Target: sustainable petfood processing

Controversy entangles GRAS process

How-to: Monitor your brand’s reputation with social networking

Feature company
THE PERFECT PETFOOD?
Karen Scoggins of My Perfect Pet, p. 22

Digital version at www.petfoodindustry-digital.com
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October 2011 Petfood Industry
You earn your trust with pet owners at every meal. They rely on you for nutritious food, with innovative ingredients that their pets will love—which is why you need a supplier that can deliver new solutions for your formulations. At ADF, we offer unique protein ingredients to meet the needs of challenging diets and ensure pet health. With the wide range of ADF® spray-dried proteins, we can help you stay up to date with ingredient trends and keep your customers coming back for more.

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Presentation: Learn more about process heating

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PowerPoint: Who’s in the driver’s seat?
Ready to implement a social media monitoring strategy or looking to strengthen your brand’s online presence and build your Internet reputation? Check out Melissa Brookshire’s Petfood Forum 2011 presentation, “Consumer Brand Perception: Who’s in the Driver’s Seat?” for tips, tricks and stats: www.petfoodindustry.com/7961.html.
Assure that Pet Food Safety is Part of Your Culture

Corporate Project Services (CPS) has the project management expertise and on-site experience to lead your team through the following steps as you expand your Food Safety Management System, deepen the food safety culture within your organization, and protect your brand identity. Here’s how:

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Our central focus is effective food safety business solutions for the industry. Effectively evaluating, consulting and implementing procedures within the extrusion processing industry is our specialty. When the pet food market needs increased assistance in a specialized direction – such as food safety initiatives – we are able to respond.

There is only one contract service provider that can leverage over 75 years of industry expertise to maximize client results. That provider is Wenger’s Corporate Project Services – CPS. Contact us today.
Despite continuing economic woes in some regions and markets—and consumers still spending conservatively no matter what their financial situations—sales of natural foods, petfoods and other products continue to grow.

Consider this: US sales of natural foods and beverages rose 7.7% in 2010 to US$21.3 billion in natural stores alone, according to Natural Foods Merchandiser and described by A. Elizabeth Sloan in the July issue of Food Technology magazine. Sales of natural/organic foods in conventional food, drug and mass merchandise stores totaled US$16.5 billion, a 7.6% increase from 2009.

How does this compare to petfood? While US sales of natural petfood dipped 2.4% from April 2009 to April 2010, according to SymphonyIRI, that was only in US supermarkets, drug stores and mass merchandisers (excluding Walmart then). In reporting this data in Pet Food in the US, 9th Edition (March 2011), Packaged Facts said it expects natural sales to rebound over the next five years at 11% compound annual growth, compared to only 4% annual growth for petfood overall. That would put US natural petfood sales at US$2.5 billion by 2014.

In natural supermarkets in the US, sales of natural petfoods rose 3.5% in 2010 to US$54.2 million, Packaged Facts says, citing data from SPINS Inc. The growth was driven by a 10% increase in sales of natural treats. For organic petfood, Packaged Facts reported data from the Organic Trade Association showing 2009 US sales of US$85 million, representing 10% growth from the previous year.

Considering that consumers who shop at natural retailers might be better weathering the down economy, that growth makes sense. But the August issue of Nutrition Business Journal puts a negative spin on it, saying US sales of natural and organic petfood grew “only 4%, the lowest category growth ever recorded.”

A summary of the issue’s reports also said pet supplements grew 6% in 2010 but “suffer from a lack of significant new product development,” while other natural and organic pet supplies had “another banner year.” According to NBJ, the total animal nutrition market—defined by the publication as including those three categories of natural and organic petfood, pet supplements (excluding animal feed supplements) and natural and organic pet supplies—increased 5% to US$3.2 billion last year.

Sloan’s article in Food Technology reported:
- Nearly one-third of the top-selling new foods/beverages launched in the US in 2010 carried a natural or organic claim (IRI, 2011);
- “Natural” topped the list of descriptors consumers looked for when purchasing foods/drinks at retail stores in 2010 (Hartman, 2010);
- Seven in 10 shoppers believe food described as fresh means it is healthier.

With petfood, Packaged Facts says “natural” topped US marketing claims in 2010 for the third year running, outpacing the next most popular claim, “high vitamins” (211 mentions vs. 106). Mintel’s Global New Product Database showed similar findings, with “all-natural product” ranking among the top three claims of new petfood products launched in 2010. “No additives or preservatives” was the most prevalent claim globally, followed by “vitamin/mineral fortified.”

So, even though most countries or regulatory bodies have no legal definition for “natural,” the buzzword has clearly captured consumers’ attention and wallets. It’s a marketing claim that works, even with a sluggish economy.

Debbie Phillips-Donaldson is editor-in-chief of Petfood Industry magazine. Email her at dphillips@wattnet.net.
Nuremberg, Germany
17 – 20.5.2012

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601 N. 13th St., Monett, MO 65708     417.236.9602     customerservice@3Dcorpsol.com
Speakers, topics announced for Petfood Forum events, savings on registration available

Several speakers for Petfood Forum Asia 2012, scheduled for February 16 in Bangkok, Thailand, have been confirmed: Greg Tilford of Animals’ Apawthecary Co. and Animal Essentials Inc. on trends in natural and organic ingredients and supplements; Dr. K.B. Kore of Navsari Agricultural University, India, on prebiotics, probiotics and synbiotics as functional foods for dogs; Galen Rokey of Wenger on validation of extrusion temperatures as a CCP in processing; and Laurence Callejon of SPF on a systemic approach to dog palatability: Asia focus.

Petfood Forum 2012, April 2-4 in Schaumburg, Illinois, USA, will feature experts such as Jon Roska Jr. of PetFoodDirect.com sharing consumer insights; Daniel McChesney, PhD, of the US Food and Drug Administration’s Center for Veterinary Medicine with an FSMA update; and Dr. Roger Clemens of the Institute of Food Technologists and ET Horn on balancing evidence-based science with marketing. Following Petfood Forum on April 4-5, Petfood Workshop will focus on new product development. Speakers include Greg Aldrich, PhD, on how to set and manage expectations and timelines in developing new products.

Online registration is open for Petfood Forum Asia, Petfood Forum and Petfood Workshop 2012, with early bird savings available. For more information and to register, visit www.petfoodindustry.com/petfoodforum.aspx.

AIB International plans petfood manufacturers safety course in November

AIB International will hold a Food Safety and Sanitation for Petfood Manufacturers course, November 8-10, at the company’s Manhattan, Kansas, USA, facilities.

The petfood safety course allows participants to gain an understanding of legal requirements from the Food Safety Modernization Act and Reportable Food Registry; recognize prerequisites necessary to comply with good manufacturing practice guidelines; develop and implement HACCP food safety programs; identify and evaluate control methods for pests; recognize types of foreign material contamination and equipment and methods for control of such contaminants; and identify microbiological issues relevant to a petfood facility.

The course is aimed at petfood industry professionals, including plant, quality assurance, product safety and maintenance managers. Those interested in attending may obtain more information and register online at www.aibonline.org.

FDA may get US$50 million for food safety

The US Food and Drug Administration may receive additional funding when the 2012 fiscal year starts October 1, 2011, as the Senate Appropriations Committee considers a bill that sets the organization’s spending limit, according to reports.

The reports say the Senate’s version of the budget bill would allocate approximately US$350 million more than the appropriations bill passed in the House in June. This would be nearly US$50 million more than FDA’s fiscal 2011 budget allowed.

Quick hits
- Intersystems is expanding its Omaha, Nebraska, USA, facility with construction of a 60,000-square-foot addition, scheduled to be completed in January 2012.
- Boehringer Ingelheim Vetmedica Inc. named Dr. Albrecht Kissel as president and CEO.
- Packaging products manufacturer Silgan Holdings Inc. closed its US$25 million purchase of Nestlé Purina PetCare Co.’s steel can-making assets for petfood products.
- Magnum Systems signed an agreement with Bulk Processing Equipment as a technical industrial representative for packaging systems in the markets of Minnesota, North Dakota, South Dakota and western Wisconsin, USA.
- Diamond Pet Foods is constructing a new pet food facility in Ripon, California, USA, expected to be completed in March 2012.

October 2011
Spot-on Chelated Mineral Solutions.

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NATUGUARD® feed preservative antioxidant

IDEA™ assay feed quality service
For Consumers

Freshpet Dognation treats
Freshpet’s Dognation treats for dogs are available in three different varieties: Sweet Potato Chews, Fresh Bones and Free-Range Fillets. Dognation Sweet Potato Chews contain sweet potatoes as the only ingredient, the company says, and are available in a 6.5-ounce resealable pouch. Fresh Bones are crunchy brown rice bones with real chicken baked inside that come packaged with two bones in a 5.6-ounce resealable pouch, says the company. Free-Range Fillets are made from buffalo and come with four chews in a 4.3-ounce resealable pouch.

Freshpet
+1.866.789.3737
www.freshpet.com

Fido’s Cookie all-natural treats
Fido’s Cookie Company makes all-natural treats for dogs. Cookie varieties include peanut butter, apple, chicken and veggie and bacon cheddar bites. Each is sold in a 12-ounce resealable bag and contains no corn or wheat, the company says.

Fido’s Cookie Company
+1.800.779.8925
fidoscookies.net

Pooch & Mutt Slimmin’ Tonic
Pooch & Mutt’s Slimmin’ Tonic is a supplement designed to aid in reducing obesity in dogs. The tonic can be sprinkled into petfood or can be mixed into drinking water to make a “gravy.” The company says the product aids in fat burning, appetite reduction and muscle building. Slimmin’ Tonic is available in 160-gram tubs.

Pooch & Mutt
+020.7819.4277
www.poochandmutt.com

Feline Thyroid Health prescription food
Hill’s Pet Nutrition Inc. says Prescription Diet y/d Feline Thyroid Health is a low-iodine petfood designed to manage hyperthyroidism in cats. The food also supports kidney health with low phosphorus and low sodium levels, as well as contains omega-3 and omega-6 fatty acids and nutrients like taurine and carnitine, according to Hill’s. The cat food is available both in cans and in bags.

Hill’s Pet Nutrition Inc.
+1.905.826.5655
www.hillspet.com

Special Diet sensitive skin/stomach
Blackwood Pet Food LLC’s Special Diet dog food comes in two formulas for sensitive skin or stomachs. Recipes include salmon meal and rice and lamb meal and rice. The food is free of corn, wheat and soy, the company says. It is designed for dogs of all lifestages.

Blackwood Pet Food LLC
+1.330.424.1431
www.blackwoodpetfood.com

Castor & Pollux PetWorks Organix
Castor & Pollux PetWorks’ Organix line is a grain-free food for dogs that meets all requirements established by the US Department of Agriculture’s National Organic Program, the company says. The food is available in one dry formula with organic free-range chicken as well as in four wet grain-free options. The food is sold in 5 1/4- and 14 1/2-pound bags.

Castor & Pollux PetWorks
+1.800.875.7518
www.castorpolluxpet.com
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April 2 – 4, 2012  Renaissance Schaumburg Convention Center Hotel, Schaumburg, Illinois USA

Make plans now to join 1,200+ industry colleagues and peers in two intensive days of learning, networking and marking the successes of our industry. The event returns to the beautiful Renaissance Schaumburg Convention Center Hotel with an even larger exhibit hall and more space for conference sessions, receptions and other networking opportunities.

Scheduled topics and speakers to include:
- Consumer insights from the pet e-commerce channel—Jon Roska Jr, founder of PetFoodDirector.com and VP of merchandising for Pet360
- FSMA update: what and when to expect from FDA—Dr. Daniel McChesney, director of the Office of Surveillance & Compliance, Center for Veterinary Medicine, Food and Drug Administration
- Balancing evidence-based science with marketing desires and demands—Dr. Roger Clemens, president of the Institute of Food Technologists and chief scientific officer for ET Horn

Check www.petfoodindustry.com/PFF2012.aspx frequently as we confirm more speakers!

Petfood Workshop: New Product Development
April 4 – 5, 2012  Renaissance Schaumburg Convention Center Hotel, Schaumburg, Illinois USA

Immediately following Petfood Forum 2012, Petfood Workshop is a focused seminar on new product development. New products have been a driving force behind the petfood industry’s continual growth, but new product development requires much more than a good idea. In this interactive seminar, learn from experts on how to successfully bring a new petfood product to market.

Speakers to include Dr. Greg Aldrich on how to set and manage expectations and timelines in developing new products.

REGISTER NOW + EARLY BIRD SAVINGS
Register online at http://www.petfoodindustry.com/PFF2012.aspx or complete the registration form on reverse side by February 1, 2012, and save up to 15%.
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Petfood Forum group discount available to five or more attendees. For more information, e-mail OutreachRegistration@niu.edu or call +1.815.753.7922.

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Organizational function (e.g., marketing, management, R&D, etc.):  
Industry segment (e.g., manufacturer, supplier, retailer, veterinarian, etc.):  
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Do you subscribe to Petfood Industry magazine?  

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**NOTE:** Registrations will not be processed without payment; rate is determined by date payment is received. Prior to February 1, 2012 attendee registration fees are refundable minus a cancellation fee; contact OutreachRegistration@niu.edu or +1.815.753.7922. Substitution of registered personnel at no charge. Watt Media reserves the right to substitute speakers and change schedule as necessary. If anyone in your party requires special assistance, please contact us.

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For special rates on a taxi, limo or shuttle, please visit [www.petfoodindustry.com/PFF2012.aspx](http://www.petfoodindustry.com/PFF2012.aspx) or call +1.815.753.7922. For the best rates and service, please reserve your ground transportation in advance.

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Rooms are also available at a special rate for Petfood Forum or Workshop participants at the Embassy Suites, just two blocks away. Free transportation will be provided between the two hotels on a regular basis throughout each day and evening. To reserve your room at the Embassy Suites, call +1.847.241.5415 or visit [http://embassysuites.hilton.com/en/es/groups/personalized/C/CHISBES-WAT-20120330/index.jhtml?WT.mc_id=POG](http://embassysuites.hilton.com/en/es/groups/personalized/C/CHISBES-WAT-20120330/index.jhtml?WT.mc_id=POG).
For Manufacturers

**K-Tron 2410 powder receiver**

K-Tron Process Group offers the 2410 powder receiver, which is designed for the conveying of fine bulk materials. The receiver is available in two versions for either general keep-full conveying or loss-in-weight feeder refill applications. Receivers for full-keep applications are fitted with a gravity gate discharging valve. Receivers designed for loss-in-weight applications are fitted with a level sensor in the housing and a slide/orifice or butterfly valve. Conveying rates, based on a distance of 15 m and bulk density of 0.5 kg/dm³, are possible up to 408 kg/hr, the company says.

K-Tron Process Group
+1.856.589.0500
www.ktron.com

**NuTec 750 four-hole patty former**

NuTec Manufacturing says the 750 four-hole patty former can portion certain items at over 4,800 pounds per hour. The former’s vane pump feeds directly to the mold plate cavity and has a usable mold width of 19 inches. A vacuum paper feed allows for individual pre-cut sheets of waxed paper to be placed under each patty for fresh or frozen applications. The former is US Department of Agriculture-approved and completely hose-proof, according to the company.

NuTec Manufacturing
+1.815.722.2800
www.nutecmfg.com

**No. 2 recyclable pouch**

Ampac Packaging LLC developed the No. 2 recyclable pouch as a stand-up pouch made primarily of high-density polyethylene. When clean and dry, the pouch can be recycled like plastic retail shopping bags, the company says. The No. 2 pouch can be printed using high-definition graphics.

Ampac Packaging LLC
+1.513.671.1777
www.ampaconline.com

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**Macrowave post-baking dryers**
Radio Frequency Co. offers Macrowave post-baking dryers that utilize radio frequency energy to heat and dry moist areas of food. Macrowave dryers, according to the company, eliminate surface checking and control moisture and color. The dryers were developed for high-volume production and are available in band widths up to 64 inches wide.

Radio Frequency Co.
+1.508.376.9555
www.radiofrequency.com

**DuPont Biomax Strong 120**
DuPont’s Biomax Strong 120 is an ethylene copolymer designed to modify polylactic acid and enhance its performance in packaging applications. Biomax Strong modifies PLA to reduce its brittleness, increase toughness, enhance flexibility and improve viscosity stability, according to the company.

DuPont
+1.800.441.7515
www.dupont.com

**Vibroscreen Flo-Thru low profile screener**
Kason Corp. manufactures a Vibroscreen Flo-Thru low profile screener. The screener classifies bulk material into three fractions using two screening decks and two unbalanced-weight gyratory motors.

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mounted on opposing exterior side-walls. The screener’s design allows for vertical alignment of the top inlet and bottom outlet, allowing the smallest fraction to descend through the screener in a straight-through path, the company says, while larger fractions are ejected through spouts at the edges of the mesh screens. Vibroscreen Flo-Thru low profile screener is offered in diameters from 18 to 84 inches.

Enterprise 21 ERP software
Enterprise 21 ERP software from Technology Group International is designed for small to mid-size businesses. The company offers data mitigation services using a series of mapping files to take a business’ existing data from a number of different small business software systems to load into Enterprise 21 ERP.

Technology Group International
+1.419.841.0295
www.tgiltd.com

More products online!
For more new consumer products, visit the database at www.petfoodindustry.com/petfoodandtreats.aspx.

High-pressure petfood treatment solution
Multivac Inc. developed a concept for integrating equipment for the high-pressure treatment of petfoods into fully automatic packaging lines for both vacuum packages and modified atmosphere packaging. The solution comprises a high-pressure unit with one or more autoclaves and an automation concept to integrate the process into packaging lines, as well as a high pressure-compatible packaging concept for MAP packs. The integration solution automatically loads finished packs into transport containers, and following the high-pressure treatment, it automati-
For Manufacturers

cally unloads, dries, prints and labels packs, then puts them into cartons, the company says.

Multivac Inc.
+1.816.891.0555
www.multivac.com

Sustainability retort audit program

Allpax Products provides an energy and sustainability room retort audit program for petfood manufacturers. The company says its audit service identifies improvements for lowering energy costs, minimizing water waste, enhancing productivity and assures conformance to US Food and Drug Administration guidelines. The audit examines the overall consumption of steam, the process for venting steam, the amount of water consumed in cooling and the overall effectiveness of manual and automated controls. Auditors also evaluate potential safety hazards from corrosion as well as the wear on hard-to-replace parts such as hinges, handles and baskets.

Allpax Products
+1.888.893.9277
www.allpax.com

NIRS DS2500 petfood analyzer

FOSS says the NIRS DS2500 petfood analyzer operates with near-infrared analysis over a wavelength range of 400 to 2500 nm. All instruments in the system are hardware-standardized, the company says, meaning light intensity, bandwidth and wavelength precision are controlled for consistency between instruments. NIRS DS2500 is IP65-certified to withstand humidity, vibration and temperature fluctuations, according to the company.

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Making safe petfood in today’s rapidly changing environment is the focus of the upcoming live and online industry event.

If you need to know more about petfood safety, especially how the new Food Safety Modernization Act will affect petfood regulations, be sure to sign up for Virtual Petfood Forum 2011, taking place live online, Wednesday, October 26, 2011. Under the new FSMA law, petfood will fall under much of the same regulations and scrutiny as human foods. That portends significant changes for petfood manufacturers, no matter how stringent your current safety and risk prevention programs might be.

Registration for this completely online event is free for petfood professionals, and you can participate from your office, your home or on the road. If you register, you can also access an archive of the event through January 26, 2012. (Access to the archive is available to registrants whether or not you participate live on October 26.) Register today at www.wattevents.com and check PetfoodIndustry.com and Petfood-Connection.com for updates on speakers, topics and companies participating in the virtual tradeshow!

Here’s a preview of the experts and educational sessions that can help you prepare for the swiftly changing regulatory environment:

**FSMA: a comprehensive overview**—Jessica Wasserman, president, Wasserman & Associates. How will the new Food Safety Modernization Act affect petfood manufacturers? Learn from a global regulatory expert and former agricultural service executive for the US Department of Agriculture about:
- Impact of FSMA on Food and Drug Administration compliance issues;
- How FDA is preparing 50 rules, guidance documents, reports and studies to implement FSMA.

**Get prepared! A “how-to” on what to expect and how to deal with new FSMA regulations**—Judi Lazaro, director of customer relations, AIB International. So you know what FSMA is about—what exactly does it mean for you and your company? This food safety auditor and auditing expert will help you understand:
- How to prepare for the coming regulations and how to deal with regulators who might visit;
- What the FSMA means specifically for petfood regulations and safety requirements.

**Providing petfood manufacturing safety with HPP**—Glenn Hewson, VP of global marketing, Avure Technologies. High pressure processing is one of the newer technologies used to help keep food and petfood free of toxins and other contaminants. Find out from this high-tech expert about:
- What HPP is: a new and innovative way to prepare and manufacture petfood;
- How HPP can be implemented into your current system to provide a safer product for consumers.

**FSMA and petfood trade**—Benjamin England, CEO of FDAImports.com LLC and Benjamin L. England & Associates LLC. The new FSMA includes much stronger regulations for imports of ingredients and food products. This 17-year veteran of the US Food and Drug Administration will explain:
- FSMA and foreign policies—what you should prepare for when handling imports and exports and global certifications;
- Your legal rights and how you should handle an FDA search, seizure or quarantine of your products or ingredients.

**GRAS process for safety of petfood ingredients**—George A. Burdock, PhD, president and founder of the Burdock Group. Learn the details and recent controversy surrounding the Center for Veterinary Medicine’s voluntary pilot program for “generally recognized as safe” determination:
- Why and how you might want to submit a GRAS notification for your new ingredient;
- What you can expect from the process as CVM irons it out.

Think we’ve missed an important safety-related topic or want to know more about this virtual event? Head over to www.petfood-connection.com to voice your opinion and get your questions answered!
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Q&A with My Perfect Pet’s president and founder, Karen Scoggins

Find out why My Perfect Pet is well positioned to drive growth in the industry, why the company insists on fresh, natural ingredients and how Scoggins and her team are driven to educate pet owners on how to make healthier choices for their pets: www.petfoodindustry.com/7974.html

For more information on My Perfect Pet, Karen Scoggins and the rest of the company team, check out the company’s bio: www.petfoodindustry.com/7976.html

JUST THE FACTS

Headquarters: Poway, California, USA
Officers: Karen Scoggins, president and founder; Tom Scoggins, CEO and co-founder
Sales: While My Perfect Pet doesn’t share sales numbers, the company is expanding its current facility by 300% to accommodate automation to keep costs down, avoid raising prices and support a growth rate of 400-500% annually
Brands: Boomer’s Blend, Hunter’s Blend, Roxy’s Blend, Snuggles Blend, Buckaroo Blend, Bobo’s Bites, Party Bites and Personal Blends
Distribution: My Perfect Pet products are currently in retail stores throughout California, Arizona and Las Vegas, with national distribution just announced in September 2011. US customers can have products directly shipped overnight, guaranteed to arrive next day frozen
Facilities: New high-volume facility, along with expanded facility for all other business operations will open soon, also located in Poway, California, USA
Employees: 12+ and growing
Website: http://myperfectpet.net

Fresh and frozen: the perfect petfood?

By Jessica Taylor

California’s innovative My Perfect Pet is doing its best to spread its message of ‘healthier food means happier pets’ with Petco’s help.

Like many pioneering petfood makers before her, Karen Scoggins first started researching pet diets and nutrition when her dog, Hunter, became suddenly ill in late 2006. Within weeks of his passing, headlines around the world announced the largest petfood recall in history. “We dedicate every batch to Hunter and the thousands of pets and families affected,” Scoggins says in her bio. “The more we studied and researched, the more horrified—and angry—we became.” So, putting on hold her plans of retiring from her corporate job and spending time on warm tropical beaches, Karen and her husband and My Perfect Pet co-founder, Tom, instead found themselves driven to form a company that they say puts pet health over profits and is focused on educating pet owners on how to make better food...
choices for their pets.

Scoggins dedicated the next three years to research and development, working with nutritionists, veterinarians, breeders, pet stores and restaurant food suppliers to create the perfect blend of all-natural, fresh, restaurant-quality ingredients that provide maximum nutrition with the least processing and no harmful preservatives, she explains. By January 2010, My Perfect Pet had become not only what Scoggins says is the first frozen fresh petfood company in California, but it was enjoying the spotlight with the help of Unleashed by Petco, the pet superstore’s smaller-format concept store.

“Unleashed stores are focused on education, nutrition and care of animals,” Petco explains in a press release. “Customers experience the same nutritional knowledge, animal consciousness and pet compassion of the parent brand in a smaller footprint store.” Free samples of My Perfect Pet products were available for the grand opening of stores throughout California and then later were stocked on the shelves.

MPP made another splash with the introduction of its Party Bites treats for dogs, released November 2010. “Initially intended to be available only during the holiday season, Party Bites are made with fresh turkey, pumpkin, yams, cranberries, spinach, carrots and other holiday favorites that people can safely enjoy with their dogs,” says Scoggins. “It has since become our highest selling treat and a permanent part of our product line. Party Bites are our most popular treat at events, at times people eating more than the dogs!”

With such great momentum driving the new petfood company forward, Scoggins and her team can count on future continued growth because of the reputation they have worked so tirelessly to build with their customers. “Pet owners see an immediate difference in their pet after switching to fresh, whole food,” claims Scoggins. “Unsolicited testimonies report improvements in pet health: reduced allergy symptoms, tearing/staining disappearing around the eyes and mouth, digestive tract issues resolved and even the pickiest dogs love it!” The company even has one staff member who is currently eating nothing but My Perfect Pet food for one month (puppy formula for the added calcium) and claims she’s never felt better.

**But what if** word-of-mouth and five-star online reviews aren’t enough? “[My Perfect Pet] is the only nationally available petfood company open to the public for viewing and tasting during all business operations,” explains Scoggins. The company has an education center where pet owners can learn more about pet nutrition and health in general, and from there they can observe the production areas through glass partitions and even taste the products themselves! The results of all this have led to very aggressive customer loyalty and viral growth within the pet community, say the MPP co-founders.

MPP announced national distribution in September 2011, with planned distribution throughout the US within the next quarter. In addition to retail channels, My Perfect Pet is supporting an online next-day delivery model for markets not supported by retail outlets and customers wanting the flexibility and convenience of online shopping and delivery. “We are also partnering with qualifying nonprofit groups, setting them up to act as distributors for My Perfect Pet products, allowing pet owners to purchase directly through them, enabling petfood purchases to become a source of revenue generation for their nonprofit organization,” Scoggins explains.

**As the industry** is moving toward fresh foods, My Perfect Pet is well
positioned to drive significant growth opportunity in the petfood industry. Scoggins also sees the untapped homemade market significant in growing the business as well. “There are many products claiming to be the best for a variety of health issues, but continue to use lower cost, more highly processed and refined ingredients that are more difficult for the pets to digest and contribute to ongoing health issues,” she says. “There is a strong correlation between pet diet and health, and we are driven to educate pet owners on how to make healthier choices for their pets.”

Coming soon from MPP? A line of fresh food products specifically developed to meet dietary needs of pets with health issues requiring a special or restricted diet, fresh alternatives for dogs with common health issues, such as renal/kidney disease and pancreatitis, and a cat food line currently in development, likely to be introduced by early 2012.

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My Perfect Pet is open to the public for viewing and tasting during all business operations and has an education center where pet owners can learn more about pet nutrition and health in general, and from there they can observe the production areas through glass partitions and even taste the products themselves.

My Perfect Pet offers Personal Blends – custom formulated diets for pets with unique dietary needs. Each blend is based on pet owner and/or veterinarian recommendations with only fresh, all-natural ingredients, says MPP.
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How-to:
Monitor your petfood brand's reputation with social networking

By Jessica Taylor

With consumer trust faltering and misinformation on the Internet running rampant, learning the who, what and how of online tracking is critical.

It’s a fact: Almost all consumers are online and sharing their opinions on your brand, your products, your ingredients and your philosophy, no matter what their credentials. According to the Pew Global Attitudes Project survey, just 18% of Americans said they never use the Internet. Social networking sites like Twitter have almost 30 million tweets per day and Facebook boasts more than 5 billion user minutes per day, according to Melissa Brookshire, DVM, of North River Enterprises.

This enormous audience represents a customer—whether past, current or potential—and what they are saying about your petfood company is quickly becoming more important than any paid form of advertising.

Brookshire stressed the importance of petfood manufacturers implementing social media monitoring plans in the current market, especially. In her presentation, “Consumer Brand Perception – Who’s in the Driver’s Seat?” she points out that consumer trust in the petfood industry has been at a low since the 2007 recalls, while online misinformation is at an all-time high.

What should your company do to monitor your presence and reputation on the Internet?

1. Develop a company strategy for...
managing Internet presence;

2. Make this strategy a part of your business’ marketing plan; and

3. Commit marketing dollars/man hours to this initiative.

There are many social media-building tools available online that you can start utilizing almost immediately. Let’s take a closer look at some of these technologies and review how they can be utilized to maintain and build the status of your brand.

**Twitter is a**
great place to keep an eye on your brand. Tools like HootSuite and and TweetDeck allow you to see when your company name is being used in a tweet. Hootsuite allows you to track click-throughs, time updates, monitor mentions and assign tasks among team members. It also acts as a management tool, allowing you to update multiple accounts at once. “Twitter is also a
great tool for your customer service representatives to monitor,” says Nick Stamoulis in his article “Your Online Reputation with Social Networking” for www.business2community.com. “Many consumers tweet complaints or ask for help, so being able to quickly respond to a user is a great way to maintain a good
We invite you to download *Principles of Palatability*, our primer on the role palatants play in successful dog and cat foods. Whether you've been at it awhile or are new to the business, we've found you can always learn more about what makes a pet food good to the last bite. Visit our website or ask your account manager for your copy.

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To learn how AFB’s research expertise and tailored solutions can help grow your brand, contact an office listed below or visit www.afbinternational.com.

![AFB International Logo]
relationship with that user, as well as protect your online reputation. An angry Twitter user can quickly become a satisfied customer.”

**Google Realtime shows** how much social networking activity has been going on around your specific search. This can include your company name, products and brand names. You can also stay up-to-date by setting Google alerts that note every time your desired phrase is used online. These email alerts include social networks, articles, press releases and blogs.

Social Mention is a tool that offers useful influence-tracking features including reach, sentiment, passion and strength. Social Mention also allows you to set up alerts specifically for social media, allowing you to receive daily email alerts of your brand, company, employees, marketing campaign or, on a developing news story, a competitor or other high-profile individual.

Kurrently is a real-time search engine for Facebook and Twitter. Simply enter a search term, be it a keyword, business or person, and Kurrently will produce all mentions and shares from these channels.

"**Monitoring your streams** regularly will allow you to determine which ones are the most active and useful, which will help you streamline your approach to focus only on the most informative search terms," writes Alexandra Reid in her Business Insider article, “Drinking from the Waterfall: How to Effectively Monitor Social Media.” And remember, online monitoring requires ongoing active listening and social analysis. If you’re not managing your Internet image, someone else is.

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A single thread of controversy entangled nearly every committee discussion during the annual Association of American Feed Control Officials (AAFCO) meeting in August 2011. That thread was the impending change in the way the US Food and Drug Administration’s Center for Veterinary Medicine will oversee the safety of ingredients in petfoods and other animal feeds from now on—and how that change could severely inhibit the industry’s ability to demonstrate the acceptability of its ingredients to state regulators.

In the debate over whether AAFCO will accept ‘no questions’ from FDA to allow new ingredients, our industry can learn from human foods.

**Background:**
**GRAS for petfood**
Read more about the history of the GRAS notification process and how it came to be proposed for petfood: www.petfoodindustry.com/7921.html.

**The human foods industry** has relied on the GRAS notification process for the last 14 years. Key to its efficiency is that, instead of conducting its own time-consuming direct review of the data, FDA reviews the sponsor’s detailed summary and expert analysis of the basis for GRAS (generally recognized as safe) notification process, a safety review by FDA that deviates from the direct review of safety data FDA had previously contributed to the AAFCO definition process. Although a human food ingredient that receives a “no questions” letter from FDA in response to a GRAS notification generally can be used in all states without regulatory consternation, a debate has arisen over whether such a process will be good enough for AAFCO.
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status. It then responds with one of the following conclusions: “Notice does not provide a basis for a GRAS determination” or “FDA has no questions.”

So, the agency no longer says, “We think it’s safe” when the outcome of the review is positive, but it does say, “We think you’ve done everything necessary to support a conclusion of safety.” With human food, that has been enough. A “no questions” response is widely interpreted as a stamp of approval, documenting that FDA has thoroughly reviewed the process—including the nature of the experts consulted, the science on which they relied and the analysis they applied to the underlying data—and the agency agrees it was adequate to establish GRAS status.

The safety and appropriate use of ingredients for human foods is regulated almost exclusively by FDA’s Center for Food Safety and Nutrition. There is little of the questioning of ingredient safety by state governments that is seen with petfoods.

However, there are analogous examples in the human foods industry of third-party reliance on FDA “no questions” responses to GRAS notifications. The most impressive of these is with infant formula, the most highly regulated food product in the US. The Infant Formula Act of 1980 requires that CFSAN conduct a thorough review of each new infant formula introduced to the marketplace to ensure it is a suitable and adequate nutritional substitute for human milk. This review is conducted by a different office within FDA (Office of Nutrition, Labeling and Dietary Supplements, ONLDS) from the one that reviews

Useful links

“FDA lays out options for new ingredients” (Petfood Insights), April 2010: www.petfoodindustry.com/2406.html


CVM GRAS notification program: www.fda.gov/AnimalVeterinary/Products/AnimalFoodFeeds/GenerallyRecognizedasSafeGRASNotifications/default.htm

CVM Animal Food GRAS Notices Inventory: www.fda.gov/AnimalVeterinary/Products/AnimalFoodFeeds/GenerallyRecognizedasSafeGRASNotifications/ucm243845.htm

CFSAN GRAS Notice Inventory, a cumulative list of all notifications received, along with FDA’s conclusions: www.accessdata.fda.gov/scripts/fcn/fcnNavigation.cfm?rpt=grasListing


Flavor and Extract Manufacturers Association (FEMA) discusses its more than 50 years of convening expert GRAS panels and publishing its own self-affirmations of GRAS status: www.femaflavor.org/gras

1980 requires that CFSAN conduct a thorough review of each new infant formula introduced to the marketplace to ensure it is a suitable and adequate nutritional substitute for human milk. This review is conducted by a different office within FDA (Office of Nutrition, Labeling and Dietary Supplements, ONLDS) from the one that reviews
to be safe, ONLDS fully accepts the adequacy of a “no questions” response from OFAS to a GRAS notification.

The GRAS notification process has been in use at CFSAN since 1997, and a total of 394 ingredient/intended use combinations have been submitted to that process. (See “Useful links,” p. 34.) Many international governments have given deference to OFAS “no objections” status, even in the sensitive infant formula arena.

Based on the nature of review provided under the GRAS notification process as it has been used in human food for 14 years—as well as the acceptance of a “no questions” response that has been established within sensitive industries, international governments and other FDA offices—it would not be unreasonable for AAFCO to consider the safety component of an AAFCO definition to be fully addressed by such a response from FDA to a GRAS notification.

The alternative would be an unnecessary, expensive and time-consuming duplication by AAFCO of the already thorough efforts of the sponsor’s expert panel and FDA.

AAFCO members and working groups are already firming up their positions on GRAS notifications to be ready to deal with the first “no questions” responses from CVM. Petfood manufacturers and ingredient suppliers are encouraged to discuss the issue as soon as possible with their trade association representatives and state regulators.

Melanie Fairchild-Dzanis, JD, is president of Regulatory Discretion Inc. (http://regulatorydiscretion.com) and previously had regulatory responsibility at Nestlé USA.

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Target: Sustainable petfood processing

By Debbie Phillips-Donaldson

To save energy and costs during extrusion, take aim at areas such as dryer exhaust air, energy inputs and your heating system.

Petfood companies from giants like Mars Petcare US and Nestlé Purina PetCare to specialists like Canidae Pet Food and Natura Pet Products have been opening or retrofitting eco-friendly facilities to great fanfare over the past few years. But executives from these and other manufacturers would say making petfood more sustainable usually starts with the basics, including processing.

“Prior to sustainability becoming the hot buzzword, it was called cost efficiency,” said Terry Block, president of Nestlé Purina’s North American division. “As you reduce energy and water, you reduce costs.”

The amount of energy consumed by a typical extrusion operation makes it an obvious target for reduction. According to Tjitze Smit, petfood division manager for Graintec A/S, the extrusion process can use up to 380 kilowatt hours (kWh).
For its third edition, Petfood Forum Asia moves to a new location at the beautiful Bangkok International Trade & Exhibition Centre (BITEC) in Bangkok, Thailand. The event brings you expert content about pet nutrition, petfood processing, safety, marketing and other important topics — along with the opportunity to network with your peers. Plus, you can visit with key industry suppliers exhibiting at Victam Asia.

SPEAKERS & TOPICS INCLUDE:

Trends in natural and organic ingredients and supplements — Greg Tilford, author, consultant and teacher in the field of veterinary botanical medicine/CEO of Animals’ Apawthecary Co. and Animal Essentials Inc., Montana, USA

Prebiotics, probiotics and synbiotics as functional foods for dogs— Dr. K.B. Kore, Assistant Professor, Department of Animal Nutrition, College of Veterinary Science and Animal Husbandry, Navsari Agricultural University, India

Validation of extrusion temperature as a CCP in the petfood process— Galen Rokey, process manager for the Pet Food Applications Group, Wenger Manufacturing, Kansas, USA

Systemic approach to dog palatability: focus on Asian market— Laurence Callejon, innovation engineer, SPF, Elven, France

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Registration to attend Victam Asia is separate from Petfood Forum Asia registration. Register for Victam Asia for free online at www.victam.com. For information on hotels and travel packages, visit www.victam.com or www.bitec.net.

NOTE: Registrations will not be processed without payment; rate is determined by date payment is received. Prior to January 20, 2012, attendee registration fees are refundable minus a cancellation fee; contact OutreachRegistration@niu.edu or +1.815.753.7922. Substitution of registered personnel at no charge. Watt Media reserves the right to substitute speakers and change schedule as necessary. If anyone in your party requires special assistance, please contact us.
of energy per ton of final product (Figure 1). The drying part of the process accounts for the largest use of energy (Figure 2, p. 40).

Recovery of dryer exhaust and other processing air can save 20 to 100 kWh of thermal energy per ton of final product, Smit said during Petfood Forum Europe 2011. Often the most cost-effective solutions integrate technologies to reduce not only energy use but also odor and carbon dioxide emissions. Smit suggested four potential solutions for recovering energy from the drying process:

1. A cross flow air/air heat exchanger allows for up to 50% recovery;
2. An air/water heat exchanger offers up to 40% recovery;
3. An air-to-water exchanger combined with a high-temperature (80 – 110°C) heat pump can effect up to 70% energy recovery and potentially more than 50% odor reduction; and
4. An air/water heat exchanger combined with recirculation of dryer air may offer only up to 20% energy reduction but also odor reduction above 85%.

**Thermal and mechanical** energy are the major inputs for extrusion, with the typical operation using a 1:2 ratio of mechanical to thermal energy, said Galen Rokey, process tech-

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Figure 2. Energy suckers

Drying accounts for the largest use of thermal energy during extrusion, at 60%, plus another 13% of electrical energy, according to Tjitze Smit of Graintec A/S.

Thermal energy consumption

- Heating of liquids
- Stem to extruder/conditioner
- Air heating for drying

Electrical energy consumption

- Others
- Extrusion
- Grinding
- Drying

Source: Graintec A/S

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technology manager for Wenger, during a seminar for petfood producers in the UK in June 2011. This ratio affects utility and equipment wear costs and influences sustainability.

The costs are significant, Rokey added, with mechanical costing about 2.5 times more than thermal for the same unit of energy. Wenger has found these averages applicable in almost every region of the world:

- Thermal energy = US$7.32/million kilojoule (kJ);
- Mechanical energy = US$18.06/million kJ; and
- Equipment wear = US$1.25/ton for every 22 kWh/ton specific mechanical energy.

Rokey shared an exercise in which the 1:2 ratio was altered by reducing thermal energy by 25% and 43%, with the latter resulting in a 1:1 mechanical:thermal ratio. This changed the energy inputs to the extrusion process, dramatically driving...
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**About the Instructor**
Course developer Linda P. Case, M.S., is a recognized expert in the fields of canine and feline nutrition, behavior and training, and companion animal health care. She operates AutumnGold Dog Training Center and is the author of four books, as well as numerous scientific papers and pet owner educational materials. Case has also served as an adjunct assistant professor at the University of Illinois College of Veterinary Medicine, and lecturer and program coordinator at the University of Illinois Department of Animal Sciences.

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up utility costs and, to a lesser extent, equipment wear costs (Figure 3, p. 41).

To maximize efficiency, try to increase thermal energy inputs—look at steam in the preconditioner barrel—and decrease mechanical energy, especially within the extruder.

**Steam heat efficiency** is key, too. David Degelau of Hydro-Thermal Corp. detailed the energy losses in a typical industrial heating system during Petfood Forum 2011:

- **Stack losses** – 10-30% of energy input;
- **Blow-down losses** – 5-10% of boiler output;
- **Condensate losses from leaks or non-functioning trap systems** – up to 10% of energy input;
- **Flash losses** – 5-10% depending on system pressures as hot condensate is reduced; and
- **Condensate heat losses** – less than 2% of energy input.

According to Degelau, direct steam injection (DSI) can mitigate these losses. “DSI uses 100% of the steam’s heat energy by adding steam directly to the processing fluid,” he said, and delivers benefits such as:

- Reduced steam consumption;
- Significantly lower energy costs (25% or more);
- Near-instantaneous energy (heat) transfer;
- Low maintenance;
- Handling of fluids that are difficult to heat, such as highly viscous or abrasive slurries;
- Small size, requiring no production floor space; and
- No condensate return required.

To help determine what type of system is best for your operation, Degelau suggested doing an energy comparison. Several energy calculators are available online, including from the US Department of Energy (www.energy.gov), Hydro-Thermal (www.hydro-thermal.com) and Sempra Energy (www.sempra.com).

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**Presentation:** Learn more about process heating

If a 1994 law addressing dietary supplements for humans becomes applicable to animal products, it would shake up the regulatory landscape.

In a presentation at the annual meeting of the National Animal Supplement Council a few months ago, a representative of the US Food and Drug Administration made a very interesting comment. He said that in FDA’s attempt to find “legal homes” for the plethora of unapproved ingredients currently on the market, one possibility is for FDA to reconsider the applicability of the Dietary Supplement Health and Education Act (DSHEA) for products intended for animal consumption. I have not heard any more, but if DSHEA does become applicable to animal products, it will dramatically alter the current regulatory rubric.

Enacted in 1994, DSHEA drastically changed the way dietary supplements for human consumption are regulated. While still “food” under the Federal Food, Drug and Cosmetic Act (FFDCA), DSHEA defines a distinct subcategory with unique regulatory privileges not afforded other foods. For one, unlike substances in conventional foods, those in a product that meets the statutory definition of “dietary supplement” do not necessarily have to be generally recognized as safe (GRAS) or approved food additives.

Claims can be made for a dietary supplement relative to effect on structure and function of the body that do not directly relate to its nutritional content without evoking an intent to offer the product as a drug. For example, under DSHEA, a pill containing echinacea can make claims such as “to support a healthy immune system” even though the herb is not GRAS and its function is unrelated to its vitamin, mineral or other nutrient content. But a chicken soup product with echinacea would be an adulterated food by virtue of it containing an unapproved food additive and possibly even an adulterated drug if the labeling made any functionality claims for that ingredient.

DSHEA prompted a tremendous growth in the dietary supplement market, both for human and animal consumption. However, in 1996, FDA issued a notice in the Federal Register opining that DSHEA did not apply to products intended for animals. The logic was:

- It was neither contemplated nor intended by Congress;
- There is a paucity of data to support safe use;
- It would circumvent requirements to show absence of unsafe residues in meat, milk or eggs of animals consuming the dietary supplement;
- It would allow for unfair “production claims” (i.e., drug claims).

As a result, animal dietary supplements remained under the old rules and to this day have to meet the same regulatory requirements as any other animal feed. This prompted the formation of NASC and the development of its unique labeling format for products that do not meet FFDCA.

While not in a formal legal category, “dosage form animal health products” for non-human food

Helpful links


National Animal Supplement Council: www.nasc.cc

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

October 2011 Petfood Industry
chain animals (e.g., horses and pets) labeled per NASC guidance are not subject to oversight by most state feed control officials but rather are tolerated by FDA under enforcement discretion as “unapproved drugs of low regulatory priority.” While this arrangement has worked to the satisfaction of industry and government for years, its long-term survivability is in question as FDA now ponders the wisdom of continuing its current enforcement discretion practices.

Important to note is that if DSHEA is not amended by Congress but simply interpreted by FDA, it would appear only to apply to products in supplement form and not to complete and balanced petfoods or other foods in conventional form. Therefore, there would probably be much stronger incentive for regulators to take action against conventional foods containing unapproved food additives, such as glucosamine and chondroitin sulfate, rather than tolerating them, even under specified conditions as is currently practiced by most states.

DSHEA changed the way dietary supplements for human consumption are regulated.

If FDA is to revisit the applicability of DSHEA without seeking amendment by Congress, it would have to counter its previous arguments as to why DSHEA didn’t apply. It’s not obvious to me how that would be accomplished. Assuming it is done, however, one effect would be that many of the pet supplement products on the market today could come out of their current regulatory limbo. With clearer guidance as to what is both acceptable and unacceptable for a legally defined dietary supplement (as opposed to a product in unapproved drug status), it would be much easier for manufacturers to comply and regulators to monitor and enforce.

I assume if this new determination comes to pass, animal products would need to meet good manufacturing practices as required for human dietary supplement products, as well as the need to file notices with FDA regarding intended label claims and use of new dietary ingredients. It’s less clear whether the 1994 grandfather clause in DSHEA for ingredients would also apply to animal products.
Salmon: nutrient-rich petfood ingredient

Salmon, the supposed “last wild food” (Greenberg, 2010), has become very popular in petfoods. This may simply be marketing; however, there is some nutritional credence to the hype. Salmon has been touted as a “super food” by the human medical community for its content of omega-3 fatty acids. For many of the same reasons, salmon also fits into a solid nutritional platform for a pet’s diet too. So, what do we know about salmon’s use in petfood, and are there any issues?

There are several different forms of salmon available to the petfood industry: salmon meat, rendered salmon meal and hydrolyzed salmon for flavor designations and hypoallergenic diets. At the high-cost end of the spectrum, salmon meat consists of the same sort of fillet found at the grocery, either as whole meat or minced. Seldom are these offered as varieties of salmon like king, sockeye or coho. More often salmon meat is derived from the “frames” of which the fillet has been removed. These are either ground to include the bone or deboned with a mechanical deboning machine to capture all the soft material (meat and fat) and then frozen into blocks. These “meats” are commonly used in the production of wet foods; some are turned into a slurry for use in extruded foods.

Salmon meat, especially the mechanically deboned slurries, consists of a fair amount of moisture (pushing 80%) and modest amounts of protein and fat/oil. The fatty acids within the salmon oils are very rich in omega-3s, making up more than 30% of the total. A significant amount of these omega-3s are the important long chain eicosapentaenoic and docosahexaenoic acids (often called EPA and DHA).

The ash content can be quite variable depending on the type of material and the supplier. The meat is typically not the pretty pink found on the store shelf but rather a gray-colored flesh similar to what one would associate with other fish. Nutritionally, salmon meat is used in a manner similar to that of other meats such as beef, pork, chicken or pollock fish (Faber et al., 2010).

Rendered salmon meal is available on a limited basis. This species-specific fish meal is derived from the remaining carcass components following removal of the fillets for the restaurant and grocery trade. The meal will consist of the meat and bones from the heads and frames, along with some skin and organs. These are rendered to remove moisture and the high-value salmon oil, then ground to a coarse powder. The resulting meal will commonly exceed 60% protein and 10% fat, with ash of 15-25% depending on supplier.

Another option often available in the petfood industry is salmon hydrolysates. These are primarily components of “natural flavors” or as a fish option in hypoallergenic diets. The latter requires the meat proteins be hydrolyzed (broken down) to small peptides by protease enzymes to avoid being recognized by the body’s immune system.

Following hydrolysis, the protein is spray dried into a brown/tan powder with a mild fish aroma. The protein content can be quite high (70-90% depending on supplier) with fat and ash levels negligible. When used in pet diets, it can

Wild caught or farm raised, salmon offers a source of digestible protein and omega-3 fatty acids for pet diets.

Dr. Greg Aldrich is president of Pet Food & Ingredient Technology Inc.
be a reasonable replacement for other quality proteins like poultry by-product meal (Zinn et al., 2009). The amino acid digestibility can be very high (exceeding 90%); but, due to a high proportion of non-essential amino acids, the protein quality can be fairly low (Folador et al., 2006). Further, when compared to other hydrolyzed proteins, the ingredient may lack some binding capability in a food. These factors make it important to consider a complementary protein source when formulating with hydrolyzed salmon.

**The practice of farming salmon might just be the salvation for their wild cousins.**

compared to other hydrolyzed proteins, the ingredient may lack some binding capability in a food. These factors make it important to consider a complementary protein source when formulating with hydrolyzed salmon.

**There is one** bit of controversy surrounding salmon that has little to do with petfood and nutrition—specifically, whether the salmon was wild caught or farm raised. At the heart of the matter is whether there are sufficient wild-caught salmon to support the world’s consumption and whether they are inherently a healthier choice for the animal and planet. At present, the Food and Agriculture Organization of the United Nations reports that nearly four times more (2.30 vs. 0.83 MMT) salmon were produced via aquaculture than were caught, and these wild stocks are in decline (FAO, 2008).

A recent *Time* magazine article by Bryan Walsh captures the essence of the matter: “There just isn’t enough seafood in the seas...to keep up with the global seafood consumption.” However, that doesn’t deter opponents of salmon aquaculture. They point out a number of issues:
- Algae blooms and nitrogen pollution reported in waters around salmon farms;
- The appearance of new diseases and pests such as salmon anemia and sea lice that could threaten the wild species;
- Antibiotic residues found in both fish and surrounding seawater;
- Mixing of weaker genetic traits from escaped farmed salmon that could threaten wild salmon; and
- Farmed salmon contain a higher concentration of dioxins and PCBs in the fatty tissues due to feeding practices.

**Unlike animal agriculture** that has had some 12,000 years to work out these sorts of issues, salmon aquaculture has been around for a mere 40 years. There is a concerted global effort under way to resolve breeding, feeding and environmental issues, much of it spearheaded by the UN. The decline in wild salmon is primarily a result of disrupted river systems from human land development. With the help of organizations such as the World Wildlife Fund, practices learned from aquaculture are being used to help rehabilitate wild salmon populations where they had previously vanished. The practice of farming salmon might just be the salvation for their wild cousins.

While wild-caught salmon may be the ideal, the benefit from consuming farm-raised salmon outweighs the risks by a wide margin (Foran et al., 2005) and sustains the supply for future generations. The net result for our pets is a nutrient-rich ingredient, regardless of where the salmon were raised.

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Impact of high fat and fructose diet in dogs

The aim of this study was to elucidate the impact of a high-fat, high-fructose diet (HFFD; fat, 52%; fructose, 17%), in the presence of a partial (~65%) pancreatectomy (PPx), on the response of the liver and extrahepatic tissues to an orally administered, liquid mixed meal. Adult male dogs were fed either a nonpurified, canine control diet (CTR; fat, 26%; no fructose) or a HFFD for eight weeks. Dogs underwent a sham operation or PPx.

Postprandial glucose concentrations were significantly greater in the HFFD group than in the CTR group. Impaired glucose tolerance in HFFD was due in part to accelerated gastric emptying and glucose absorption, as indicated by a more rapid rise in arterial plasma acetaminophen and the rate of glucose output by the gut, respectively, in HFFD than in CTR. It was also attributable to lower net hepatic glycogen uptake (NHGU) in the HFFD group compared to the CTR group, resulting in lower hepatic glycogen synthesis (GSYN) in the HFFD group than in the CTR group. HFFD also displayed aberrant suppression of lipolysis by insulin.

HFFD feeding accelerates gastric emptying and diminishes NHGU and GSYN, thereby impairing glucose tolerance following a mixed meal challenge. These data reveal a host of deleterious metabolic consequences associated with consumption of HFFD.


Water intake in domestic rabbits

Rabbits (Oryctolagus cuniculus) often suffer from urolithiasis. A high water intake is important in the prophylaxis of uroliths. We investigated the influence factors for water intake using 12 rabbits and different feed and water regimes: hay, fresh parsley, a seed mix and two different pelleted feeds offered in diverse combinations. Water was provided either by open dish or nipple drinker ad libitum except for four treatments with six- or 12-hour access.

Under the different feeding regimes, the drinker had no influence on water intake, but fecal dry matter content was significantly higher with nipple drinkers. Dry food led to a higher water intake, but total water intake was still lower than with addition of “fresh” food.

With restricted water access, rabbits exhibited a significantly higher water intake with open dishes compared with nipple drinkers. High proportions of fresh parsley or hay in the diet enhanced total water intake and urine output and led to lower urinary dry matter content and lower urinary calcium concentrations. Restricted access to drinkers led to a decreased total daily water intake and increased dry matter content of urine and feces.

For optimal water provision and urolith prophylaxis, we recommend a diet high in fresh food plus hay ad libitum, with free water access offered in an open bowl.


Can cats convert beta-carotene to retinol?

Many animals convert beta-carotene to retinol to meet their vitamin A (VA) requirement. However, this pathway is inefficient in many carnivores. This study quantified the plasma response to a single oral dose of [2H8]-beta-carotene in adult domestic cats, including measurement of [2H4]-retinol derived from the dose.
Cats were fed either a control diet containing adequate VA or a VA-devoid diet for 28 days. An oral dose of either 5 mg/kg body weight (BW) or 10 mg/kg BW of [2H8]-beta-carotene was administered on day 28. Plasma samples were collected prior to dosing and at various hourly intervals post-dose.

Beta-carotene was undetectable in plasma prior to dosing. Mean peak plasma beta-carotene was 0.37 ± 0.06 nmol/ml at 9.0 ± 1.8 hours post-dose, while [2H4]-retinol peaked at 3.71 ± 0.69 pmol/ml at 55.2 ± 16.3 hours. There was little effect of diet or dose on the beta-carotene or [2H4]-retinol responses.

The appearance of [2H4]-retinol in plasma indicates cats are capable of converting beta-carotene to active VA. Conversion efficiency was not calculated in this study, but it is likely inadequate to meet cats’ VA requirement without the inclusion of preformed VA in the diet.


Fiber analysis and digestibility in petfoods

Six dry dog foods and six dry cat foods with different carbohydrate sources were investigated in digestion trials. Food and fecal samples were analyzed for crude fiber (CF), total dietary fiber (TDF) and starch. In dogs, neutral detergent fiber (aNDFom) and acid detergent fiber (ADFom) were also analyzed. N-free extract (NFE) was calculated for CF and all other fiber analyses.

Crude fiber analyses gave the lowest values and TDF the highest, while ADFom and aNDFom were in between. Variation between diets was lowest in CF and highest in TDF. Total dietary fiber, aNDFom and ADFom in food were positively correlated. CF did not correlate with any other method.

The NFE analogue for TDF was closest to the starch content. Methods of fiber analyses in feces did not agree well with each other. CF had the lowest apparent digestibility, followed by...
ADFom, TDF and aNDFom.

For all analyses, there was a significant correlation between fiber intake and fecal fiber excretion. True digestibility was close to zero for CF, with a high uniformity in both species. In dogs, true digestibility of aNDFom was 53%, ADFom, 26% and TDF, 37%. In cats, true digestibility of TDF was 31%.

Except for CF, the intercept of regression equations suggests fecal excretion of some material of non-food origin is analyzed as fiber. A combination of TDF and CF analyses might give good information on the content of total (TDF), unfermentable (CF) and partially fermentable fiber (TDF-CF) in petfoods.

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Industry Calendar

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

**Online events**

- **Virtual Petfood Forum – Making Safe Petfood in Today’s Rapidly Changing Environment** will take place October 26, 2011, 8-5PM CST. This is a live event, so make sure to go to www.petfoodindustry.com/petfoodforum.aspx for the latest information and for information on registration, topics and schedule.

- Mocon Inc. has announced its 2011 Free Webinar Series which began March 9, 2011, and takes place once a month until December 10, 2011. To view class details and registration information, please visit www.mocon.com/events.php.

- AFIA Webcasts: Controlling Salmonella in Your Facility and Management Considerations for Salmonella/Microbial Control are available for download at www.afia.org.

- The Powder and Bulk Online Training Center is a virtual campus providing online training and lectures on topics such as Pneumatic Conveying, Mixing & Blending and Solids Flow. All of these web-only classes are available for download at www.powderandbulk.com/online_training.

**AFIA Regulatory Training Short Course**, October 11-12, 2011, Westin Arlington Gateway, Arlington, Virginia, USA. For more information, please go to www.afia.org.

- **10th Annual Pet South America International Trade Show**, October 18-20, 2011, Expo Centre Norte, Red Pavilion, São Paulo, Brazil. For information on this event, go to www.petsa.com.br.


- **AFIA Equipment Manufacturers Conference**, November 3-5, 2011, Sheraton Ft. Lauderdale Beach Hotel, Fort Lauderdale, Florida, USA. For more information, please go to www.afia.org.

- **“Establishing a HACCP Program for the Feed Industry” Short Course**, November 7-10, 2011, Kansas State University, Manhattan, Kansas, USA. To register, please visit www.afia.org.


**Industry Calendar**

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**International events**

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