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Impacts of China's edible oil pricing policy on nutrition

Shu Wen Ng[a], Fengying Zhai[b], Barry M. Popkin[a,*]

[a]*Carolina Population Center, University of North Carolina at Chapel Hill, University Sq., CB# 8120 123 W. Franklin St., Chapel Hill, NC 27516-3997, USA*

[b]*Chinese Center for Disease Control and Prevention (China CDC), 27 Nan Wei Road, Beijing 100050, People's Republic of China*

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Abstract

China's health profile has shifted to one dominated by obesity and nutrition-related noncommunicable diseases (NR-NCDs) necessitating an examination of how economic policies can improve this situation. Edible oil consumption is responsible for much of the increase in energy density of the Chinese diet and particularly linked with the shifting burden of NR-NCDs toward the poor. Longitudinal analysis among adults in the China Health and Nutrition Survey (CHNS) covering the period 1991–2000 revealed that price policy effects on edible oil can influence dietary composition (particularly of the poor) and the results identify a key preventive policy need.

Keywords: China; Edible oils; Pricing policy; Nutrition transition; Overweight

Introduction

During the past 20 years, there have been remarkable transformations in global economies and a major shift in the health area—where undernutrition is rapidly being replaced by overweight and obesity (Mendez, Monteiro, & Popkin, 2005; Monteiro, Conde, Lu, & Popkin, 2004). One of the major components of this shift has been a rapid increase in the energy density of the diet (Bell & Rolls, 2001; Kral & Rolls, 2004; Prentice & Poppitt, 1996; Rolls & Drewnowski, 2005). Large increases in edible oil consumption are an issue in many countries, representing a major element in this shift toward more energy-dense food intake (Drewnowski & Popkin, 1997; Du, Lu, Zhai, & Popkin, 2002; Du, Mroz, Zhai, & Popkin, 2004).

These newly emerging problems are particularly relevant for China. China, with its rapid economic and social change combined with the nutrition transition (i.e., a series of changes in diet, physical activity, health and nutrition), has seen a similar shift (Popkin, Kim, Rusev, Du, & Zizza, 2006; Wang, Du, & Popkin, 2006). With some of the fastest rates of increase in overweight and obesity accompanied by large increases in health costs and other related economic costs, China faces a situation where conservative estimates predict 8.7% of its 2025 gross national product (GNP) will be allocated to nutrition-related noncommunicable diseases (NR-NCDs), linked with energy imbalance and obesity (Popkin et al., 2006). These changes represent serious health and economic threats to China's adults and suggest that the future of their children will not be a healthy one. Prices and other economic incentives, used to foster rapid growth of the economy, can be

*Corresponding author. Tel.: +1 919 9661732.
E-mail addresses: shuwen@unc.edu (S.W. Ng), popkin@unc.edu (B.M. Popkin).

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used to provide a positive effect on the dietary decisions of Chinese adults.

Price policies are basic to China's development, and are also very important in affecting global food consumption decisions (Guo, Mroz, Zhai, & Popkin, 2000; Guo, Popkin, Mroz, & Zhai, 1999; Timmer, Falcon, & Pearson, 1984). The basic idea is that the price of food, set by the market, reflects the cost of producing the food rather than true costs (which should include the external costs of treating NR-NCDs such as coronary heart disease or Type II diabetes). If this is indeed true, then a price increase should, in theory, provide an economically efficient solution to the mismatch between true and market costs. However, the effectiveness of such a measure depends on how responsive consumers are to price changes. Since there are convenient substitutes between foods, it is not sufficient to simply look at price changes of targeted food groups to observe dietary impacts. It is also necessary to consider how price changes for one food might impact the demand for other foods and resultant nutritional intakes.

An added consideration is the impact on rich and poor Chinese. Recent research has shown a marked shift in NR-NCDs toward the poor in China (Monteiro et al., 2004). The most rapid shifts in energy-dense foods, higher fat diets, and greater obesity are found among lower-income and rural Chinese (Du et al., 2004; Wang et al., 2006). Similar changes are occurring in other developing countries with increases in GNP per capita greater than $2500 (in real terms) (Monteiro et al., 2004).

China's edible oil pricing policies

In China, food-pricing policies have changed notably over the last half-century. At the time of the founding of the People's Republic of China in 1949, China's grain production was very low, resulting in a limited supply in the face of increasing demand. To address the shortage, a state monopoly for purchasing and marketing grain was implemented nationally in 1953, replacing free trade of grain and edible oils (Ge, Chen, Shen, & Zhang, 1991).

In 1955, a rationing system that gave the government control over the price system for major foods was instituted in urban areas (Today'sChina, 1988) with quotas determined by age, occupation, and intensity of labor. The government purchased farm and farm-related products at a fixed purchasing price and they were subsequently sold to urban residents at lower prices. Due to escalating production costs, the government purchasing price of farm and farm-related products was raised systematically, but the selling price to residents remained unchanged. Government subsidies compensated for the differences between the purchasing and selling prices (Duncan & Jiang, 2001).

China began reforms in 1978 through 1980 that focused on increasing agriculture production, investment, and employment generation. These reforms were followed by many shifts in economic policies at the national, provincial, city, and county levels. Price policy shifts were central to these reforms as the government worked to remove the heavy financial burden of its price subsidy system. Consequently, subsidies for food were gradually reduced to meet the needs of the market economy.

Edible oil price policies were a critical element in this transformation. In 1983, the government removed its unified purchasing policy on edible oils and opened the market for negotiated prices (ChinaGate, 2004). In May 1991, the price of rationed grain and edible oil was re-adjusted, with the price of grain increasing 70% and the price of edible oil almost doubling (Ge et al., 1991). The government also released food supplies previously unseen in China, resulting in demand and consumption increasing significantly during this period (Du et al., 2002; Popkin et al., 1993). By 1992, governmental control over the price of edible oil was eliminated. To lessen the impact of increased costs, the government provided subsidies on certain non-staple foods to urban residents. In 1996, state-own enterprises (SOEs) were also exempted from the value-added tax (VAT) when selling edible oil (Qian & Wu, 2000).

The most recent development was China's accession into the World Trade Organization (WTO) in 2001. As part of WTO trade negotiations, China agreed to phase out tariff quotas for soy oil, and to eliminate the quota on sunflower, peanut, and corn oil, with a 10% tariff put in its place (Agri-Canada, 2002). The supply of domestic oil production also increased, especially for rapeseed and soy oils, with technology improvements in seed crushing and processing. There had been enormous rationalization of the Chinese production sector—employment was dropping significantly and larger, more capital-intensive, and modern production facilities were emerging. All of these signaled general declines in oil prices towards international market prices and had implications on consumer demand.