(1993) 08 GUJ CK 0036

In the Gujarat High Court

State of Gujarat — APPELLANT

Vs

Navalchand Thakarshi and Others — RESPONDENT

Date of Decision : 12-08-1993

Acts Referred:
Prevention of Food Adulteration Act, 1954 — Section 16(1)(a)(i), 7

Citation : (1994) 2 GLR 998

Hon'ble Judges : B.C. Patel, J

Bench : Single Bench

Judgement

B.C. Patel, J.—[His Lordship after stating the facts of the case, further observed:]

3. So far as the case against accused No. 1 is concerned, it goes without saying that it was a firm and accused No. 2 was in-charge of the firm. There is sufficient evidence that the firm can be convicted. The Magistrate has not relied on the certificate as he was impressed by the evidence of Public Analyst who was examined by the accused. It is clear that sample was examined for the purpose of Baudouin''s test. What was the percentage of sesame oil has not been determined but from the sample of 5 cc of Ghee, the test was carried out which has indicated the presence of sesame oil by Baudouin''s test. What the Act requires is that Baudouin''s test should be carried out and the result must be in negative meaning thereby there should be no presence of sesame oil and if the Baudouin''s test indicates positive then the sample is not according to the standard. Under the Act, it is not necessary for the expert to find out the percentage of sesame oil. Mr. Yagnik, learned Advocate, drew my attention to a book "Food Analysis" written by Woodman, Associate Professor of Analytical Chemistry, Emeritus, Massachusetts Institute of Technology, 4th Edition, at page 210. The Author has observed as under:

The reaction is attributed to one of the constituents of unsaponifiable part of the oil, a phenolic substance to which the came "sesamol" has been given. Other substances, such as vanillin and oil of cloves, will give a similar reaction; hence caution should be used in applying the test to oil extracted from confections or

food products of mixed composition. Also it has been noted, as in the case of the Halphen reaction for cottonseed oil, that lard oil or butter prepared from animals fed on sesame cake will give a positive, though faint, test for sesame oil.

This is under the heading of Baudouin''s test and from this passage it is contended by Mr. Yagnik learned Advocate that ghee prepared from milk of animals and if such animals are fed on sesame cake, ghee on analysis will give a positive, though faint, test for sesame oil. As per the author there would be a positive, though faint, test for sesame oil. No doubt, it would not be in the case of ghee but would be in the case of butter prepared from animals fed of sesame cake. It is required to be noted that ghee is a foreign substance to western countries and ghee is mainly used in tropical countries. Under the provisions of the Act Baudouin''s test should be negative. Looking to the article of food and for its purity it has been declared so. It is also required to be noted that ghee is prepared from butter. Butter will have to be heated at a high temperature. Only thereafter ghee can be obtained from butter. In the process of obtaining ghee, sesame oil would be burnt in the heating process and, therefore, if the sample is of pure ghee there would be no presence of sesame oil even slightly. The Act requires that sample should be according to the standard. No variation is allowed. The Act is to be strictly complied with.

4. So far as sesame oil is concerned, David Pearson in "the Chemical Analysis of Foods" 1962 Edition at page 421 has referred to sesame oil:

That is fixed oil extracted from the seeds of Sesamum indicum L. The B.P. describes sesame oil as a pale yellow oil which does not solidify when cooled to 0 degree Centigrade. The B.P. (British Pharmacopia) requirements include weight per ml at 20 degree Centigrade 0.916 to 0.919. refractive index at 20 degree Centigrade 1.472 to 1.476, iodine value 103 to 116, saponification value 188 to 195, acid value 2% maximum. The B.P. also requires Halphen''s test for cottonseed oil to be negative. The red colour formed in Baudouin''s identity test is due to the presence of a phenolic substance sesamol in sesame oil. This substance is, however, destroyed by heat and no reaction takes place with oils which have been heated at 200 degree Centigrade. The iodine value of sesame oil is somewhat higher than that of clove oil.

5. So far as the food article ghee is concerned, the learned Authors A.C. Aggarwala and Radhey Mohan Sharma in a book "A Laboratory Manual of Milk Inspection" published by Asia Publishing House at page Nos. 105 and 106 have observed:

Ghee: Ghee is prepared by heating unsalted butter on a low fire for a considerable period and then straining; the heating evaporates considerable quantities of the water and the straining removes a part of the curd which the heating has tended to flocculate.... Because of the temperature in making, ghee has a pronounced heated flavour and odour. It never shows the waxy texture of butter and is commonly grainy and brittle. At rather high temperatures there

may be considerable oiling off. Ghee keeps well under temperature conditions which would be considered very unsatisfactory for butter. It seems probable that its manufacture developed because of the unfavourable conditions for the storage of butter prevailing in tropical and sub-tropical countries where the temperatures are often high and the facilities for cooling limited. The temperature to which the butter may be heated in making what may be called "normal ghee" varies from 122 degree to 130 degree Centigrade. In normal ghee the various constituents vary as under:

Proteins from 0.000 to 0.019 per cent (nitrogen)

Water from 0.039 to 0.166 per cent

Elimination of water and curd in heating appear to be factors which determine the preservation qualities of ghee. Moulds very often grow on ghee which is improperly prepared and is abnormal. The exposure of ghee to diffuse light results in the development of tallowy condition and sometimes even brings about beaching. This indicates the value of practice of using earthern ware or tin rather than glass for the storage of ghee. The higher the temperature used in making ghee, the more pronounced is the heated flavour and odour in the finished product. The higher temperature also yields ghee with better preservation qualities. The preservation qualities of ghee appear to be due to its composition. The elimination of moisture and curd makes conditions unfavourable for the growth of organisms and moulds. When ghee deteriorates, fatty acids as caproic, caprylic and capric are liberated and acid value of ghee increases.

6. Thus it is very clear that the Food article ghee is prepared by heating the butter at the temperature of 122 to 130 degree Centigrade and in that case sesame oil would be burnt and in pure ghee it would not indicate any presence and therefore, Baudouin''s test would be negative. Baudouin''s test indicates positive meaning thereby the article of ghee which is examined is not according to the standard required under the Rules.

7. Indian Standard Institution has published a book on "Method of Sampling and Test for Oils and Fats" Volume II (IS 548 (Part II) 1974) at page 5 has indicated the test for the presence of sesame oil (modified Baudouin test). For the purpose of test the reagents, namely, hydrochloric acid or furfural solution both are to be used. The procedure is also prescribed which is as under:

Procedure - Take 5 ml. of the oil or melted fat in a 25 ml. measuring cylinder (or test tube) provided with a glass stopper, and add 5 ml. of hydrochloric acid and 0.4 ml of furfural solution. Insert the glass stopper and shale vigorously for two minutes. Allow the mixture to separate. The development of a pink or red colour in the acid layer indicates presence of sesame oil. Confirm by adding 5 ml. of water and shaking again. If the colour in acid layer persists, sesame oil is present. If the colour disappears it is absent.

The evidence of the expert is consistent with the procedure prescribed required

to be followed. Expert has experience of 15 years in the branch of analysis of samples of ghee. Evidence clearly reveals that for Baudouin test hydrochloric acid and furfural were used. Merely that is not noted on papers is no ground to discard evidence. Witness being expert knows and has in fact used chemicals. There is no reason to discard this evidence on oath. In para 21 of the judgment, trial Court has observed that complainant has not questioned the witness that which chemicals were used or which method was followed for opining test as positive. Witness was for defence. So far as report is concerned it is admissible in evidence. Now, if defence wanted to challenge, it was for the accused to put the question and not necessary for prosecution to question. Witness has stated the use of chemicals with names yet trial Court has observed that complainant has not questioned about use of chemicals. When witness has stated specifically while under examination by accused is it necessary for complainant to put the question though answered at the instance of accused? Trial Court has erred in not reading this evidence led before the Court. It is not necessary for the prosecution to examine Public Analyst. When witness has deposed on oath the same is to be considered. Trial Court has further committed error by taking into consideration Food Article enumerated at A 19, i.e., Vanaspati, wherein it is provided in Clause (x) that it shall contain raw or refined sesame (til) oil not less than 5 per cent by weight.... Sample was of ghee and not of Vanaspati. Trial Court has further observed that in absence of strength of chemicals reagent no positive conclusion can be reached. No question has been put to the witness that chemicals should be of particular strength and the chemicals used were not of required strength. In absence of such question, it cannot be said that chemicals were not of required strength. When the Report is made admissible in evidence it goes without saying that the result indicated in the Report is obtained after following a standard procedure with the aid of standard materials/ chemicals. Therefore, presumption will have to be raised that the required procedure is followed with required material. When defence has examined a person, namely the expert, it is for defence to rebut the presumption. In absence of that no adverse inference is permissible. Questions, put in chief-examination are indicative that the strength is not mentioned in protocol papers and not that the chemicals or reagent used for carrying out the test were not standard or of required strength. The Court should have accepted the Report. Procedure, for Baudouin''s test is followed. Trial Court has observed that in papers it is straightway noted as "positive" without noting for the test. No questions in this behalf have been put to the witness. If any suggestion contrary to the Report is there, then the witness must be asked that question and in absence no adverse inference can be drawn. Thus trial Court has seriously erred in arriving at conclusion.

8. Thus it is very clear that on examination Baudouin''s test is positive, which under the Rules should be negative and in that view of the matter there is no escape but to come to the conclusion that food article in question is adulterated and, therefore, the. view taken by the Magistrate is required to be quashed and

set aside, fence this appeal so far as accused No. 1-Firm is concerned, is allowed. The order of acquittal recorded by the Magistrate against accused No. 1 is quashed and set aside. Accused No. 1 is convicted for an offence punishable u/s 16(1)(a)(i) of the Prevention of Food Adulteration Act read with Section 7 of the Act and is sentenced to pay fine of Rs. 1000/-. So far as accused No. 2 is concerned the appeal abates and so far as accused Nos. 3 and 4 are concerned, there is no evidence against these accused and hence the order of acquittal in so far as they are concerned is required to be confirmed. The appeal is allowed to the aforesaid extent.

