

# Monitoring sugar content in soft drinks - Portuguese initiatives towards public health

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## Introduction

COSI (Childhood Obesity Surveillance Initiative) stated that in 2019, 29.6% of Portuguese children were overweight and 12% were obese. Moreover, soft drinks consumption increased 13.7% in primary school children between 2008 and 2016.

WHO recommends that less than 10% of our total energy consumption comes from free sugars, which is equivalent to 50 g per day (approximately 12 tea spoons) and, ideally, below 5%, to obtain greater benefits in health. According to the same organization, free sugars are all types of sugars that are added to foods and beverages, either by the producer or the consumer, as well as those that are naturally present in honey, syrups, fruit juices or fruit concentrates.

The results presented by the National Food and Physical Activity Survey (IAN-AF) indicated that the biggest contributor for the ingestion of free sugars is the table/addition sugar, followed by soft drinks. The same results also revealed that the prevalence of soft drinks and nectars consumption with sugar content exceeding 220 g sugar/day reached 42% for teenagers.

To decrease chronic diseases, namely obesity, Portugal defined the Integrated Strategy for the Promotion of Healthy Eating (EIPAS), which includes measures to reduce sugar intake.

**Objectives:** To evaluate sugar content in soft drinks available on the Portuguese market against the sugar target values recommended by EIPAS; to know current reality and support policy makers.

## Methods

Nutritional information, sugar and energetic value, were collected during 2019 from labels on soft drinks category in the largest supermarket chains that provide online information.

Sugar collected data were compared with EIPAS recommendations: 2.5 g/100 mL. For energy, EIPAS has no limits defined. Therefore, as a reference for assessing the energy value of this category, the Regulation No. 1924/2006 on nutrition and health claims made on foods, states that a claim that a food is low in energy can only be made when the product does not contain more than 20 kcal (80 kJ)/ 100 mL for liquid foods.

**Results:** Information on the collected data is displayed in figures 1 and 2. From 170 labels, 47 complied with EIPAS sugar recommendations, 122 did not comply and one was discarded, as it stood out from other values in relation to the excess of sugar and energy values (further check in shelf revealed wrong online information).

For sugar, the mean, median and mode, in g/100 mL, were 5.4, 4.5, and 0, respectively. Regarding energy, in kcal/100 mL, the mean and median were 23.9 and 20.0, respectively.

In this category, it was found that in products with low or 0% sugar, this component was partially or totally replaced by sweeteners.

In both graphs the behavior of the curves is similar, with a visible direct relation, due to the fact that in this food category sugar is the only contributor to the energy value.

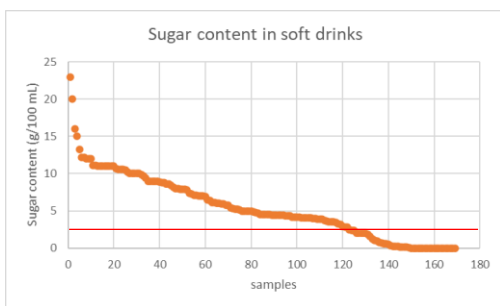


Fig. 1 – Sugar content in soft drinks.

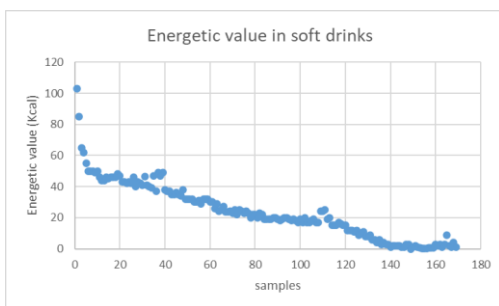


Fig. 2 – Energetic value in soft drinks.

## Conclusions

- ✓ 28% of the targeted foods were below the requirements stated by EIPAS for sugar content, which indicates that the reformulation on these categories of products is conceivable. On the other hand, and considering the reported increase in consumption of soft drinks mostly by a young age group, it also means that there is still a long way to go.
- ✓ Low or 0% sugar soft drinks are increasing in the market as we can accomplish by looking at the mode value – 0 g of sugar per 100 mL. Therefore, the partial or total substitution of sugar by sweeteners may eventually lead to the need for studies related to the acceptable daily intake by the highest consumers of soft drinks.
- ✓ The obtained median in energetic value is in line with the values stipulated in the Regulation for foods with the nutritional claim "low in calories", reflecting the food industry's effort to gradually reduce sugar.
- ✓ In addition, to better conduct these studies and to avoid misleading the consumer, the information available in online stores regarding these and other products should be improved, reproducing the product label.

## References

- [1]- COSI Report, 2016-2019 data. Available in: <https://www.ceidss.com/pt/cosi-portugal/>
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- [3]- National Food and Physical Activity Survey, IAN-AF 2015-2016 | Results report
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