

AN OBSERVATIONAL STUDY ON SWARASA - A POTENT THERAPEUTIC
FORMULATION WSRT MULAKA SWARASAParlakoti Akshaya Kumar*¹ and Shrinath M. Vaidya²¹Post Graduate Scholar, Department of Ayurveda Samhita and Siddhanta, Sri Dharmasthala Manjunatheshwara college of Ayurveda and Hospital, Hassan, Karnataka, India.²Professor, Department of Ayurveda Samhita and Siddhanta, Sri Dharmasthala Manjunatheshwara college of Ayurveda and Hospital, Hassan, Karnataka, India.***Corresponding Author: Dr. Parlakoti Akshaya Kumar**

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Article Received on 04/04/2022

Article Revised on 25/04/2022

Article Accepted on 15/05/2022

ABSTRACT

Introduction: The present day life style is majorly depending on preservative foods with or without our conscious that will damage our health slowly. Many people have tendency to store by adding preservative rather they need to be consumed freshly. The use of preservative may cause allergy, nausea, headache, weakness, heart disease, Cancer etc... Changes in the health is observed clinically after using preservative for long time, present study focuses on observation of pH of mulaka swarasa with OR without preservative on hourly and daily basis. This study gives an evident to the clinician for its use in a proper manner. **Methodology:** Mulaka is (Radish - Raphanus Sativus) is purchased from local market and then its juice is extracted and observed hourly and daily basis for change in pH. **Discussion and Results:** Decrease in the pH value in both preservative and no preservative added sample, on hourly and daily basis is observed it suggests increase of acidic nature in swarasa kept for longer time, which has its ill effect on body.

KEYWORDS: Preservative, No preservative, Mulaka swarasa, pH value.**INTRODUCTION**

Swarasa is the most potent form of therapeutic formulations among Panchavidha Kashaya Kalpana. Extraction of juice from parts of the plants has been in practice since many decades. Swarasa are ideally advised to use within their Swaveeryata Avadhi (Shelf life) Post their shelf life, the potency gradually decreases making them inept for therapeutic purpose. As the era keeps changing there are modifications in the way of usage of these formulations. Preservatives^[1] are added to freshly extracted Swarasa to keep them viable for a longer duration. Preservative added readily available concoctions are preferred as fresh preparation of Swarasa is laborious. Although the preservatives added in pharmaceutical products are of prescribed amount, the sustained use of these preservative might cause tissue damage leading to other health concerning side effects.

METHODOLOGY

Mulaka Swarasa was collected and initial pH value was noted then Preservative was added to it and its pH is observed on hourly and daily basis. Then the observations are tabulated and discussed to draw the conclusions.

REVIEW OF LITERATURE**Swarasa**

Swarasa, Kalka, Kwatha, Hima, Phantaare Pancha Vidha Kashaya Kalpana. Swarasa^[2] is the liquid obtained by crushing drugs and straining through a cloth. The method of extraction (Sagni, Niragni) of Swarasa differs depending on the form of drug. Ideally they are advised in a dosage; if extracted by Niragni method- 2 tola (24gms), if extracted by saagni method-4 tola (48gms).

Swarasa is heavy for digestion and good in potency. They are used as Aoushada, Anupana, Bhavana purpose, used in Shodhana and Maarana of Rasa Dravya and are used in many secondary preparations.

Preservative

Preservative are natural or synthetic substances that are added to fruits, vegetables, prepared food items, cosmetics and pharmaceuticals in order to increase their shelf life and maintain the quality and safety by inhibiting or arresting their fermentation, acidification, microbial contamination and decomposition.

The common preservative used for kashayas is sodium benzoate. Sodium benzoate is commonly used preservative in all the food products, the research work

published in 2007 for UK's Food Standard Agency (FSA) states that Ascorbic acid (Vitamin-C) when used with sodium benzoate forms benzene which is known to be carcinogenic. Sodium benzoate is a preservative as a food additive, Sodium benzoate has E-211 it is bacteriostatic and fungi static under acidic condition. Benzoates can induce allergies and even lead to brain damage.

Common side effects of preservatives are headache, sweating, redness of skin^[3], nausea, weakness, heart disease, breathing problem and cancer. Sustained and excessive consumption of artificial preservatives can weaken heart tissues which is dangerous especially for the aged people.

OBSERVATION AND RESULTS

1. The observations in the pH level of Mulaka Swarasa with and without preservatives for a week on daily basis is depicted in the table below.

Sl.no	Day	Parameters	Mulakaswarasa without preservative	Mulakaswarasa with preservative
1	Day 1	pH	5.97	5.95
2	Day 2	pH	-	5.2
3	Day 3	pH	-	4.88
4	Day 4	pH	-	4.63
5	Day 5	pH	-	4.38
6	Day 6	pH	-	4.00
7	Day 7	pH	-	3.6
8		Specific gravity	1.02	1.02%
9		Total Solid	5%	5%

2. Observation in pH Value of Mulaka Swarasa without and with preservative on hourly basis for 8 hours is depicted below

Sl.no	Day	Time	Parameters	Mulaka swarasa without preservative	Mulaka swarasa with preservative
1	1	9:00 AM	pH	4.93	5.03
2		10:00AM	pH	4.93	4.98
3		11:00AM	pH	4.94	4.98
4		12:00PM	pH	4.91	4.98
5		01:00PM	pH	4.90	4.99
6		03:00PM	pH	4.87	4.98
7		05:00PM	pH	4.88	3.92
8	2	9:00 AM	pH	4.4	4.80

Results of Standardization parameter.

Sl.No.	Parameter	Mulaka swarasa without preservative	Mulaka swarasa with preservative
1	Specific gravity	1.02	1.02
2	Total Solid	5%	5%

DISCUSSION

The analytical parameters, Specific gravity and Total solids in both the form were found to be same, while the pH in the preservative added Swarasa was found gradually decrease from Day 1 to Day 7.

Majority of the people have a habit of storing the prepared foods or fresh juices which is edible and the reason behind the storing is may be the economic condition or due to their life style or busy schedule or rates may be high to purchase in small case so that they purchase in large scale and prepare the little more as per they require.

The storing the freshly prepared foods or juices OR Using of preservatives to foods in daily life may cause serious illness to the body in long-term usage the present analytical study is an example how the stored food or Preservative added foods loses their real potency.

Present generation uses more items added with preservatives those all are not safe for healthy life style we need instant solution but after that it will be a cause for many disease.

Many times the fresh juice freeze and made into powder that type of products may made easily available item but they are also cause the disease. Chemicals which are not

supportive or suitable to our body may cause nausea, skin rashes etc.

CONCLUSION

Based on the pH value of the mulaka swarasa on hourly basis it is observed that it is gradually the pH decreasing in preservative added Sample.

Freshly prepared Mulaka swarasa have high pH value when used with in two hour, if kept for days by adding preservative then the observation itself suggests that the pH value gradually reduces day by day in the sample looked of for 7 days.

The decrees in pH values suggests acidic nature increases in the swarasa (juice), as the acidic content may cause Gastric irritation and various diseases.

REFERENCES

1. Seema Mandi Balanga Reddy Regulatory Perspectives of Preservatives in Ayurvedic Kwatha Formulations. *Journal of Ayurveda Medical Sciences* ISSN 2456-4990, Apr-Jun, 2018; 3(2): 344-346.
2. Bishak varadamallavirachitadipika, panditkashirama vaidya virachita-gudartadipika teeka, Sharangadhara samhita. *chaukamba orientalia, Varanasi madhyama khanda 1st chapter swarasa adhyaya.*
3. S.P. Anand and N. Sati. Artificial preservatives and their harmful effects: Looking toward nature for safer alternatives. *International Journal of Pharmaceutical sciences and research, IJPSR*, 2013; 4(7): 2496-2501.