

ตารางที่ 3 เอนไซม์ที่ใช้ในอุตสาหกรรมอาหารสัตว์

| Enzymes | Action | Substrate | Feed type | Benefits |
|-------------------------|--|-----------------------------------|-----------------------------|--|
| β -glucanases | β -glucan to oligosaccharides and glucose | Barley, Oats and rye based diets | Poultry and pigs diets | Reduction of sticky dropping and improved feed utilization |
| Cellulases | Cellulose to low molecular weight products and glucose | High fibre diets | Poor- grade forages | Improved energy availability |
| Xylanases | Arabinoxylans to molecular weight products and sugars | Wheat, rye and barley | Pigs and poultry diets | Improved quality and feed utilization |
| β -galactosidases | Degrade oligosaccharides and ANFs | Soybean and legumes | Pigs diets | Improved energy availability, reduced scours in piglets |
| Phytase | Increase availability of P from phytic acid | Plant feedstuffs | Pigs and poultry diets | Reduced need for inorganic phosphorus absorption |
| Proteases | Protein to peptides and amino acids | Wheat By-products, legumeproteins | Milk replacer using soybean | Higher protein digestibility, lower nitrogen excretion |
| Lipases | Fats to fatty acids | Animal and vegetable fats | Pet/broiler diets | Improved digestibility of fats and enhanced energy retention as a result |
| Amylases | Degrade cereal starch to dextrins and sugars | High starch cereal diets | Early pig/calf diets | Increase availability of cereal in weaner feeds |

ที่มา : Bedford (2001)