

Nutri drinks as a super health food: Product development and sensory evaluation

Kiran Agrahari and Varsha

The objective of present investigation was to “development and sensory evaluation”. Various of nutri drinks like soup, shake, juice, shake etc have a sweet flavour, soft texture and are easy to digest. Nutri drinks are highest source of nutrients like manganese, potassium, carotene, various vitamins and water. They are also a very filling food. Nutri drinks are considered useful in defending against cancer diseases, diabetes, heart diseases. The developed products were given to the panel of 10 judges products were tested for flavour and taste, body and texture, colour and appearance and over all acceptability. The organoleptic evaluation of products was done by using score card methods (9-point hedonic scale). The result of nutri products *i.e.* broccali soup, pepper corn milk, (T₀) and (T₁) were best in all treatments in case of all sensory attributes. The over all acceptability (T₁) broccali soup, pepper cron milk, were 7.9 and 9.0, respectively.

Key Words : Nutri, Drink, Development, Acceptability, Super food

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INTRODUCTION

“The drinks, which have medicinal properties along with quenching thirst, are called health drinks or nutri drink.”

In the beginning there was water- abundant, refreshing, providing every think the body needs to replenish the fluids it loses. Humans relied on it as their only beverage for millions of years. Milk come next, with the advent of agriculture and the domestication of animals. The newcomers- Nutri drinks sports the like-offer hydration but with a hefty those of unnecessary calories and the body mayn have a hard time regulating (Popkin,

et al.,2006).

This category of nutri drink includes fruit juice, vegetable juice, whole milk, sports drinks, vitamin-enhanced waters, and alcoholic beverages. Each has its pluses and minuses. One-hundred-percent fruit juice has most of the nutrients of the fruit itself, but it usually delivers more energy. Vegetable juice is a lower calorie alternative to fruit juice, but may contain a lot of sodium. Whole milk is a good source of calcium and vitamin D, but has nearly twice the calories as skim milk. Citrus products such as orange juice and tangerine juice are familiar breakfast drinks, while grapefruit juice, pineapple, apple, grape, lime and lemon juice are also common. Coconut water is a highly nutritious and refreshing juice. Many kinds of berries are crushed; their juices are mixed with water and sometimes sweetened. Raspberry, blackberry and currants are popular juices drinks but the percentage of water also determines their nutritive value. Vegetable juices are usually served warm or cold.

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Different types of vegetables can be used to make vegetable juice such as carrots, tomatoes, cucumbers, celery and many more. Some vegetable juices are mixed with some fruit juice to make the vegetable juice taste better. Many popular vegetable juices, particularly ones with high tomato content, are high in sodium and, therefore, consumption of them for health must be carefully considered. Some vegetable juices provide the same health benefits as whole vegetables in terms of reducing risks of cardio-vascular disease and cancer.

Objectives:

- To standardize and develop the nutri drinks.
- Organoleptic evaluation of developed nutri drinks.

METHODOLOGY

The present investigation entitles “Nutri drink as a super health food product development and sensory evaluation” The study was conducted in Department of Food and Nutrition, Faculty of Home Science, KNIPSS Sultanpur.

Justified, judicious and scientific methodological consideration is indispensable for any investigation to deduce meaningful interferences the objective of the study. The study design reflects to the logical manner in which units of the study are assessed and analyzed for the purpose of drawing generalizations. Thus, with the view of available resources, the best procedures for taking correct observation should be first sorted out in a logical manner so that unbiased interference can be down. This chapter delineates information pertaining to the research design and methodological step used for investigation. The research procedure has been distinctly described as under in following heads:

- Procurement of material
- Development of nutri drinks
- Sensory evaluation
- Statistical analysis.

Procurement of material:

For the present investigation required material was purchased from the local market of Sultanpur city. The procuring was done in single. Avoid variation compositional difference so that the quality difference should be ruled out.

Processing of product:

This material was subjected to cleaning and washing

in the following manner.

Cleaning and washing:

The material was subjected to cleaning and washing with the tap water and them rinsed with water to remove dirt, dust and other adtering impurity.

Development of nutri drink product:

Ingredients	Amount	
	Control	Experiment
Broccoli stalk	–	1½cup (finely chopped)
Broccoli florest	–	1 cup
Garlic	2	2
Tamato	2	–
Salt	Accordin g to taste	According to taste
Cornflour	–	Dissolved in 1½ cup milk
Ground blanchpeppercorns	–	1 tsp
Almonds	–	1 tsp

Method:

Heated 2 cups of water in a deep kadhai and added the broccoli stalks and cooked on a medium flame for 4-5 min. Added the broccoli florest, onion, garlic and salt and mixed well and cooked for 5 min, while stirring occasionally. Removed from the flame, allowed it to cool a little. Once slightly cooled, blended with a hand blender till smooth. Transfer the prepared broccoli mixture into the same kadhai and added the cornflour milk mixture and mixed well cooked on a medium flame for 2 min while stirring continuously. Added the pepper powder and roasted almond slivers mix well and cook on a medium flame for another 1 min. Serve hot.

Ingredients	Amount	
	Control	Experiment
Peepercorn ground	–	1½ tsp
Milk	1glass	1 glass
Water	1¼cup	1¼ cup
Sugar	20 g	20 g

Method:

Mix all ingredients and heat to boiling points continue to cook on medium heat, stirring continuous. Until there

is 1 cup of liquid left.

OBSERVATIONS AND ASSESSMENT

The data were collected on different aspect per plan were tabulated and analyzed statistically. The result from the analysis presented and discussed chapter in flowing sequence.

Organoleptic evaluation of nutri drink based product:

- Flavour and texture
- Body and texture
- Colour and appearance
- Over all acceptability

Table 1 shows that the experimental (T₁) obtained maximum 8.3, 7.9, 8.0,7.8 for flavour and taste, body and texture, colour and appearance and over all acceptability ; while control (T₀) obtained 7.8 , 7.7, 7.9, 7.8 for flavour and taste, body and texture, colour and appearance and overall acceptability, respectively. This indicated that the experimental (T₁) soup was found to be fallen under category of “like very much to liked extremely.

Lawlor *et al.* (2009) reported that fruits and vegetables commonly used in juice processing are exposed to variety of potential spoilage micro-organisms during agriculture production, harvesting and transportation of fruit sorting and juice extraction facilities. Most micro-organisms that are initially observed on whole fruit surfaces are soil inhabitants water. Fruit and fruit juices are contaminated with yeast and moulds often from insect damage. Flavouring, water, processing machinery, filling lines and other chemicals are all potential sources of microbial contamination.

Table 2 shows that the experimental (T₁) obtained maximum 8.9, 8, 9,9 for flavour and taste, body and texture, colour and appearance and over all acceptability ; while control (T₀) obtained 7.7,8.8,8.7,7.9 for flavour and taste, body and texture, colour and appearance and overall acceptability, respectively. This indicated thart the experimental (T₁) milk was found to be fallen under category of “ like very much to liked extremely”.

Gil *et al.* (2000) concluded that pomegranate juice and encapsulated pomegranate extract become widely available. In a study conducted the anti oxidant activity

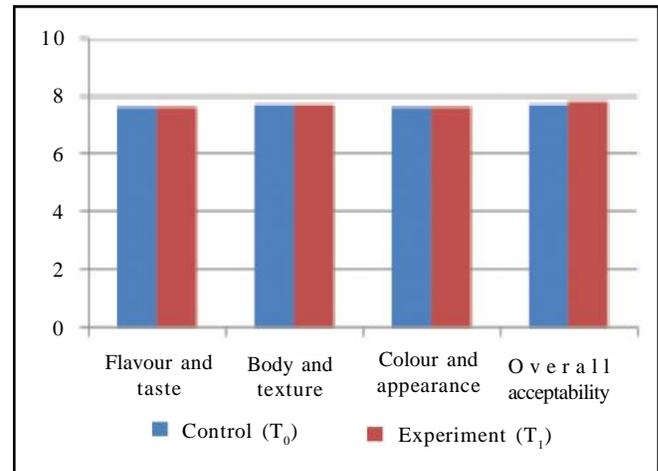
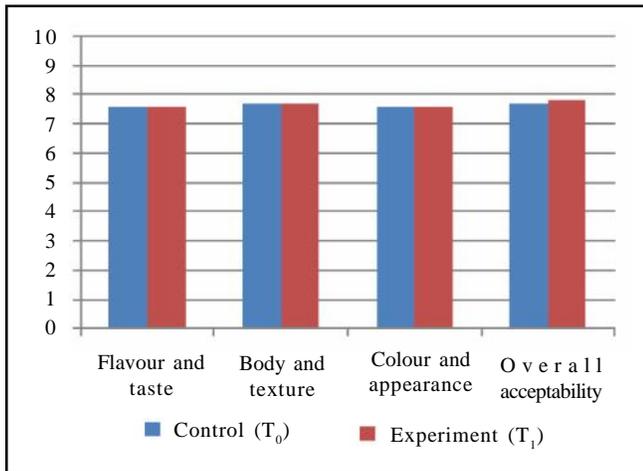


Table 1 : Organoleptic evaluation of broccoli soup

Product	Flavour and taste	Body and texture	Colour and appearance	Overall acceptability
T ₀	7.8	7.7	7.9	7.8
T ₁	8.3	7.9	8.0	7.8

Table 2 : Organoleptic evaluation of pepper cron milk

Product	Flavour and taste	Body and texture	Colour and appearance	Overall acceptability
T ₀ (Controlled)	7.7	8	8.7	7.9
T ₁ (Experimental)	8.9	8.6	9	7.9

of pomegranate juice in comparison to red wine and a green tea infusion, the anti oxidant activity of experimental pomegranate obtained in the laboratory from pomegranate ariels by a hand press washed twice those of red wine and green tea the activity was lower in a experimental juice prepared from frozen ariels, showing that during the freezing process, some antioxidant compounds are degraded or transformed. The anti oxidant activity of both commercial pomegranate juices was nearly three times that of wine and tea suggesting that the industrial process to obtain the juices either increased the content of pomegranate antioxidants or enhanced their activity.

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