



Table Butter: Know the best brand to choose from

Often, we choose products on the basis of various claims and advertisements being dispersed. However, there are conscious consumers too who contest to such long talks and check products on their ingredients, making techniques besides price. For example, a product like butter, which is a good source of vitamin A and has a little bit of vitamin D as well. Of all of these attributes, which have the most say in determining the quality of the table butter? Since consuming much butter is not good for one's health, what with the saturated fats in it, one will be well advised to choose a brand that meets the basic quality requirements specified in the food standards, especially with regard to fat, curd (solids not fat), moisture and salt. The findings from our test results reveal, among other things, whether the brands have the minimum 80 per cent milk fat as specified by the food standards. Here, in this report, we've tested eight table butter brands in a NABL accredited lab and checked them on different parameters. Besides, we went to check some other factors through a series of tests such as adulteration, microbiological and sensory tests. Here's a report revealing the best table butter brand for you.

A Consumer Voice Report



Butter is the fatty product primarily in the form of an emulsion of the type water in-oil derived exclusively from milk or milk products, or both. Butter may be of following types: 1) Table Butter 2) White Butter

Coming to table butter, it is the product made from pasteurised cream obtained from milk and milk products, with or without ripening with the use of standard lactic culture, addition of common salt, annatto or carotene as permitted colouring matter, and diacetyl as flavouring agent.

Now, what is white butter? It is the product made from pasteurised cream obtained from milk and milk products thereof, without ripening and without addition of any preservative including common salt, any added colouring matter, or any added flavouring agent.

Nutritionally butter has minimum 80 per cent milk fat (mostly saturated), 12-16 per cent water,

2 per cent nonfat milk solids as curd (lactose, protein), and 2 per cent added salt. It is the most concentrated of dairy products, containing about 740 kilocalories per 100 grams (210 kilocalories per ounce). Butter is a good source of vitamin A and has a small amount of vitamin D.

How We Test

The brand samples of eight table butter brands have been tested following the FSSAI requirements and BIS standard IS: 13690 specifications for pasteurised butter. Consumer VOICE tested the eight regular selling brands on a range of quality, safety and acceptability parameters. These included milk fat, milk solids not fat, curd, moisture, acidity and common salt. The brands have been further tested to qualify adulteration, microbiological and sensory tests. We followed the standard test methods at a NABL-accredited laboratory.

Comparative Product Testing



The table below shows which brand secures what rank as per their performance scores.

Rank	Score out of 100	Brand Name	MRP in Rs.	Net Weight, gm	Price of per 100 gm, Rs.	Best Before, Months	Manufacturer/marketer's Name
1	93	Verka	235	500	47	8	The Punjab State Co-Operative Milk Producers Federation Ltd.,
2	92	Patanjali	225	500	45	12	Patanjali Ayurved Limited
2	92	President	54	100	54	6	Tirumala Milk Products Pvt Ltd.
3	91	Gowardhan	250	500	50	12	Parag Milk Foods Pvt. Ltd.,
4	90	Britannia	57	100	57	12	Britannia Dairy Pvt Ltd
4	90	Nova	48	100	48	12	Sterling Agro Industries Ltd
4	90	Amul	48	100	48	12	Gujarat Cooperative Milk Marketing Federation Ltd, Anand
5	89	Mother Dairy	48	100	48	12	Mother Dairy Fruits & Vegetable Pvt. Ltd,

Note: Brands Gowardhan, Patanjali were made from Cow milk.

CV Recommendations

Top Performer
verka
Value for Money
Patanjali



Key findings

- In overall performance, brand Verka performed on top followed by Patanjali and President.
- Our Value for Money brand is Patanjali.
- Highest fat has been found in President followed by Verka and Patanjali.
- Moisture has been found lowest in Verka and highest in Nova.
- In sensory tests, Amul has performed on top followed by Mother Dairy and Britannia.
- Salt has been found lowest in President and highest in Amul.
- All the brands have passed in microbiological tests thus these are safe for consumption.
- All the brands have met all the Food Safety & Standard Regulations requirements.

Comparative Performance Score of Table Butter

Parameter	Brand	Wt. %	Verka	Patanjali	President	Gowardhan	Britannia	Nova	Amul	Mother Dairy
Marking/labelling		3	3	3	3	3	3	3	3	3
Moisture		5	4.20	3.85	3.60	3.45	3.70	3.25	3.73	3.65
Milk Fat		30	28.5	26.1	28.8	24.6	25.2	24.9	24.3	24.3
Acidity (as lactic acid)		5	4.50	4.75	4.50	4.75	4.75	4.75	4.50	4.75
Curd/SNF		8	5.44	7.36	4.80	8.00	6.08	6.72	6.72	5.44
Common Salt as NaCl		3	2.16	2.10	3.00	2.28	1.92	2.46	1.86	2.10
Reicher Meissl value of extracted fat		6	6	6	6	6	6	6	6	6
Butyro-Refractometer reading of extracted fat		6	6	6	6	6	6	6	6	6
Net Weight		2	2	2	2	2	2	2	2	2
Microbiological tests*		12	12	12	12	12	12	12	12	12
Sensory Panel Tests#		20	19.29	18.76	18.07	19.06	19.39	18.80	19.71	19.50

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

*Microbiological tests include Aerobic Plate Count, Yeast & Mould Count, Coliform Count, Escherichia Coli, Staphylococcus Aureus, Salmonella, Listeria monocytogenes

#Sensory Panel Tests includes Colour & Appearance, Flavour, Body & Texture, Package



Test Results

Milk Fat

It is a major constituent of the butter where the requirement of fat is 80 per cent minimum for table butter. Fat is an essential part of any balanced diet, providing essential fatty acids, fat-soluble vitamins and a concentrated source of energy. It is a major constituent of butter.

Fat was found above minimum specified limit of 80 per cent in all the brands thus fulfilled the minimum laid down standard requirement. Milk fat has been found highest in brand President followed by Verka and Patanjali.

Sensory Panel Tests

The quality and acceptance of butter have been checked on the basis of its sensory characteristics which are important to consumers. The samples have been judged by an expert panel on these attributes: a) colour & appearance, b) flavour, c) body and texture, and d) packaging. The test guidelines have been followed as prescribed in Indian Standard IS: 7769-1975. In sensory tests, Amul performed on top followed by Mother

Dairy and Britannia. The brand President has been preferred low.

Microbiological Tests

Microbiological contamination is a serious issue for milk and milk products. Microorganisms are responsible for many food-borne diseases. We conducted tests as per FSS Regulations, for yeast and mould count, aerobic plate count, coliform count, *E. coli*, *S. aureus*, *Salmonella* and *Listeria monocytogenes*. All the brands passed in these tests thus, they are safe for consumption.

Curd

Curd shall be 1.0 per cent maximum as per the Indian standard and 1.5 as per Agmark. All the brands were found within the specified limit. It was highest in President and lowest in Gowardhan.

Reicher Meissl value of extracted fat

Reichert Meissl (RM) value determines adulteration. FSSAI regulation has separate requirement for cotton tract and non-cotton tract areas. All the brands have complied with the FSS Regulation requirement thus these are not adulterated.



Butyro-Refractometer reading at 40°C of extracted fat

BR reading can be used to check adulteration, if any, of milk fat. An increase in BR reading indicates adulteration with vegetable oil.

If BR reading diverges from the prescribed limit for variability, presence of foreign fat may be suspected. All the brands have been found within the specified range of FSS Regulation limit, thus they have met the requirement and are not adulterated.

Physico-chemical Tests

Moisture

Moisture content assesses the presence of water in the product. Maximum permissible limit of moisture is 16 per cent maximum in table butter. The presence of moisture is inherent in butter processing and to some extent is good for maintaining the taste and odour. But an excess of moisture compromises the quality of the butter. All the brands have been found well within the specified standard limit. Moisture was lowest in Verka and highest in Nova.

Acidity as lactic acid

Acidity is due to lactic acid produced by the action

of bacteria. Acidity increases with storage time; this parameter is a means of checking storage conditions. It should be 0.15 maximum as per the Indian standard. All brands have been found within the specified limit.

Milk Solid Not Fat(curd)

SNF stands for solid not fat. SNF in table butter shall be a maximum two per cent by mass as per FSS Regulations. SNF has been found within the permissible limit of 2.0 per cent maximum in all the brands.

Common Salt as NaCl

Salt is added in butter as a preservative and also as a taste enhancer. Salt must be homogeneously mixed during the processing of butter to give it a uniform taste. It shall be 3 per cent maximum as per the FSS regulation. All the brands have been added with salt. Patanjali butter used Sendha Namak (rock salt). We found the lowest quantity of salt in brand President and highest in Amul.

Packaging

Packing should be proper and of permitted food grade materials because it protects the product from deterioration and increases its shelf life. Each pack should also carry information about



the characteristics of the product and/or the claims of the manufacturer. The samples were verified against the requirements as given in the relevant Indian Standards. All the brands were wrapped in printed butter paper and packed in hard paper box.

Marking

The product shall be marked as per national standard requirement. This gives information about the characteristics of the product and/or claim of the manufacturer, which help consumers on selection of the product. Marking on product label were verified against the marking requirements. All the brands have required information on label.

Net Weight (in grams)

Net weight shall be not less than the limit prescribed in legal metrology. All the brands have been found above the claimed value.

Conclusion

Table butter is one of the highly concentrated forms of fluid milk and fat is major part of it. We

found that all of the brands being tested fulfilled the minimum requirements of national standard. Table butter shall have minimum 80 per cent fat and maximum 16 per cent moisture. All brands tested have been found well within the standard limits thus complied. Moisture is important parameters which affect the quality of butter. SNF should not more than 2.0 per cent. All brands have been found complying with national standard. On the basis of overall performance, brand Verka has been found on top position followed by Patanjali and President.

Butter and margarine look similar and are used for the same purpose. While butter has a high level of saturated fat, margarine is rich in unsaturated fat. If you would like to eat margarine, ensure that it is trans-fat-free. Whatever you choose, butter or margarine eat in moderation. Healthiest choice is use liquid oils, such as olive, canola and safflower oil. Table butter contains high fat and cholesterol thus should be consumed in limited quantity by elderly persons.