

Different Type of Oral Rehydration Solution (Ors) Developed from Germinated Cereals and Pulses Flour

Gulnaaz Shaikh

Chief Dietitian, Noor Hospital, India

Oral Rehydration Therapy (ORT) is the cheap, simple and effective way to treat dehydration but it lacks macro and micro nutrients.

Purpose of the study: Formulate and analyse the nutrients and microbial count in the modified flour oral rehydration solution (ORS).

Methodology

Five types of (ORS) developed using different ingredient of germinated cereals and pulse flours (power flour)

ORS-I Germinated Rice + Wheat+ bajra + Cowpea

ORS-II Germinated Rice + Wheat + Jowar + Peas

ORS-III Germinated Rice + Wheat + Ragi + Green gram

ORS-IV Germinated Rice + Wheat + Sorgum + Moth beans

ORS-V Un-germinated rice

50-100 g quantity of (ORS) is added about 1 litre of water mash thoroughly and boil, stirring to prevent lumps. Salt can be added in the right amount a level teaspoon and when the solution is cooled it can be given immediately. All (ORS) sample nutrients, physio chemical properties, and shelf life were assessed for the period of 120 days.

Findings

Moisture of the developed ORS I was 4.25 percent with the carbohydrate value of 72.14g and protein value of 16.49g with fat value of 3.08g and energy value of 374Kcals.

Moisture of the developed ORS II was 4.51 percent with the carbohydrate value of 73.58g and protein value of 15.88g with fat value of 2.44g and the energy value of 369.64kal.

Moisture of the developed ORS III was 3.74 percent with the carbohydrate value of 71.04g and protein value of 15.54 with fat value of 2.49g and energy value of 368.73Kcals.

Moisture of the develop ORS IV was 4.56 percent with the carbohydrate value of 71.58g and proteins value of 16.74g with fat value of 2.38g and energy value of 374.70Kcals.

High positive correlation is seen between the flavour of porridges and water absorption capacity of the developed ORS, at 0.05% level.

A strong positive correlation was not among the texture of the developed ORS at 0.05% level.

The mean scores of the appearance of all developed ORS were 6.866. Among the five variations, appearance of ORS III scored highest 6.133 followed by ORS I with the mean value is 6.000 and ORS IV and SORS with mean values 5.933 and 5.333 respectively. The least mean score 1.807 obtained from ORS II.

Article Information

Conferenc Proceedings: Global congress on Physiotherapy (Dubai)

Conferecne date: 22-24 April, 2019

Inovineconferences.com

***Corresponding author:** Gulnaaz Shaikh, Chief Dietitian, Noor Hospital, India; Email: [gulnaazakram\(at\)gmail.com](mailto:gulnaazakram(at)gmail.com)

Citation: Shaikh G (2019) Different Type of Oral Rehydration Solution (Ors) Developed from Germinated Cereals and Pulses Flour. J Health Sci Dev.

Copyright: © 2019 Shaikh G. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Conclusion & Significance

Significant different between the developed (ORS) prepared using different combinations for the criteria of the appearance.

Significant different at 0.05% level between ORS I, ORS II, ORS III, ORS IV, with standard ORS for the criteria of the colour.

The mean score of the flavour of all developed ORS was 6.506. Among the five variation SORS scored highest 6.866 followed by ORS III (6.666) and the least mean score was 6.066 obtained from ORS I.

No Significant different between the developed (ORS) prepared using different combinations for the criteria of the flavour.