

में मुझसे पूछी कि दूकानों में घीरतों के जो करीब करीब नमूने बिच रखे जाते हैं उन के लिये जी. इस बिच में सवा होनी चाहिये क्योंकि सवा घीरतें ही उन दूकानों की धो बढ़ाने के लिये हैं ? घादमियों को भी रखना चाहिये । जैसा हमारे बाकूपाल जी ने कहा कि घीरतें फैशन बढ़ाती हैं घीरतों को आर्काइव करती हैं, तो इन में बह भी मुगह्वार हैं । जब वह अपनी घीरतों के लिये फैशन बढ़ाने के वास्ते पल्ले पल्ले कपड़े नहीं लायेंगे, लिपस्टिक नहीं लायेंगे, तो घीरतें फैशन नहीं बढ़ा सकेंगी ।

एक माननीय सदस्य : घीरतें इस के लिये बिच करती हैं ।

जीवनी विनिमाता : बिच करती है, ती उमे बसलने के लिये घापकी लाठी है ।

सभापति महोदय : मुझे उम्मीद है कि आभरेबल मेडी मेम्बर घीर ज्यादा बचन लेना चाहती हैं । ६ बज चुके हैं । अगर घाप घीर बज लेना चाहती हैं तो आइन्दा जो दिन मुकरं होगा इस बिच के वास्ते उन दिन के लिये बाकी रखें ।

PRESIDENT'S ASSENT TO BILLS

Secretary: Sir, I lay on the Table following three Bills passed by the Houses of Parliament during the current session and assented to by the President since a report was last made to the House on the 3rd December, 1957:—

(1) The Indian Nursing Council (Amendment) Bill, 1957.

(2) The Cantonments (Extension of Rent Control Laws) Bill, 1957.

(3) The Indian Telegraph (Amendment) Bill, 1957.

VEGETABLE OILS AND ANTI-OXIDANT

Shri V. P. Nayar (Quilon): I am raising this discussion as a result of the unsatisfactory and incomplete answers given to me for Starred Questions Nos. 755 and 760 of the 3rd December, 1957 by Shri A. P. Jain, Minister of Food and Agriculture, and I am doing so to focus the attention of the Government and this House on three points, namely: (1) the failure of the Government of India to undertake successful research in producing anti-oxidants from indigenous and cheap materials; (2) failure of the Government of India to take adequate steps to ensure that ghee and edible vegetable oils do not get rancid and thereby become poisonous; and (3) continuance of allowing imports of materials badly needed by Indian industry when such materials can be produced on a commercial scale from indigenous raw material.

I am glad that you, Sir, occupy the Chair now because I have seen how in this House several times you have fought for the cause of ghee in this country.

I would only submit that the hon. Minister who seems to be there to answer me, and I, may be equally ignorant of anti-oxidants, and most of the Members also may not understand it. So I do not want to enter into the realms of chemistry in this discussion, and shall try to avoid as many technical words as possible.

One of my questions was whether any anti-oxidant had been produced in the Pusa Institute which ensured the keeping quality of vegetable oils and fats, and the answer was "yes". I could have understood him there, but he went on to say:

"Resinous extractives obtained from one variety of the Myristica seeds showed strong antioxidant properties, but it cannot be recommended for edible oils because of its high toxicity as indicated by preliminary trials."

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This is where the Minister, I am sorry to say, has been briefed unfortunately to tell something which is not true. If we had to take the Minister's statement, we must concede—and I cannot do it—that all the oils in this country are edible. It is not so. Most of the oils are not used only for edible purposes. There are ever so many other purposes for which oil is used, such as non-edible and industrial purposes, in all of which the keeping quality of the oil is very necessary. And what is more, when the millions of our cultivators who produce the oil take the oil which they produce to the market, they find that a particular quality will get them a price, but if the oil goes rancid or if it goes bad in any way, then the purchasers slash down the price, sometimes by half, and sometimes by three-fourths. In a country like India which can rightly claim to be the biggest producer in the world for vegetable oils, certainly the problem of keeping quality is one of great significance.

It is in this context that I have been surprised to know from the Minister's answer that what has been found out in the Pusa Institute has certain toxicity and cannot be recommended. It would mean that the Minister and those who briefed him thought that the use of anti-oxidants was confined only to the preservation of edible oils, which is not a fact. As we know, vegetable oils find their various uses, for example, in the soap industry, then in the cosmetics industry, in the hydrogenation of oils, in the vanaspati industry and so on. There are even so many other industries which I do not want to list, where oils are used for non-edible purposes. I am sure the Minister will also concede that a very sizeable quantity of vegetable oils is being consumed in this country for non-edible purposes. So, where is the question of toxicity?

I have read the report of the research by two members attached to the Pusa Institute, and all honour to

these scientists who found it out, because I find that even at this stage, the test trials have revealed that this anti-oxidant has ensured better keeping quality of vegetable oils and fats than the most competent of all the anti-oxidants now being imported into this country, one of them being specifically referred to as B.T.H. or butylated hydroxyl toluene. I know that firms of foreign origin operating in this country much to the detriment of our economy, like the Imperial Chemicals have a monopoly on such items. What we want to know is what steps Government have taken to break these monopolies? I am sure Government will not have any figure to show us how much we import of this material. As a matter of fact, this is required not merely for the vegetable oil industry, but it is also required, I am told, for the petroleum industry. Again, it is also required by the rubber industry, the leather industry and so many other industries.

The ingenuity of our scientists has found out a very powerful anti-oxidant from one of the raw materials,—I have them here before me; here are the seeds—which is found in plenty in the wilds in the State of Kerala. The report says that this tree is very common in all the hills in Malabar and it is growing wild. So, this is not some material which we have to pay for. We can just pick it up. Here, the scientists say that it is all right. But what does Government say? In the case of such technical reports, it is no good decrying or saying that a particular substance has toxicity. I have perused all the records available in all the libraries here on this subject, and I do not find a single report by any competent man, who, after having worked on the toxicity of this, has said that it has toxicity.

You know that toxicity is very often tested on laboratory animals. Where has this been tested? Has it been tested on rats or guinea pigs or other such animals? Has it been sent to some other foreign laboratory?

The Minister also said that even though considerable quantities of vegetable oils and fats get rancid, they were consumed in industry. Which is the industry which consumes rancid ghee in this country? I do not know of any. Then, again, industries cannot consume rancid oil and rancid fats at all, because they also such require as much consistency as any other. Keeping of quality is very necessary. What is more, as we know, this oil and the fat have very little of vitamin content in our intake of food. When the oil or fat gets rancid, what you find is that there is an immediate deterioration of the vitamin content.

As you know, coming from the State which has the maximum per capita consumption of milk and milk products, most of the villagers take rancid ghee. In U.P., for example, I found while going through a pamphlet that there are about 2 to 3 million people suffering from night blindness, obviously because of the vitamin A deficiency in their food.

This is a matter of vital importance. There are so many reports before me from which I can show that the use of rancid oils is not merely injurious to human beings but is dangerous. Laboratory tests by eminent scientists have shown that this can create intestinal cancer. Rats grown on this were seen to develop humped backs. It affects generations. Vitality can be injured and progeny can be affected. This is not a very small matter in a country like ours, where even the little vitamin we get is being taken away because the oil or fat cannot be stored properly.

When two of our scientists find out that there is a very cheap indigenous material from which an anti-oxidant could be developed, the Government come forward and say that they cannot have it because there is some toxicity and, therefore, it cannot be recommended. I want the hon. Minister to tell me where this toxicity has been tested, by whom? Has the report been published? Has it been tested by any other competent

laboratory outside our country? If so, what is the toxicity? I shall be very glad to read the material which he gives me.

I was going through the report of one of the most authoritative treatises on this subject. I find that from the British Institute. It is a big monograph by Dr. C. H. Lee, published by the Department of Scientific and Industrial Research, U.K. He also says that industrial oils and fat products cannot be allowed to go rancid. Subsequently, in other monographs or treatises I find this particular article being referred to as authoritative both in our country and in other countries.

If the hon. Minister chooses to read it—unfortunately, I do not have with me my copy here in Delhi. I can pass it on to him—he will see how dangerous it is, particularly to our people, to take rancid oils.

Here I want the hon. Minister to tell me why it is that it has not been possible to think of ways and means to develop and manufacture the anti-oxidant in this country to our requirements. Yesterday, my hon. friend, Shri Manubhai Shah, had promised me to give some idea of the total imports, but unfortunately, he has left Delhi without doing so. I believe that the imports will be anywhere about Rs 50 lakhs a year. Government say that foreign exchange is in crisis. Why is it that we still have to import this?

I find that this work started in 1948. Two or three scientists were at it. The pamphlet, to which I referred, was published last December, before Government admitted the foreign exchange crisis. But what has been done? I ask Government whether they have given any financial grants to any University to further the research and evolve processes by which this can be commercially extracted. When we get a tree growing in abundance, in a wild state, in a particular region and when the material which is of vital importance for our country has been isolated from that, which after isolation com-

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pared with the best imported material, and when we want that material here for a variety of industries, each of them as important as the other, I say Government should not sit so smug on this matter. They should take immediately steps to see that the fullest exploitation of the seeds of *Myristica malabarica* is started forthwith, and the scientists who have found out this valuable material, which is likely to save foreign exchange to the tune of crores of rupees in the near future, should be encouraged to continue their work.

I do not want to give further details, but before I close, I would like the hon. Minister to specify the reasons why this has not been done. Is it because the raw material is found in plenty only in Kerala? I would also ask him whether he would consider favourably my suggestion that the present University of Kerala should be given special funds to prosecute further research on it. There are other species of the same genus which have other anti-oxidants. Government should try to utilise the plant products to the fullest extent in order to save our dependence on imported material which our scientists are competent here to find and solve for us.

Mr. Chairman: How much time would the hon. Minister take?

The Minister of Co-operation (Dr. P. S. Deshmukh): Five to seven minutes will do.

Shri Kodiyam (Quilon-Reserved—Sch. Castes): I want to ask only two questions. What is the total requirement of anti-oxidants and how much of the requirement is imported by foreign firms like the Imperial Chemical Industries? The second question is whether any anti-oxidant is now manufactured in India and if so, what is the quantity?

Shri Kaswara Iyer (Trivandrum): I have only one question to ask in respect of this anti-oxidant on the

question of incidence. Has the incidence of toxicity examined and if so what is the result of that examination?

Dr. P. S. Deshmukh: I am thankful to my hon. friend for taking so much interest in this particular subject. The answers which he has summarised were given to questions which were asked in the House. They had been addressed to the Ministry of Food and Agriculture. As my hon. friend has pointed out, there are various uses which this oil can be put to. He has defined them as edible and non-edible oils.

So far as non-edible oils are concerned, the Food and Agriculture Ministry has very little to do with because they are used for industrial purposes. Therefore, any exploitation of even this easily available material would have reference to other organisations than the Food and Agriculture Ministry. The replies were given from the point of view of the Ministry of Food and Agriculture. Naturally, they limited themselves to the use of these materials so far as edible oils were concerned.

It is quite competent for my friend to ask what the Government has done so far as all the uses are concerned. He is also entitled to ask how far we are in a position to exploit the material which is available. I can forthwith say that because it is available in Kerala, there is no prejudice against it. Not only that. We would rather be inclined to pay a little more attention because there are very live representatives of Kerala here who will not allow us to neglect anything which is of particular advantage to Kerala.

I may also incidentally point out that if the University were to take up any scheme which could come under the purview of the work done by the ICAR, it will get a hundred per cent grant provided the scheme is acceptable and the research scheme is approved by the Indian Council of Agricultural Research.

We have now evolved a system of hundred per cent. grants. Formerly, it used to be a sort of a matching grant—fifty per cent. from the University or State Government and fifty per cent. from us. But that restriction has now been removed in the case of Universities and even private institutions. So, there would be no embargo on any proposal coming from Kerala or the University. We will very much welcome it provided it is acceptable to the ICAR—I mean the research scheme which he wants the University to take up and which perhaps would be submitted to the Ministry of Food and Agriculture.

So far as the other aspects and uses of this material are concerned—non-edible oils—I am afraid it lies outside the purview of the Ministry of Food and Agriculture. These questions were addressed to the Ministry of Food and Agriculture. We have given whatever information we had. The conclusion has been made known to the hon. Member that it could not be recommended for edible oils because of its high toxicity which was found to develop.

My hon. friend asked me what were the trials that we conducted. So far as I know, the preliminary trials alone indicated the unsuitability of this material as anti-oxidant, in the case of vegetable oils. I have not got the detailed information, but I am sure it must have been tried on some suitable animals. I do not think my hon. friend is quarrelling with this, because he only wanted to know the details on which the conclusion viz., that this develops toxicity, was based.

Apart from this, it has to be borne in mind also that if this anti-oxidant is to be used the chemical which is manufactured must be of a very high purity. Therefore, it naturally follows that although we have lot of raw material we will have to develop sufficient technique to manufacture it in such a condition that we will be able to reach a high standard which has been reached in other countries from where we import it.

I made enquiries about the value of imports even just now, a few minutes ago, but it was not possible for anybody to give us even approximately the value of the imports. But I do not imagine it will be much, because the quantity used of this material is rather small as can be seen from a notification issued by the Health Ministry. In most cases whenever it is permissible to use it the use is 0.01 per cent. to about 0.05 per cent.

Secondly, most of the oils, especially edible oils and ghee, are consumed before they become rancid. That is also another factor. I have not got the figures, and we have plainly told the hon. Member also that we do not possess any figures to show what quantity of ghee or edible oils really get rancid.

At the same time, we want to discourage the use of any of these because we know it is harmful. Therefore, from all these facts it appears that even if we are importing at the present time and the ICI have got the monopoly, the expenditure is small and the foreign exchange involved is not likely to be so large. But I do not want to put forward that as an excuse for not exploiting the raw material and trying to manufacture the anti-oxidant.

We are obliged to the hon. Member for drawing our attention to this. There are various other agencies concerned, the Scientific Research Organisation, the Chemical Laboratories and so on, and we will certainly try to see how best we can utilise this raw material which is easily available, and then try to minimise our imports in this matter.

But the Food and Agriculture Ministry, unfortunately cannot take upon itself the responsibility of doing all these things. Our sphere of activity is bound to be limited to the edible oils only. Non-edible oils fall in the category of industrial oils, and it would be the Ministry of Commerce and Industry and the Council of Scientific Research who will have to

[Dr P S Deshmukh]

deal with it. I am sure the pointed attention which my hon friend has drawn to this matter will probably awaken them to the necessity of doing more work in this field. So far as the Food and Agriculture Ministry is concerned, we have not felt any great need of going any further, but even so, I would like to say that if there are any other aspects so far as the use of edible oil is concerned and prevention of their getting rancid is concerned, we will certainly look into it and I hope this assurance will satisfy my hon friend.

Mr. Chairman: It appears there are certain edible oils which are also non-edible oils and there are certain non-edible oils which are also edible oils. For instance, castor oil is both edible and non-edible and some other inedible oils are used by way of medicine. Thus they come within the scope of edible oils. Anyhow they are within the purview of at least the Indian Council of Agricultural Research of which the hon Minister is

the President. So, the matter is quite important and I expect that the suggestion made by the hon Member will be taken into consideration and that the hon Minister will see that the material mentioned is fully experimented with and if proper, exploited for rational purposes.

Shri V. P. Nayar: I only wanted to raise this discussion because I thought that the prices of vegetable oil were the concern of the Ministry of Agriculture. My contention was that oils get rancid and the cultivators do not get prices also. If something could be devised by which the oils will not get rancid then it comes within the purview of his Ministry. But I am very much satisfied with the hon. Minister's assurance.

Mr. Chairman: The House stands adjourned till 11.0 A.M. tomorrow.

18.26 hrs.

The Lok Sabha then adjourned till Eleven of the Clock on Saturday, the 21st December, 1957.