

Soan Papdi

The Sweet that melts.... safe to eat safe to Gift....



The festival season has kick started with Ganesh Chaturthi and soon the markets will be chock-a-block with everything and anything to do with the coming festivals. Besides the usual ritualistic accessories associated with individual festivals, traditional sweets or 'mithais' are a must. Each festival has its a special sweets associated with it, but we found that 'Soan Papdi' is a perennial favorite with all consumer categories. It is also sold packaged and branded unlike most sweets, which are sold loose and by the kilos. Consumer VOICE tests Products which are packaged and sold under FSSAI.

A large variety of traditional Indian sweets are produced and consumed very regularly in most Indian households. Except a few like Rassogulla and Soan Papdi, most sweets are sold loose to give the consumers their choice of weight that they want to buy of any particular sweet.

Hence CONSUMER-VOICE decided to test the regular selling brands of Soan Papdi (variety made from Desi Ghee) since it is sold in sealed packages and is supposed to have all the mandatory nutritional as well as packaging information printed on the containers.

Soan Papdi is a popular South Asian (India, Bangladesh, Pakistan) sweet and is one of the most famous and traditional sweets of India. It can be round or square in shape and has a crisp and flaky texture. Soan Papdi is made with besan, wheat flour(maida), ghee and sugar. It is flavoured with cardamom and rose

water and garnished with toasted pistachios and almonds. Soan Papdi can be made at home with a relatively simple recipe. However in recent years most people prefer to buy it as an off the shelf sweet from sweet shops for household consumption. For bulk consumption (by our railways or various airlines) orders are placed with industrial manufacturers.

VOICE tested the following 7 most popular as well as regular selling brands of Soan Papdi. Name and the ranks based on performance of the brands of Soan Papdi that were tested are as follows:

Soan Papdi Brands and their Ranks

Bikano	1
Haldiram	2
Bangla	3
Kaleva	4
Nathu's	5
Nanaji	6
Ganguram & Sons	7

Key findings:

- Brand Bikano performed on top followed by Haldiram and Bangla.
- Brand Haldiram's was most acceptable in sensory tests followed by Bangla and Bikano. Brand Nanaji was least acceptable among all.
- All brands found safe to consume in terms of Trans fat, heavy metals and microbial.
- Sugar was found from 37.11 to 39.79 % hence to be consumed in limited quantity.
- Fat content was found between 21.67 to 27.86 %.
- Cholesterol was found between 17mg & 28mg. The lowest was in the brands Ganguram & Kaleva and highest in Nathu's & Haldiram's.



Packing

Except for brand Ganguram all the tested brands were packed in plastic containers sealed by shrinkage packaging. Brands Bikano, Kaleva and Nanaji had better packing amongst all. Brand Ganguram was packed in sealed polythene and paperboard box which was not adequate hence got lesser weightage.

Except Ganguram all the brands were marked with all the required information on their packaging, hence got full weightage. Ganguram did not mark any required information and therefore got lesser weightage.

Net Weight

As per the Legal Metrology (Packaged Commodities) Rules, 2011, there is

permissible error limit of 3% for the package of 300gm to 500gm pack.

Except brands Bangla and Ganguram, all the brands of Soan Papdi were found within the permissible limit of legal Metrology. Ganguram and Bangla brands were found underweight beyond the permissible limit, hence got lesser weightage in comparison to the other brands. Brand Nanaji was also found under weight but within the permissible limit.

Total Fat

Though the fat component of desi ghee does add richness of flavour and contributes towards a smoother texture of sweets, lower the fat content the better, so as not to adversely affect the health of

consumers. We found total fat in Soan Papdi in the range of 21gm to 28gm per 100gm.

Brand Nathu's failed to meet its claim for fat content, hence got the least weightage amongst all the brands tested. Brand Kaleva was found with the least fat content (21.67gm) followed by Haldiram's (23.99gm) and Bikano (25.68gm). However brand Nathu's (27.68gm) had a higher fat content followed by Nanaji & Bangla. The total fat, which was due to the presence of edible oil & desi ghee in the Soan Papdi, was found to be between 21.67 to 27.86%.

Cholesterol

Cholesterol is found to be present in Soan Papdi due to its inherent

Recipe for home made Soan Papdi

Ingredients

Gram flour – 1 ¼ cup

Plain flour (Maida) – 1 ¼ cup

Ghee – 250 gms

Sugar – 2 ½ cups

Water – 1 ½ cup

Milk – 2 tbsp

Cardamom seeds (crushed coarsely) – ½ tsp

Almonds, Pistachios, Pumpkin seeds, Cantaloupe Seeds and Water melon seeds (4 seed mix) – 2 tsp.

Preparation

- First sift both flours together and heat ghee in a heavy saucepan.
- Now add flour mixture and roast till light golden colour.
- Keep aside to cool.
- Simultaneously prepare syrup.
- We make syrup out of sugar, water and milk by bringing it to 2 ½ thread consistency.
- Pour at once into the flour mixture.
- Beat well with a large fork until the mixture forms threadlike flakes.
- Pour onto a greased surface and roll to 1" thickness lightly.
- Sprinkle the 4 seed mix and crushed cardamom seeds and gently press with palm.
- After cooling, cut into 1" squares.
- Soan papdi is ready, store in an airtight container.



Comparative Test

presence in desi ghee. It plays a central role in many biochemical processes but is best known for its association with cardiovascular diseases. Bad Cholesterol also increases the risk of nervous system problems, brain synapse connectivity, gall bladder stones and perhaps even cancer.

We found cholesterol level between the ranges of 17mg to 28 mg in different brands of Soan Papdi. Brand Nathu's was unable to meet its claim for cholesterol content and got lesser weightage. The lowest cholesterol content was found in brands Kaleva, Ganguram's & Bikano. The highest quantity of cholesterol was found in brands Nathu's & Haldiram's thus lowering their weightage.

Saturated Fatty Acids

Saturated fats directly raise total and LDL (bad) cholesterol levels. It is supposed to be less in Soan Papdi.

Saturated fat was found in the range of 15gm to 19gm in Soan Papdi. Brand Nathu's failed to meet its claim for saturated fat content. Brand Kaleva had the lowest fat content (15.35gm) followed by Haldiram's (16.99gm).

Trans Fat

All the seven brands of Soan Papdi were tested and found to be free of trans fats. Trans fat is not desirable for good health so it is good news for consumers.

Sugars

Besides giving its characteristic sweetness and palatability to Soan Papdi, it also acts as a preservative. Soan Papdi is considered a low sugar sweet.

Sugar was found in the range of 37gm to 40gm. Brand Gunguram had the lowest sugar content (37.11gm) followed by Nanaji (38.61gm) and

Nathu's (38.86gm), however Kaleva had the highest sugar content (39.79gm) amongst all.

Sodium

Sodium is a mineral commonly referred to as salt. Sodium is a naturally occurring mineral found in many different foods in the form of sodium chloride. Salt is used for seasoning as well as food preservation. Salt also inhibits the growth of bacteria in food articles. Sodium helps to control the amount of water in the body. If found in higher quantities it can have bad health effects.

Sodium content in Soan papdi was expected to be as low as possible. Brands Nanaji, Haldiram's and Bikano did not meet their claim for sodium content and were found to be beyond their claim hence got lesser weightage.

Total Carbohydrates

Most of the brands did not meet their claim for their stated carbohydrates content. Brand Kaleva was found with the highest carbohydrates content (70.54gm) followed by Haldiram's (67.98gm). Brand Nathu's was found with the lowest carbohydrates content (61gm) among the brands we tested followed by Nanaji (61.47gm) and Ganguram (62.94gm).

Protein

Brands Bangla, Haldiram's and Kaleva failed to meet their claim for protein content and were found to be below their claim value hence got less weightage. Brand Nanaji was found with a higher protein content (9.77gm) followed by Nathu's (7.33gm).

Energy Value

Brand Bangla was found to have the highest energy value count (529Kcal) followed by Nanaji and Nathu's.



Energy value of Kaleva and Bikano was close to their claimed value.

Heavy Metals

These metals should be as low as possible in Soan Papdi. All the brands were found free from any heavy metal content, hence got full weightage.

Microbiological Tests

Microbiological contamination is a very serious issue for food products. Microorganisms are responsible for many food borne diseases. We conducted this test for Total plate count, Yeast & mould count, E.coli and Coliform count.

All the brands of Soan Papdi were found safe to be consumed in microbiological testing.








Sensory Tests

This is a very important parameter where subjective Panel tests were conducted based on their critical examination and opinion. Since most consumers are very critical about the selection of products from retail stores, price also plays an important role to make a brand most/least acceptable. During this test, we determine the overall organoleptic (sensory) quality of the product in terms of consumption. We conducted the sensory tests for colour & appearance, Flavour, Taste, Sweetness, After taste feel & Overall acceptability. These tests were conducted in the lab involving panel members under the supervision of trained experts.

Brand Haldiram's was most acceptable in organoleptic properties followed by Bangla and Bikano. Brand Nanaji was least acceptable amongst all.



COMPARATIVE PERFORMANCE SCORE OF SOAN PAPDI

Brand Parameter	Wt. %	Bikano	Haldiram	Bangla	Kaleva	Nathu's	Nanaji	Ganguram's
Net weight, gms	2	500	500	500	500	500	400	500
MRP/Retail Price, Rs.		145/145	145/145	130/130	152/140	150/150	90/90	140
Physico-chemical Tests								
Total fat	7	5.75	6.12	5.51	6.63	3.94	5.49	5.01
Cholesterol	6	4.65	3.45	3.85	4.45	1.65	3.60	4.45
Saturated Fatty acids	5	2.95	3.60	2.70	3.43	2.13	3.19	2.70
Energy Value	4	3.65	3.81	3.33	4.0	3.44	3.56	3.26
Trans fat	3	3	3	3	3	3	3	3
Sugar	6	3.81	4.11	3.84	3.65	3.87	3.93	3.79
Sodium	4	1.99	1.0	2.16	2.0	2.27	1.08	1.94
Protein	6	3.68	2.56	2.45	2.12	4.71	5.88	3.28
Total carbohydrate	6	5.35	4.14	4.05	3.31	5.91	2.93	5.25
Heavy metals as lead & Arsenic	4	4	4	4	4	4	4	4
Microbiological tests: Total plate count, Yeast & mould, E.Coli, Coliform	10	9.30	9.04	9.26	9.22	9.03	9.41	9.0
Net weight	2	2.0	2.0	0.99	2.0	2.0	1.1	0.98
Sensory Tests *	30	26.22	28.26	26.28	20.1	20.46	14.7	15
Packing	3	2.94	2.85	2.64	2.94	2.70	2.94	1.0
Marking	4	4.0	4.0	4.0	4.0	4.0	4.0	1.0
Overall Score (Rounded off)	100	83.3	81.9	78.1	74.9	73.1	68.8	63.7
								

Rating: >90 – Excellent *****, 71-90- Very Good *****, 51-70- Good ***, 31-50- Average **, upto 30 – Poor *

* Sensory tests include Colour, Appearance, Flavour & Odour conducted with panel experts.