

## عنوان مقاله:

Shelf life prediction of paneer tikka by artificial neural networks

## محل انتشار:

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## خلاصه مقاله:

Artificial Neural Network (ANN) model has been proposed to predict the shelf life of paneer tikka using the sample data. The stored samples were evaluated at regular intervals for changes in physico-chemical characteristics, viz., moisture, titratable acidity, free fatty acid and tyrosine content, which were taken as input parameters; while overall acceptability scores (OAS) was output parameter. Experimentally determined 42 observations for each input and output parameters were considered for the modelling. The dataset was randomly divided into two disjoint subsets, viz., training set containing 38 observations, and test set comprising of 4 observations. Paneer tikka is an exotic kebab of Indian cottage cheese, which is highly rich in proteins, vitamins, minerals, fibre content and sulphur compounds. The ANN model with two hidden layers having twenty five neurons in first hidden layer and twenty five neurons in second hidden layer was found to be the best configuration to predict OAS with root mean square error as 0.094547317 and R2 as 0.964243219, confirming that the developed model is efficient for predicting the shelf life of paneer tikka stored at  $3\pm 1^{\circ}\text{C}$ .

## کلمات کلیدی:

Artificial neural network ، Artificial intelligence ، Paneer tikka ، Shelf life prediction ، Soft computing

## لینک ثابت مقاله در پایگاه سیویلیکا:

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