



March 7, 2016

Shri. J.P.Nadda
Hon'ble Minister for Health & Family Welfare
Government of India
Nirman Bhawan, New Delhi 110108

Subject: Packaging guidelines for food items

Dear Sir,

I am writing this on behalf of the Disease Management Association of India – The Population Health Alliance (DMAI). DMAI is the only NGO in Health with a 'Special Consultative Status' from the United Nation's ECOSEC. Our work focuses around healthcare reforms, policies and associated activities that impact the health and healthcare of our nation.

Through this note, we wish to highlight our concern for the newspapers used in packing food items and the printed material on tea bags and the potential dangers associated with it. We also suggest based on the facts available, it might be worthwhile banning the use of plastics, recycled materials and newspapers for food packing.

It is a fact that the newspapers are printed with ink that is dissolved on it with the help of chemical solvents. Studies have shown that printing ink from newspapers can easily get leached into foods wrapped or served in them and pose a health risk. The solvent used to dissolve ink on the paper can be potentially carcinogenic.

Also, newspapers and cardboard boxes used for packaged foods are made of recycled paper that may be contaminated with harmful chemicals like di-isobutyl phthalate and di-n-butyl phthalate that can cause digestive problems and also lead to severe toxicity.

Recycled paper also has printing ink residues trapped from previous prints. These trapped residues have found to contain hormone disruptors like benzophenones and mineral oils. They can interfere with reproductive cycle, especially in women

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Exposure to a class of organic chemicals called aryl amines, such as benzidine, Naphthylamine and 4-Aminobiphenyl, are associated with high risks of bladder and lung cancer. Apart from these, printing inks also contain colorants, pigments, binders, additives and photo-initiators (used for speeding up the drying process of the ink), which have harmful effects. Mineral oil-based printing inks for newspapers contain mineral oils, which consists of various types of hydrocarbon molecules that can exist as Mineral Oil Saturated Hydrocarbons (MOSH) and Mineral Oil Aromatic Hydrocarbons (MOAH). These hydrocarbons usually convert into gases by evaporation that eventually penetrates food items.

Newspapers are usually produced by a system called offset-web printing, which requires a certain consistency of the ink (it needs to be very thick) and a particular means of drying. For the former, mineral oils (petroleum-based) and solvents such as methanol, benzene and toluene are used; and for the latter, heavy metal (Cobalt)-based drying agents are used. None of these should be used in food packaging, as they are also classified as harmful and can be perilous for consumers' health.

According to the Food and Agriculture Organization/World Health Organization (FAO/WHO) Joint Expert Committee on Food Additives, the safe upper limit for the MOSH in foodstuffs is 0.6mg/kg. Older people, teenagers, children and people with compromised vital organs and immune system are at a greater risk of acquiring cancer-related health complications.

Another similar problem is that fast food restaurants are packing in thin, transparent plastic bags, as takeaways. These clear synthetic bags are typically made of polyethylene (polythene) and the principal potential 'migrant' agent is ethylene. There are a number of potential additives to polythene, such as anti-static agents, ultra-violet protection and flame-retardants. These additives can be very dangerous if they move into the takeaway food.

According to an article in the British Medical Journal, 'Food packaging and migration of food contact materials: will epidemiologists rise to the neotoxic challenge? J. Epidemiol' by Muncke J, et al. (Feb 2014), scientists say that most food contact materials (FCMs) are not inert. Chemicals contained in the FCM, such as monomers, additives, processing aids or reaction by-products, can diffuse into foods and this chemical diffusion is accelerated by warm temperature, and in India, the temperatures can touch as high as 45 degrees Celsius.3

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The scientists believe that FCMs are a significant source of chemical food contamination. As a result, humans consuming packaged or processed foods are chronically exposed to synthetic chemicals at low levels throughout their lives.

Formaldehyde, another known carcinogen, is widely present at low levels in plastic bottles made of polyethylene terephthalate. Other chemicals known to disrupt hormone production and used in food and drink packaging include; Bisphenol A, tributyltin, triclosan and phthalates.

There is an increase in the use of tea bags, and while using teabags, sometimes; people squeeze the teabag using the label fixed at the other end of the thread. This can leak the ink from the label. We recommend that the guidelines be framed and implemented to warn people of the same and prevent this practice

The FSSAI must act immediately and frame guidelines to control wrapping of fried foods in newspapers, banning the use of plastic bags for takeaways, and other practices that are harmful.

Further, it must mandate the use of food packaging grade 'butter paper' or 'aluminum foil' for packaging. We need to act on this without losing any further time

In hope of the needful at the earliest

With best regards

Rajendra Pratap Gupta
President & Board Member

CC:
MOS, Ministry of Health & Family Welfare, GOI
Secretary, Health & Family Welfare, GOI
CEO, FSSAI

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