ABSTRACT

Diabetes according to the World Health Organization (WHO) is a major cause of global death. This disease can be prevented early, by routinely checking blood sugar levels in the hospital. but because many people are afraid of syringes, they ignore the examination a lot. Even though the examination is very important to avoid other effects of diabetes, therefore a device that functions like a glucometer is made, namely "Development of a Detection System for Blood Sugar Levels Using a Photodiode Based on Arduino Uno". The advantage of this tool is that the patient does not need to be injected / blood drawn first bright, then the photodioda will read the results of refraction of the light and immediately display it on the LCD accuracy of the system made worth 96.04%.

Keywords: Blood Sugar, Arduino Uno, Photodioda, Glucometer.