



COMMITTEE FOR VETERINARY MEDICINAL PRODUCTS

SULPHUR

SUMMARY REPORT (1)

1. Sulphur has been used for medicinal purposes in man and animals for many years.
2. The therapeutic properties of topical applications of sulphur are attributed to the production of sulphides and polythionic acids. Orally, in non-ruminant animals, sulphur has a local effect on gut membranes which results in a laxative action.
3. Sulphur is naturally present in many foods and is an essential nutrient in the diet of ruminants.
4. Following topical application little or no absorption into the systemic circulation occurs.
5. Following oral administration sulphur is absorbed either in the form of sulphur containing amino acids (ruminants) or as sulphides which are rapidly oxidised to sulphate. Absorbed sulphate enters the normal sulphate body-pool and is excreted via the kidneys.
6. Classical toxicological studies have not been reported. Toxic effects in animals probably do not occur at doses below 4 g/kg bodyweight. The few case reports of sulphur toxicity in the published literature relate to excessive doses, considerably higher than therapeutic levels.
7. The allocation of an ADI for sulphur is considered inappropriate.
8. The metabolism of sulphur is such that any residues following therapeutic treatment of food-producing animals would be indistinguishable from those naturally occurring in animal tissues.
9. No MRL is deemed necessary for residues of sulphur.