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Tē Whare Wānanga o Waikato

Added Sugar in Packaged / Processed Fruit and Vegetable Products

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INTRODUCTION

Both Type 2 Diabetes Mellitus (T2DM) and prediabetes are prevalent in New Zealand affecting approximately 7% and 26% of adults, respectively.¹ Dietary recommendations for both groups include consuming less sugar in an attempt to improve glycemic control. Fruits and vegetables are generally considered to be a healthy option, although a recent survey of New Zealand supermarket foods suggest that processed foods dominate the marketplace and that the majority of these foods contain added sugars.² Further, processed fruit and vegetable-based products have been shown to be 'less healthy' than those that are minimally processed,² though the levels of added sugars in these products has not been quantified. Thus, our study aimed to evaluate the sugar content of commonly consumed, processed/packaged fruit and vegetable products available in New Zealand supermarkets.

METHODS

Nutritional composition data were collected from all packaged, processed fruit and vegetable-based products from two large supermarket chains during Nov / Dec 2017. A total of 914 foods (soups, sauces, jams/spreads, pickles/chutneys, canned fruit and veg) were included. All products were at least 25% fruit and/or vegetables.

The sugar content of the aforementioned categories was determined from the product nutrition information panels (NIPs). The number of products with 'no added sugar' was recorded, as well as the proportion of products promoted as 'low sugar' (including "no added sugar", "50% less sugar", "light" and "lite"). Added sugars included sugar, cane sugar, honey, glucose-fructose syrup, glucose, sucrose, fructose, and/or high fructose corn syrup, as reported on the NIP.

RESULTS

>75% of all soups, sauces, jams, spread, pickles & chutneys contained added sugar.

Serve size was variable, but sugar was >5g in one serve of most soups, sauces, jams and canned fruits.

>5g
per
serve

Vegetable-based products generally contained less sugar than fruit-based products. Notable exceptions included tomato sauces, beans and vegetable chutneys which contained an average of 3-6 teaspoons (15-25g) of sugar per 100g.

BAKED BEANS HAVE UP TO **30g SUGAR** (6 teaspoons) per serve!

CANNED FRUIT

- Had the highest median sugar content per serve (17.8g; 3 ½ teaspoons of sugar) of all categories. 60% of these products contained added sugar.
- Fruits canned in syrup contained more sugar than those canned in juice (median 25g vs 14.5g per serve).
- Nearly 20% of all 'fruits in syrup' were classed as being "low sugar / lite" although 95% of these products still contained added sugar.



RESULTS

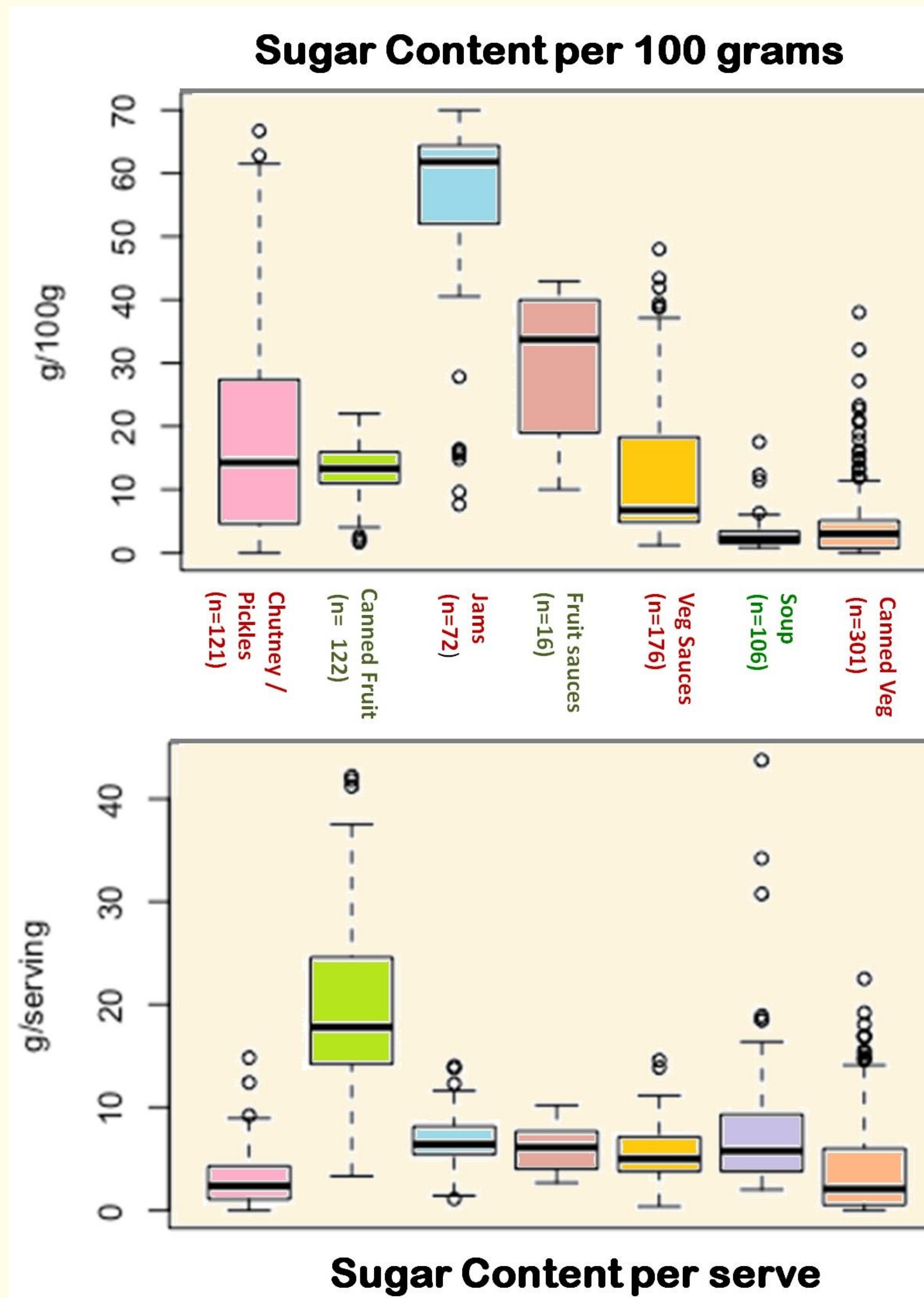


Figure 1: Sugar content of processed Fruit and Vegetable Products per 100 g and per serve (thick horizontal lines = median, box = interquartile range)

CONCLUSIONS

Diabetics should view processed fruit and vegetable products with caution, particularly fruits canned in syrup, baked beans and sweetened sauces. Further care should be taken to not exceed serve size recommendations. Fresh fruit and vegetables should be preferentially chosen over processed products wherever possible.



AVERAGE SUGAR CONTENT OF EXAMPLE FOODS (PER 100 GRAMS)

Product images are indicative only of products from that category, values reported are category means. Total sugar content on labels do not distinguish between naturally-occurring and added sugars

¹ Coppel K, Mann J, Williams S. Prevalence of diabetes and prediabetes. Edgar Diabetes and Obesity Research Centre. Available from <https://www.otago.ac.nz/diabetes/otago059631.html>

² Luiten CM, Steenhuis IH, et al. Ultra-processed foods have the worst nutrient profile, yet they are the most available packaged products in a sample of New Zealand supermarkets. Public health nutrition. 2016;19(3):530-8. This study was undertaken with the support of a summer student scholarship for Ms Everson. Financial support for presentation at NZSSD was kindly provided by the University of Waikato.