

Identifying the Best Delivery for Your Beloved Patient



The New Animal Health Economy

Investment in the animal health industry is at an all-time high, with strong growth projections for the future. Spend on animal medicines and vaccines represents roughly 22% of the estimated 100 billion dollar animal health market¹. Future growth projections look strong, with industry expectations set at compound annual growth rate of 5.7% for the market². Consumer spending on companion animals is particularly bullish. Experts estimate 51 billion dollars were spent on companion animals in the United State alone in 2011, with 25% of that spent on veterinary care (including medicines) and another 20% on over-the-counter medicines and supplies³. This represents 62% of US households, or 73 million homes⁴. Spending on pets is expected to grow 3.3 per cent in the United States, but in emerging markets where per capita disposable income is on the rise, spending is expected to be much greater. By comparison, in Latin America growth is targeted at over 10%⁵. These trends, coupled with increasing pet ownership and longer life expectancy for companion animals, have created a substantial growing market for pet medications. Access to pet medications is increasing both in the retail sector and traditional veterinary-supplied medicines, and broader types of treatments are available as compared to just a decade ago.

All of these factors create a need to ensure effective ways to deliver medication to each beloved patient. While pet owners are increasingly choosing to spend discretionary income on their pets, they do expect value and effectiveness for the medication treatment. Similarly, for certain vaccines and other treatments for equine or livestock, for example, considerable amounts of money are invested in these therapies. Owners want to rest assured that their animal receives the maximum benefit of the medication, returning to and subsequently maintaining optimal health. For some treatments, this may involve maintenance therapies that may very well continue for the life of the animal.

The Importance of the Product Delivery

Ensuring effectiveness of the treatment can often be directly tied to the role of packaging. Packaging plays a role both in the protection of the medication and ensuring its efficacy, as well as the primary tool for delivering the medication properly. This is namely communicating how to administer the medication as well as providing for the physical application of the drug product.

Similar to human health medications, animal health medications come in many delivery forms. These may include traditional oral solids such as tablets or capsules, more convenient chewable tablets or flavoured

soft chews being packaged in bottles and blister packs, liquids administered orally or topically via bottles or tubes, or perhaps injectibles and other parenterals including innovations such as transdermal delivery forms or other increasingly convenient methods of delivery. The need for product protection from the elements forces packagers to incorporate protective barrier materials, providing shelf-life stability to ensure both safety and efficacy until administration and after. Increasingly, products being commercialised have need for higher levels of protection from the detrimental effects of moisture and oxygen. The packaging materials industry has stepped up to provide more effective barrier materials, benefitting animal health product manufacturers. As suppliers continue to innovate, the performance of these materials continues to develop, allowing for extended shelf-life and faster commercialisation of medicines.

Product protection also comes in the form of better methods of delivery. Through effective package design, medicines can be delivered more safely and effectively. This ensures that care providers realise the maximum benefit for their investment, and the animal receives the maximum benefit of the therapy. Innovations in package design, such as unit-of-use blister packs with ease of administration, can significantly outperform outdated package styles or bulk containers. By virtue of these innovations, consumers realise value through both the product and the package itself. Incorporating innovative time-saving features can benefit the owner. Options for recloseability or resealability can extend the life of the product and extend the value for the animal owner.

Packaging as the Important Communicator

Packaging can also deliver benefit through its ability to communicate to consumers. This may be reflected in many different ways. For example, consumers need clear and concise





communication regarding the proper methods of delivery or product application. When administering to animals, the method and technique of the application can often be pivotal to achieving the desired result and impact of the therapy. Without this vital instruction, or more specifically clear and concise instruction, the benefit of the medicine is not realised and the purchaser is certainly left frustrated. Likewise, the package plays a key role in educating the care giver about the potential side-effects or what to do in the case of adverse reaction. Conversely, packaging is often the primary method for identifying the key benefits of the medication and how it may be superior to a competitive product. Likewise, a particular product may feature several different strengths, and dosing dependent on the size of the animal. The packaging highlights the weight or breed considerations critical for effectiveness. Whereas human health products rely on pharmacists and physicians to supplement patient education about the medication, animal health products in retail or veterinary distribution do not share that luxury. This makes the packaging a frontline tool for educating the person administering the medication.

Packaging can play a key role in educating the pet owner about the disease state or affliction. Some medications may be a simple and relatively short course of treatment, whereas others may be maintenance therapies that could extend the life of the animal. Packaging also communicates what specifically the medication does or does not treat, an essential role for pet owners left to select the best course of treatment in a crowded retail environment full of colourful options.

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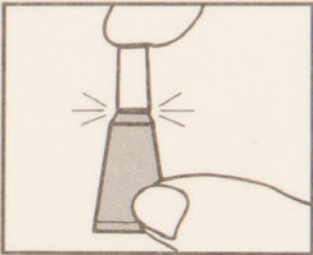
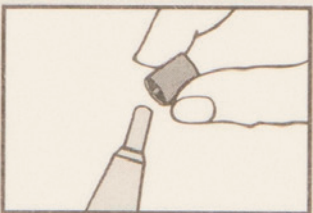

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**READ ENTIRE LABEL BEFORE EACH USE.
USE ONLY ON CATS OR KITTENS OVER 12 WEEKS OF AGE.**

DIRECTIONS FOR USE: It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
This product contains three monthly treatments, each 0.03 fl. oz., (1 ml)
To control fleas on cats:

- 1. Use ONLY on cats or kittens over 12 weeks of age. DO NOT USE ON OTHER ANIMALS.**
- Remove one applicator tube from package and hold in an upright position pointed away from your face.
- Pull off cap. Turn the cap around and place on top.
- Simply press cap down to break the seal of the tube. Remove cap carefully.
- Position the tip of the tube on the cat's back between the shoulder blades and squeeze out the entire contents of the tube.
- Repeat every month.

humans. As these products are commercialised, packaging is playing a pivotal role in the success of the product and extending the life of the animal by virtue of packaging's ability to protect and house the medication, protect the owner from unintended exposure, and ultimately deliver the optimal effectiveness of the medication for the beloved patient. As the market continues to increase, so too will the impact of packaging in ensuring future success.

References

- <http://www.zoetis.com/animal-health/growing-industry>
- <http://www.zoetis.com/animal-health/growing-industry>
- http://www.springer.com/cda/content/document/cda_downloaddocument/9781461444381-c1.pdf?SGWID=0-0-45-1351111-p174512857
- http://www.springer.com/cda/content/document/cda_downloaddocument/9781461444381-c1.pdf?SGWID=0-0-45-1351111-p174512857
- <http://www.zoetis.com/animal-health/companion-animal-health>

Package labelling is the primary communication tool for identifying critical safety considerations. In addition to potential adverse effects considerations for the animal receiving treatment, clear instruction is provided for inadvertent exposure to humans, particularly children. This often includes poison hotlines with vital contact information, as well as immediate treatment and considerations such as whether to induce vomiting for exposure. This role of packaging may also include key features to help protect children through the use of innovative child-resistant features. Packaging also plays a critical role in identifying how to effectively store the product to protect children while at the same time ensuring product safety, such as keeping the product out of sunlight or storing it in refrigeration. The role of packaging is multifaceted.

Conclusion

As rates of pet ownership increase globally, coupled with increases in discretionary income both in developed and developing countries, more investment is being focused on the treatment of animals and their course of therapy. These therapies include many traditional treatments, as well as therapies for afflictions once thought to be reserved only for



Justin Schroeder is the Executive Director, Marketing, Business Development & Design at Packaging Coordinators Inc. (PCI). Mr Schroeder is responsible for new account development, global marketing, and creative package design with a focus on the development and commercialisation of unitdose and compliance-prompting packaging.

He holds a Bachelor of Science from the School of Packaging at Michigan State University, and a Master of Business Administration in Marketing from Northern Illinois University. Mr Schroeder has been at PCI/Anderson since 2000, holding positions including Process Development / Packaging Engineer, Customer Project Manager, Director of Project Management and Planning, and most recently Senior Director, Marketing & Development Services. Previously, Mr Schroeder held package engineering positions with Hershey Foods Corp and at the J.M. Smucker Co. (Smucker's). Mr Schroeder is a Certified Packaging Professional from the Institute of Packaging Professionals (IoPP) and is the Vice Chairman of the US Healthcare Compliance Packaging Council (HCPC). Email: info@pciservices.com