- Conditioning Systems
- Control Systems
- PDU (Product Densification Unit)
- SAS™ (Sphere-izer Agglomeration System)
- Liquid/Powder Coating Systems
- Pneumatic Conveying Systems
- Multi-Color Extrusion Die Assemblies
- Replacement parts for major brands of extruders
- Re-manufactured extruders and dryers
- Re-conditioning Services



It's a bold statement that very few can make. Dramatically increasing the hourly petfood production rates while improving the overall quality of the finished product. It's all possible when you partner with Extru-Tech\*.

While the competition focuses on individual components, Extru-Tech® delivers comprehensive solutions that elevate the overall productivity of your operation. Isn't it time you investigate the true potential of your operation with someone who truly understands the petfood industry? Contact Extru-Tech® today for a confidential consultation.



### CORPORATE OFFICE Extru-Tech, Inc.

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

# European Report | news | BY PETER BEST

# International petfood partnership in Romania

etfood manufacturers with investors from different countries are quite rare in Europe. However, there is an example in Romania that is even more unusual because it can also claim to have had the backing of a European government.

"Our company was established about four years ago in a project that was led by a group of Dutch investors," reported Constantin Toporiste, director of Bucharest-based Nordic Petfood Group, when in Brussels recently to attend Kemin's latest European petfoods symposium. "Today, 51% of the shares are held by Romanians and 49% by Dutch.

"We had also received Dutch government support. The Romanian input was to build the factory on a green field site, while the Dutch helped us on the equipment side," Toporiste continued. "The grinders we use, for example,

The total investment in the project was around 4.5 million Euros.

— Peter Best



came from Ottevanger.

"The equipment for extruding and drying was bought secondhand in the Netherlands to be refurbished and installed in our new building. The rest of the line (dosing, milling and mixing, packaging) is brand new, and more than 75% of the units were manufactured in Romania," he added.

"We enlisted the help of Professor Mian Riaz of Texas A&M University in the United States to spend two days at the factory and explain to us how we could improve our extrusion process.

The improvement we wanted to make was in quality, not in capacity. Our total focus is to supply a premium dry product."

The total investment in the project was around 4.5 million Euros, Toporiste continues, and was devised to make Nordic a local producer that could compete with the big multinational corporations for a share of the Romanian market. This market is developing very quickly, as more of the country's population is buying readymade petfood products for their dogs

### For Quality Petfood Ingredients Count on Scoular People

Blending • Co-Packing • Procurement • Risk Management • Logistics

- Marine Proteins & Oils
- Vegetable Proteins & Oils
- Starch & Starch Derivatives
- Animal Proteins & Fats
- Organic, Natural & IP
  - Sov Proteins & Flour
- Wheat Gluten
- Variety Meats & Fish



Count on Scoular Peoble



www.scoular.com/petfood

800-875-7870 • 250 Marquette Ave., Suite 1050 • Minneapolis, MN 55401

Constantin Toporiste (at left) of Nordic Petfood Group in Romania is pictured with Catalin Tudorache, sales chief of Kemin's Romanian dealer Profeed.

and cats. Unofficial estimates put its size at around 35,000 metric tons per year for complete dry diets and therefore suggest it is starting to be large enough to justify the entry of a Romanian manufacturer challenging the imported brands.

Despite its name, Nordic has no Scandinavian connection. Toporiste reveals the name was chosen simply because the headquarters would be situated in a building at a location where one of its shareholders had been born, near Bucharest's north railway station. The newly formed company has since become both a producer — the biggest under local ownership — and a wholesale distributor of high-quality petfoods to small shops and supermarkets throughout Romania.



Today, all industries in Romania are preparing as the country enters the European Union as a full member effective this month. Among other effects, petfood and animal feed interests must organize themselves to meet the EU's directive on good manufacturing practices (GMP). For the Nordic factory that has meant working with its Dutch partners on understanding and implementing HACCP and GMP systems before membership in the European Union arrives.

Belonging to the expanded EU of 27 countries could additionally give the company some exporting opportunities for its premium products. "It is something that we look at very closely," Toporiste comments. "However, I think for the moment we will concentrate on increasing our share of the home market. Our sales in Romania have already exceeded the targets we set ourselves at the start, but there is always work to be done to expand the business even further. Customers in Romania are not really interested if the product is of Romanian origin or comes from abroad. They are far more concerned about quality and price. Fortunately, we can compete with the international brands in both respects."

Peter Best is the European editor for Petfood Industry magazine. He invites comments and suggestions from all readers about future topics for his column. He can be contacted at: best@watt-4.demon.co.uk.

Visit the World's Premier Exhibition & Conferences for the Animal & Aquatic Feed, Petfood and Flour Milling & Grain Processing industries...

# International 2007

8 - 10 May 2007 • Jaarbeurs Halls, Utrecht, The Netherlands

Visitors to the exhibition will find the world's foremost companies supplying equipment, technology, automation and ingredients used in the production and processing of animal feed, dry petfood and aquafeed, together with systems for their handling, storage and packaging.

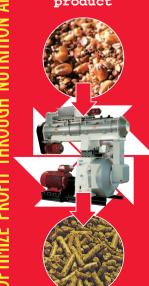
For conference programmes & delegate registration, travel & accommodation or visitor information contact:

E-mail: expo@victam.com Website: www.victam.com Tel: ++ 3 | 33 246 4404 Fax: ++ 3 | 33 246 4706 Supporting conferences:

- I. Petfood Forum Europe 2007 "New products, New opportunities", organised by Petfood Industry magazine and Watt Publishing.
- 2. The Provimi Symposium "Optimize profit through Research & Nutrition", organised by Provimi.
- **3. Aquafeed Horizons**, organised by Aquafeed.com & the Norwegian Institute of Fisheries & Aquaculture Research.
- **4. "Pellets for bio-energy: addressing the challenges"**, organised by AEBIOM (European Biomass Association).

Victam
International
2007

Everything from the raw material to the finished product



# Brick and mortar vs. Internet store dynamics

p, up and away, specialty stores sales increased in the first six months of 2006 compared to the same 2005 period, as specialty retailers dominate the initial ranking of "Hot Retailers," published by Stores magazine. This listing highlights retailers with the greatest percentage of yearover-year growth. Retailers with specialty products and services took seven of the top 10 spots.

These specialty stores continue to seek performance improvements, new investment and new management in pursuing turnaround opportunities, while several troubled specialty stores were bought in the summer by various private equity firms: for example, Petco, the pet supply retailer.

#### Specialty retail channel dvnamics

Within the US market, consumer spending, a major driver of specialty retail sales, increased 2.6% in June 2006 compared to June 2005. While mass merchandisers like Wal-Mart and shopping clubs like Costco provide strong competition to specialty merchants by effectively creating large, low-cost specialty departments within their superstores, more and more specialty retail items are being bought from catalog and Internet retailers, which offer a broader selection of merchandise.

Overall, Internet retail sales increased from about US\$20 bilSpecialty stores sales increased in the first six months of 2006.

— Huntley Manhertz Jr.



lion in 2000 to more than US\$100 billion.

Typically, specialty store products are bought based on seasonal occasions or around the end of the year for holiday gifts. Normally, specialty store sales are highest in third and fourth quarters, and merchants typically generate 40% of their business around the end-of-year holidays.

#### Valuable market research information

To create and keep traction. more malls and individual stores are issuing so-called "frequent buyer" cards that give discounts and other rewards once shoppers have spent a certain amount. In addition to building customer lovalty, such cards can provide valuable market research information about shopping habits.

Although many specialty retailers have established Internet sites on which customers can order products and make credit card payments, Internet sales as a whole amount to a small 2% of total US retail sales.

Some retailing specialties, such as books, are very suitable for Internet sales, but jewelry and low-cost items, such as petfoods, haven't sold very effectively on the Internet. Specialty retail stores are therefore hinged on being able to attract customers to the store, and once they're in the store, to offer personalized service and attractive merchandise that will compel the customer to

#### Revenue-generating tools

Much of the business of specialty stores comes from repeat customers, and many stores have programs to engender customer loyalty. Offers that integrate prenotice of sales, have special sale hours for loval customers and mail customers to advise them of new merchandise are great revenue-generating tools.

Dr. Huntley Manhertz Jr., is a consumer product goods market researcher and an independent writer. He can be reached at Tel: +1.813.310.0237. E-mail: info@ consumerlinkageresearch.com.

### **Research Notes**

#### Urine pH in cats

The objective of this study was to determine if urine pH can be predicted using the nutrient components of feline foods. One hundred fifty foods (90 dry foods, 60 wet foods) were fed to groups of 10 adult cats (mean, 8.5 years of age) to determine the urine pH of cats fed each food. The food was fed for seven days, and pH was determined on freshly voided urine on days five to seven of the

#### ➤ Urine pH in cats

(Intern J Appl Res Vet Med 4(1):58-66): Urine pH of adult cats can be predicted from the nutrient components of the food, thus reducing the number of animal studies to optimize urine pH.

### ➤ Risk factors for obesity

(Intern J Appl Res Vet Med 4(2):177-186): Overweight dogs were more likely to be older, of certain breeds, neutered and consume mainly semi-moist foods.

test. Through step-wise regression, it was determined which cations, anions and sulfur-containing amino acids were of importance for urine pH prediction.

Three models were developed for urine pH prediction. These models included: 1) wet and dry foods; 2) wet only foods; and 3) dry only foods. The cations included in all models were sodium, potassium and magnesium. Calcium was excluded from the wet only model. The anions for all models were chloride, sulfur and phosphorus. Including sulfur in the model allowed for the exclusion of methionine and cysteine from the dry model.

Source: Yamka, R.M., Friesen, K.G. and Schakenraad, H., 2006. The prediction of urine pH using dietary cations and anions in cats fed dry and wet foods. *Intern J Appl Res Vet Med* 4(1):58-66.

#### Risk factors for obesity

The prevalence of overweight and obesity in dogs over 1 year old seen by US veterinarians during 1995 was determined. Risk factors were also determined from the variables of age, breed, gender, body condition score, food type, reported concurrent disease and geographic region. Thirty-four percent

of adult dogs (n = 21,754) were overweight or obese. Overweight dogs were more likely to be older, of certain breeds (Cocker Spaniel, Labrador Retriever, Dalmatian, Dachshund, Rottweiler, Golden Retriever, Shetland Sheepdog, mixed breed), neutered and consume mainly semi-moist foods.

Overweight adult dogs were most likely to reside in the Pacific, South Central, East North Central or Northeast regions of the US and be diagnosed with hyperadrenocorticism, ruptured cruciate ligament, hypothyroidism, lower urinary tract disease or oral disease. Obese dogs were more likely to be older, of certain breeds (Shetland Sheepdog, Dachshund and Golden Retriever), neutered and consume "other" foods (meat or other food, commercial treats or table scraps), homemade or canned foods. Obese adult dogs were more likely to live in the Pacific or Northeast region of the US and be diagnosed with hypothyroidism, diabetes mellitus, pancreatitis, ruptured cruciate ligament or neoplasia.

Source: Lund, E.M., Armstrong, P.J., Kirk, C.A and Klausner, J.S., 2006. Prevalence and Risk Factors for Obesity in Adult Dogs from Private US Veterinary Practices. Intern J Appl Res Vet Med 4(2):177-186.



# Tired of juggling with too many suppliers?

Let us be your one-stop pet food ingredient solution



Toll Free: 1.800.263.7430 Phone: 1.519.824.2381 Fax: 1.519.824.9472 E-mail: marketing@bi-pro.com Web: www.bi-pro.com

# Meeting Planner | events | JANUARY 2007

- Annual Practical Short Course on Feeds & Pet Food Extrusion, January 28-February 2, 2007, Texas A&M University, College Station, Texas, USA. Contact: Dr. Mian N. Riaz, 2476 TAMU - Food Protein R&D Center, Texas A&M University, College Station, Texas 77843-2476 USA, Tel: +1.979.845.2774, Fax: +1.979.458.0019, E-mail: mnriaz@tamu.edu, Website: www. tamu.edu/extrusion.
- > AFIA Expo/USPOULTRY IPE, January 31-February 2, 2007, Georgia World Congress Center, Atlanta, Georgia, USA. Contact: US Poultry & Egg Association, 1530 Cooledge Road, Tucker, Georgia 30084 USA, Tel: +1.770.493.9401, Fax: +1.770.493.9257, Website: www.poultryegg.org or www.afia.org.
- ➤ Global Pet Expo, February 22-24, 2007. Orlando, Florida, USA. Contact: APPMA, 255 Glenville Road, Greenwich, Connecticut06831USA, Tel:+1.203.532.3601, Fax: +1.203.532.0551, E-mail: gpe@appma. org, Website: www.globalpetexpo.org.

- > VIV Asia, March 7-9, 2007, Bangkok, Thailand. Contact: Richard de Boer, VNU Exhibitions Europe, P.O. Box 8800, 3503 RV Utrecht, Netherlands, Tel: +31.30.295.2714, Fax: +31.30.295.2809, E-mail: richard. de.boer@vnuexhibitions.com. Website: www.vnuexhibitions.com or www.viv.net.
- > NGFA Annual Convention. March 18-20, 2007, St. Francis, San Francisco, USA. Contact: National Grain and Feed Association, 1250 I St. N.W., Suite 1003, Washington, D.C. 20005 USA, Tel: +1.202.289.0873, Fax: +1.202.289.5388, E-mail: info@ngfa. org, Website: www.ngfa.org.
- **Expo Zoo**, March 18-20, 2007, Paris, France. Contact: Expo Zoo, 45 Ave. George V, 75008 Paris, France, Tel: +33.1.53.57.62.24, Fax: +33.1.53.57.62.01, E-mail: Veronique. oury@europ-expo.com, Website: www. expozoo.com.
- ➤ Animal Agriculture Alliance Stakeholders Summit. March 19–21, 2007.

- Sheraton Crystal City Hotel, Arlington, Virginia, USA. Contact: Animal Agriculture Alliance, Tel: +1.703.562.5160, Fax: +1.703.524.1921; www.animalagalliance.org.
- > Japan Pet Fair, March 29-April 1, 2007, Pacifico Yokohama, Tokyo, Japan. Contact: Tomo Miura, Tel: +81.3.3512.5674, E-mail: jpf2007@smj.co.jp, Website: www. jppma.or.jp/2007jpf/e/index.html.
- H.H. Backer Pet Industry Spring Trade Show, March 30-April 1, 2007, New Atlantic City Convention Center, Atlantic City, New Jersey, USA. Contact: H.H. Backer Associates Inc., 200 S. Michigan Ave., Suite 840, Chicago, Illinois 60604 USA, Tel: +1.312.663.4040, Fax: +1.312.663.5676, E-mail: hhbacker@hhbacker.com. Website: www.hhbacker.com.
- ➤ **Petfood Forum**, April 16-18, 2007, Hyatt Regency O'Hare Hotel, Chicago, Illinois, USA. Contact: Marcia Riddle, Watt Publishing Co., 122 S. Wesley Ave., Mt. Morris, Illinois 61054 USA, Fax: +1.815.734.5631, E-mail: mriddle@wattnet.net. www.wattnet.com/petfoodforum.
- Petfood Focus on Treats, April 18-19, 2007, Hyatt Regency O'Hare Hotel, Chicago, Illinois, USA. Contact: Marcia Riddle, Watt Publishing Co., 122 S. Wesley Ave., Mt. Morris, Illinois 61054 USA, Fax: +1.815.734.5631, E-mail: mriddle@wattnet. net; www.wattnet.com/petfoodforum.
- Petfood Forum Europe, May 8, 2007, Utrecht, Netherlands. Contact: Marcia Riddle, Watt Publishing Co., 122 S. Wesley Ave., Mt. Morris, Illinois 61054 USA, Fax: +1.815.734.5631, E-mail: mriddle@wattnet. net; www.wattnet.com/petfoodforum.
- ➤ Victam International, May 8-10, 2007, Utrecht, Netherlands. Contact: Henk van de Bunt, Victam International B.V., P.O. Box 197, 3860 AD Nijkerk, Netherlands, Tel: +31.33.246.4404, Fax: +31.33.246.4706, Email: expo@victam.com; www.victam.com.

**New Technology** Raises the Bar on Palatability Testing Our Radio Frequency Identification technology (RFID) shifts the paradigm for feline food preference testing. It records ALL THE DATA related to feline feeding, not just first choice and total consumption. We're cageless because no cage setup can match our no-stress in-home environment. Increase your knowledge. Lower your R&D costs. Be more humane. Contact us now! 815-473-4035 ron fuller@hughes.net erence TECHNOLOGY, INC. More Humane. More Knowledge.

For a complete list of 2007 events, visit **Petfood Industry** 

Online at www.petfoodindustry.com

Send meeting dates to Jenny Kvamme at jkvamme@wattnet.net. Include dates, location, contact name, address, phone, fax, E-mail and website.

### **Product News**



#### **Organic cleaning**

The Xtreme steam one-step dry steam cleaning and sanitizing systems (220-365°F; 95% dry steam, only 5% moisture) clean and sanitize in difficult-to-reach places on equipment, production lines, packaging lines and working environments. AmeriVap Systems offers the system for use on wrappers, conveyors/chains, belts, sprockets, scales, sensors, refrigeration systems, electrical panels, circuit boards, gaskets, slicers and dicers.

AmeriVap Systems, 1292 Logan Circle, Atlanta, GA 30318 USA, Tel: +1.404.350.0239, E-mail: Werner.Diercks@amerivap.com, Website: www.amerivap.com.

#### X-ray inspection line

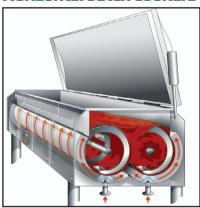
The Loma X4 system offers users a new sensing technology. The X4 line incorporates the latest-generation line



scan sensor for efficiency of X-ray to signal conversion, according to Loma. This new technology allows detection of a variety of contaminants including: ferrous, non-ferrous and stainless steel; glass; stones, ceramic and cement; calcified bones; polyvinyl chloride (PVC) and Teflon fluoropolymers; natural rubber; and product or spice clumps.

Loma Systems Inc., Gary Wilson, 283 E. Lies Road, Carol Stream, IL 60188 USA, Tel: +1.630.681.2050, Fax: +1.630.588.1394, E-mail: Gary.Wilson@loma.com.

#### Horizontal batch cookers



Mepaco has developed its new line of ThermaBlend cookers for viscous food products. ThermaBlend cookers have an hourglass design that provides a larger heating surface for better heat transfer, according to the company. The cookers feature dual-ribbon agitators, a wrap-around ASME heat jacket and a scraper system to prevent burnon, while maximizing even transfer of heat to the product.

Mepaco, Tom Hoffmann, Tel: +1.920.356.9900, E-mail: thoffmann@mepaco.net, Website: www. mepaco.net.

#### Corner labeling systems

EPI's corner labeling systems apply labels to the leading or trailing edge of your carton. The label is applied to two sides of your package so batch and product data can be seen on two sides



of the carton, according to company literature. The system can be integrated with most cartoner lines. A printer can be added to the system to print barcode, date or other production data.

**EPI,** Tel: +1.717.235.8345, E-mail: sales@ epilabelers.com, Website: www.epilabelers.com

### Vertical reciprocating conveyors

TKF's line of vertical reciprocating conveyor (VRC) solutions are econom-

ical and efficient. says the company. All feature counterweighted lift mechanisms to reduce horsepower (HP) and requirepower ments, while a new shaft-mounted drive reduces maintenance reauirements, without a loss in HP. VRCs are used in a wide variety applications where items need to be moved from



one level to another, including basements, mezzanines, balconies or within multi-story buildings.

TKF Inc., 726 Mehring Way, Cincinnati, OH 45203, Tel: +1.513.241.5910, Fax: +1.513.651.2792, E-mail: sales@tkf.com, Website: www.tkf.com.

# Marketplace

#### KENNELWOOD INC.

Twenty-five years of pet food testing for nalatability and nutritional adequacy.

217 356-3539 email: dowatts@aol.com

#### NATURAL' & ORGANIC MEATS FROM MAVERICK RANCH

Beef • Pork • Lamb Buffalo • Chicken • Turkey

Chicken Neck, Back & Breast Bones Beef & Buffalo Bones & Offal



Contact: **David Kantar** Denver, Colorado (303) 408-9166

\*Natural: Minimally processed. No artificial ingredients or preservatives USDA permits no preservatives in this product.



Soy based protein products for The Pet Food Industry

**TSP**<sup>®</sup> (textured soy protein) Canned dog and cat food applications

Additional product offerings Flavored analogs, soy protein isolates, soy protein concentrates, soy flour as well as

**TWP**<sup>®</sup> (textured wheat protein)

LEGACY FOODS ...

2701 East 11th Ave • Hutchinson, KS 67504-1099

1-800-835-5006

www.legacyfoods.com

#### Nestlé Purina PetCare

### **FOR SALE**

- Cascade Model 30A Layer Picker
- Carruthers Nu-Pak 600 Can Filling Machine
- Buhler-Miag Model OTW-150 Cooler
- Container Handling Side-by-Side Metering Belt Conveyor
- Wolfking Mdl C400 Meat Grinders & Mixers
- Hema Rotary Filler for 307 x 111 Cans

plus much more!

Visit our website to view entire inventory or contact: Nestlé Purina PetCare, Investment Recovery Group 5100 Columbia Ave., St. Louis, MO 63139 314/982-5115 or FAX 314/982-5159

e-mail: sandra.schroeder@purina.nestle.com website: www.investmentrecovery.com

), bi-pro

The Best Pet Food Ingredients The World Has To Offer.



65 Massey Road, Guelph, Ontario Canada N1H 7M6 • Toll Free: 1.800.263.7430 Phone: 519.824.2381 Fax: 519.824.9472 web: www.bi-pro.com e-mail: marketing@bi-pro.com

### **Your Source for Healthy Whole Grains**

- \* Certified Organic \* Non-GMO Cereal Grains
- \* Amaranth

\* Specialty Grains

- \* Conventional Grains \* Specialty Ingredients
- \*MILLED Whole Grains Available

\*AIB "Superior" Facility \*Kosher \*HACCP Program 800-243-7264 www.hesco-inc.com Watertown, SD

Batching Systems • Extrusion Automation Manufacturing Execution Systems





Automated Extrusion Control

Bachelor Controls, Inc.

Systems Integration for Manufacturing

785.284.3482 • www.bachelorcontrols.com



Potato Protein • Brewer's Dried Yeast 1-800-984-4460

www.ingredientsupply.com

#### Malted Barley • Barley

Whole kernel, flour & custom grinds:

- Black Malt (colorant) Liquid & Dry:

  - Malt Extracts
- Black Malt Extract (colorant) Flour, flakes & custom grinds:
- · Pregelatinized Pearled Barley

Briess Malt & Ingredients Co. Chilton, WI, (800) 657-0806, www.briess.com



AUTOMATED PROCESS EQUIPMENT CORPORATION MANUFACTURERS OF:

> AUTOMATED BATCHING SYSTEMS MICRO INGREDIENT SYSTEMS **BATCH MIXERS** LIQUID COATERS

WE PROVIDE TOTAL SYSTEMS WITH SINGLE POINT RESPONSIBILITY, DOMESTIC AND INTERNATIONAL.

1201 FOURTH AVE. • LAKE ODESSA, MI 48849 USA PH. 616-374-1000 • FAX 616-374-1010

www.anecusa.com e-mail sales@apecusa.com



INDUSTRIAL DRIED GOODS

#### **Your Complete Source** for Dried Fruit Products

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

Specializing in Alternative Fiber Sources.

Apple, Blueberry and Cranberry.

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

5740 Limekiln Rd. • Wolcott, NY 14590 Ph: 315-594-1760 • Fax: 315-594-1956

www.orchardsweets.com

#### 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

#### WE BUY AND SELL USED FEED AND GRAIN EQUIPMENT

- Pellet Mills Coolers Drvers Roller Mills
- Flakers Clearers Sewing Lines Mixers

  Legs Dust Filters Air Pumps Complete Feed Mills

  All replacement parts for Instapro extruders
  - New Conex extruders & replacement parts for Instapro Model 2000 & 2500 rebuilt extruders. LARGE INVENTORY IN STOCK



CONTINENTAL-AGRA

EQUIPMENT, INC. 1400 S. Spencer Rd., Newton, KS 67114 Ph: 316-283-9602 • Fax: 316-283-9584 E-mail: gary@continentalagra.com Web: www.continentalagra.com

#### WE SPECIALIZE IN:

E Certified amb eal, Lamb MDM, Lamb Organs mport and Domestic ishmeals Venison, Pork, Beef & Poultry Products Spray Dried Brewers Yeast Dehydrated Potatoes, Potato Protein & Potato Fiber Peas. Pea Fiber and Pea Flour Tallow & Vegetable Oils

#### Tomato Pomace & Organic Ingredients **VALUE ADDED SERVICES:**

**Custom Blending & Formulations** Custom Packaging & Antioxidant Applications ust-In-Time Deliveries from International Markets

#### **CONTACT US:**

613 649-2031 (ph) 613 649-2034 (fx) dafelski@wecon.com

Visit us on the web: WWW.WILBUR-ELLISFEED.COM Vibrationless



for sifting & conditioning pet food

#### www.gentleroll.com

EBM Manufacturing, Inc. 1014 Sherwood Rd. Norfolk, NE 68701 1-877-370-4948 Fax: 402-371-9117 www.ebmmanufacturing.com

#### DRIED EGG PRODUCT

Excellent quality protein. Our Dried Egg Product contains **NO** hatchery waste. Plant Approved For EU Export.

Manufactured and sold by:

VAN ELDEREN, INC. Martin, MI

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

#### Romer Labs, Inc. offers:

- Mycotoxin Detection Test Kits: Fluorometric. ELISA, and Lateral Flow - offered in Qualitative and Quantitative Formats
- Using HPLC and TLC Official Reference Methods
- Laboratory Equipment

Our "Total Quality Assurance & Mycotoxin Risk Management Program" is what makes us the Worldwide Leader in Providing Mycotoxin Solutions.



Stephanie Tinsley, Sales Manager Romer Labs, Inc.

1301 Stylemaster Drive, Union, MO 63084 636-583-8600 www.romerlabs.com email: stephanie.tinsley@romerlabs.com

KLÖCKNER-Dryer T225.5 cpl. (Extr. Petfood) U.K.; July 2001; 2,0 to/h; PLC-op.

GRAHN! Mittelweg 4 57629 Höchstenbach Germany

+49 2680-822 Lugrahn@onlinehome.de

#### **DEHYDRATED VEGETABLES**

LaBudde is offering a unique and consistent powdered blend of dehydrated carrots, celery, beets, parsley, lettuce, watercress and spinach. We know of no other way to get the healthy benefits of so many vegetables in one product. Give us a call at **800-776-3610** or **262-375-9111** and let us work with you from concept to completion. LaBudde Group, Inc. Grafton, WI 53024 USA





#### QUALITY INGREDIENTS FOR PET NUTRITION

Chicken Meal Chicken Fat (EU Approved) Chicken By Product Meal

Low Ash Chicken By Product Meal (EU Approved) Poultry By Product Meal

#### QUALITY FRESH & FROZEN INGREDIENTS FOR PET NUTRITION Chicken Livers

Chicken Heart and Livers Chicken Heart, Liver, and Lungs Chicken Hearts

Chicken By Products Viscera Chicken Mechanical Debone Meat Chicken Eggs

Contact: Michael Gammel mgammel@pilgrimspride.com 903.575.3924 • 972.290.8354

# TRADING COMPANY, INC

POULTRY MEAL MEAT & BONE MEAL BLOOD MEAL FEATHER MEAL BEEF & LIVER MEAL

LAMB MEAL **RAW TRIMMINGS** FISH MEAL **TALLOW** SPECIAL BLENDS

#### BADGER TRADING COMPANY, INC.

9400 W. Highland Rd. Mequon, WI 53097 Or

P.O. Box 423 Thiensville, WI 53092 PH: 262/238-1100 • FAX: 262/238-1501 E-mail: bluehrnt@aol.com Web Site: badgertrading.com

## ANISCO

Providing a Wide Range of Solutions For All Types of Pet Food

Gum Blends Functional Systems **Texturants** Specialty Sweeteners Antioxidants Emulsifiers Cultures Enzymes

#### Contact:

fizul.bacchus@danisco.com Tel: 416-757-4126 Fax: 416-757-9243 Mobile: 416-896-4487

# Marketplace

### **DIE ROLLS** 800.343.7655

weidenmiller.com

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

Proven, Trouble Free Performance In difficult grind applications.

Mill Technology Company, Inc. 763-553-7416 888-799-5988 gary@mill-technology.com

High Quality LaBudde Group 262-375-9111



Cereal Byproducts Company

- DRIED WHOLE EGGS
  - RICE PRODUCTS
  - DRIED BREWERS YEAST
  - DRIED WHEY BEET PULP
  - STABILIZED FLAXSEED MEAL

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

Web Site: www.cerealbyproducts.com

#### Oven-Baked Dog Food

- · Human grade lamb & chicken 1st ingredient
  - · Available in 15 & 30 lb bags
  - · Canned products 13.2oz cans
    - · Distributors wanted
      - · Free shipping

• АРРМА

It's not just the ingredients, it's how you cook them.



Dog Food www.LIFE4K9.com • 770.399.3100 Five Concourse Pkwy., 30th Fl · Atlanta, GA 30328

#### Fast/Friendly Service HIGH QUALITY WEAR PARTS

For most common Extruders

Cast D-2 Knives \* Wear Rings

\* Insert Dies \* Die Plates \* Knifeholders

\* Misc. Machined

Parts
Manufactured to OEM or Customers Specifications. Over 15 years experience supplying precision parts to the Feed & Petfood Manufacturing Industry.

#### New Technology Inc.

11063 Highway 59 North, Gravette, AR 72736 Telephone: 479-787-6772 Fax: 479-787-9957 1-800-684-0042

Home page: www.newtechnology.com

#### **FOR SALE**

Reconditioned Cooking Extruders & Dryers Single & Twin Screw Designs CLEXTRAL WENGER EXTRU-TECH - AEROGLIDE

EXTRU-TECH, INC. 100 Airport Road

extru-techinc@extru-techinc.com

EXTRU-TECH, INC. Fax.

Phone 785-284-2153

Attn: Equipment Sales Group

Deamco offers

a full line

of Parts and

Components

### LANSING

TRADE GROUP, LLC

SPECIALIZING IN:

- POTATO FLAKES
- SWEET POTATO FLOUR
- GRAPE SEED EXTRACT

LANCE LAUGEN 800-227-8237

lance@lansingtradegroup.com

#### **MIDWEST** AGRI-COMMODITIES

Sugar Beet Pulp suppliers to the pet food industry representing 4 farmer-owned co-operatives with 12 factories across the U.S.

#### MIDWEST AGRI



www.mwagri.com Tel: 1-800-842-2133

### de Rosier, inc.

SPECIALIZING IN PET FOOD INGREDIENTS MILLED FROM:

- corn wheat rice
  - barlev •
- flax rye oats

John M. de Rosier 612-339-3566 E-Mail: jderosier@derosierinc.com

Roberto Bari 612-339-3599 E-Mail: rbari@derosierinc.com

Fax: 612-339-3568

#### **Deamco Bucket Elevator, Vibratory** Conveyors Feeders and Bulk Storage Systems Handle Tons of Dry & Semi Dry Pet Food Daily.

Deamco Bucket Elevator fed by Vibratory Feeder and Infeed Hopper.

Deamco Vibratory Conveyors Feeders, Natural Frequency – Isolated and Balanced Design run Quietly and Gently moving Bulk Material continuously through processing lines.

(800) 933-2620 - (888) 933-2620 www.deamco.com

DESIGN, ENGINEERING & ASSOCIATED MANUFACTURING COMPANY 6520 East Washington Blvd., City of Commerce, CA 90040-1822

interchangeable with most **Bucket Elevators** 

# CARTONERS

**EXTRUDERS** FILL FRS

FORM/FILL/SEAL **GRINDERS** LABELERS

METAL DETECTORS

MIXERS & MORE

### Frain Group QUALITY PRE-OWNED

PROCESSING & PACKAGING MACHINERY

- 7000+ Machines IN-STOCK
- ALL Equipment Available for Rent
  - Full Engineering Consultation & On-Site Engineering Service Center

Visit www.fraingroup.com or Call 630,629,9900

## Ad Index

Company Name	Page No.
3D Corporate Solutions LLC200 Central Ave, PO Box 478, Monett, 1.417.236.9602 Fax: 1.417.236.0039 www.3dcorpsol.com	51 MO 65708
ADF-Amer Dehydrated Foods	5 5809
AFB International	26,27
Alcan Packaging	13 IL 60631
Ameri-Pac Inc	3
Andritz Sprout A/S	37 6705
BHJ A/S	7
Bi-Pro	43
Bill Barr & Co	17 66215-4611
Extru-Tech Inc	<b>39</b>
Geelen Counterflow BV Peter Schreursweg 38, Haelen, 6081 N	52

Intl Ingredient Corp       3         150 Larkin Williams Indust Ct, St Louis, MO 63026-037         1.636.343.4111 Fax: 1.636.349.4845         www.iicag.com	<b>5</b>
Kemin Nutrisurance Inc	5
Omega Protein Inc	2
Pappas Inc	0
The Peterson Co	0
Preference Technology	4
SPF North America	2
Summit Ridge Farms	9
The Scoular Company4 250 Marquette Ave Ste 1050, Minneapolis, MN 55401 612.851.3737 Fax: 612.851.3738	0
Trouw Nutrition USA LLC	1
VICAM	5
Victam Intl bv	1

**Company Name** 

# Marketplace

Netherlands

31.475.592315 Fax: 31.475.592767

www.geelencounterflow.com



3D & 4D MDB Hand deboned beef

Semi load lots Satisfaction Guaranteed

800-826-2341

Fax: (715) 267-7214

#### Wild Alaskan Salmon Oil

Salmon Protein Hydrolysate

Private Label Opportunities Available

Veterinary Resource Group 1-253-581-1880 email: sales@vrg-usa.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

**Bruce Plantz**, Group Publisher/Vice President bplantz@wattnet.net

#### **EDITORIAL STAFF**

**Debbie Phillips-Donaldson**, Editor-in-Chief dphillips@wattnet.net

**Tim Phillips**, DVM, Editor tphillips@wattnet.net

Page No.

Jenny Kvamme, DVM, Managing Editor jkvamme@wattnet.net

Peter Best, European Editor best@watt-4.demon.co.uk

Liz Crosby, Art Director

#### **EDITORIAL & SALES OFFICE**

**PETFOOD INDUSTRY**, 122 S. Wesley Ave., Mt. Morris, IL 61054-1497 USA. Tel: +1.815.734.4171, Fax: 1.815.734.5649 (Editorial), 1.815.734.5663 (Sales).

#### **USA ADVERTISING SALES**

Steve Akins, Publisher sakins@wattnet.net

Jim Francis, Sales Manager ifrancis@wattnet.net

**Ginny Stadel**, Sales Associate gstadel@wattnet.net

#### **EUROPE ADVERTISING SALES**

Tineke van Spanje, Sales Assistant spanje@xs4all.nl Tel: +31.495.526155, Fax: +31.495.525126

**Sunny Li** (CHINA only) Lddg75@163.com Tel: +86.21.64474625

#### **PUBLISHING SERVICES**

James Wessel, Circulation Director

For subscriptions, address changes, past copies—jwessel@wattnet.net

**Bill Spranger**, Production Director For advertising material, deadlines and processing bspranger@wattnet.net

#### **ADMINISTRATIVE STAFF**

Leslie A. Watt, Chairman Emeritus

James W. Watt, Chairman

Gregory A. Watt, President/CEO

Tim Smith, COO, VP Finance, Corp. Secretary/Treasurer Steven Slakis, VP/Director of Business Development

#### SUBSCRIPTION INQUIRIES/ CHANGE OF ADDRESS

Contact the Circulation Department at 122 S. Wesley Ave., Mt. Morris, Illinois 61054-1497 USA. Tel: +1.815.734.4171; Fax: +1.815.734.7021; 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: \$36.00/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 FosteReprints, +1.866.879.9144 or www.fostereprints.com.

© Copyright 2007, Watt Publishing Co. All rights reserved

### AMERICAN BUSINESS MEDIA

The Association of Business Media Companies

# Something to Chew On comments By debbie phillips-donaldson

# Looking east to grow the market

ompound annual growth of 11.8%. Projected growth of 33%. Increases of 48%, 104%, 177%.

These are gaudy numbers from any point of view. And they apply to a booming new market for petfood and other pet products: Central and Eastern Europe.

At the first International Pet Conference, held in Frankfurt, Germany, this past November, experts from Euromonitor International, Dähne Verlag (the conference organizer), Information Resources Inc. and various pet retailers cited these and similar statistics to describe the current and estimated growth of the pet market in countries such as Poland, Slovakia, Romania and Bulgaria.

(The figures, respectively, represent growth of the pet market in Eastern Europe since 2001, projected growth for that market by 2011, growth of dog and cat food sales in the Czech Republic from 2000 to 2005 and growth of dog foodsales at 104% and volume at 177%—in Romanian grocery outlets from September 2005 to September 2006.)

#### **Lots of pets**

According to Ralf Majer-Abele, managing editor of Pet in Europe magazine and the conference chair. Eastern European countries comprise four of the top five European countries in dogs and cats per capita. And those pet owners are learning more about proper pet nutrition and enjoying more discretionary income to provide it.

He also explained that in these countries, the majority of dog and cat meals are still prepared by owners from table scraps and other "people food." But manufactured petfood is steadily growing in sales, especially in urban areas

Some say developing markets will comprise **20%** of the global pet market by 2015.



— Debbie Phillips-Donaldson

and for inexpensively priced products, often produced by private label manufacturers. In capital cities, premium brands are gaining traction, benefiting from owners' increasing awareness of pet health issues and inclination to treat their pets as family members—like the humanization of pets so prevalent in developed markets.

This all adds up to continued high growth potential for petfood in the region, according to Majer-Abele, as people there continue to gravitate toward Western living standards and become more interested in product quality. One caveat is the continued risk for political instability of some of the region's countries.

#### Politics and petfood

Indeed, some of the most interesting sessions at the conference were by executives from Eastern European retailers and pet suppliers describing the many political changes in their countries over the past two decades and how those have affected the pet market. Tamas Gorcs, owner of Ti&To Co., a retailer in Bratislavia, Slovakia, led attendees through a brief history of pet shops in the country. His reasons for predicting continued growth in Eastern Europe—increased popularity of dry petfood, rising sales through pet superstores and a shift in marketing toward education—echoed those of other conference speakers.

Gorcs was followed by Irina Papazova, CEO of Felina Bulgarien, a distributor for Vitakraft products based in Plovdiv, Bulgaria. Her moving description of the impact of recent political upheaval in her country on pets and their owners drew a standing ovation. She ended on a positive note, citing statistics such as 19% growth in 2006 sales of dry cat food through one Bulgarian grocery chain.

The conference also covered the potential for the pet market in China. According to Gorcs, developing markets overall will comprise 20% of the global pet market by 2015. He cited total growth of the Eastern European market from 1996 to 2005 as 320%, followed only by Asia (excluding Japan) at 220%. Now how's that for gaudy?

#### Corrections

In the November 2006 issue of Petfood Industry, the source for the chart on p. 22 was Euromonitor International. On p. 33, the correct E-mail address for Ron Fuller is ron fuller@hughes.net.

Phillips-Donaldson is editor-in-chief of Petfood Industry magazine. Email her at dphillips@wattnet.net.

# Solutions For Success.

**Production** 

3D Corporate Solutions has its advantages. It's a more effective company because pet food ingredients, service, and logistical solutions are our core business. We have the professional expertise to create, produce, and manage all aspects of ingredients, services, and logistics.

TOVEN

Quality Ingredients and Service.

CorporateSolutions

Sourcing / Consulting

## Logistics

### **OUR PRODUCT OFFERING**

Fresh / Frozen (Joplin, MO) Ground Chicken

**Emulsified Chicken** Ground Turkey **Emulsified Turkey** Chicken Blend Backs & Necks Liver Products Chicken & Egg Concentrated Broth Custom Freezer Storage **Proprietary Products** 

Spray Dried (Joplin, MO) Liver & Chicken Chicken Turkey Chicken & Rice Liver Oil Savory Fat **Proprietary Products** 

Chicken Cook Plant (Danville, AR)

Chicken Meal (EU & Domestic) Chicken Fat (EU & Domestic) Low Ash Chicken Meal (EU & Domestic)

Midland Ingredients (Monett, MO)

White Rice Brown Rice Bran Hulls

Sourcing (Monett, MO) Poultry By Product Meal

Chicken By product Meal Pet Food Grade Fat Feed Grade Fat Meat & Bone Meal Pork Meat & Bone Meal

Logistical Services (Monett, MO)

Truck: Hopper/Reefer/Dry Van

### Geelen Counterflow

# DRYER MkII

Clean, efficient drying of extruded products



- Highly efficient energy consumption because of counterflow design, internal recirculation and minimal exhaust air
- Zero downtime during change over of product
- Uniform product bed by PLC controlled distributor
- Fire proof insulation between double stainless steel walls
- Gravity driven product flow allows thorough purging between batches
- High drying uniformity by frequent product and air mixing
- Gas or steam as heat source
- Air flow control at every drying stage
- Fines separation by internal cyclones and central dust collection
- Low maintenance hydraulic discharge system
- Advanced control system with 15 inch colour touch screen, remote access and networking capability
- Microwave moisture sensor in hopper
- Automatic moisture control regulates discharge air temperature of burners
- Efficiency indicator on control screen
- Worldwide sales and service network
- 24 hour technical support

Some of the above features may be optional.



**Geelen Counterflow**T + 3 1 - 4 7 5 - 5 9 2 3 1 5
F + 3 1 - 4 7 5 - 5 9 2 7 6 7

info@geelencounterflow.com

Geelen Counterflow USA Inc.
T + 1 - 7 7 2 - 5 5 9 4 3 3 8
F + 3 1 - 4 7 5 - 5 9 2 7 6 7
www.geelencounterflow.com

Geelen Counterflow®

COOL AND DRY!