## Analysis & Implementation of MPASI Recommendation System Based on Nutritional Status Using K-NN Method (Case Study: Ngaglik I Health Center, Sleman Regency)

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## ABSTRACT

MPASI or complementary food for breast milk is a balanced nutritious food or drink that is given to children aged 6 months with certain doses to meet the child's nutritional needs. Inappropriate provision of MPASI can cause stunting, long-term health problems such as obesity, cardiovascular disease, diabetes, digestive disorders and others. The causes of inappropriate provision of MPASI are generally due to lack of knowledge and education for parents regarding MPASI information, provision of MPASI too early and differences in culture or tradition. This study will analyze and implement an MPASI recommendation system based on nutritional status using the K-NN (K-Nearest Neighbor) method which aims to make it easier for parents to provide balanced and appropriate nutritional intake needs based on the child's nutritional status. The design of this system uses the waterfall method. With data totaling 17 samples taken from 3 integrated health posts in 3 villages, namely Sardonoharjo, Sinduharjo and Minomartani. The K-Nearest Neighbor algorithm method is used to predict the MPASI menu based on its nutritional status data. The division of training data as much as 80% and test data as much as 20% using K = 3, produces an accuracy of 50%. It is concluded that this algorithm is good and successfully applied to the MPASI recommendation system based on nutritional status.

Keywords: MPASI, Nutritional Status, K-nn, Website