

Poultryhealth BYTES

Number: 181

Nutritional diseases XIV

Your own reference source on poultry health



AgroLogic

Agromed

Aveve Biochem

Ayurved

Aytav

Chore-Time

CID Lines

Coventry Chemicals

DACS

Easepharma

Henke-Sass Wolf

Hubbard

Hyline

Interheat

Innovad

Folic acid

Folic acid is a cofactor of the important enzyme system involved in transferring methyl groups and is required for normal nucleic acid metabolism and the formation of the nucleoproteins required in cell replication. Folic acid has more biological active forms than any other vitamin and so its quantification is not easy.

Clinical signs

Folic acid deficiency is characterised by poor growth and very poor feathering with brittle shafts. Folic acid is required for feather pigmentation. Deficient birds are anaemic, have a leukopaenia and a chondrodystrophy. Turkey poultts have a cervical paralysis that is quickly fatal.

Embryos from deficient hens die soon after pipping of the air cell and have a deformed mandible and bending of the tibiotarsus.

Treatment

Treatment is by replacement therapy.

Choline

Choline is important because it is a structural component of phospholipids, it is part of the neurotransmitter acetylcholine and as a methyl donor via betaine it is important in the synthesis of substances like methionine, creatine, carnitine and N-methylnicotinamide. Choline can be synthesised by the chicken, but at a rate which is inadequate for normal growth or egg production.

Clinical signs

Poor growth and chondrodystrophy are the most common lesions seen in choline deficiency in chicks and poults. The latter have a high choline requirement and accordingly show more severe chondrodystrophy in which bent metatarsi are seen.

Treatment

Treatment is by replacement therapy but is unlikely to have much effect in birds with chondrodystrophy once the tendon has slipped.

Impextraco

Novation

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Merial

Special Nutrients

LUBING

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Ziggity