Quantitative Analysis of Histochemical Information from Intestinal Specimens

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Summary

Histochemical techniques are indispensable for many current bioscience studies. However, it is quite rare to find papers featuring quantitative analysis of such histological information although images allow location of particular molecules, for example by immunohistochemistry. If these images could be converted to sets of quantitative data, this would facilitate performance of statistical comparisons. Such "quantitative" histochemical analysis is also not currently in vogue with physiological studies in the field of food and food ingredients. Homogenization of tissue is usually required to get biochemical information, which results in neglect of the locations of molecules in cells or tissues. With quantitative information from histochemical observations, the significance of biochemical findings could be evaluated more efficiently. In this review, quantitative analysis of data from histochemical imaging of intestinal epithelia is discussed.