



Preferences for apples produced conventionally and organically as certified by the Agricultural and Livestock Service (SAG) in southern Chile

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INTRODUCTION

In Chile, 30,443 organic hectares were certified in 2007/08. Of this area, 14% is dedicated to fruit trees, in particular vineyards, olive trees and apple trees.

The increased land with organic certification has focused mainly on export, but the domestic market is also expected to grow with the implementation of the Chilean Organic Production Standard.

The relative importance of the production system (conventional and organic), organic certification (with and without SAG seal) and price (normal, 25% and 50% increase) were evaluated in apples chosen by consumers in the southern city of Temuco, Chile. Consumer typologies were also identified based on their preferences.

Three consumer typologies were distinguished. The largest (Group 1, 45.8%) gave greatest importance to production and preferred organic apples. The second (Group 2, 34.0%) gave the greatest importance to price and the smallest (Group 3, 20.2%) to seal, but both preferred conventional fruit. In all three typologies, the SAG seal and the lowest price were favored (Fig. 1 and 2).

The typologies presented differences according to education (Fig. 3), occupation (Fig. 4), lifestyle (Fig. 5), expenditure on foods (Fig. 6) and fruits (Fig. 7), organic fruit consumption (Fig. 8) and purchasing habits (Fig. 9) and reasons not to consume organic fruits (Fig. 10); therefore, not according to gender, age, composition of the family group, socioeconomic level and ethnic origin.



METHODOLOGY

400 direct surveys were applied in February 2009. Those surveyed put their preferences in nine combinations of levels for each attribute in a factorial design with a conjoint analysis.

A cluster analysis was used to distinguish consumer typologies. To describe the segments, a Chi-square test was applied for the discrete variables and a one-factor analysis of variance for the continuous variables, with a 99% confidence level. The variables whose analysis of variance resulted in significant differences ($P \leq 0.001$) were subjected to the Tukey Multiple Comparisons Test. The SPSS program version 16.0 for Windows was used.

RESULTS AND DISCUSSION

In the total sample, price (39.7%) was more important than production system (32.1%) and seal (28.2%) (Fig. 1). Organic apples were preferred, with the SAG seal and at the lowest price (Fig. 2).

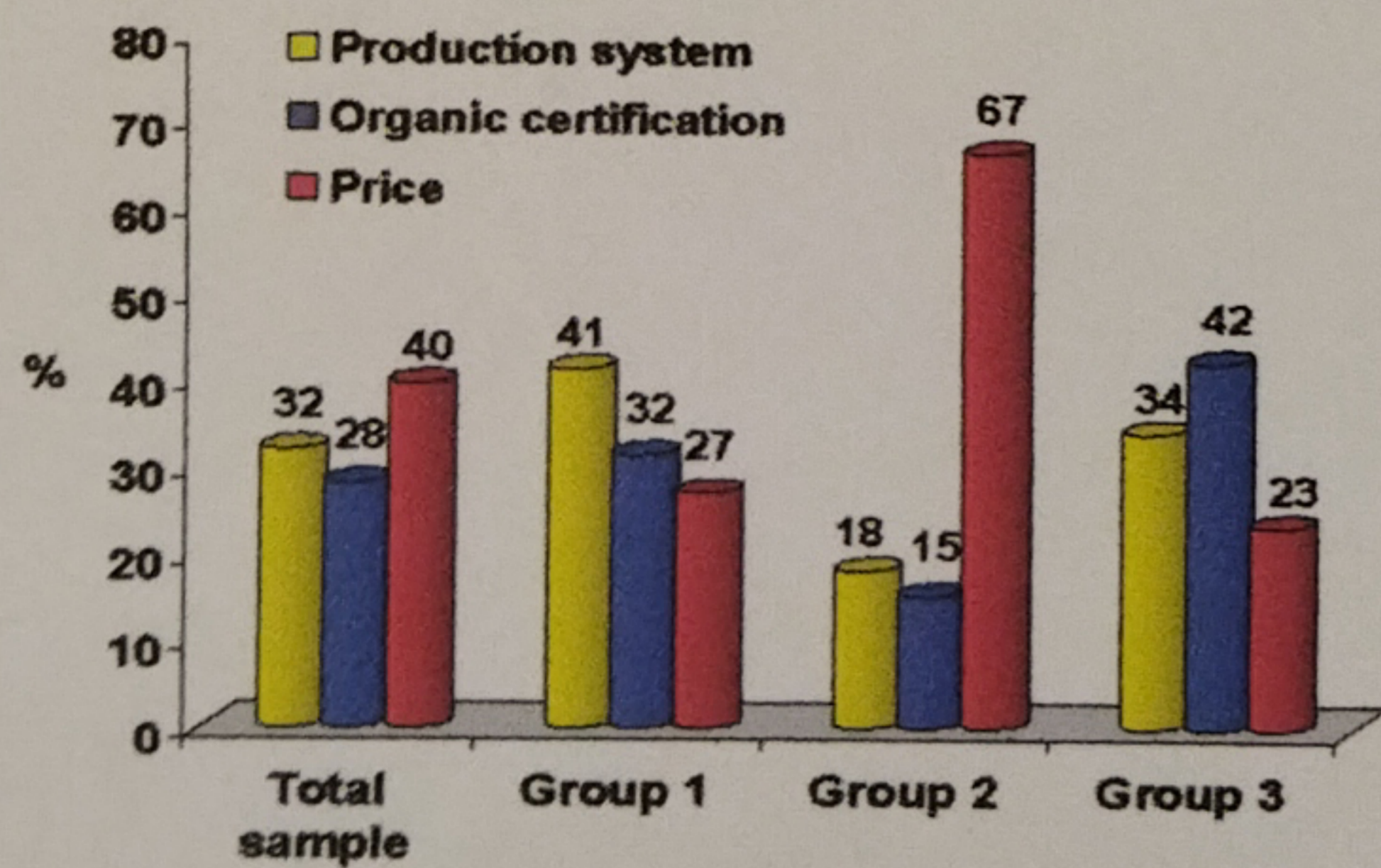


Figure 1. Importance (%) of the attributes in the total sample and groups obtained with cluster analysis.

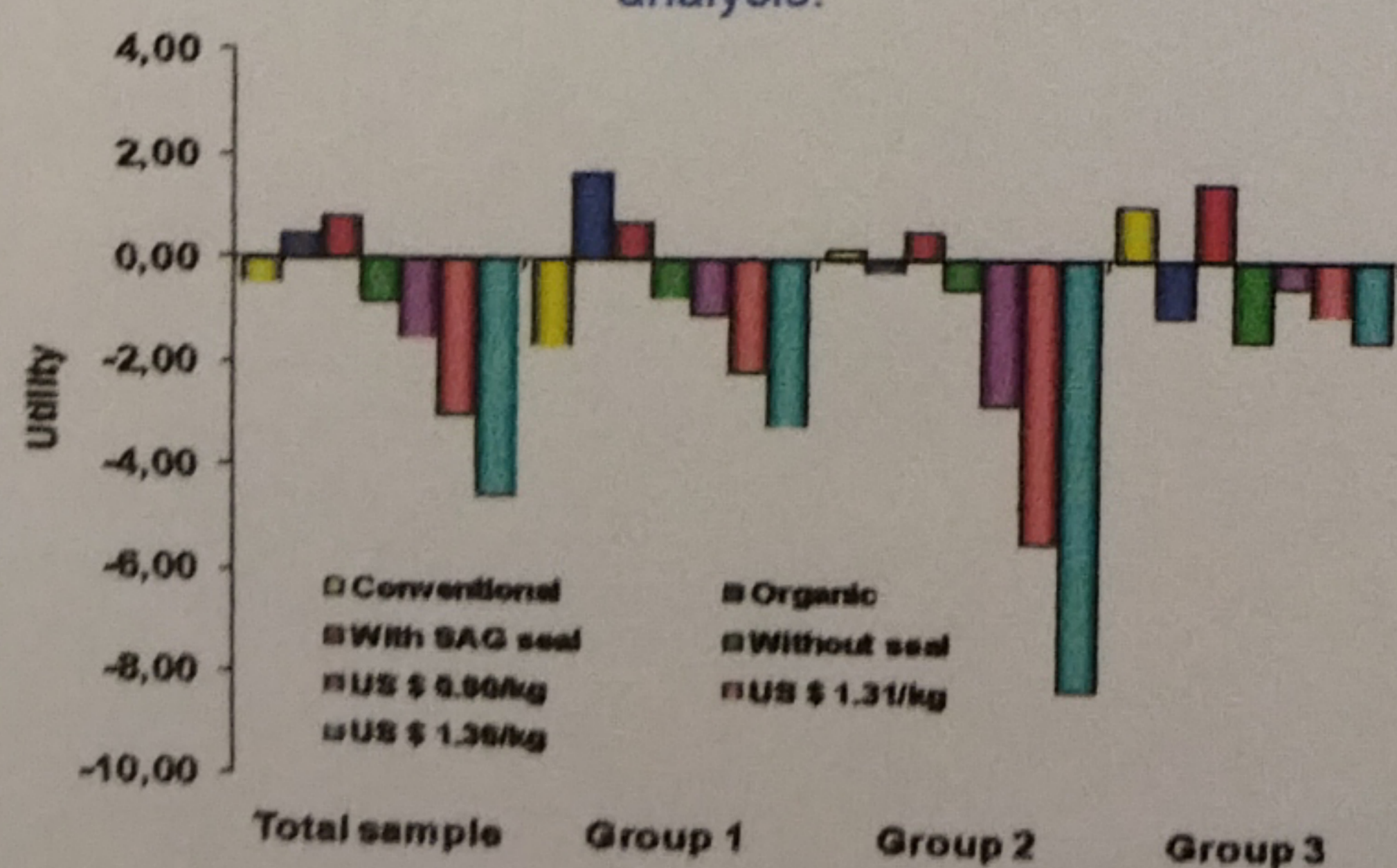


Figure 2. Utilities of the levels of the in the total sample and groups obtained with cluster analysis.

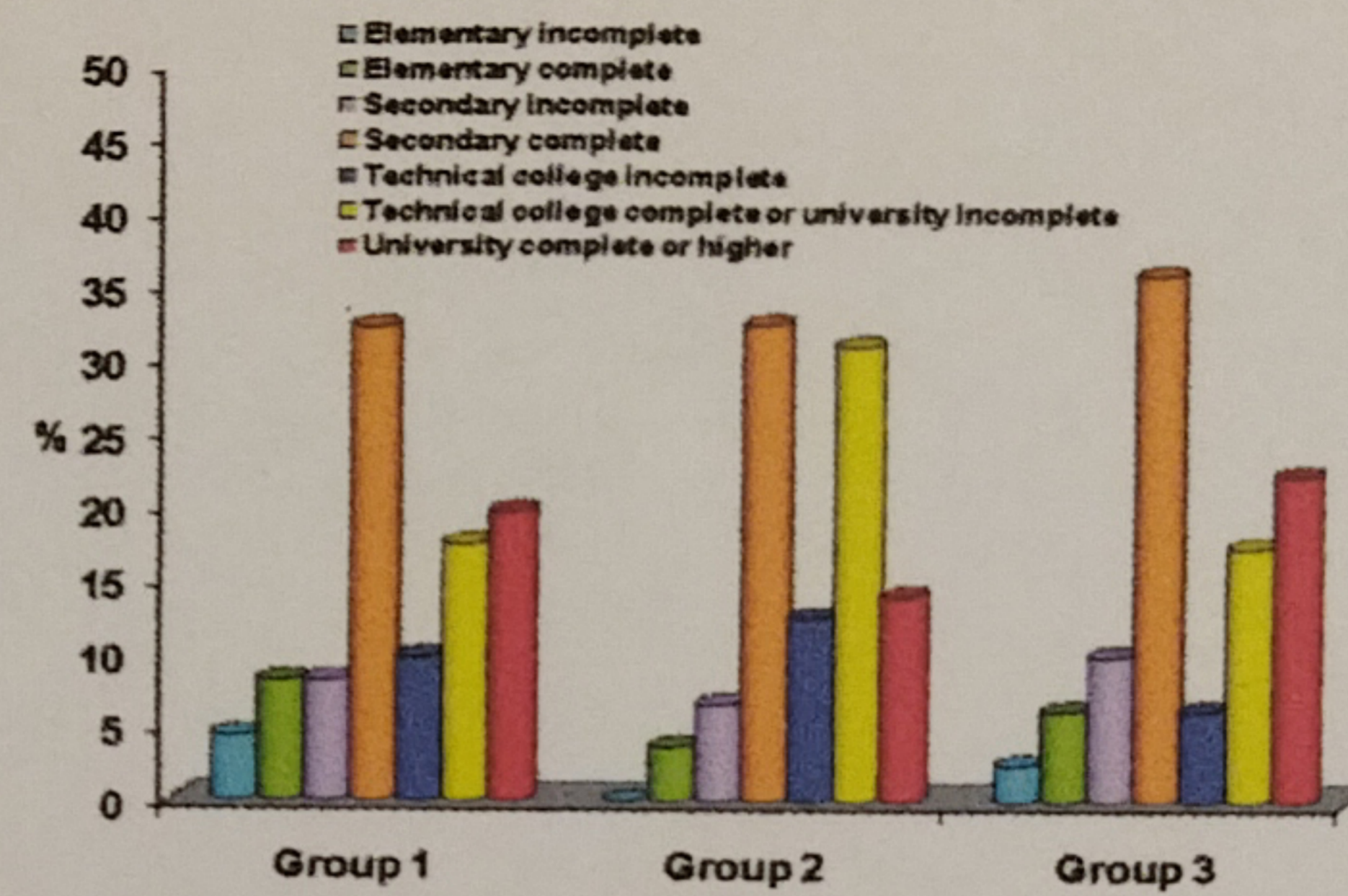


Figure 3. Educational characteristics of groups obtained with cluster analysis.

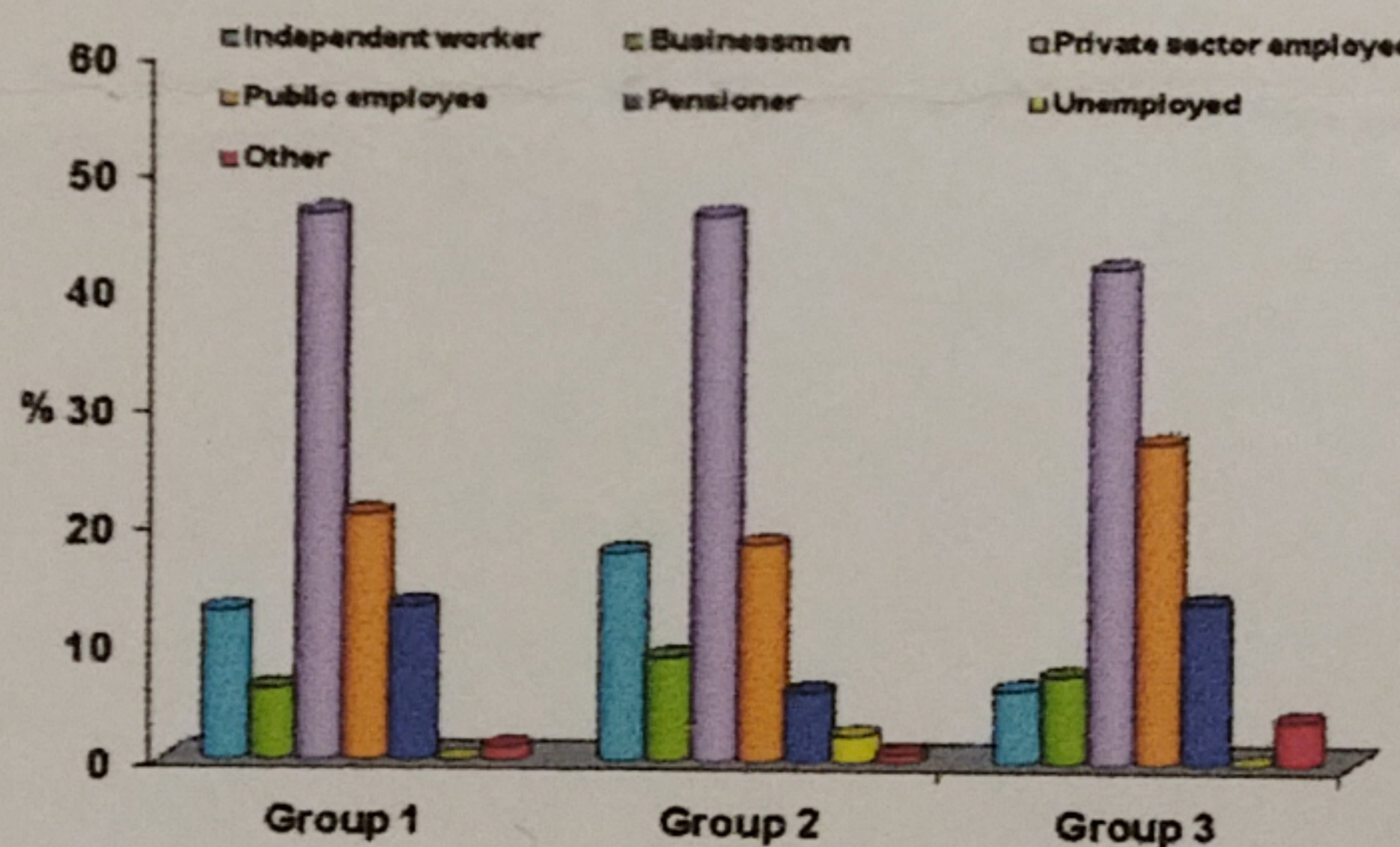


Figure 4. Occupation characteristics of groups obtained with cluster analysis.

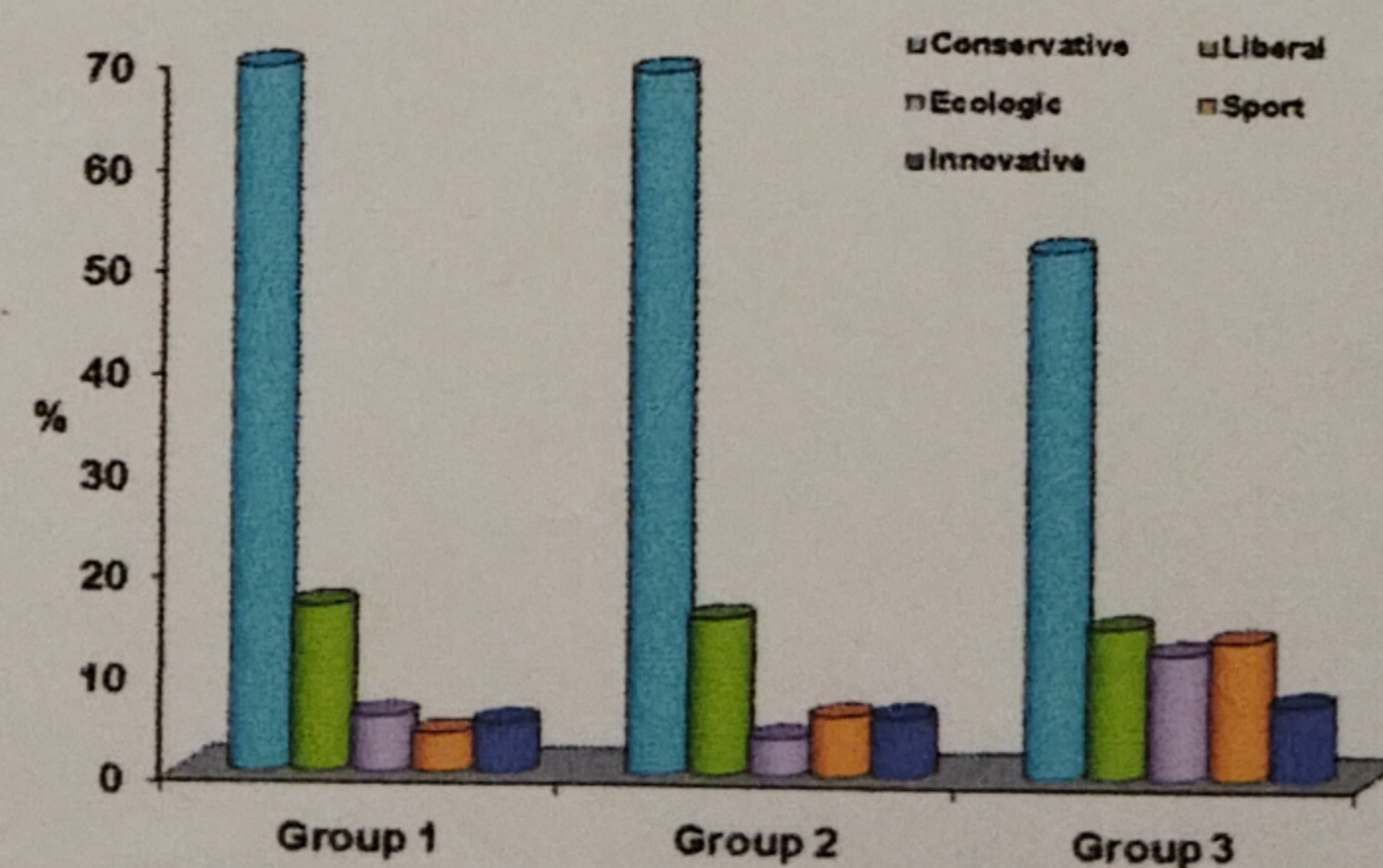


Figure 5. Lifestyle of groups obtained with cluster analysis.

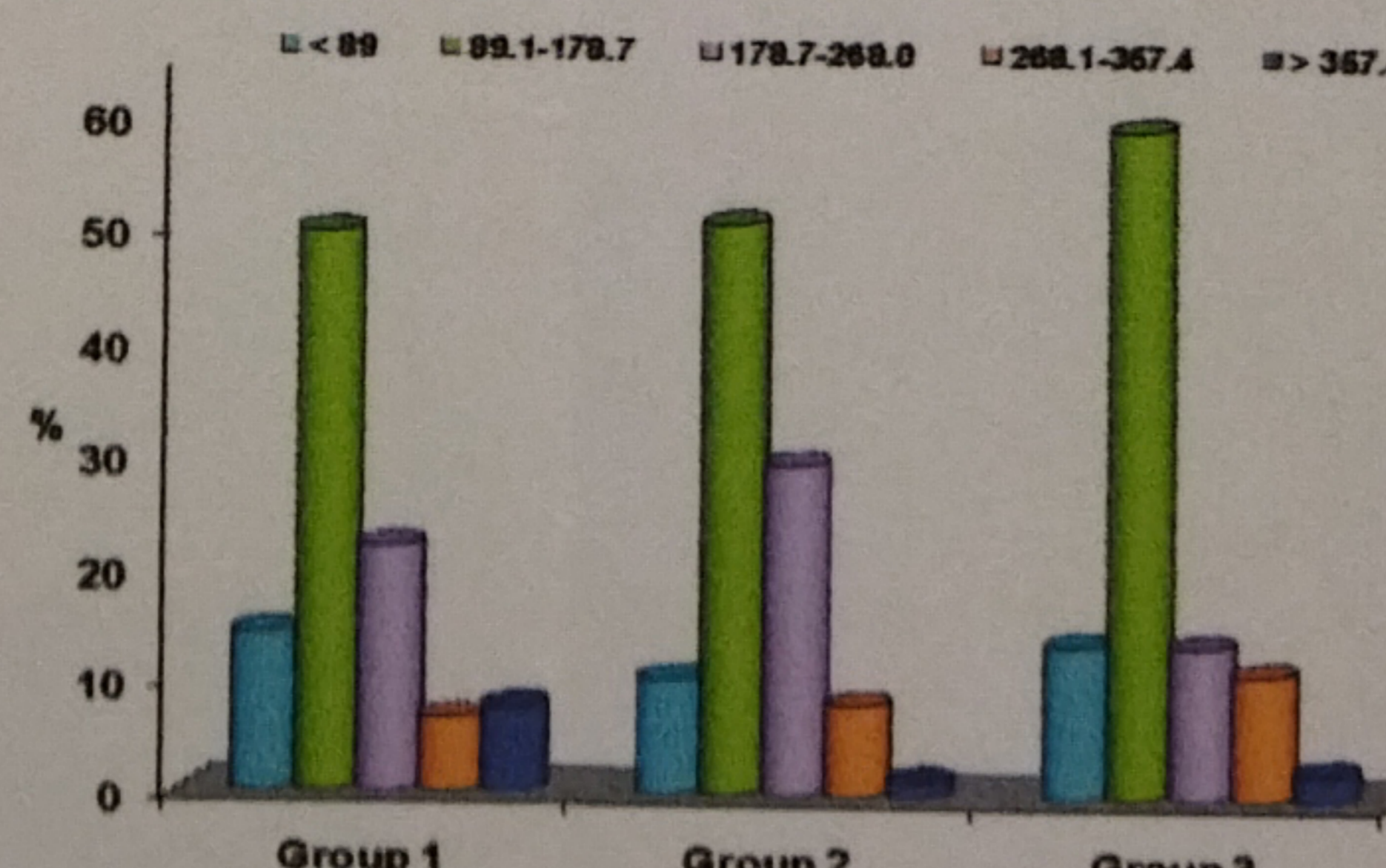


Figure 6. Expenditure on foods (US\$) of groups obtained with cluster analysis.

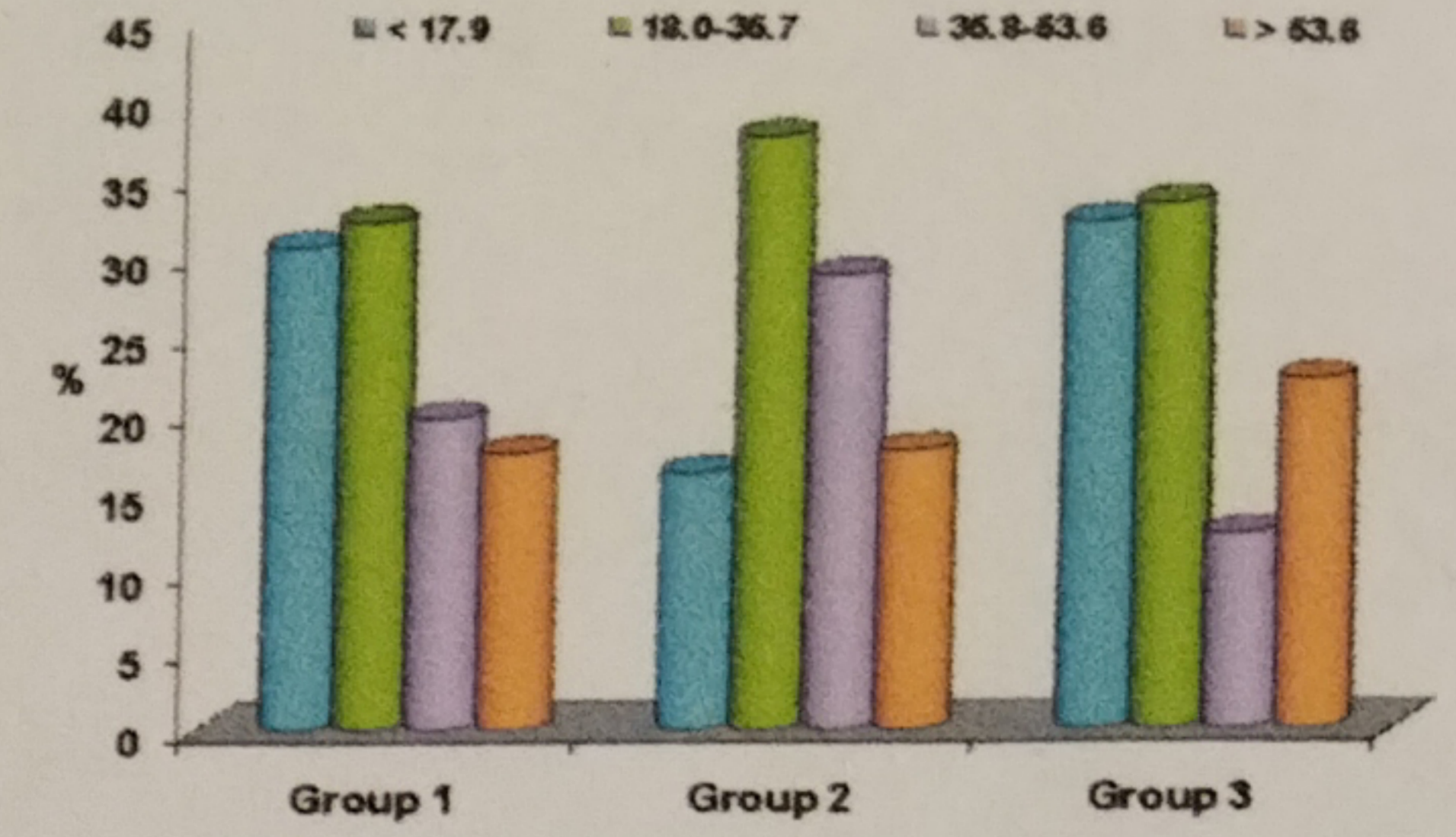


Figure 7. Expenditure on fruits (US\$) of groups obtained with cluster analysis.

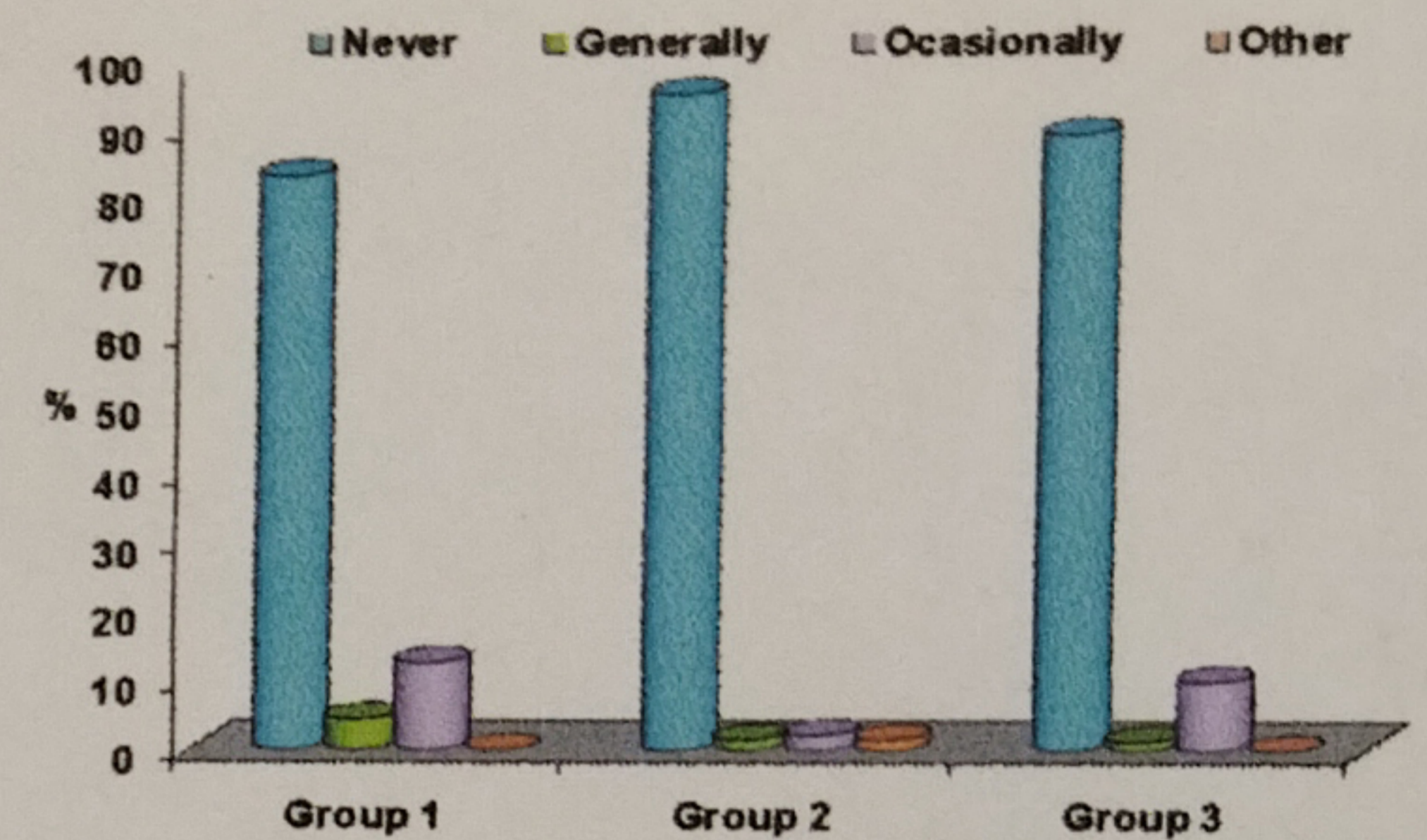


Figure 8. Organic fruits consumption of groups obtained with cluster analysis.

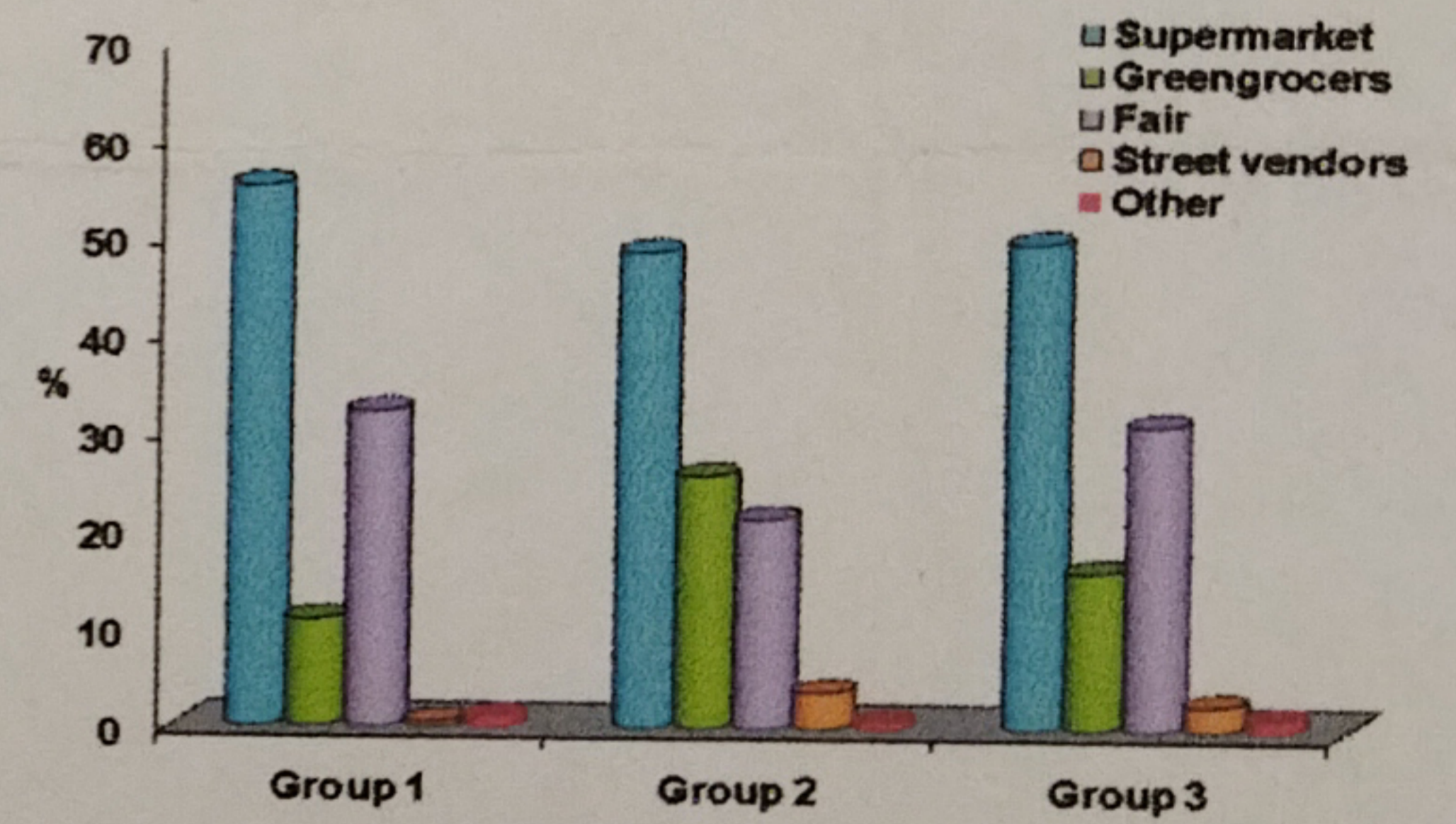


Figure 9. Fruits purchasing habits of groups obtained with cluster analysis.

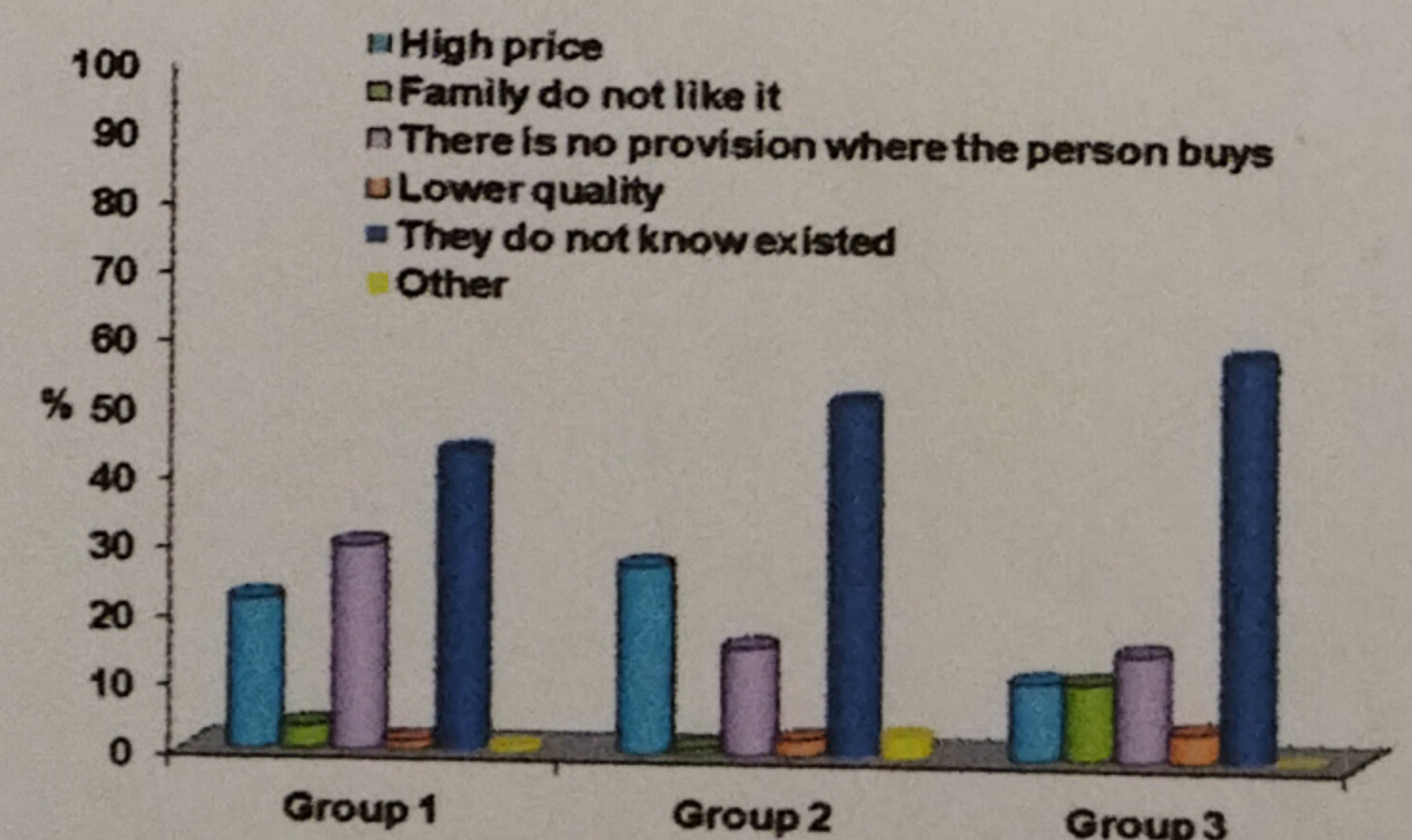


Figure 10. Reasons not to consume organic fruits of groups obtained with cluster analysis.

CONCLUSION

A significant proportion of consumers prefer organic apples, favoring the product with SAG certification; however, price is the attribute that dominates the choice and this would limit the growth of the organic fruit market in Chile.

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