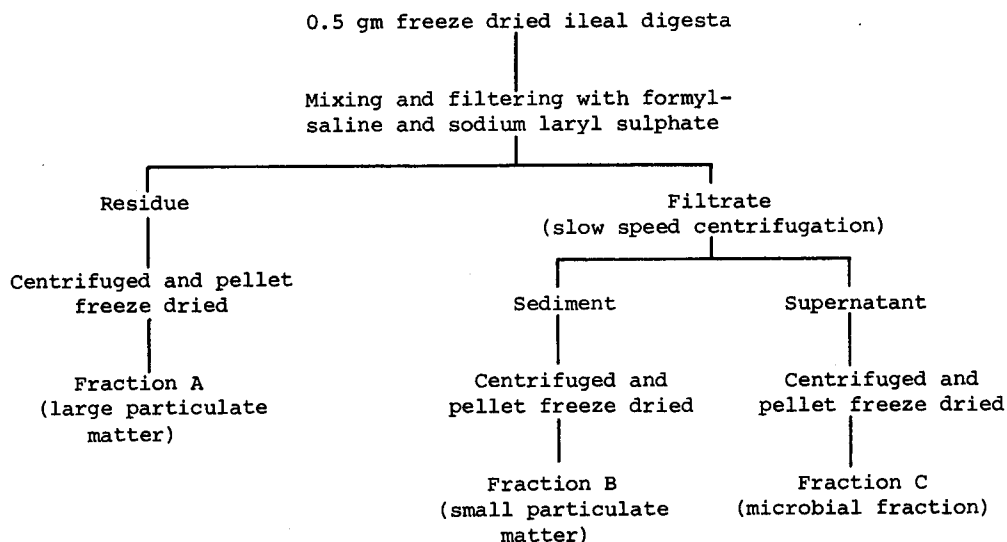


SEPARATION OF MICROBIAL MASS FROM ILEAL CONTENTS OF CHICKS

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The determination of ileal digestibility is a convenient way of estimating the amino acid availability of feedstuffs. Errors are introduced into these determinations by the presence in the gut of amino acids of endogenous and bacterial origin. A physical separation technique for human faeces (Stephen and Cummings, 1980) and poultry excreta (Parsons et al., 1982) were modified to separate the microbial fraction of ileal digesta. The fractionation scheme is outlined below.



Introduction of slow speed centrifugation (1 min at 50 g) reduced contamination of the microbial fraction with small particulate matter. Direct counts demonstrated that more than 95% of microbial cells were present in the microbial fraction. Using this technique the microbial mass of ileal contents of broilers was shown to be approximately 120 g/kg DM.

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