

A

STATE OF TAMIL NADU

v.

B

S. SHANUMUGHAM CHETTIAR & ANR.

September 22, 1980

[R. S. SARKARIA AND O. CHINNAPPA REDDY, JJ.]

C

Prevention of Food Adulteration Act, 1954; Section 16(1)(a) read with Section (i) and 2(i) (L)—gingelly oil—increase in the Free Fatty Acid content—Oil whether becomes adulterated.

D

Under section 2(i)(L) (before it was amended in 1976) of the Prevention of Food Adulteration Act, 1954, an article of food is deemed to be adulterated "if the quality of purity of the article falls below the prescribed standard or its constituents are present in quantities which are in excess of the prescribed limits of variability".

E

On November 1, 1969, sample of gingelly oil was purchased by the Municipal Food Inspector from the shop of the respondents. After completing the necessary formalities, the Food Inspector arranged to send one part of the sample to the Public Analyst for analysis. The Public Analyst analysed the sample on November 11, 1969 and reported that it contained 5.1% of Free Fatty Acid as against the permissible limit of 3%. On receipt of the report, the respondents were prosecuted for offences under Section 16(1)(a)(i) read with Section 7(i) and 2(i)(L) of the Prevention of Food Adulteration Act. At the trial, in pursuance of the respondents request, another sample was got analysed on February 6, 1970 by the Director, Central Food Laboratory. According to his report, the gingelly oil contained 6.2% of the Free Fatty Acid and was therefore, adulterated.

F

The District Magistrate observing that the Free Fatty Acid had increased from 5.1% to 6.2% between November 11, 1969 and February 6, 1970 and it was therefore, likely that the Free Fatty Acid content in the oil might have similarly increased between November 1, 1969 when the sample was taken and November 11, 1969 when the sample was analysed by the Public Analyst, held that it was not possible to say that the prosecution had established that on the date when the sample was taken the Free Fatty Acid content of the oil exceed 3% and acquitted the respondents. The order of acquittal was confirmed by the High Court. In the appeal to this Court, it was,

G

HELD : 1 (i) The judgments of the District Magistrate and the High Court are set aside. The second respondent is convicted under Section 16(1)(a)(i) and sentenced to pay a fine. [780C]

H

(ii) There was no justification for the conclusion of the District Magistrate and the High Court that the Free Fatty Acid content of the oil on the date when the sample was taken might have been less than 3% and therefore not adulterated. [780B]

In the instant case, the Public Analyst report had been superseded by the certificate of the Director, Central Food Laboratory, and the latter certificate had become conclusive evidence of the facts mentioned in it. The sample, must therefore be held, to be adulterated. There was nothing in the evidence, nor had anything been shown from any scientific work which would suggest that the Free Fatty Acid content would so rapidly increase in the space of about three months. If it was less than 3% on November 1, 1969 when the sample was taken it could not have increased to 6.2% by February 6, 1970 when the sample was analysed by the Central Food Laboratory. [777H, 778D]

2. Gingelly (Til or Sesame) oil is a semi-drying oil. It is only after Prolonged exposure to air and light that there may be some discernible chemical changes in gingelly (Til or sesame) oil. [779G]

New Encyclopaedia Britannica, Vol. 13 pages 526-527 referred to.

CRIMINAL APPELLATE JURISDICTION : Criminal Appeal No. 115 of 1975.

Appeal by Special Leave from the Judgment and Order dated 10-1-1972 of the Madras High Court in Crl. Appeal No. 64 No. 657/70.

A. V. Rangam for the Appellant.

A. T. M. Sampath for the Respondents.

The Judgment of the Court was delivered by

CHINNAPPA REDDY, J.—On November 1, 1969, a sample of gingelly oil was purchased by the Food Inspector, Madurai Municipality from the shop of the first respondent, who is now reported to be dead and against whom, this appeal, has, therefore, abated. At that time respondent No. 2 was attending to the business. After completing the necessary formalities the Food Inspector arranged to send one part of the sample to the Public Analyst at Madras for analysis. The sample was analysed by the Public Analyst on November 11, 1969 and it was reported by him that it contained 5.1% of Free Fatty Acid as against the limit of 3.0% permissible under clause A.17.11 of Appendix B to the Prevention of Food Adulteration Rules, 1955. In his report he also mentioned that the sample was properly sealed, it was air-and-moisture-tight and packed in thick paper so as to be proof against light, and, the Free Fatty Acid content of the oil would, therefore, remain unchanged for several months. On receipt of the Public Analyst's report a complaint was filed against the two respondents for an offence under sec. 16(1) (a) and Sec. 7(i) read with sec. 2(i) (L) and Clause A.17.11 of Appendix 'B' to the Prevention of Food Adulteration Rules. Both the respondents denied the offence. The

- A second respondent stated that he signed on the various documents produced by the prosecution as he was asked to do so by the Inspector. He did not read the contents of those documents. The brother of the second respondent was examined as a defence witness and he stated that he was in the shop when the Food Inspector came there and purchased the sample and that at the time of the sale the Food Inspector was told that the gingelly oil was not meant to be used as an article of food but was meant for "oil bath".

- At the trial a request was made by the respondents that another part of the sample which had been produced by the Food Inspector in the Court might be sent to the Director, Central Food Laboratory, Calcutta, for analysis. It was sent as desired. The sample was analysed by the Director, Central Food Laboratory, Calcutta on February 6, 1970. According to his report the gingelly oil contained 6.2% of Free Fatty Acid and was, therefore, adulterated.

- The learned District Magistrate, Madurai acquitted both the respondents observing that the Free Fatty Acid had increased from 5.1% to 6.2% between November 11, 1969 and February 6, 1970 and it was, therefore, likely that the Free Fatty Acid content in the oil might have similarly increased between November 1, 1969 when the sample was taken and November 11, 1969, when the sample was analysed by the Public Analyst, Madras. On that ground, the District Magistrate held that it was not possible to say that the prosecution had established that on the date when the sample was taken the Free Fatty Acid content of the oil exceeded 3%. The State preferred an appeal to the Madras High Court against the order of acquittal. The High Court confirmed the order of acquittal for the same reason as that given by the District Magistrate. The State has filed this appeal after obtaining special leave of this Court under Art 136 of the Constitution.

- Under Sec. 2(i)(L) (before it was amended in 1976) of the Prevention of Food Adulteration Act, 1954, an article of food is deemed to be adulterated "if the quality of purity of the article falls below the prescribed standard or its constituents are present in quantities which are in excess of the prescribed limits of variability".

Paragraph A.17.11 of Appendix 'B' to the Rules made under the Prevention of Food Adulteration Act prescribes the standard in the case of Til oil (Gingelly or sesame oil) and to the extent relevant it reads as follows :

- H ["A.17.11.—Til oil (Gingelly or sesame oil) means the oil expressed from clean and sound seeds of Til (*Sesamum indicum*), black, brown, white, or mixed. It shall be clear, free

from rancidity, suspended or other foreign matter, separated water, added colouring or flavouring substances, or mineral oil. It shall conform to the following standards :

- | | | |
|--|----|-----------------------------|
| (a) Butyro-rafractometer reading at 40°C | .. | 58.0 to 61 |
| (b) Saponification value | .. | 188 to 193 |
| (c) Iodine value | .. | 105 to 115 |
| (d) Unsaponifiable matter | .. | Not more than 1.5 per cent. |
| (e) Free fatty acid as Oleic acid. | .. | Not more than 3.0 per cent. |
| (f) Bellier test (Turbidity temperature—
Acetic acid method). | | Not more than 22°C.)] |

Now, a sample of food purchased by a Food Inspector has to be divided by him into 3 parts and each part has to be marked, sealed and fastened separately. Before the Act was amended in 1976, one part was to be delivered to the person from whom the sample was taken, another part was to be sent for analysis to the Public Analyst and the third part was to be retained with the Food Inspector to be produced by him in case legal proceedings were taken or it became necessary to send it for analysis to the Director of the Central Food Laboratory. The Public Analyst was required to deliver a report of the result of his analysis and this report was ordinarily the foundation of the prosecution by the Food Inspector. After the institution of the prosecution, the accused was given the right to request the Court to send the third part of the sample retained by the Food Inspector to the Director, Central Food Laboratory for a certificate. The Director, Central Food Laboratory was required to send to the Court a certificate specifying the result of his analysis and the certificate of the Director, Central Food Laboratory, thereupon, superseded the Public Analyst's report. The Public Analyst's report, if not superseded by the Certificate of the Director, Central Food Laboratory and the Certificate of the Director, Central Food Laboratory might be used as evidence of the facts stated therein in any proceeding under the Act with this difference that the certificate of the Director, Central Food Laboratory was to be final and conclusive evidence of the facts stated therein.

In the present case the certificate of the Director showed that the sample of gingelly oil contained 6.2% of Free Fatty Acid whereas the permissible limit was 3% only. We are not concerned with the Public Analyst's report since that has been superseded by the certificate of the Director, Central Food Laboratory, and the latter certificate has been made conclusive evidence of the facts mentioned in it. The sample, it must therefore be found, was adulterated.

- A. The sample, as we mentioned earlier, was taken on November 1, 1969, the analysis by the Public Analyst was on November 11, 1969 and the analysis by the Director, Central Food Laboratory was on February 6, 1970. The learned District Magistrate and the High Court thought that although the Free Fatty Acid content in that part
- B of the sample which was sent to the Director, Central Food Laboratory was 6.2% on the date when the Director analysed the oil it could not be said to have been established that on the date when the sample was taken by the Food Inspector the Free Fatty Acid content exceeded 3%. According to them it could well be that the
- C Free Fatty Acid content increased due to natural causes. We are unable to agree with the lower Courts. There is nothing in the evidence, nor has anything been shown to us from any scientific work which would suggest that the Free Fatty Acid content would so rapidly increase in the space of about three months that what
- D was less than 3% on November 1, 1969, when the sample was taken increased to 6.2% by February 6, 1970, when the sample was analysed by the Central Food Laboratory. On the other hand in the New Encyclopaedia Britannica Volume 13 (pages 526-527) it is said :

- E "Fats can be heated to between 200° and 250°C without undergoing significant changes provided contact with air or oxygen is avoided. On exposure to air, oils and fats gradually undergo certain changes. The drying oils absorb oxygen (dry) and polymerize readily; thin layers form a skin
- F or protective film. The semidrying oils absorb oxygen more slowly and are less useful as paint oils. Still, sufficient oxygen is absorbed in time to produce distinct thickening and some film formation. Oxidation of the drying and semidrying oils is accelerated by spreading the oil over a large surface. On
- G greasy cloths, for example, oxygen absorption may proceed so rapidly that spontaneous combustion ensues. The nondrying oils, of which olive oil is typical, do not oxidize readily on exposure to air, although changes do take place gradually, including slow hydrolysis (splitting to fatty acids and glycerol
- H and subsequent oxidation. This slow oxidation causes disagreeable smell and taste described by the term rancidity.

The chemical reactions involved in oil oxidation have been studied widely, when oils and fats are exposed to air, little change takes place for a period of time that varies from oil to oil depending upon the amount and type of unsaturation and the content of natural antioxidants. During this so-called induction period, there is virtually no change in either odour or chemistry of the oil because of the protective effect of natural antioxidants, especially tocopherol. Gradually, the effectiveness of the antioxidant is overcome and there is an accelerating rate of oxidation of unsaturated acids, called autoxidation. Chemically, the first identifiable oxidation products are hydroperoxides. These break down into a large variety of low-molecular-weight aldehydes, esters, alcohols, ketones, acids, and hydrocarbons, some of which possess the pungent, disagreeable odours characteristic of rancid fats. In soyabean oil exposed to air to the point of incipient rancidity, more than 100 different oxidation products have been identified. Natural oils such as coconut oil, with very low levels of unsaturation, are very stable to flavour deterioration, but the more highly unsaturated oils such as soyabean oil or safflower oil lose their flavour more quickly. Sesame oil is unique in its flavour stability because of the presence of several natural antioxidants (sesamin, sesamol, sesamol). Synthetic antioxidants such as propyl gallate, butylated hydroxyanisole (BHA), and butylated hydroxytoluene (BHT) have been used to retard the onset of rancidity and increase the storage life of edible fats".

Gingelly (Til or sesame) oil we may mention is a semi drying oil. From the extract from the Encyclopaedia Britannica it is only after prolonged exposure to air and light that there may be some discernible chemical changes in gingelly (til or sesame) oil. In fact it is mentioned in the Encyclopaedia Britannica that sesame oil is unique in its flavour stability because of the presence of several natural antioxidants. There is nothing to indicate that the samples were not packed as required by the rules. The report of the Public Analyst mentions "The sample has been received properly sealed, to be air and moisture tight and packed in thick paper to be proof against access to light. Under these conditions the Free Fatty Acid content of oils

- A** remains unchanged for several months". The certificate of the Director, Central Food Laboratory mentions "The seals were intact". We are, therefore, clearly of opinion that there was no justification for the conclusion of the District Magistrate and the High Court that the Free Fatty Acid content of the oil on the date when the sample was
- B** taken might have been less than 3% and therefore, not adulterated. We set aside the judgments of the District Magistrate and the High Court and convict the second respondent under Sec. 16(1)(a)(i) read with sec. 7(i) and 2(i) (L) of the Prevention of Food Adulteration Act and sentence him to pay a fine of Rs. 100 in default to
- C** undergo simple imprisonment for a period of two weeks. We are imposing a nominal sentence having regard to the circumstance that we are interfering with a concurrent order of acquittal more than ten years after the commission of the offence.
- D** N.K.A.