

Adulteration in loose groundnut oil



Rampant adulteration in loose groundnut oil

Appeal to government to make available small affordable pack sizes in the market

Cooking oil is a staple in every household. Groundnut oil is one of the healthiest cooking oils popular in western India. Loose edible oil is purchased by economically weaker sections (such as daily wagers) because they cannot afford to buy large quantities at one time. Pilot tests and media reports indicate that loose samples are susceptible to adulteration and contamination. That is the reason we picked up loose samples and tested them for purity and quality.

Key findings

Consumer Education and Research Centre tested 15 samples of loose groundnut



oil as per the requirements of the Food Safety & Standards Act, 2006 (Rules & Regulations, 2011). The key findings are:

Five samples out of 15 tested were adulterated with palmolein while seven samples were adulterated with cottonseed oil.

Nine samples out of 15 were found to be rancid and failed the test for freshness.

None of the samples complied as far as visual examination goes. The samples were found to contain black particles, dirt and sediments – another indication of poor quality. Worse still, in one sample insects were seen!

While checking for clarity, two of the samples, were observed to be turbid

Upon letting the samples stand for longer period, many of the samples showed sedimentation and slight crystallization.

However, none of the samples were seen with separated water after prolonged standing.



None of the samples were found to be adulterated with castor oil, mineral oil, sesame oil/vanaspati, argemone oil, karanja oil or synthetic colour.

Impact on consumers



This is a case of intentional adulteration for economic gain as both adulterants, cottonseed oil and palmolein, are much cheaper – half to two-thirds the price respectively of groundnut oil. The consumer does not get value for money.

Adulteration with palmolein and cottonseed oil does not have any known adverse health effects. However, palmolein is high in saturated fat and should be used sparingly. Also, rancidity is more common with palmolein.

Rancidity indicates that either the samples belong to an old/expired lot and/or they have been mixed with rancid oil. The deterioration could be due to prolonged exposure to open air and/or sunlight – a result of improper storage facilities. Rancid oils are unfit for consumption not so much for health reasons but due to 'off' flavour and bad taste.



The presence of black particles, sediments, dirt and insects implies unhygienic handling and storage. It could also be due to poor quality of container or packing material used for selling loose oil.

Price comparison



The prices for one liter packs of five popular brands of filtered groundnut oil are as follows Ankur (Rs. 126), Gulab (Rs. 126), Maruti (Rs. 132), Fortune (Rs. 155) and Pankaj (Rs. 140). The pack sizes available were 1, 5 and 15 liters. In a few local brands, packs of 500 ml were available. The average price of one liter of the loose samples tested by us comes to around Rs. 110. This price differential is significant for low income groups.

Areas of Action

The regulatory authorities and manufacturers must ensure smaller pack sizes are available in the market to cater to the needs of the low income groups. If shampoos and ketchup can come in small pouches, why not edible oil?



Agmark certification to be made mandatory for basic food items such as oils and spices to combat adulteration.

The mechanism of surveillance needs to be strengthened by the Food Safety and Standards Authority of India (FSSAI). Also, the state-level enforcement authorities need to continuously monitor the quality of food items sold loose in the market.



Efforts should be initiated to make consumers more aware about adulteration and food safety.

Health facts



Groundnuts contain 40-50% fat but most of it is unsaturated fat which is better for the heart. Also, a larger percentage is monounsaturated fats which help lower LDL or 'bad cholesterol'.

Consumption of groundnut oil does not lead to build-up of cholesterol.

This oil is a natural source of antioxidants which helps reduce inflammation apart from other benefits. It is also a good source of vitamin E.

Those with a peanut allergy should avoid using this oil.

Conclusion

Going by the test results and observations it is safer to avoid consuming oils sold in loose form. As affordability could be a significant issue for low income groups, smaller pack sizes should be made available in the market.

Source: *Grahak Sathi Volume 2 Issue 2 August-September*