

Measurement of Gastrointestinal Motility with Strain Gauge Force Transducers

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Summary

The regulation of intestinal motor events is extremely complex so that effective measurement of intestinal motility in conscious individuals is necessary for detailed understanding of the motor events. However, measuring colonic motility under conscious conditions is difficult due to the technical limitation in the methodology and in accessibility of the colon by the usual approaches. To overcome the problems, strain gauge force transducers offer a potent alternative. This method permits direct measurement of the contraction of intestinal muscle with minimal interference so that intestinal motility can be evaluated quantitatively. The approach is also useful for evaluating the effects of functional foods, such as probiotics and prebiotics, on colonic motility.