

Editorial

Adulterated Milk: Increases Susceptibility to Disease

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Editor

Milk, one the most nutritious of human food, is being converted into injurious substance through different types of adulteration, making the consumers vulnerable to cancer, kidney failures, abnormal growth and diseases of joints and high blood pressure.

Pakistan produces 41 billion litres of milk annually and is ranked fourth largest global milk producer after India, United States and China. Only six percent of this milk is processed by documented producers and around 10 percent is sold after pasteurisation by non-documented producers. The rest is distributed by milkmen that bring it from far way places to the urban centres.

Since milk has a shelf life of less than six hours, it has to be preserved, while transporting it to the cities.

Its shelf life could be increased through pasteurisation to 72 hours or through ultra heat treatment to three months. The ordinary milkmen do not pass the milk through these processes and as an alternative add chemical preservatives such as penicillin, streptopenicillin, formaldehyde, hydrogen peroxide, sodium bi-carbonate, urea, hair removing chemicals, etc to prolong its shelf life.

All these adulterants have severe health implications on the consumers. The oldest and simplest method of adulterating milk is by dilution with water. If the water used is pure it does no harm other than to defraud the consumer but if it is impure, as it often is when drawn from wells near manure heaps, in barnyards, or country privies, it may prove fatal.

The adulterants / preservatives assume the proportion of health hazards for end consumers, particularly infants, the experts said, adding that formaldehyde is the substance most commonly used for preserving milk and is rarely, if ever, added to any other food. Its use is inexcusable and especially objectionable in milk served to infants and invalids.

District administrations across the country are aware of the malpractice in milk sales. In all the cities, the period samples taken by them reveal adulteration of injurious substances but have been unable to eliminate or reduce

this menace. Abnormal growth, nervous disorder in babies, diseases of joints, kidneys and high blood pressure stem from adulterated milk.

Melamine, in particular in combination with cyanuric acid, causes deposition and precipitation of birefringent (double refraction) crystals, thereby causing renal failure.

In cases where antibiotics or formalin are used to preserve milk it would not be possible to break the milk in to curd by adding lemon juice or a spoon of curd.

A more dangerous trend developed in recent years among the dairy farmers is to inject growth hormone (rBGH) to dairy cows or buffaloes to increase milk production.

It has now been established that growth hormones induce prolonged negative energy balance for at least eight weeks during which increased milk production is paralleled by reduced total body fat, excessive tissue loss and hypertrophy of foregut tissue.

The traces of this hormone are found in the milk consumed by human beings, adding that this milk contains higher quantity of fat with long chain fatty acids.

Besides, this milk induces premature growth stimulation in infants, gynecomastia (excessive development of the breasts in males) in young children and breast cancer in women.

This unethical practice should be curbed through stern administrative action.

A worker of a milk processing plant said that when a cream separator at a creamery is cleaned it is often found to contain a residue of manure, hairs, dirt, and perhaps pus and blood from inflamed udders. This speaks volumes about the way we collect and sell milk.

It is a general perception that officials from the police and civic bodies collect bribes from dairies and adulterators and allow the racket to continue.

Milk is a complete food, readily digested and absorbed. It is a sole natural food for infants for the first few months of life and is chiefly valuable as a source of good quality nutrients.