

PHYTASE: ANATOMY OF AN INVISIBLE WIN-WIN TECHNOLOGY

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ABSTRACT

Phytase is an enzyme that frees the phosphorous and other nutrients bound in phytate so they can be digested by non-ruminant animals. Phytase has the potential to decrease the cost of feed and decrease the phosphorous in feces, thus decreasing the potential for nutrient runoff. However, it is relative invisible; phytase easily blends in feed rations, requires no extra labor by the farmer since it is in the premixes, and has no visible effects on the animals. This study examines the factors that affect the farmer's knowledge and stated use of phytase using data from a spring 2006 of Missouri and Iowa poultry and livestock farmers. Responses to a number of questions in this survey reveal that knowledge of this win-win innovation is low. It also shows the importance of understanding the technology, industry, and locus of decision-making in adoption research; phytase was able to be adopted automatically and nearly completely by non-ruminant farmers who remained uninformed of this technology.