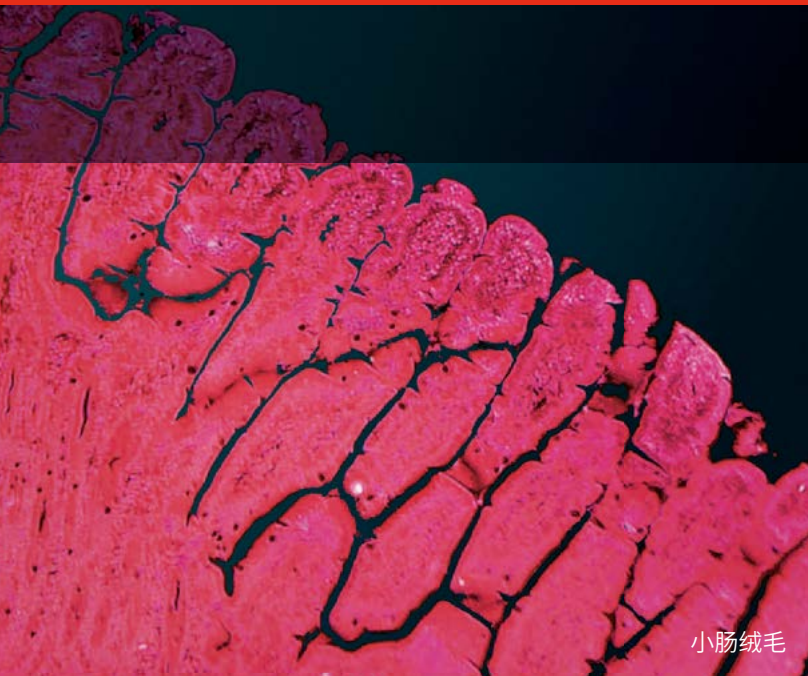


# 食物蛋白过敏



小肠绒毛



## 热门话题

食物过敏在犬猫中并不常见，但宠物主人往往认为宠物皮肤或肠道症状是对特定食物成分的过敏反应。

普瑞纳研究院将会提供科学事实来帮助您了解有关宠物食品营养的讨论话题。

let's  
**takeback**  
the conversation.

了解更多关于营养效用的信息，请访问

[PurinaInstitute.com](http://PurinaInstitute.com)

## 宠物多久会发生一次食物过敏？

在全世界范围内，食物过敏现象在人类身上的发病率不断攀升，<sup>1</sup>但食物过敏在犬和猫中并不常见。宠物对食物过敏的现象看起来似乎更常见，这是因为在宠物身上发生的其他健康问题也会有类似的症状。<sup>2,4</sup>

关于宠物食物过敏患病率的统计数据可能会加深这种误解，根据兽医对宠物进行检查的原因不同，过敏的患病率会有显著差别：在做常规健康检查的猫中只有 1% 被诊断为食物过敏，但在因皮肤瘙痒初诊的猫中，该比例为 21%。<sup>5,6</sup>



其他健康问题也可能表现出类似于食物过敏的症状

## 食物过敏的原因是什么？

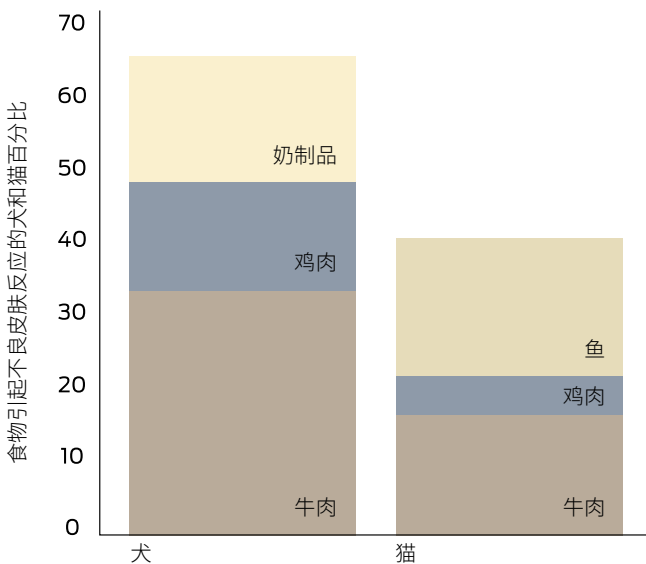
当机体的免疫系统把无害食物当作有害“入侵者”并做出免疫反应时，就会发生食物过敏。食物过敏与食物不耐受、食物中毒不同，后两者均不涉及免疫系统。

当食物过敏发生时，最常见的诱因是蛋白质。没有一种蛋白质是低过敏性的，过敏反应是个体对蛋白质的大小或结构产生免疫反应的结果，其部分原因是该个体曾经接触过这种蛋白质。<sup>3,7-9</sup>

虽然也有报道称谷物原料也会引起食物过敏，但最终结果显示通常是谷物中的某些蛋白质成分引发的过敏反应。<sup>10</sup>

无论是犬还是猫，谷物都不是报告最多的食物过敏原。

在犬的食物中，排名前三的食物过敏原为牛肉、乳制品及鸡肉中的蛋白质。在猫的食物中，最常报道的食物过敏原来自于牛肉、鸡肉或鱼类。<sup>9</sup>



Mueller et al., 2016

## 营养学在食物过敏中起什么作用？

诊断食物过敏的黄金标准是饮食排除试验，通过使用宠物以前从未接触过的单一蛋白质和单一碳水化合物的食物来源进行饲喂，以诊断食物过敏。<sup>8</sup> 研究也表明通过那些建立在血液、唾液或头发样本上的过敏原检测得到的结果并不可靠。<sup>11-14</sup>

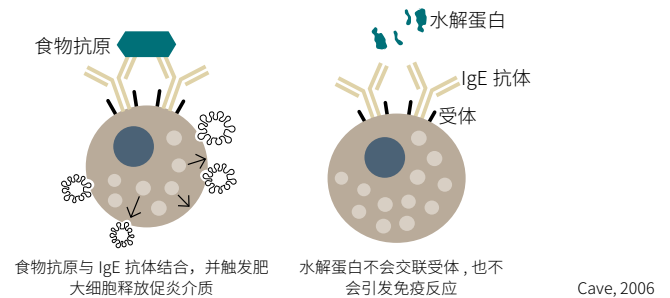
挑选新型蛋白质往往十分困难；新型蛋白质来源可能会与原过敏原发生交叉反应，许多宠物会发生多重食物过敏反应。<sup>15,16</sup> 试验饮食也必须保证营养全面均衡。理想情况是：该饮食在8~12周的饮食试验期间易于饲喂或适合长期维持饲喂。

饲喂水解蛋白粮食可提供方便且营养全面均衡的饮食来降低宠物的食物过敏反应。<sup>17-19</sup>

## 水解蛋白如何帮助控制食物过敏？

水解是将蛋白质分解成更小片段的过程。“超水解”蛋白被分解成非常小的片段。这一过程改变了蛋白质的大小和结构——这是决定蛋白质致敏性的关键因素。

一般情况下，对食物成分的不良免疫反应需要一种过敏原——通常是蛋白质，尤其是分子大到足以交联特定免疫细胞表面受体的蛋白质。水解蛋白的大小和结构已经改变，不会交联这些细胞表面的受体，因此不会触发免疫反应。<sup>7</sup>



水解蛋白还有一个额外的优势，即能提高蛋白质的消化率，从而减轻肠道炎症。<sup>20</sup>

## 参考资料

- Savage, J., & Johns, C.B. (2015). Food allergy: Epidemiology and natural history. *Immunology and Allergy Clinics of North America*, 35(1), 45-59.
- Benedé, S., Blázquez, A.B., Chiang, D., Tordesillas, L., & Berin, M.C. (2016). The rise of food allergy: Environmental factors and emerging treatments. *EBioMedicine*, 7, 27-34.
- Gaschen, F.P., & Merchant, S.R. (2011). Adverse food reactions in dogs and cats. *Veterinary Clinics of North America Small Animal Practice*, 41(2), 361-379.
- Mueller, R.S., & Olivry, T. (2018). Critically appraised topic on adverse food reactions of companion animals (6): Prevalence of noncutaneous manifestations of adverse food reactions in dogs and cats. *BMC Veterinary Research*, 14(1), 341.
- Mueller, R.S., & Unterer, S. (2018). Adverse food reactions: Pathogenesis, clinical signs, diagnosis and alternatives to elimination diets. *Veterinary Journal*, 236, 89-95.
- Olivry, T., & Mueller, R.S. (2017). Critically appraised topic on adverse food reactions of companion animals (5): prevalence of cutaneous adverse food reactions in dogs and cats. *BMC Veterinary Research*, 13(51), 017-0973-2.
- Cave, N.J. (2006). Hydrolyzed protein diets for dogs and cats. *Veterinary Clinics of North America Small Animal Practice*, 36, 1251-1268.
- Verlinden, A., Hesta, M., Millet, S., & Janssens, G.P.J. (2006). Food allergy in dogs and cats: A review. *Critical Reviews in Food Science and Nutrition*, 46, 259-273.
- Mueller, R.S., Olivry, T., & Prelaud, P. (2016). Critically appraised topic on adverse food reactions of companion animals (2): Common food allergen sources in dogs and cats. *BioMed Central Veterinary Research*, 12, 9.
- Roitel, O., Bonnard, L., Stella, A., Schiltz, O., Maurice, D., Douchin, G., ... Couturier, N. (2017). Detection of IgE-reactive proteins in hydrolyzed dog foods. *Veterinary Dermatology*, 28(6), 589-e143.
- Coyner, K., & Schick, A. (2016). Inaccuracies of a hair and saliva test for allergies in dogs. *Veterinary Dermatology*, 27, 68. (Abstract)
- Johansen, C., Mariani, C., & Mueller, R.S. (2017). Evaluation of canine adverse food reactions by patch testing with single proteins, single carbohydrates and commercial foods. *Veterinary Dermatology*, 28, 473-e109. (Abstract)
- Mueller, R.S., & Olivry, T. (2017). Critically appraised topic on adverse food reactions of companion animals (4): Can we diagnose adverse food reactions in dogs and cats with in vivo or in vitro tests? *BMC Veterinary Research*, 275.
- Udraite Vovka, L., Watson, A., Dodds, W.J., Klinger, C.J., Classen, J., & Mueller, R.S. (2017). Testing for food-specific antibodies in saliva and blood of atopic and normal dogs. *Veterinary Dermatology*, 28, 552.
- Guilford, W.G., Jones, B.R., Markwell, P.J., Arthur, D.G., Collett, M.G., & Harte, J.G. (2001). Food sensitivity in cats with chronic idiopathic gastrointestinal problems. *Journal of Veterinary Internal Medicine*, 15, 7-13.
- Kawarai, S., Ishihara, J., Masuda, K., Yasuda, N., Ohmori, K., Sakaguchi, M., Asami, Y., & Sujimoto, H. (2010). Clinical efficacy of a novel elimination diet composed of a mixture of amino acids and potatoes in dogs with non-seasonal pruritic dermatitis. *Journal of Veterinary Medical Science*, 72(11), 1413-1421.
- Jackson, H.A., Jackson, M.W., Coblenz, L., & Hammerberg, B. (2003). Evaluation of the clinical and allergen specific serum immunoglobulin E responses to oral challenge with cornstarch, corn, soy and a soy hydrolysate diet in dogs with spontaneous food allergy. *Veterinary Dermatology*, 14(4), 181-187.
- Ricci, R., Hammerberg, B., Paps, J., Contiero, B., & Jackson, H. (2010). A comparison of the clinical manifestations of feeding whole and hydrolyzed chicken to dogs with hypersensitivity to the native protein. *Veterinary Dermatology*, 21(4), 358-366.
- Puigdemont, A., Brazis, P., Serra, M., & Fondati, A. (2006). Immunologic responses against hydrolyzed soy protein in dogs with experimentally induced soy hypersensitivity. *American Journal of Veterinary Research*, 67, 484-488.
- Marks, S.L., Laflamme, D.P., & McAloose, D. (2002). Dietary trial using a commercially available hypoallergenic diet containing hydrolyzed protein for dogs with inflammatory bowel disease. *Veterinary Therapeutics*, 3(2), 109-118.