INDIAN AIR CRAFT (PUBLIC HEALTH) RULES, 1954 (Amended in 1969)

• These rules are framed by the Government of India as per the power given in the Aircraft Act 1934. These rules have described the following terms:

Health officer- means in respect of an airport in India any person appointed by the Central Government to the health office of the airport;

Infected aircraft- means an aircraft which has any person or animal who carries an infectious disease;

Infected area- in relation to a quarantinable or another infectious disease means any area outside India, declared by the Central Government, by notification in the official Gazette; Isolation is applied to a person or group of persons means the separation that person or group of persons from other persons, except the health staff on duty, in such a manner as to prevent the spread of infection.

Period of incubation-means (a) in respect of a quarantinable disease mentioned below, the period specified against it:-

Yellow fever 6 days

Plague 6 days

Cholera 5 days

Small pox 14 days

Typhus 14 days

Relapsing fever 8 days

• At the time of arrival of aircraft following measures are taken by the health officer:



When an infected or suspected aircraft coming from a place outside India, the health officer may take the appropriate measures as prescribed by the rules. He may consider medical examination or inspection of any passenger or crew on his/her arrival at the airport particularly when it comes from a yellow fever infected areas. When the aircraft comes from the area where malaria or other mosquito-borne disease could develop from imported vectors, the aircraft may be disinfected. All actions a health officer has to take in relation to the yellow fever, plague, cholera, typhus and relapsing fever have been described.

An aircraft will be regarded as infected with an infectious disease other than quarantinable disease, if it has a case of any infectious diseases on the board.

Except in case of emergency, an aircraft shall not on account of an infectious disease other than quarantinable disease, be prevented by the health officer for loading cargo, stores, taking on fuel or water.

- At the time of departing, all persons should be certified by the health officer for their medially fitness. In case of pilgrim aircraft all persons should produce valid certificates of vaccination against cholera and yellow fever.
- No person shall bring into India any dead body or human remains of persons who may have died of yellow fever, plague, anthrax, ganders or such other diseases as may be notified by the Central Government for this purpose. If such body is properly cremated then ashes shall be placed in an urn or casket having an outer packing of suitable material may be brought to India. There are specification for bringing un-cremated remains.
- No person shall throw or let fall from any aircraft any matter capable of producing an
 outbreak of a quarantinable or an infectious or any other epidemic disease. Whoever
 contravene any provision of these rules may be punished for a term not exceeding three
 months or with fine which may extend to one thousand rupees or with both. The Indian
 Air Craft (Public Health) Rules need revision considering the recent modification
 adopted in International Health Regulation.

DELHI ANTI-SMOKING & NON-SMOKER'S HEALTH PROTECTION ACT, 1996

Every second one person dies of tobacco related diseases. Smoking is indeed hazardous to health. In fact, smoking is the main cause for lung cancer, other diseases of the lungs and bronchial tree well as long term diseases like "chronic bronchitis", "cardiovacular diseases" etc. The public is hereby informed that under the section 8 and 9:

Selling cigarettes and other tobacco based products to children under 18 years of age is illegal.

Storing, selling and distributing cigarettes, bidis, or tobacco based products within 100 meters of schools, colleges and other educational institutions is illegal.

Smoking in public places and inside public transport is a punishable offence.

If anybody contravene these provisions could lead to a fine of up to Rs. 500/- and it is broken second time the fine could be up to Rs. 1000/- or imprisonment up to 3 months or both.

THE PREVENTION OF FOOD ADULTERATION ACT, 1954 (Amended in 1964, 1976, 1986)

The Act provides the protection from adulteration / contamination of food that may lead to the health risk of consumers. The Act deals with the frauds also that can be perpetrated by the dealers by supplying cheaper or adulterated foods. The Act regulates the use of chemicals, pesticides, flavours and other additives in food preparation. Through this Act there is a control over dumping of sub-standards foods. Enrichment of flour, bread, or other cereals with vitamins or minerals, iodization of salt, vitaminisation of vansapati oil, addition of vitamin "C" in certain foods can be done under the provision made in this Act.

Different definitions of food, adulteration, misbranding, etc. are described in the Act (Sec 2). Centre is empowered to appoint an Advisory committee called the Central Committee for Food Standard (Sec 3). In any dispute an adulterated sample need to be examined by the court. The Central Food Laboratories give its final opinion on the subject. These 4 laboratories are located in Calcutta, Ghaziabad, Mysore and Pune. There are approximately 82 food laboratories in the country at district/regional/state level working for the purpose of the PFA Act. Powers are given to the State Governments to appoint Public Analyst and Food Inspectors who control the food supply, storage, and marketing of foods. It is the duty of inspector to draw and dispatch samples to a laboratory. The Central Government is empowered to define the standards of quality, control over production, distribution and sale of food, packing, labeling, licensing, and controlling the food additives.

There is a provision of penalty if anybody break the law for a maximum imprisonment of 1 year or a minimum fine or Rs. 2000 in the first instance and for imprisonment of 6 months which may extend to 6 years and cancellation of license on the second or subsequent offense. There is a penalty for violation of rules with regard to seized article subsequently found adulterated and contaminated with injurious substances. When consumed adulterated food is likely to cause death or injury to the body or amount to grievous hurt can be punished according to Section 320 of the Indian Penal Code. There is an imprisonment of 3 years but which may extend to the life term and with the fine which shall not be less than Rs. 5000. Some of the examples of Adulteration / Contamination are given in Table 52.1

Role of Central Government



The Ministry of Health & family welfare is responsible for ensuring sea food to the consumers. The enforcement of the Act is done by the state/UT governments.

To review the provision of PFA Act, 1954, Rules and Standards in consultation with the central committee for Food Standards, a statutory Advisory Committee under the Act and its 9 Technical Sub-committees.

To conduct examination for the Chemists for their appointment as Public Analyst under the Act;

To organise training programme for various functionaries under the Act;

To approve the State PFA Rules;

To examine and approve the labels of Infant foods.

To evaluate and monitor progress of implementation of the Act in the state/UTs by collecting periodical reports and spot visits;

To liaise with National and International Food Quality Control Organisation such as Directorate of Marketing and Inspection (operating Agmark Scheme), Ministry of Food Processing Industries (implementing Fruits Products Order-FPO), Codes Alimentarius Commission/World Trade Organisation;

To ensure quality of food imported to India under the provision of Act;

To create consumer awareness; and



To augment the food testing laboratories.

Table 52.1: Food Items with type of Adulteration or Contamination

	Food Items	Adulteration/ Contamination
1.	Non-Alcoholic Beverages	Non-permitted colours, Saccharin, ducin, lead, arsenic and copper, and Dirt and filth.
2.	Baking powder	Citric acid.
3.	Starchy foods	Foreign starches in arrowroot, sand, dirt, etc.
4.	Spices	Sand, grit, coal tar dyes, saw dust, lead or lead chromate in haldi, In shah zeera excessive stalky and woody matter.
5.	Coffee and Tea	Coat tar dyes, excessive stuff, husk, tamarik husk, sand and grit, used tea dust.
6.	Milk	Water, Starch ad abstraction of fat.
7.	Vansapati	Animal fat, excessive hydrogenation Rancid stuff. Sesame oil deficiency, foreign flavour.
8.	Mustard seed	Argemone seeds which can cause epidemic dropsy.
9.	Oils	Mineral oil potential carcinogenic, argimone oil.
10.	Dals	Kesari dal which can cause lathyrism coal tar dyes.
11.	Groundnut	Aflatoxin can cause cirrhosis of liver

EPIDEMIC DROPSY

Problem: Epidemic Dropsy occurrence is common in some parts of the country. An epidemic has been witness in Delhi and neighbouring states and caused many hundred of lives in the months of August and September 1998.

Cause: Contamination of mustard oil with argemone oil which contain a toxic alkaloid, sanguinarine. The sanguinarine interferes with the oxidation of pyruvic acid which accumulates in blood. Seeds of Argemone mexicana (Poppy Weeds) closely resemble mustard seeds which can be easily mixed with mustard seeds.



Symptomatology: Sudden onset of non-inflammatory swelling of legs, glaucoma, nausea, vomiting, diarrhea, fever, dyspnoea, cardiac failure and death may occur in 5%-50% of cases. There is an occurrence of erythematous motting and raised haemangiomas on the skin and mucous membrance. It may affect anybody whoever consumes the contaminated oil prepared.

Test for adulteration:

Nitric acid test: In a sample of oil, nitric acid is added and then the tube is shaken up which give rise to orange-red colour, indicates the presence of argemone oil. It does not give positive result if the level of oil is less than 0.25 percent.

Paper Chromatography test: It is highly sensitive test to detect argemone oil up to 0.0001 percent in all edible oil and fats.

Treatment: Supportive therapy for cardiac failure is effective, but the response may be slow. A high protein diet is beneficial. All contaminated mustard oil must be identified and further exposure avoided. Temporary ban can be imposed for the sale and use of oil. Mass awareness programme is required to control the epidemic. Selling of open oil should be discouraged and manufacturing at the local level without any specification and standard should be restricted.

Reference

Govt. of India. Annual report 2001-2002. Ministry of Health & Family Welfare. Nirman Bhawan, New Delhi 110011

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