

## Study on the Quality score of Orange flavoured drink prepared from market and cultured chhena whey

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### ABSTRACT

The present study was planned to know the best quality score of drink prepared by market and cultured chhena whey using Orange flavour. It can be concluded that cultured chhena whey drink was highly acceptable.

**Key words**-market, cultured, Chhena whey, Quality score and Orange flavour,

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### I. Introduction

In India found that about 6.0 percent of milk utilized as chhena making (Sahu and Das 2009). Chhena whey is a fluid obtained during preparation of chhena. The world production of whey is estimated at about 200 million tones whereas in India is about 2.0 million tons per year (Deepak Kumar verma.et.al 2024).

**Objective of study**-Attempt was made to study the quality score of chhena whey drink prepared from market and cultured whey using orange flavour.

**Material and Methods**- 20 samples of chhena whey collected from local market. All the samples were prepared from citric acid coagulant (0.2%). The whey was examined for its quality as per A.O.A.C.(1970). After filtration of whey the acidity of each lot was adjusted up to 0.25% with the help of lactic acid or soda. Stabilizer (sodium alginate) was added @0.5%. Ageing of stabilizer for 30 minutes. Whey was pasteurized 85°C for 5 minutes and then cooled up to 37°C. 5% sugar was added to every drink. To make drink acceptable, Whey was flavoured by food grade orange flavour @ 0.25 ml per litre with orange colour @ 10 drop per litre as suggested by Gagrani and Rathi(1987) and Gupta (2020) with some modification. For getting cultured whey same fresh market chhena whey inoculated with 3% starter culture. Incubation at 37°C for 8 hours. After incubation same process was adopted for making drink. Samples were stored at 10°C for quality score evaluation by using score card technique (total quality score 100) as described by body felt (1981) and Gupta (2020) with modification. Data were analyzed statistically as per Panse and Sukhatme (1985).

**Result and Discussion**-The quality score of different type chhena whey drink are presented in Table No-01-

Table No-01-Showing the quality score of drink prepared from different type of whey drink

SN	Characters	Perfect score	Orange flavour Market chhena whey	Orange flavour Cultured chhena whey
1	Flavour	30	21.37	21.00
2	Colour	20	15.70	16.00
3	Viscosity	20	15.95	15.50
4	Acceptability	30	21.20	22.00
5	<b>Total quality score</b>	<b>100</b>	<b>74.22</b>	<b>74.50</b>

It is evident from Table no-1 the highest total sensory score was found in chhena whey drink prepared from cultured whey followed by market whey drink. The flavour score (score 30) was found highest in chhena whey drink prepared from market whey (21.37) and lowest in cultured whey soft drink (21.0). Same trends were found in Viscosity but acceptability (score 30) and colour (score 20) were highest in cultured chhena whey soft drink (22.00). The same type of work was carried out by D. Gupta et.al(2020) and Deepak et.al.(2024).

**Conclusion**- It can be concluded that whey drink prepared from cultured whey was highly acceptable in comparison to market whey.

### References

- [1]. **A.O.A.C(1970)**:Official methods of analysis. Association of official agri. chemists, Washington, D.C.
- [2]. **Body felt, F.W. (1981)**:Dairy product score card, Journal of Dairy science, vol64(11)2303-2308
- [3]. **Gupta,D.(2020)**: Study on organoleptic score of different fruit flavoured whey drink from chhena whey, Research journal of Animal husbandry and Dairy science,vol11(1),June ,6-8.
- [4]. **Gagrani,RL. and Rathi, S.D.(1987)**:Preparation of fruit flavoured beverages from whey, Journal of food science and Technology,vol24(2) 93-94.
- [5]. **Panse,V.G. and Sukhatme,P.V.(1985)**:Statistical methods for agricultural works ,Publication and information Div, I.C.A.R, New Delhi.
- [6]. **Sahu,J.K.and Das,H.(2009)**:A continuous heating and coagulation unit for continuous production of chhena ,Assam Univ. J. Sci.&Tech. Phys. Sci. &Tech., 4:40-45(Google scholar).
- [7]. **Verma, D.K.,Patel, A.R., S. Tripathi.,Singh,S., ,Gupta,A.K.(2024)**:Processing and formulation technology of nutritional and functional food products by utilizing cheese and/or paneer whey, Journal of king Saud university science, vol36,issue 11 Dec24,103508.