Puppy

SUPPORTING THE PUPPY'S DEVELOPING IMMUNE SYSTEM

Puppies are born with functional but immature immune systems. Specific nutrients can support growing puppies' immune systems and help enhance their immune response, helping them to fight disease or infection.

Key Messages

Antioxidant nutrients:

- Immune cells produce more free radicals (unstable molecules that can cause damage) than other cells and are vulnerable to injury and oxidative damage.
- Antioxidant nutrients, such as vitamin E, beta-carotene, vitamin C, lutein, flavonoids, zinc and selenium, may help to protect the immune cells from the damage of free radicals and help the developing immune system to respond optimally to vaccination.

Bovine colostrum:

- Purina research shows that feeding the bioactives and antibodies found in colostrum can provide immune benefits at any life stage.
- Studies show that adult dogs fed a diet with colostrum demonstrated a stronger and longer immune response to canine distemper virus vaccination, with a 50% increase in antibody levels after 6 months.

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Key Messages (continued)

Probiotics:

- Probiotics are live microorganisms that can help to maintain an optimal balance of gut bacteria. Probiotics can promote healthier immune function and have been used for many years for the maintenance and restoration of healthy gut microflora in animals showing disturbances caused by changes in diet, stress and antibiotic therapy.

Prebiotics:

- Prebiotics are soluble fibers that serve as food for the beneficial gut bacteria, promoting their growth. Prebiotics also support the health of the gut itself. Prebiotics used in pet food include purified inulin, wheat aleurone, and chicory root.

Additional Resources

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Waldron, M., Kerr, W., Czarnecki-Maulden, G. L., & Davis, J. (2012). *Supplementation with Enterococcus faecium SF68 Reduces Flatulence in Dogs*. Presented at the International Scientific Congress of the European Society of Veterinary and Comparative Nutrition, Bydgoszcz, Poland.

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The Purina Institute aims to help put nutrition at the forefront of pet health discussions by providing user-friendly, science-based information that helps pets live longer, healthier lives.

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Advancing Science for Pet Health