

REPORT OF THE SCIENTIFIC COMMITTEE FOR ANIMAL NUTRITION ON THE USE
OF COPPER METHIONATE IN FEEDINGSTUFFS FOR PIGS

Opinion expressed 7 October 1981

TERMS OF REFERENCE (March 1980)

The Scientific Committee for Animal Nutrition is requested to give an opinion on the following questions :

1. What is the qualitative and quantitative composition of the residues in products of animal origin, arising from the use of copper methionate under the proposed conditions of use (see Background)?
2. What is the qualitative and quantitative composition of the excreted products, deriving from this additive, under the proposed conditions of use?
3. Could the use of this additive result in biological or ecological effects different from those of the copper compounds already authorized as additives in feedingstuffs?

BACKGROUND

Copper methionate was the subject of an application for admission to Annex I, Section i of Council Directive 70/524/EEC, of 23 November 1970, concerning additives in feedingstuffs⁽¹⁾, under the following conditions of use:

Species of animal : pigs

Maximum content in complete feedingstuffs : 125 mg copper (total Cu)/kg.

(1) OJ No L 270 of 14.12.1970, p. 1

OPINION OF THE COMMITTEE

1. Copper methionate is a stable complex (chelate) formed from one atom of copper and two molecules of methionine. It is practically insoluble in water and organic solvents. It is not possible to determine the amount of copper methionate in feedingstuffs, body tissues or excreta because the chelate is decomposed during analysis. Only the levels of copper and methionine can be determined.

Studies with copper methionate in the diet of pigs suggest that it will behave similarly to copper sulphate. Under the proposed conditions of use, the level of copper in pig liver did not differ appreciably from that arising from the use of copper compounds already authorized as feed additives.

2. According to the information available, the amount of excreted copper derived from feeding copper methionate is similar to that arising from feeding permitted copper compounds. The copper ingested with the feed is largely excreted in the faeces and only a small amount is retained in the body.
3. Taking into account the similar behaviour of copper methionate and other copper compounds already authorized in feedingstuffs, there is no reason to assume that the use of copper methionate as feed additive should result in biological or ecological effects notably different from those of the other copper compounds.

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