

This would enable countries of origin either to prevent such patent applications, or to require benefit-sharing arrangements with the applicants. Developed countries should support — not block — this proposal.

As part of the implementation of the Convention on Biological Diversity, developing countries should also establish national arrangements for collecting and using biological resources and the knowledge associated with them, as well as for sharing the benefits from any commercial transactions with those communities which have developed this knowledge.

Unfortunately current efforts by individual countries to review their national laws on intellectual property, in order to bring them in line with their obligations under the TRIPS agreement, is likely to accelerate the biopiracy phenomenon. For this process now requires countries that previously forbade the patenting of life to allow patents on certain types of organisms and living processes.

With careful and intelligent legal and policy choices, developing countries can avoid some of the worst dangers that can arise from the implementation of their obligations under TRIPS. In the long run, however, a fundamental revision of multilateral trade rules is essential if the injustice inflicted by biopiracy on local communities and their indigenous knowledge is to be corrected. ■

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Menacing food commodities

Escalating trends of fraudulent practice in food business has penetrated the 'whole food chain'

Rajendra Uprety

Fraudulent practices by our food industry are undermining public health in Nepal. Although news papers and media frequently cover them, fraudulent practices in the food business are becoming more rampant. It is high time that consumers, who spend a sizable proportion of their earnings on food, learn the bitter truth about the adulteration that has become "food business as usual."

Tests reported in the annual bulletin of the Department of Food Technology and Quality Control (DFTQC, HMG Nepal) reveal that food producers and distributors have been playing their dirty games for at least 20 years. A large number of marketed food items have been adulterated or contaminated (see Figure 1a); we will be discussing only a few of the more egregious cases.

According to a report in the DFTQC bulletin for 1998/99, over 90 percent of milk and milk products (as mentioned in the text) were substandard due to the presence of mesophilic contaminants (yeast, mould, coliform, *Salmonella* species and other few microorganisms) which resulted from adulteration of milk with unsafe water. The 2000/2001 bulletin states that 14 dairies have been producing dairy products in Nepal, and that, for the most part, the quality of their products has been deteriorating (see Figure 1b). The culprits include Adhunic Dairy, Pushpa Dairy, Sainju Dairy and Kharipati Dairy, out of which the products of Pushpa Dairy and Adhunic Dairy were completely substandard during 1999-2001. In addition, 60 to 80% of the marketed products of Integrated Dairy, Silwal Dairy and Nepal Dairy were adulterated. FIGURE 1b gives more details on the quality of dairy products consumed in past seven years.

There was a significant and almost continuous rise in oil adulteration from 1995 to 2001 (see Figure 1c). Most mustard and rapeseed oil was found to be adulterated with the toxic Argemone and other cheaper oils. There is no reason to suspect that these oils are any safer today.

Noodles, though comparatively expensive, are widely consumed snacks, especially popular among school children. 48 percent of snack noodles and 42 percent of

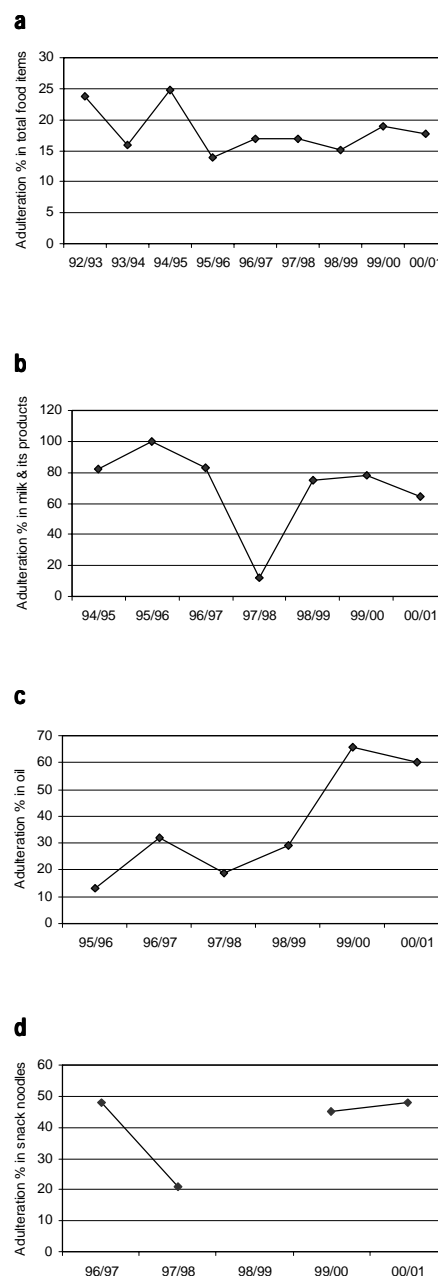


FIGURE 1. Food adulteration in different food products – total food items (a), milk and mild products (b), oil (c), and snack noodles (d). Values in parentheses are the number of samples studied. (CFRL 1998/1999, DFTQC 2000/2001)

This story is available online at www.himjsci.com/issue2/foodadulteration

COMMENTARY

TABLE 1. Conflicting values for pasteurized milk and milk products published in two DFTQC bulletins

Year	Marketed items in milk and milk products with adulteration (%)	
	1998/99 bulletin	2000/01 bulletin
1995/96	106 (one hundred and six)	100 (one hundred)
1996/97	62.5 (sixty-two point five)	83.3 (eighty-three point three)
1997/98	6.3 (six point three)	12.3 (twelve point three)
1998/99	75 (seventy-five)	7.5 (seven point five)

instant noodles consumed during 1999-2000 were found to be substandard due to the adulteration with inedible colours and other contaminants. The DFTQC bulletin states that noodles have been found substandard since regular monitoring began in 1996 (see Figure 1d). Similarly, nearly one-third of the brands of mineral water consumed in the past four years were substandard due to mesophilic contaminants.

The expanding practice of food adulteration is directly attributable to the negligence of the concerned agencies, officials, and experts. Regular inspection is indispensable. But research is not enough. DFTQC

can and should control the appalling situation by promptly releasing evidence of adulteration to the general public via the mass media. In so doing, DFTQC must take steps to present its data and analyses more logically and consistently. For instance, the data on pasteurized milk and milk products of 1998/99 appears differently in the bulletins of 1998/99 and 2000/2001 (see Table 1). The table clarifies the credibility of the reports of responsible organizations. Three different figures are given for the incidence of adulteration of pasteurized milk in 1998/99: 75 (seventy-five) percent in the main table and 90 (ninety) percent in text of the 1998/

99 bulletin, 7.5 (seven point five) percent in 2000/01 bulletin.

Food adulteration reports from throughout the country show that the situation is critical. It is up to consumers to insist that something be done, and quickly. ■

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