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**THE ULTRASTRUCTURE OF SOME GASTROINTESTINAL LESIONS IN
EXPERIMENTAL ANIMALS AND MAN**

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Knowledge of the ultrastructure of the gastrointestinal mucosa has advanced considerably over the last two decades due to contributions from both experimental electron microscopists and the diagnostic electron microscopists.

Altered morphology, whether in tissue architecture or cellular organization may offer a key to the better understanding of altered function. Consequently, a cell showing a distinctive fine structure must perform a particular function. An electron microscopist therefore, is able to explore this relationship between structure and function at the ultrastructural level. An ultrastructural investigation of cells could be performed by using either experimental tissue specimens or clinical biopsy specimens.

In the area of experimentation many different types of modifications of structure and function could be produced in the laboratory using experimental animals. Here the investigator has control over the choice of specimens and methods used. On the other hand, human disease is randomly designed and uncontrollable. Here, the investigator has much less influence over the specimens and methods. This poster presents the gastrointestinal mucosa as seen by contrasting themes of the controllable laboratory experiment and the uncontrollable experiment of disease. The experimental model under discussion is the structural response of the mouse small intestinal mucosa to irradiation. Human samples presented indicate ultrastructural features of some diagnosed disease conditions of the gastrointestinal mucosa including that of the oesophagus.