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Introduction of a Net Energy and SID Amino Acid Content Calculator
Developed by Ajinomoto Heartland, Inc. and University of Guelph

To aid nutritionists in their evolution from formulating with Metabolizable Energy (ME) to Net Energy (NE), Ajinomoto Heartland, Inc. and University of Guelph have collaborated to develop the **Swine Net Energy and SID Amino Acid Calculator.**

There are three main advantages of formulating with NE. First, the NE system enables nutritionists to more accurately assess the true energy value of feeds and feedstuffs than the DE or ME system does. This will reduce formulation costs in most scenarios. Secondly, the NE system, coupled with the ideal Amino Acid ratios, allows nutritionists to have a better prediction and control of both live performance and carcass quality while using a wide variety of feedstuffs. In addition, the NE system allows nutritionists to reduce the Crude Protein content of feeds while maintaining performance and carcass quality. This makes pig production more environmentally sustainable.

Twelve of the most common ingredients used in North America are featured in this current version of the **Calculator.** With this tool, one is able to calculate the contents of Net Energy, digestible amino acids, and digestible phosphorus based on wet chemistry analyses results. All equations are derived from the latest update of the Nutrient Requirements of Swine (NRC, 2012). The Net Energy equations use Digestible energy, crude protein, ether extract, acid digestible fiber, and starch content of the ingredients. As the chemical composition of the ingredients change, the **Calculator** can be used to update the nutrient loads in the ingredient database.

By the accurate and timely accounting for the Net Energy and SID amino acid content of feedstuffs, pig production can be more efficient, profitable, and sustainable. The **Calculator** is available for download at http://www.lysine.com/en/tech-info/Nec.aspx