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Summary only

**EFFECT OF INCLUDING QUINDOXIN, A NEW
CHEMICAL GROWTH PROMOTER, IN PIG AND
POULTRY RATIONS**

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Quindoxin, or quinoxaline 1,4 dioxide, is a non-nutritive, synthetic chemical, and a dietary additive permitting improved growth rates and feed conversion ratios in young livestock. It suffers negligible loss from pelleting and remains stable under normal storage conditions for at least 9 months. It is exceptionally stable in mineral mixes and compatible with diets containing common medicinal feed additives.

The magnitude of response is similar to other antibacterial growth promoters in being greatest in young animals and compares favourably with broad-spectrum antibiotics and other growth promoters. Further evidence indicates an additive effect in pig diets medicated with copper sulphate or certain organic arsenicals.

In pigs there is an approximately linear response, both in daily liveweight gain and feed conversion, to increasing levels of inclusion. Satisfactory feed inclusion levels of 50 g/tonne to 54 kg liveweight and 20 g/tonne thereafter are determined by economic considerations; in poultry an effective and economical plateau obtains at the 20 g/tonne inclusion rate.

The inclusion of quindoxin in rations at the above rates has improved liveweight gain and feed conversion in pigs by 4.3 and 4.4%, respectively, while corresponding improvements for broilers were 1.5 and 4.3%, respectively. Similar advantages are indicated by preliminary field trials in New Zealand. Results for both species are summarized.

Quindoxin is metabolized and excreted extremely rapidly, does not influence fertility in pigs, has a very wide margin of safety, and requires no withdrawal period from rations before slaughter.