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## A study of food labelling strategies to allay and tackle the paranoia concerning food additives, sugar and fat

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The essence of a food label is provision of useful and essential information. The label must comply with the legislative requirements; it must not be false and misleading. In the United Kingdom (UK), the food information regulations 2014 implementing regulation (EU) 1169/2011 on the provision of food information to consumers contain provisions to inform and protect the consumers from false and misleading information and ultimately fraud. The general requirements for food safety including labelling are laid down by Food Safety Act 1990 as amended and Regulation (EC) No 178/2002 of the European Parliament and of the Council. In addition to safety, there are concerns about adverse impact of certain food additives, fats and sugars on health. Hence, the consumers' food preferences are additive-free, fat-free and sugar-free products. Food safety and health are very mediacentric and sensitive. The media-centricity has been exploited and used as a weapon by certain groups to further their own agenda. In the UK, there is hardly a week without a headline on foods, often scare mongering and contradicting, with additives, fats and sugars as the main targets. The extreme and relentless campaigns against these ingredients by consumers, consumer advocacy groups and governmental agencies and departments, have led to the development of food labelling strategies to dispel the fears and appeal to the consumers. The strategies include exclusion of the E-numbers, food additives categories and use of descriptors such as fat-free and sugar-free on food labels. Such strategies raise several questions; to what extent are the descriptors misleading, what impact will the apparent absence of additives have on product sale and finally how does it influence the consumer choice? Thus, this paper through a rigorous examination of food labels, assessment of sales and consumer survey, will attempt to answer these questions and show how such labelling practice could mislead the consumer and influence their food choice. It will also highlight a new trend and opens up the debate for consumer education on food labelling and protection from psychological manipulation. It is expected with respect to food choice, that the descriptors and absence of additives will have a significant positive impact, as the fear and paranoia are dispelled.

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## Antimicrobial effect of nanocomposite films made of Cloisite 30B metal nanoparticles in soy burger

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This study was undertaken to investigate the ability of different kinds of nanocomposite films made of Cloisite-30B with different percentage of silver and copper oxide nanoparticles incorporated into a low-density polyethylene (LDPE) polymeric matrix by a melt mixing method in order to inhibit the growth of microorganism in soy burger. The number of surviving cells of the total count was decreased by 3.61 log and mold and yeast diminished by 2.01 log after eight weeks storage at  $18 \pm 0.5^\circ\text{C}$  while pure LDPE did not have any antimicrobial effect. A composition of 1.3% Cloisite 30B-Ag and 2.7% Cloisite 30B-CuO for total count and 0% Cloisite 30B-Ag and 4% Cloisite 30B-CuO for yeast and mold gave optimum points in combined design test in Design-Expert 7.1.5. Suitable microbial models were suggested for retarding above microorganism's growth in soy burger. To validate the optimum point, the difference between the optimum point of nanocomposite film and its repeat was not significant ( $p < 0.05$ ) by one-way ANOVA analysis using SPSS software, while the difference was significant for pure film. Migration of metallic nanoparticles into a food stimulant was within the accepted safe level.

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