

## The prospective impact of food pricing on improving dietary consumption: A systematic review and meta-analysis

Poor diets are the leading risk factor for death and disease globally. Food price changes have been proposed as effective strategies for improving diet. Government economic strategies to improve diet can involve increasing price (taxation) and reducing price (subsidies). Price can also be altered through other interventions, such as in store promotional price changes. Several existing reviews suggest that price change may improve diet and reduce obesity. However, the evidence only concluded effectiveness through assessment of non-numerical data. This study aims to address this gap by reviewing numerical evidence of the effect of food price changes on dietary consumption. The study also aims to learn more about how additional interventions influence these effects.

30 studies met the inclusion criteria. The systematic review found that both subsidies on healthy food and taxation of unhealthy food improved diet. There were larger effects on diet when price decreased compared to when price increased (12% vs 6% per variation in consumption per 10% price decrease vs increase, respectively). Fruits and vegetables were found to be more sensitive to price reduction compared with previous studies. A number of reasons were found to contribute to the greater effect on diet through price decrease. Firstly, the promotion of healthy behaviours rather than the restriction of unhealthy was found to be more effective. Secondly, reviewed studies investigating price decrease found that interventions such as nutrition education and promotional pricing complimented positive dietary change. Consistent with the benefits of dietary consumption, price reductions on healthy food was linked with a reduction in Body Mass Index.

Overall, this study concluded that both subsidies and taxation can encourage the consumption of healthier diets. The results can inform the future design of economic food policies aimed at improving the diet and health of populations.

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