Peas and lentils are members of the legume family and have been a staple of the human diet for many centuries, but recently have gained renewed attention in the nutrition community due to their many healthful characteristics. Peas and lentils can be an excellent lower glycemic index substitute for many other non-grain and grain carbohydrate sources.1,2 Also of importance, peas and lentils can be a nutritious novel carbohydrate source for pets experiencing adverse food reactions (AFRs) including food sensitivities and food allergies. It is time to bring the healthful benefits of peas and lentils to our pets!2

Legumes, like peas and lentils, are well known for their higher protein content compared to most plants, but many do not know that they are also rich in vitamins, minerals, healthy fibers, and antioxidants.1 Peas and lentils are particularly good sources of fermentable fibers that can act as prebiotic fibers, meaning that they serve as an energy source for beneficial or “good” intestinal bacteria.3,4 The benefit of encouraging the growth of these “good” bacteria is that they produce short-chain fatty acids, which in turn help to maintain a healthy and well-functioning large intestine by serving as an energy source for large intestinal cells called colonocytes.5 Phytonutrients are “super-nutrients” exclusively found in plants that are often responsible for the color (pigment) of the plant, but that can enrich our pets’ diets with powerful antioxidant activity. Peas and lentils have both been shown to naturally contain high levels of phytonutrients with antioxidant activity.6-9

Another attribute of peas and lentils is that they have a lower glycemic index than many other non-grain and grain carbohydrate sources.10 The glycemic index of a food represents the rise in blood glucose (blood sugar) that occurs following ingestion. Food containing carbohydrates can be classified as having a low (0-55), moderate (56-69) or high (70-100) glycemic index. High glycemic index foods are simple carbohydrates (e.g. refined sugars, refined grains, and white potatoes) that are digested and absorbed quickly, resulting in a rapid rise in blood glucose after eating. This rapid rise in blood glucose is unfortunately usually followed by a rapid drop in blood glucose due to a complementary surge in the release of the hormone insulin into the bloodstream. These rapid ups and downs in blood glucose can lead to excessive hunger and weight gain.

A recent study in free-fed overweight cats looked at the effects of feeding a diet formulated with low glycemic index vs. high glycemic index carbohydrate sources. The cats fed the low glycemic index carbohydrate diet ate less and also gained less weight. In addition, the cats fed the high glycemic index diet had higher spikes in blood glucose and insulin levels after eating.11 Similarly, obese dogs fed a low-glycemic index diet with peas as opposed to rice as the carbohydrate source have been shown to have a healthier response to a post-prandial oral glucose tolerance test.12

• Diabetes mellitus is a very serious health condition, and since obesity is a primary risk factor for diabetes in both dogs and cats, use of nutrition to assist in weight management and to promote healthy blood glucose levels is very important. Eating low glycemic index foods, like lentils and peas, has been verified in humans to result in a healthier, more gradual rise in blood glucose after eating.12 In fact, both the American and Canadian Diabetes Associations recognize the importance of the glycemic index in meal planning for prevention and management of diabetes in humans.13,14 In 2010, The American Animal Hospital Association (AAHA) published comprehensive guidelines for management of diabetes in dogs and cats. In their guidelines, AAHA advocates dietary therapy, including attention to carbohydrate types and levels, as critical in the prevention and management of diabetes for dogs and cats.15

• New research has revealed that in addition to promoting more steady blood glucose levels, eating low glycemic index foods can also help to maintain energy levels. A study in humans showed that eating a meal rich in lentils prior to exercise helped to enhance endurance capacity and maintenance of blood glucose levels throughout the exercise period.16 Similarly, a study in dogs has demonstrated that there is a delayed rise in glucose and insulin levels when fed peas or lentils compared to rice or corn.17 A different study in human men not only showed that there was improved endurance capacity during running exercise after eating a low glycemic index meal as opposed to a high glycemic index meal, but also that there was a significantly higher rate of fat oxidation (use of fat for energy).18 This may have important implications for future study in the field of weight loss and body conditioning.

Besides all of these natural health benefits, peas and lentils can be an excellent and nutritious food ingredient for pets experiencing adverse food reactions (AFRs) like food sensitivities or food allergies. Peas and lentils are not currently recognized as a common cause of any type of AFRs in dogs or cats, and also have the advantage that they are often a novel (not previously fed) dietary item for dogs and cats.19

If you would like more information about the Innova Prime line of natural holistic health food diets and California Natural Grain Free line of natural limited ingredient diets from Natura Pet that contain peas and/or lentils as the primary carbohydrate sources, please speak with your veterinarian, your local independent retailer, and/or a Natura Pet Product Adviser at 1-800-532-7261 or custserv@naturapet.com. For detailed product information please visit our website at www.naturapet.com and for ingredient sourcing information at your fingertips visit us at www.seebeyondthebag.com.

References