

**DETERMINATION OF NUTRITIONAL STATUS CLASSIFICATION
USING ADULT ANN LEARNING VECTOR QUANTIZATION (LVQ)
(CASE STUDY HEALTH KEBOMAS GRESIK)**

By

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ABSTRACT

During this, the Body Mass Index (BMI) is used as a measuring tool to assess the nutritional status of adults. Health Kebomas Gresik has a problem in terms of determining the nutritional status of adults which in determining the nutritional status of adults still use the poly nutritional formula which in its determination IMT uses only two indicators alone are weight and height possessed. To determine the nutritional status of adults is not enough if it only uses two indicators of weight and height alone because there are other attributes that should be included in the assessment. By using data mining techniques classification using Learning Vector quantization, prediction or classification can be done. There is a wide - range of methods to classify the data and each method has its advantages and disadvantages of each. Learning Vector Quantization have excess generating an error value is smaller than other artificial neural networks such as back propagation, other than that generated model methods Learning Vector quantization can be updated gradually. Based on the results of research and discussion conducted, LVQ algorithm can recognize patterns and were able to classify the nutritional status of adults to use traditional anthropometric data includes data age, weight, height, waist circumference and hip circumference with an accuracy value reached 86.67%.

Kata Kunci : *Data Mining, Classification, ANN Learning Vector Quantization.*

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