

Alternative technology for artificial stimulation of the motility of the gastrointestinal tract

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In most of the situations the direct electrical stimulation via electrodes of the gastrointestinal tract is not acceptable. An alternative remote method was developed by implantation of high concentration of piezoelectric nanostructures into duodenum, playing the role of microbatteries. These nanostructures increase the amplitude and frequency of native electrical waves generated in Cajal cells, the fact demonstrated by our experiments on rabbits.

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