



Who can afford a nutritionally adequate diet in Mexico?



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Introduction

The high cost and unaffordability of healthy diets are associated with increased food insecurity and different forms of malnutrition (stunting childhood and obesity). What the evidence shows is that as the quality of the diet increases, it becomes more expensive and exceeds what families can afford with their income. (FAO 2020, Hirvonen, Bai & Headey 2019) The objective of this study is identify and estimate the cost of different current dietary patterns of the Mexican population, compare them with the cost of a nutritionally adequate diet, and to identify for which population groups is it affordable (vs average per capita income).

Compared dietary patterns

To analyze the current dietary pattern of the Mexican population was used the 2012 National Health and Nutrition Survey (ENSANUT) data, which is representative of the national population (Romero et al. 2013). On the other hand, the nutritionally adequate diet was constructed to satisfy the nutritional needs of different groups of the Mexican population (Ávila, 2012).

Method

The current dietary pattern was analyzed to individuals between 14 to 50-year-old by clusters. The cost of both dietary patterns was estimated using the 2012 National Consumer Price Index (NCPI) and it was determined for which population groups they are affordable compared to the average per capita income estimated from the 2012 National Household Income and Expenditure Survey (NHIES).

Results

The results of the cluster analysis of the dietary patterns of the Mexican population showed that it can be characterized in three important dietary patterns. The first, identify 43% of the Mexican population, was characterized by a high consumption of dairy products and processed foods such as refined cereals, sweets, desserts and fast food and sugary drinks (industrialized). The second pattern (austere), followed by around 28% of the population, was characterized by a high consumption of corn tortillas, dairy products, refined cereals, sugary drinks, but also legumes and fruits. Finally, the third food pattern (prudent) was a trend followed by 29.4% of the population and had a high consumption of dairy products, legumes, refined cereals, but also significantly consumed fruits, Mexican snacks and red meat, and it was the pattern with the highest consumption of vegetables (Figure 1).

A nutritionally adequate diet for the Mexican population was estimated at 2012 USD PPP \$4.2/day, which was below the average cost of the different current dietary patterns, and the national average (2012 USD PPP \$ 8.3/day).

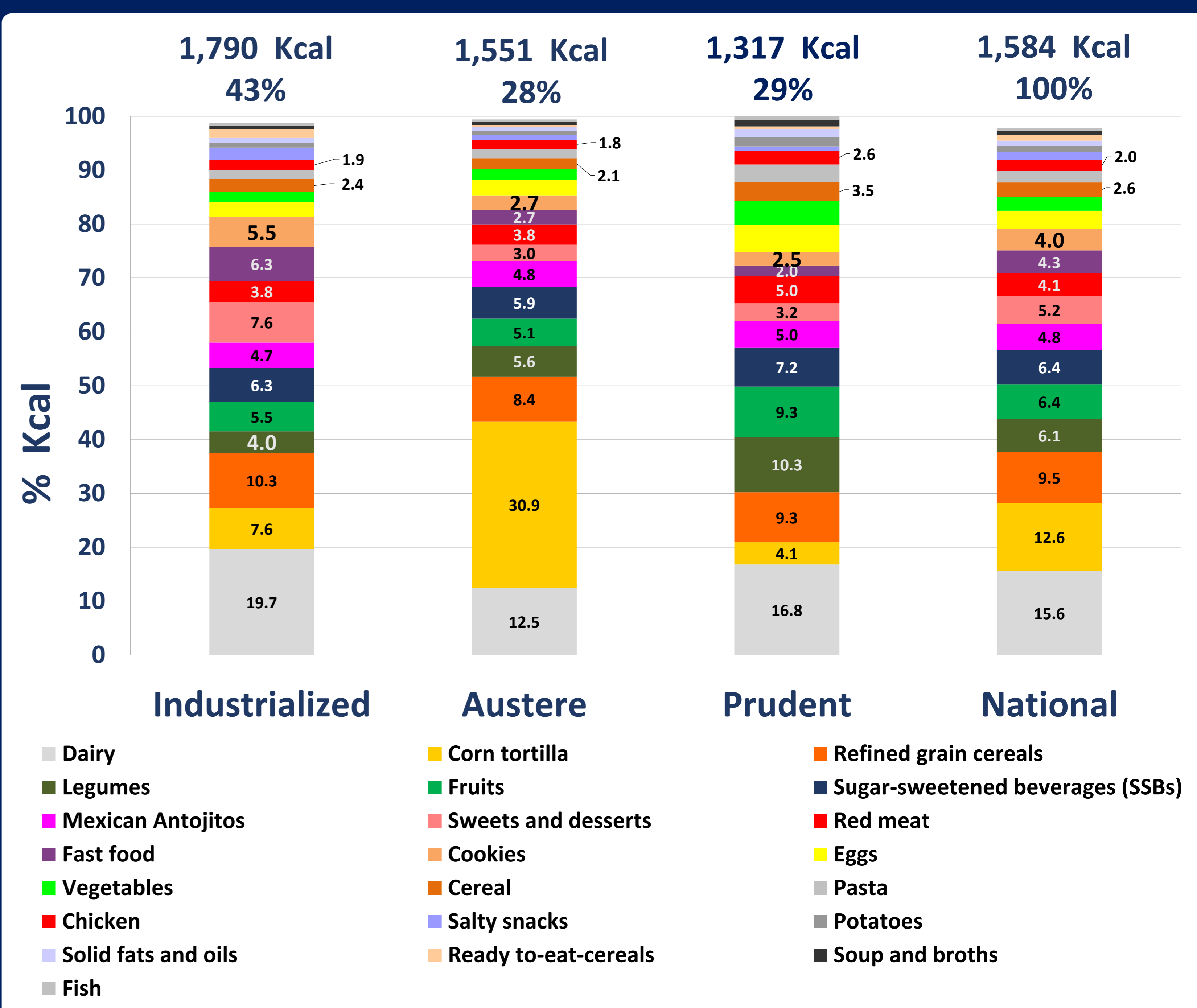


Figure 1. Current dietary patterns (clusters) in Mexico.

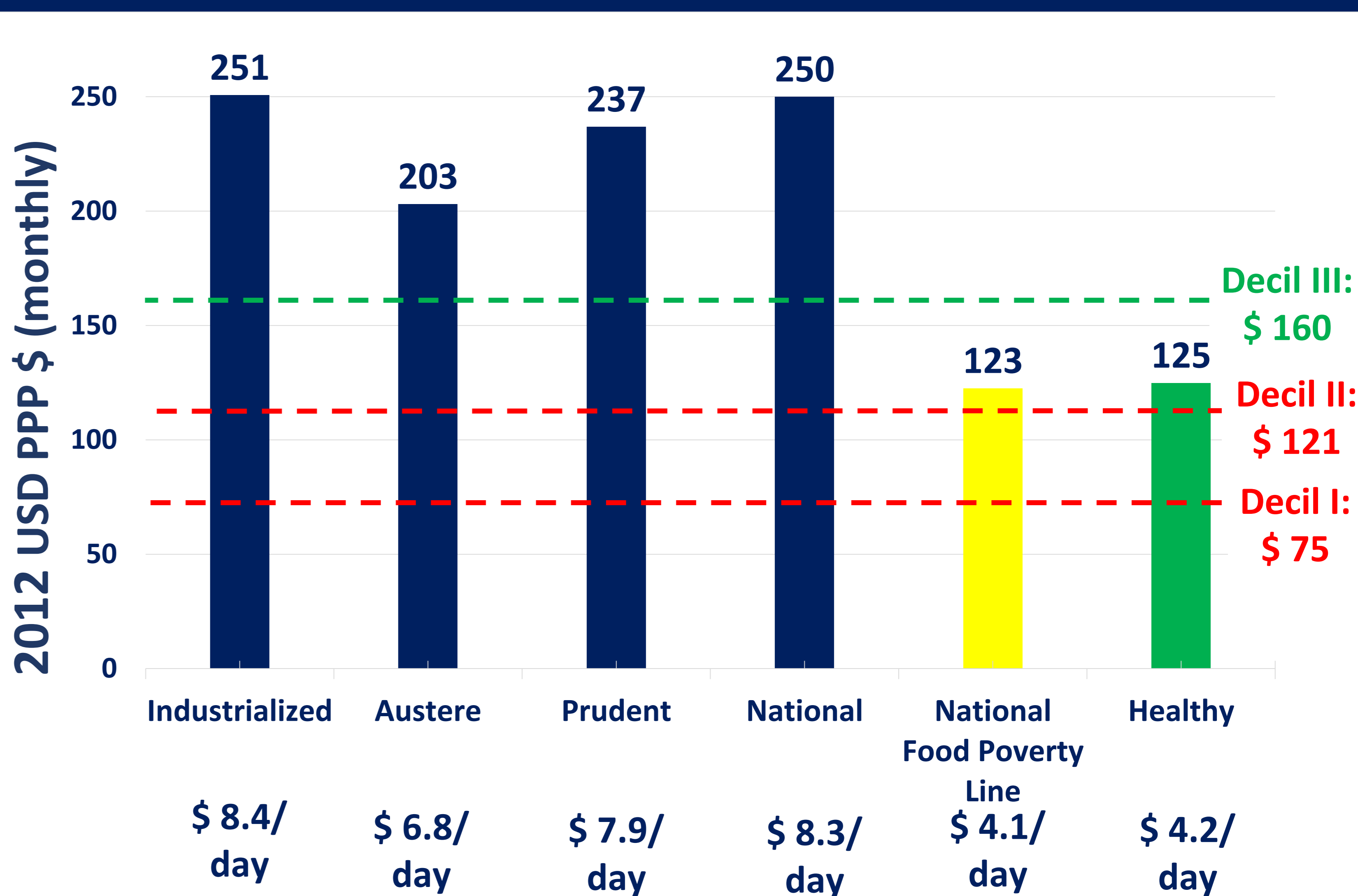


Figure 2. Affordability of a healthy and current diet (monthly and daily).

This means that for deciles I and II this diet was unaffordable, and from the third income decile, it could already be paid (Figure 2).

Conclusions

A nutritionally adequate diet can contain varied intakes of different food groups and have a cost that is only affordable for the population whose income is above the third income decile. The estimation also is above the National Food Poverty Line (2012 USD PPP \$4.1/day) and the international poverty line (2011 USD PPP \$1.90/day). This results suggests that for achieve a better Mexican diet policies are required to improve their income, make better food available at lower prices, among other actions.