Comparative Product Testing

Table Butter: Which Brand Should You Choose?

We select products based on multiple claims and ads. However, there are conscientious consumers who oppose such lengthy discussions and scrutinise items based on their ingredients, nutritional information, and pricing. Which of these characteristics has the largest influence on the quality of table butter? Because ingesting a lot of butter is bad for one's health due to the saturated fats in it, it's best to choose a brand that satisfies the fundamental quality requirements stipulated in food standards, particularly in terms of fat, solids not fat, moisture, and salt.

Our test results reveal, among other things, whether the brands have the required 80 percent milk fat specified by food standards. We tested ten table butter brands in a NABL-accredited lab on several metrics. We also went to evaluate several additional elements, 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 a fatty product obtained only from cow and/or buffalo milk or its derivatives, primarily in the form of a water-in-oil emulsion. Butter may be of two types: 1) Table Butter 2) White Butter or Cooking Butter

Table butter is obtained from pasteurised milk and/ or other milk products which have undergone adequate heat treatment to ensure microbial safety. It should be free from animal, body fat, vegetable oil and fat, mineral oil and added flavour. It should have pleasant taste and flavour free from off flavour and rancidity. It may contain food additives permitted in Regulations.

White Butter / Cooking Butter

White butter means the product made from pasteurized milk and/ or other milk products without ripening and without the addition of any preservative including common salt, any added colouring matter or any added flavouring agent.

How we Tested

The brands/samples under this comparative study were tested as per requirements of Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011 and other relevant national standards for Pasteurized Table Butter. The testing was conducted following standard test methods.

Brands Tested

Consumer VOICE tested the ten brands of Table Butter 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 adulteration, microbiological and sensory tests. The details of brands tested are given below:

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Rank	Score out of 100	Brand Name	MRP in Rs.	Net Weight, gm	Best Before, Months	Marketer / Manufacturer
1	94	Namaste India	54	100	12	NIF Private Ltd
2	88	Vita*	56	100	12	Haryana Dairy Development Co-Operative Federation Ltd
3	87	Patanjali#	52	100	12	Patanjali Ayurved Limited
3	87	Gowardhan#	340	500	12	Parag Milk Foods Pvt. Ltd.,
4	86	Paras	54	100	12	VRS Food Ltd
4	86	Amul	56	100	12	Gujarat Cooperative Milk Marketing Federation Ltd
5	85	Mother dairy	54	100	12	Mother Dairy Fruits & Vegetable Ltd
5	85	President	69	100	8	Tirumala Milk Products Pvt Ltd.
5	85	Verka	54	100	8	The Punjab State Cooperative Milk Producers' Federation Ltd
6	84	Nova	58	100	12	Sterling Agro Industries Ltd

* Agmark, #Made from Cow Milk

Rating: ≥ 90 – Very good *****, 71-90- Good ****, 51-70 Average ***, 31-50- Poor **, up to 30 – Very Poor *

CV recommendations

Top Performer Namaste India

Value for Money Patanjali

Key findings

• In overall performance, brand Namaste India performed on top and was ranked no 1 followed by Vita and Patanjali/ Gowardhan.

- Value for money brand is Patanjali.
- Highest Milk fat was found in Namaste India followed by Vita.
- Salt was lowest in Gowardhan and highest in Amul.
- All the brands meet all the requirements of Food Safety & Standard Regulations.
- All the brands passed in microbiological tests, thus are safe for consumption.
- In sensory tests, Amul performed on top followed by Gowardhan and Mother Dairy.

Comparative Performance	nce Score									
Brand → Parameter ↓	Weight- age %	Namaste India	Vita	Patanjali	Goward- han	Paras	Amul	Mother Dairy	President	Verka
Price (Rs.)		54	56	52	340	54	56	54	69	54
Net Quantity, gm		100	100	100	500	100	100	100	100	100
Milk Fat	28	28.00	22.96	21.84	17.36	21.84	21.28	21.84	21.84	18.48
Sensory tests	20	18.93	19.35	19.27	19.66	18.59	19.74	19.55	18.97	18.96
Microbiological tests	10	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Milk Solid Not Fat	8	6.08	5.44	5.44	8.00	4.80	4.80	4.80	4.80	5.44
Moisture	9	4.74	5.10	5.64	5.46	5.64	4.20	4.29	3.84	6.00
Reicher Meissl Value of extracted fat	9	5.69	4.65	4.74	4.65	5.01	5.28	3.93	4.47	4.38
Butyro-Refractometer reading of extracted fat	9	5.40	5.52	5.64	6.00	5.04	5.64	6.00	5.88	6.00
Common Salt as NaCI	4	3.20	3.52	2.96	4.00	3.44	2.72	3.04	3.76	3.52
Lead as Pb	4	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Acidity as lactic acid	3	2.91	2.91	2.91	3.00	3.00	3.00	3.00	2.28	2.91

20.16

100

58

19.48

10.0

4.80

4.02

5.96

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4.0

2.82

3.0

3.0

3.0

3.0

3.0

3.0

3.0

3.0

3.0

3.0

3

2.0

2.0

2.0

2.0

2.0

2.0

2.0

2.0

2.0

2.0

2

Net Weight

Markings

84

85

85

85

86

86

87

87

88

94

100

Overall Score (Rounded

3.36

4.80

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Test Parameters and Results

Milk Fat

Milk fat is a major constituent of table butter where the requirement of milk fat is 80 percent by mass minimum. Fat is an essential part of any balanced diet, providing essential fatty acids, fat-soluble vitamins and a concentrated source of energy.

Fat was found above minimum specified limit of 80 percent in all the brands, thus fulfilling the minimum laid down

standard requirement. Milk fat has been found highest in brand Namaste India and thus scored full marks, followed by Vita.

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: colour & appearance, flavour, body and texture and packaging. The test guidelines have been followed as prescribed in Indian Standard IS: 7769-1975.

In sensory tests, Amul performed on top followed by Gowardhan and Mother dairy.

Microbiological tests

Microbiological contamination is a serious issue for milk and milk products. Microorganisms are responsible for many food-borne diseases. We conducted tests for *Salmonella, Listeria monocytogenes,* Bacillus Cereus, Sulphite Reducing Clostridia.

All the brands passed in these tests, thus are safe for consumption.



Milk Solid Not Fat

Milk solid not fat (curd) in table butter should be a maximum two per cent by mass as per FSS Regulations. Milk solid not fat was found within the permissible limit in all the brands. It was lowest in Gowardhan followed by Namaste India.

Moisture

Moisture content assesses the presence of water in the product. 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. Maximum permissible limit of moisture is 16% by mass maximum in table butter.

All the brands were within specified limit of standard. Moisture was lowest in Verka followed by Patanjali /Paras.

• Common Salt as NaCI

Salt is added in butter as a preservative and also as a taste enhancer. Salt must be homogenously mixed during the processing of butter to give it a uniform taste. It should be 3 % maximum as per FSS regulation.



All the brands were within the specified limit. Brand Gowardhan had lowest quantity of salt and it was highest in Amul.

• Reicher Meissl value of extracted fat

Reichert Meissl (RM) value determines adulteration. RM value indicates whether the butter is prepared from milk fat or not. The extracted fat from butter should meet the standards for Reichert Meissl value as prescribed for ghee.

All the brands met the requirement of national standard. Brands Nova and Namaste India scored highest in this parameter.

• Butyro-Refractometer reading at 40°C of extracted fat

BR reading is used to check adulteration of cheaper fat. If BR reading diverges from the prescribed limit for variability, presence of foreign fat may be suspected. An increase in BR reading indicates adulteration with vegetable oil. The extracted fat from butter should meet the standards for Butyrorefractometer reading as prescribed for ghee. All the brands have been found within the specified range of FSS Regulation limit, thus they have met the requirement. Brands Gowardhan, Mother Dairy and Verka scored highest in this parameter.

• 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 national standard.

All brands were found within the specified limit.

• Lead as Pb

Table butter brands were tested for presence of lead. Heavy metals can cause acute and chronic diseases and endanger human health.

Lead was found below the detection limit in all brands.

• Net Weight

Net weight should be not less than the limit

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prescribed in legal metrology. All the brands have been found above the claimed value.

Packaging

Packing should be proper and of permitted food grade materials because it protects the product from deterioration and increases its shelf life. It should be as per Food Safety and Standards (Packaging and Labelling) Regulations, 2011.

All the brands were wrapped in printed butter paper & packed in a hard paper box.

• Marking

The product shall be marked as per requirements of Food Safety and Standards (Packaging and Labelling) Regulations, 2011. Marking gives information about the product and it claims, which help consumers on selection of the product.

\succ	Name of the material
≻	Name and address of the manufacturer
	Batch & Pkg date

- Net Quantity, gm
- Ingredients List
- Nutritional Information
- ➢ Expiry/Use by
- Storage Condition
- Vegetarian Logo (Green dot)
- ➤ MRP, Rs.
- > Customer care details

All the brands were marked with the required information on their label.

Conclusion

Ten brands of table butter were tested and evaluated in accordance with national standards (FSSAI standards). Our test results reveal, among other things, tested brands had the requisite 80 percent milk fat as required by standard. We



discovered that all of the brands evaluated met the basic requirements of national standard. All brands examined were found well within the standard limits, indicating compliance.

On the basis of overall performance, brand Namaste India scored highest and was ranked no 1 followed by Vita and Patanjali/ Gowardhan. Patanjali was value for money priced at Rs.52 for 100gm.Vita had Agmark standard.

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 to use liquid oils, such as olive, canola and safflower oil.