

# ROVIMIX® $\beta$ -Carotene 10% P

## The health benefits of $\beta$ -Carotene\*

$\beta$ -Carotene is a powerful antioxidant and immune modulator. It is also a provitamin A in dogs.  $\beta$ -Carotene stimulates both cellular and humoral immune responses. For example,  $\beta$ -Carotene supplementation increased plasma antibody concentration and enhanced the delayed-type hypersensitivity response in both dogs and cats.

### Known functionality\*:

- Quenches singlet oxygen
- Neutralizes free radicals
- Protects against oxidative damage
- May decrease incidence of cardiovascular events
- Acts in synergy with vitamin E and C
- Enhances certain immune responses
- Protects skin from sun damage
- Is a precursor of vitamin A (provitamin A)

## Now claiming nature's defense for pets!

While commercial pet foods may provide two to five times the minimum daily allowance of vitamin A, very little attention has been focused on the  $\beta$ -Carotene content of the diets. The antioxidant function of  $\beta$ -Carotene has been demonstrated to play a significant role in canine and feline nutrition including maintenance of general good health and supporting the body's ability to manage age related conditions, such as diminution of immune system capacity and cataracts\*.

Feeding studies have clearly established that it is feasible to achieve sustained increases in circulating plasma levels of  $\beta$ -Carotene through dietary supplementation and the health benefits are clear. One major challenge for pet food formulators is the inherent instability of  $\beta$ -Carotene through processing and storage of the pet food. ROVIMIX®  $\beta$ -Carotene 10% P is a newly engineered form of  $\beta$ -Carotene designed to remain stable through the processing and storage of dry extruded pet food ultimately allowing the brand owner to make quantitative label claims, expected of super-premium pet food brands.

## Pet consumer study\*\* supports $\beta$ -Carotene

From a 2011 U.S. pet consumer study, 64% strongly agreed, "Beta-Carotene is a nutrient known to support healthy immune function." while 60% strongly agreed, "Beta-Carotene supports a robust immune system.". This is compelling evidence that pet food containing Beta-Carotene provides the pet consumer with the reason to believe in immune function claims.

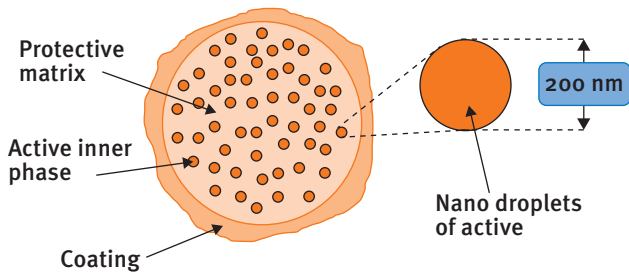
\* These benefits are a representation of current human and animal science and are not intended as claims.

\*\* DSM Pet Consumer Study by MarketTools

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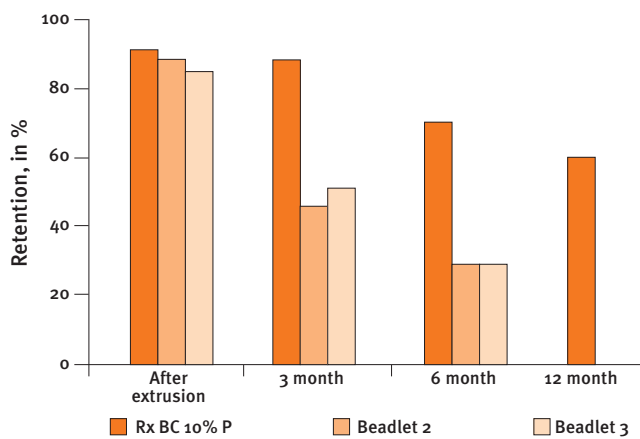
- Min. 10%  $\beta$ -Carotene
- Contains no ethoxyquin
- Unique beadlet formulation with superior stability in extrusion and storage
- Proven bioavailability

DSM's leading cross-linked beadlet technology provides superior product forms



The added stability of ROVIMIX®  $\beta$ -Carotene 10% P makes it possible to guarantee the level of  $\beta$ -Carotene on the label of a dry, extruded petfood

## ROVIMIX® $\beta$ -Carotene 10% P stability in dry petfood



Source: DSM Trial VFP24010

## Guaranteed Analysis:

|                             |                      |
|-----------------------------|----------------------|
| Crude Protein .....         | Min. 21 %            |
| Crude Fat .....             | Min. 3 %             |
| Crude Fiber .....           | Max. 12 %            |
| Moisture .....              | Max. 11 %            |
| Ash .....                   | Max. 5.5 %           |
| Calcium .....               | Min. 0.5 %           |
| Phosphorus .....            | Min. 0.4 %           |
| Vitamin E .....             | Min. 500 IU/kg       |
| <b>Beta-Carotene*</b> ..... | <b>Min. 30 mg/kg</b> |

\* Not recognized as an essential nutrient by the AAFCO Dog Food Nutrient Profiles.

Talk to your DSM representative or e-mail us at [petfood.nbd@dsm.com](mailto:petfood.nbd@dsm.com)