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Summary only

YELLOW FAT IN LAMBS

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Yellow fat in lambs may result from the presence of bile pigments in animals suffering from liver damage or from the deposition of natural plant pigments. This study investigated yellow fat resulting from plant pigments.

A survey has indicated that approximately 1 in 1000 New Zealand lamb carcasses may be rejected for export for excessively yellow fat. The freezing works from which the highest incidence was reported rejected 1 in 267 carcasses for this reason. A high incidence of 5 to 10% excessively yellow carcasses is occasionally reported from individual farms. Chemical analyses of omental fat samples have shown the presence of yellow xanthophyll pigments in all lambs investigated. A higher level of xanthophyll was found in perirenal fat than in omental fat.

A visual survey of 562 lambs of known parentage, backed up by tintometer readings and chemical measurements on a sample of the lambs, established that the progeny of 3 Romney rams had yellower fat than the progeny of 31 other sires of 5 different breeds, in all cases mated to Romney ewes. None of the carcasses in this trial was excessively yellow. Variation in the yellow colour of the fat was also found between lambs of different sires within breeds represented by larger numbers of sires. In general the lambs studied had very much whiter fat than is commonly recorded in cattle.