

## Why Lentils?

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Lentils are a member of the legume family, and have been an important component of the human diet for many centuries. Lentils have gained recent attention for their many healthful characteristics, including being a low glycemic index food, nutrient and protein rich, and a natural source of phytochemicals and antioxidants.<sup>1-4</sup> Now, for the first time, Natura has introduced red and green lentils to our pet foods, helping to bring the healthful benefits of lentils to pets.

The glycemic index of a food represents the rise in blood glucose that occurs following ingestion of a meal. Simple carbohydrates such as glucose or white bread are high glycemic index foods and result in a rapid rise in blood glucose after eating. In contrast, low glycemic index foods such as legumes and lentils result in a steady absorption of glucose and help eliminate the peak that can occur after eating a meal.<sup>2</sup> Low glycemic index foods are known for helping to maintain a steady blood glucose level, but recent studies have revealed how these foods help to maintain energy levels as well. A study in humans showed that eating a meal rich in lentils prior to exercise helped to enhance endurance capacity and maintain blood glucose levels through the end of the exercise period.<sup>5</sup> Similar responses are seen in dogs when consuming lentils, with one study demonstrating that dogs have a delayed rise in glucose and insulin levels when fed lentils or peas compared to rice or corn.<sup>6</sup> Lentils have also been shown to have a lower glycemic index than many other grain-free carbohydrate sources (Table 1).<sup>7</sup>



Although lentils are well known for their high protein content, many may not realize that they are also rich in antioxidants and fermentable carbohydrates.<sup>8</sup> Lentils naturally contain high levels of phenolic compounds that help to enrich the diet with powerful antioxidants.<sup>3-4</sup> Finally, fermentable carbohydrates and fibers provided by lentils allow for production of short chain fatty acids.<sup>8</sup> These short chain fatty acids serve as an energy source for large intestinal cells, and help to maintain colonic health.

In addition to the natural healthful characteristics that they provide, lentils are also an ideal ingredient for pets with food intolerances. Pet parents that are searching for ingredients that are novel to their pet can now feed Natura's lentil and pea based diets while avoiding more common ingredients such as rice, barley and potatoes.

Table 1. Glycemic index of select grain free carbohydrate sources.

Item	Glycemic Index
Lentils	21 <sup>a</sup>
Peas	32 <sup>b</sup>
Chickpeas	36 <sup>c</sup>
Sweet Potato	48 <sup>d</sup>
Potatoes	69 <sup>e</sup>

<sup>a</sup> Data from <http://fmx01dhs.ucc.usyd.edu.au/Sugirs/browserecord.php?action=browse&recid=1707> accessed on 7-6-2011

<sup>b</sup> Data from <http://fmx01dhs.ucc.usyd.edu.au/Sugirs/browserecord.php?action=browse&recid=2643> accessed on 7-6-2011

<sup>c</sup> Data from <http://fmx01dhs.ucc.usyd.edu.au/Sugirs/browserecord.php?action=browse&recid=1687> accessed on 7-6-2011

<sup>d</sup> Data from <http://fmx01dhs.ucc.usyd.edu.au/Sugirs/browserecord.php?action=browse&recid=2814> accessed on 7-6-2011

<sup>e</sup> Data from <http://fmx01dhs.ucc.usyd.edu.au/Sugirs/browserecord.php?action=browse&recid=233> accessed on 7-6-2011

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