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**THE MORPHOLOGY AND MORPHOMETRICS
OF LYMPH NODES OF SHEEP AND LAMBS:**

A STUDY OF NORMAL SHEEP AND
THOSE WITH ARTHRITIS

A THESIS PRESENTED IN PARTIAL (20%)
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SUMMARY

Nineteen groups of lymph nodes from six Romney ewes and six female lambs aged seven years and six months respectively as well as 50 popliteal lymph nodes from further 25 lambs were examined.

The size, weight and shape of each node was measured and recorded. Weight was found to be the most objective indirect method of describing the size of a lymph node.

There was a wide range of normal weights, both between left and right lymph nodes from the same animal and between the same node from different animals. In retrospect, more animals should have been examined to determine the extent of these ranges.

The relative total weight of lymph nodes in relation to carcass weight was greater in lambs than in ewes, and the jejunal lymph nodes showed the greatest difference. The dry matter content of lymph nodes from lambs was greater than that from ewes.

Twenty-six stifle and hock joints, which had been classified as arthritic by meat inspectors, together with the associated ipsilateral and contralateral popliteal and medial iliac lymph nodes were examined.

Only 62% of condemned joints had signs of macroscopic pathological change. Only six popliteal nodes and one medial iliac node were enlarged. There was no correlation between enlargement of these nodes and signs of disease in these stifle or hock joints.

Evidence is presented to show that pathological enlargement of lymph nodes may often be indistinguishable, on visual examination, from normal lymph nodes at the upper limits of the normal range. These findings have relevance to a critical evaluation of traditional meat inspection procedures.

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