

ABSTRACT

Technological developments in the fields of electricity and health gave birth to electrogastrography. Electrogastrography is a non-invasive technique for recording the myoelectric activity in the stomach using electrodes placed on the skin of the stomach. The results of this final project confirm that there is gastric slow wave activity in the EGG after eating, this is evidenced by the increase in the amplitude value at the output signal spectrum which is also obtained by gastric slow wave abnormalities as seen from the value of Cycles per minute for each subject, then in this study also obtained the results of the correlation test of metabolism $R = 0.038436508$ and (BMI) $R = 0.237542284$. which confirms that there is little effect of metabolism and BMI on the increase in spectrum signal amplitude. Bandpass filters with filter order 5 and a sampling frequency of 50 Hz proved sufficient to obtain egg signals with amplitude in the range of 50-500 μ V. Then true activity in the stomach when after eating and drinking, this is evidenced by the difference in spectrum signals produced by the subject after eating and drinking. There was an increase in spectrum signals in all subjects which means the study this time got pretty good results.

Keywords: Electrogastrography, Results, Stomach, PC.