



LHAAC COORDINATED SAMPLING PROJECT 9 – PIZZA CONDUCTED MAY 2013

EXECUTIVE SUMMARY

The Nutritional Value of fast food products such as pizza has long been a topical issue in the public health sector. The Local Health Authorities Analytical Committee (LHAAC) agreed to undertake a Coordinated Sampling Project (CSP) in this area to both help Western Australian Local Governments meet their obligations under the Food Act 2008 and to help provide more evidence in the debate about fast food.

A range of pizza products were identified from the major pizza franchise outlets as was a list of metropolitan locations. The Majority of metropolitan Local Governments were requested to participate in this CSP and to collect selected pizzas from specific outlets. In addition, some Local Government were asked to collect samples of manufactured/frozen pizzas from major producers via supermarket outlets and other Local Governments were asked to collect samples of Woolworths and Coles own brand pizza products.

Finally, given many localities included independent or boutique style pizza outlets, Local Governments in other regions (including the non-metropolitan area) were invited to participate by collecting samples from such outlets.

The results of this CSP revealed a high level of inconsistent samples (sampling results differed by +/- 20% from the nutritional information provided by the manufacturer). Dominos were the highest at 85% and Pizza Hut was also very high at 48%.

Feedback suggested that many EHOs viewed this as a worthwhile project to participate in, given the food product involved and the debate about fast food. Local Governments also appreciated the significant guidance by LHAAC in terms of the sample products they should be sampling and from which outlet.



INTRODUCTION

This report summarises the findings from the LHAAC Co-ordinated Sampling Project 9 on Pizza, conducted March to May 2013. This project targeted pizza produced by the major franchise operators Domino's, Eagle Boys and Pizza Hut as well as independent or boutique outlets in the metropolitan and non-metropolitan area. Frozen pizza products (e.g. Mc Cains, Emilia, Dr Oetker, When in Rome and Woolworths and Coles own brand products) were also included and samples were collected from various supermarket outlets.

This report provides comment and statistics relating to the Coordinated Sampling Project based on data provided by the two contracted analysts to LHAAC (Agrifood Technology and ChemCentre).

CONSIGNMENT DETAILS

At the end of the survey, 174 pizzas had been submitted by 26 participating Local Governments.

In the majority of cases each Local Government was asked to sample a different type of pizza meaning, in most cases, only one sample of each pizza topping was collected. In the case of the independent pizza stores, there may have been several pizzas of the same name (e.g. Supreme) but every store may have had a different combination of ingredients so every pizza was made to a different recipe in the independent group.

All metropolitan Local Governments were invited to participate in this CSP and 19 of them (66%) submitted samples. LHAAC also received submissions from seven of the nine non metropolitan regional areas.

The breakdown of the number of samples submitted by each Local Government is presented in **Appendix 1**.

TESTING METHODOLOGY

The appointed analysts looked at the following areas when assessing each sample.

1. The Nutritional Information Panel (where this was provided on the product, or was otherwise available from the manufacturer) was assessed for compliance against the requirements for NIPs in the Food Standards Code. Analysis was also undertaken on the factors required to be stated on a NIP and these results were compared against the manufacturer's information.
2. Dominos and Pizza Hut provide NIP data on their respective websites. This was used to compare results of the analysis for pizza samples from these outlets. Some of the frozen/packaged pizzas provided full NIPs, as did a small portion of the independents. The majority of independents did not include NIP data, nor did Eagle Boys.
3. Sodium, Fat Content and Fat Profile for those products where no NIP information was provided.
4. There are no specifications in the Food Standards Code for pizza manufacture.

PRODUCTS TYPES SUBMITTED

The Table below shows the breakdown of all samples received by the various manufacturers:

Product	Number of Samples	Product	Number of Samples
Dr Oetker	1	Woolworths Select	4
Emilia	2	Dominos	20
Mc Cains	5	Pizza Hut	25
When in Rome	4	Independents	96
		Eagle Boys	17
TOTAL			174

TEST RESULTS

The number of samples with inconsistent results was 42 (24%) of the 174 products submitted. This figure is influenced by the inclusion of 93 independent pizza manufacturers who did not provide NIP data. If these 93 results were excluded the level of inconsistent results would be a much more concerning 52% (42 of 81 samples).

Results were broken down as follows:

Frozen Packaged Pizzas

A total of 12 products were purchased from Coles Supermarkets and tested against the NIP provided on the packaging. Of the frozen packaged products submitted, seven (58%) were inconsistent. Results were as follows:

Manufacturer	No of Samples	Inconsistent Results	Category
Dr Oetker	1	0	
Emilia	2	1	Sugars
Mc Cains	5	4	Sugars, Total Fat, Protein, Carbohydrates
When In Rome	4	2	Sodium
TOTALS	12	7	

Woolworths Select

Of the four frozen packaged Woolworths Select products submitted, four (100%) were deemed to be inconsistent. The products were all classified as inconsistent due to inaccuracies in the nutritional panel. All four samples had higher sugar levels (more than 20% higher) than declared on the NIP.

Dominos

Of the 20 products submitted, 17 (85%) were considered inconsistent. The majority of the samples were classified as inconsistent due to variations with the NIP provided by Dominos (usually higher than the level stated on NIP data). The breakdown of inconsistent can be categorised as follows:

- NIP results: 17 samples had NIP information that was inconsistent with laboratory analysis, as follows:
 - 8 samples had significantly higher sugars than declared on the NIP
 - 8 samples had significantly higher fat than declared on the NIP
 - 4 samples had significantly higher sodium than declared on the NIP
 - 2 samples had significant variance in protein than declared on the NIP
 - 2 sample had significant variance in higher carbohydrates than declared on the NIP

The total number of incorrect results (29) is more than the 17 sampled products due to some samples being inconsistent in more than one category.

Eagle Boys

No nutritional panel analysis was completed on these 16 pizzas. Only Sodium, Fat content and Fat Profile were tested.

Pizza Hut

Of the 25 products submitted, 12 (48%) were considered inconsistent. The majority of the samples were classified as inconsistent due to variations with the NIP provided by Pizza Hut. The breakdown of inconsistent can be categorised as follows:

- Incorrect results: 12 samples had information on their product that was inconsistent with laboratory analysis, as follows:
 - 5 samples had significantly higher sugars content than declared on the NIP
 - 4 samples had significantly higher fat than declared on the NIP
 - 2 samples had significantly higher saturated fat than declared on the NIP
 - 1 samples had significantly higher sodium than declared on the NIP
 - 1 sample had significantly lower protein than declared on the NIP

The total number of incorrect results (13) is more than the 12 sampled products due to some samples being inconsistent in more than one category.

Independent Producers/Manufacturers

A total of 96 pizzas from a range of manufacturers were submitted for this survey. Of the products submitted under this classification, 93 of the pizzas had no nutritional panel analysis. Only Sodium and Fats were tested. Of the products submitted two (2.08%) were classified as inconsistent due to variations with NIP Data as follows:

- 2 samples had information on their product that was inconsistent with NIP data provided, as indicated:
 - 1 sample had significantly higher sugars than declared on the NIP;
 - 1 sample had significantly lower protein than declared on the NIP;
 - 1 sample had significantly lower carbohydrates than declared on the NIP.

The total number of incorrect results (3) is more than the two products due to some samples being inconsistent in more than one category.

GENERAL OBSERVATIONS

1. **Table Two** examines inconsistent results by analyte. Sugar was the most common excess, followed by fat, saturated fat and sodium, all of which exceeded stated levels on NIPs (by a minimum 20%).
2. Dominos and Pizza Hut, the two largest volume pizza operators in Australia, had the highest levels of sodium content in their pizzas (569 and 534.4 mg/100g respectively). Packaged/Frozen pizzas had the lowest sodium content (430.63 mg/100g). **See Table Four.**
3. Independent pizza manufacturers (96 samples) had, on average, the highest overall fat content (10.18g/100g) and packaged/frozen pizzas (16 samples) had the lowest level of overall fat content (6.28g/100g). **See Table Five**
4. **Table Six** shows Packaged/Frozen pizzas contain the highest level of sugars (6.08g/100g).
5. The most consistency was found in average carbohydrates with little difference between the manufacturers. **Table Seven** shows Pizza Hut to have the highest value (32.12 g/100g).

RECOMMENDED FOLLOW-UP ACTION

In cases where inconsistent results were found it is recommended that each Local Government communicate directly with the business concerned following normal follow-up procedures for food sampling.

LHAAC will also contact the Australian Head Office of Dominos and Pizza Hut respectively to advise them of the Coordinated Sampling Project on pizzas and, in particular, the high level of inconsistent results for Dominos and Pizza Hut samples and invite comment from them.

ACKNOWLEDGEMENTS

LHAAC would like to acknowledge the assistance of Agrifood Technology and ChemCentre in summarising the analytical data for this Coordinated Sampling Project and in the preparation of this report and the tables and charts which support the text.

LHAAC also acknowledge and thank the participating Local Governments who provided sample submissions to this project.

Appendix 1: Number of Samples submitted by participating Local Governments

Council	Number of Samples
Bayswater	5
Broome	5
Busselton	10
Cambridge	6
Canning	4
Exmouth	5
Fremantle	4
Geraldton	8
Gosnells	4
Joondalup	16
Kalamunda	2
Kalgoorlie Boulder	10
Kwinana	4
Mandurah	4
Melville	16
Mundaring	6
Nedlands	5
Peppermint Grove	4
Perth	6
Rockingham	4
Roebourne	5
Serpentine Jarrahdale	2
Stirling	15
Subiaco	6
Vincent	10
Wanneroo	8
TOTAL	174

Table One: Number and Source of Samples Submitted (showing Standard and Inconsistent results)

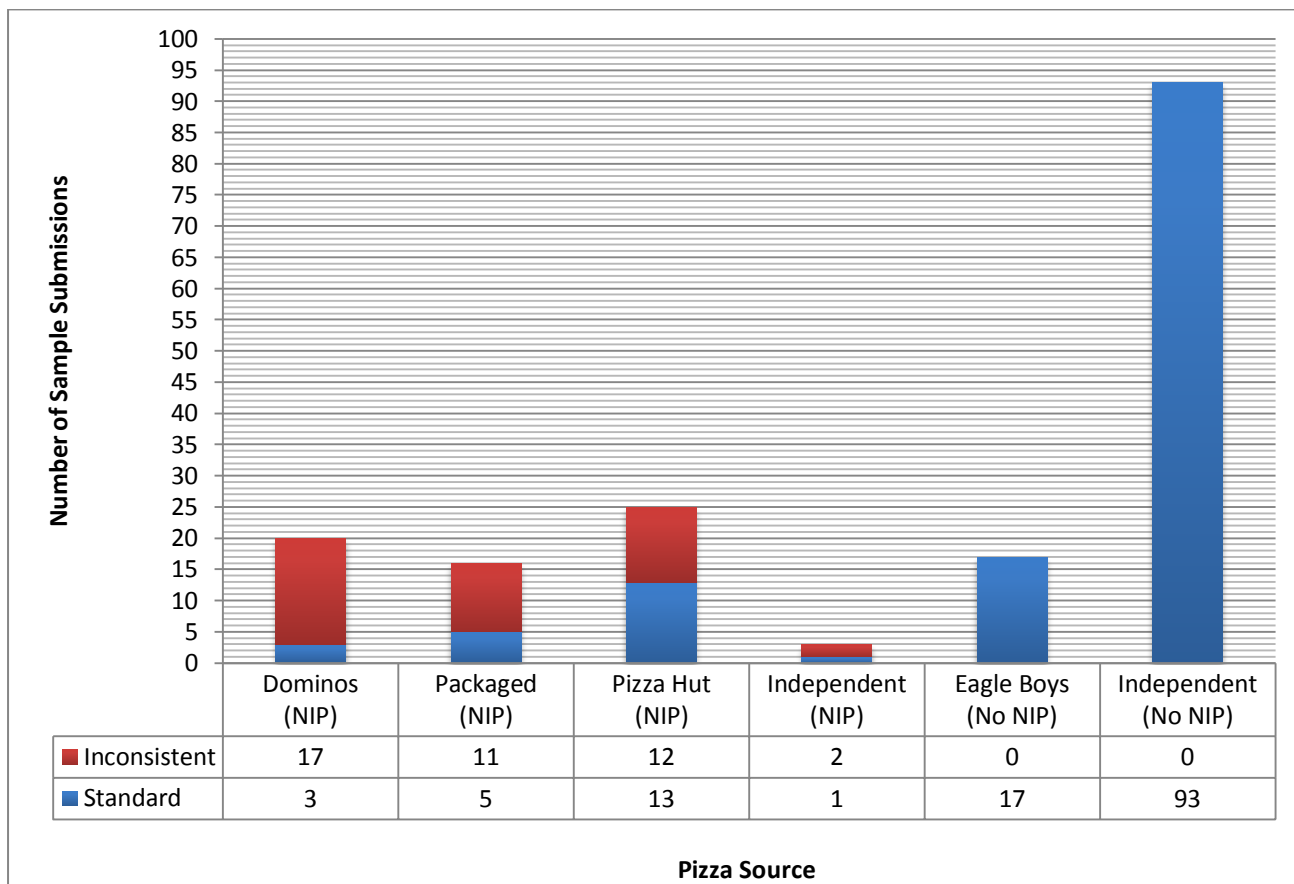


Table Two: Summary of Inconsistent Results by Analyte

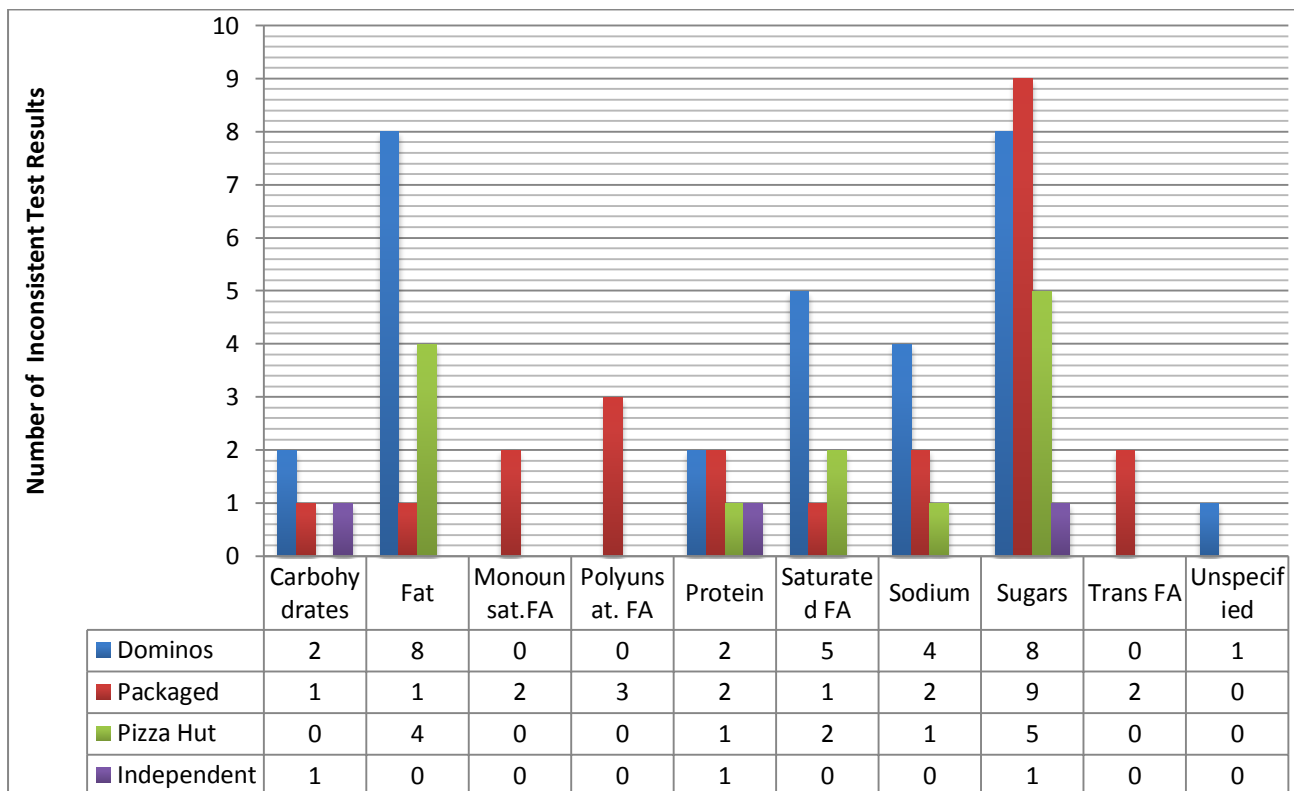


Table Three: Average Fat Content by Manufacturer Type

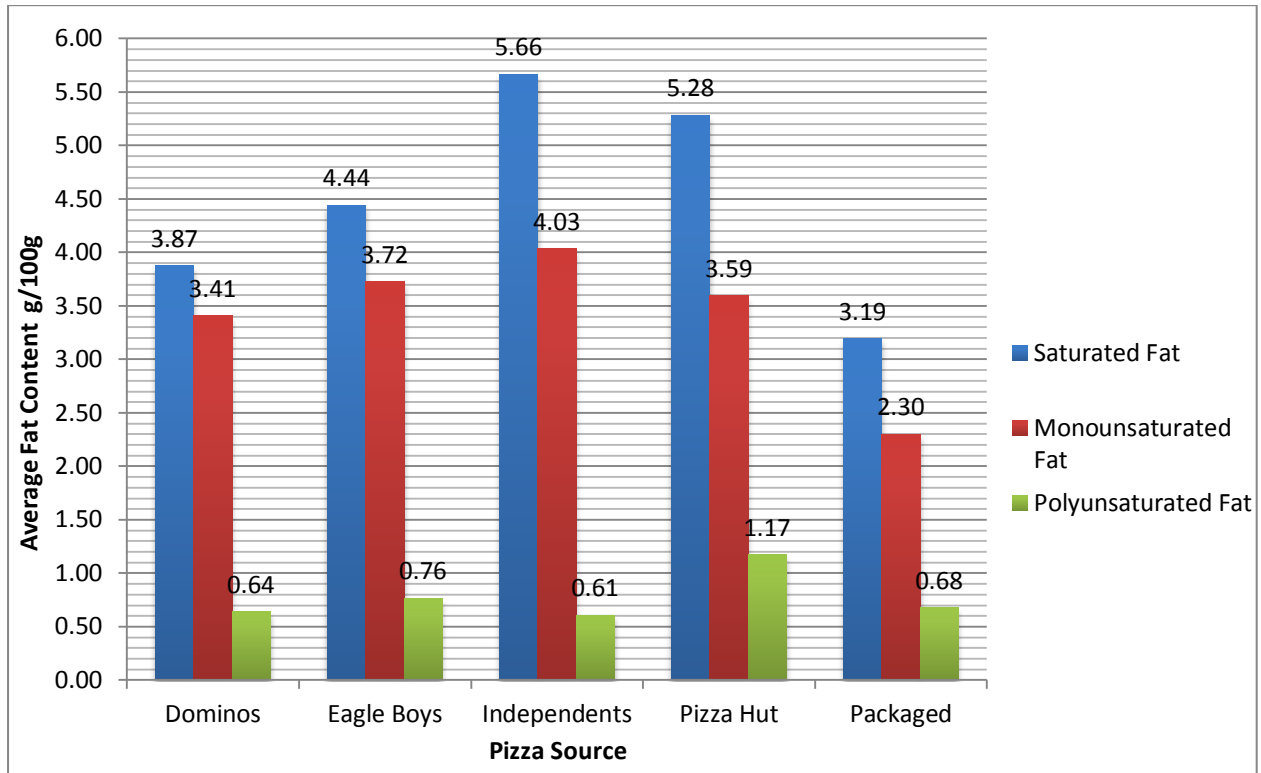


Table Four: Average Sodium Content by Manufacturer Type

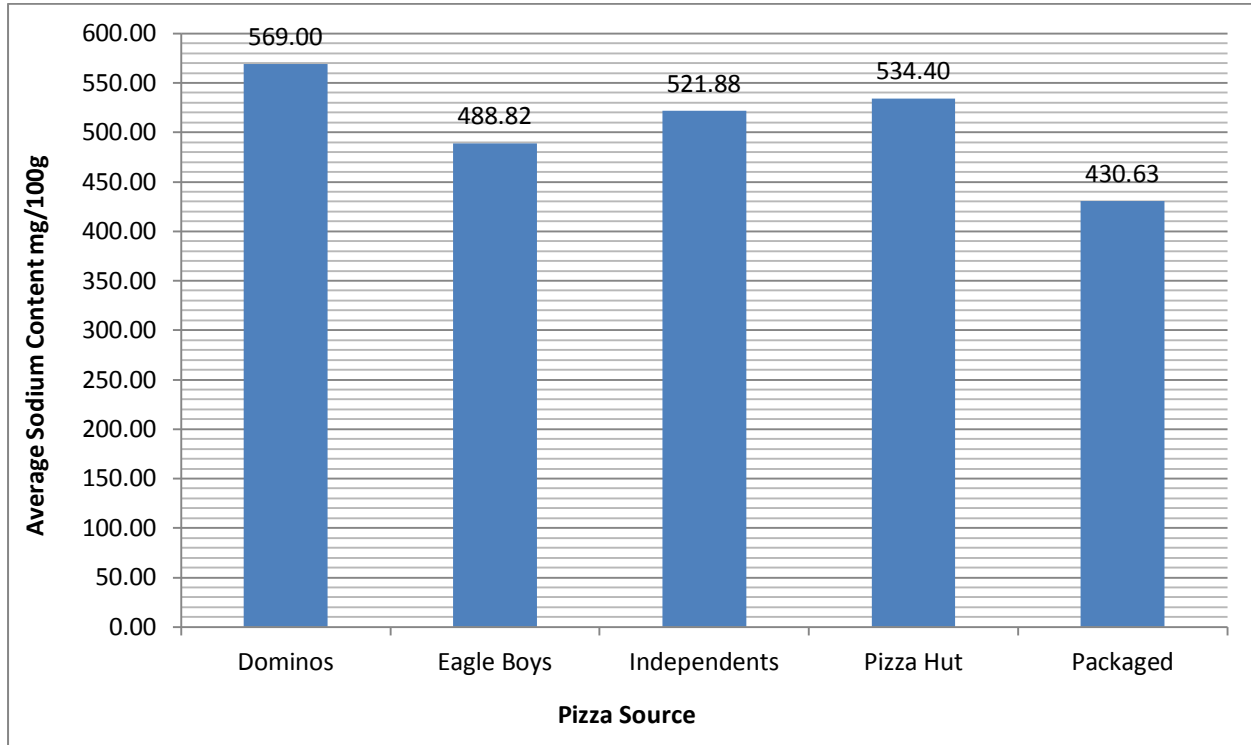


Table Five: Average Overall Fat Content by Manufacturer Type

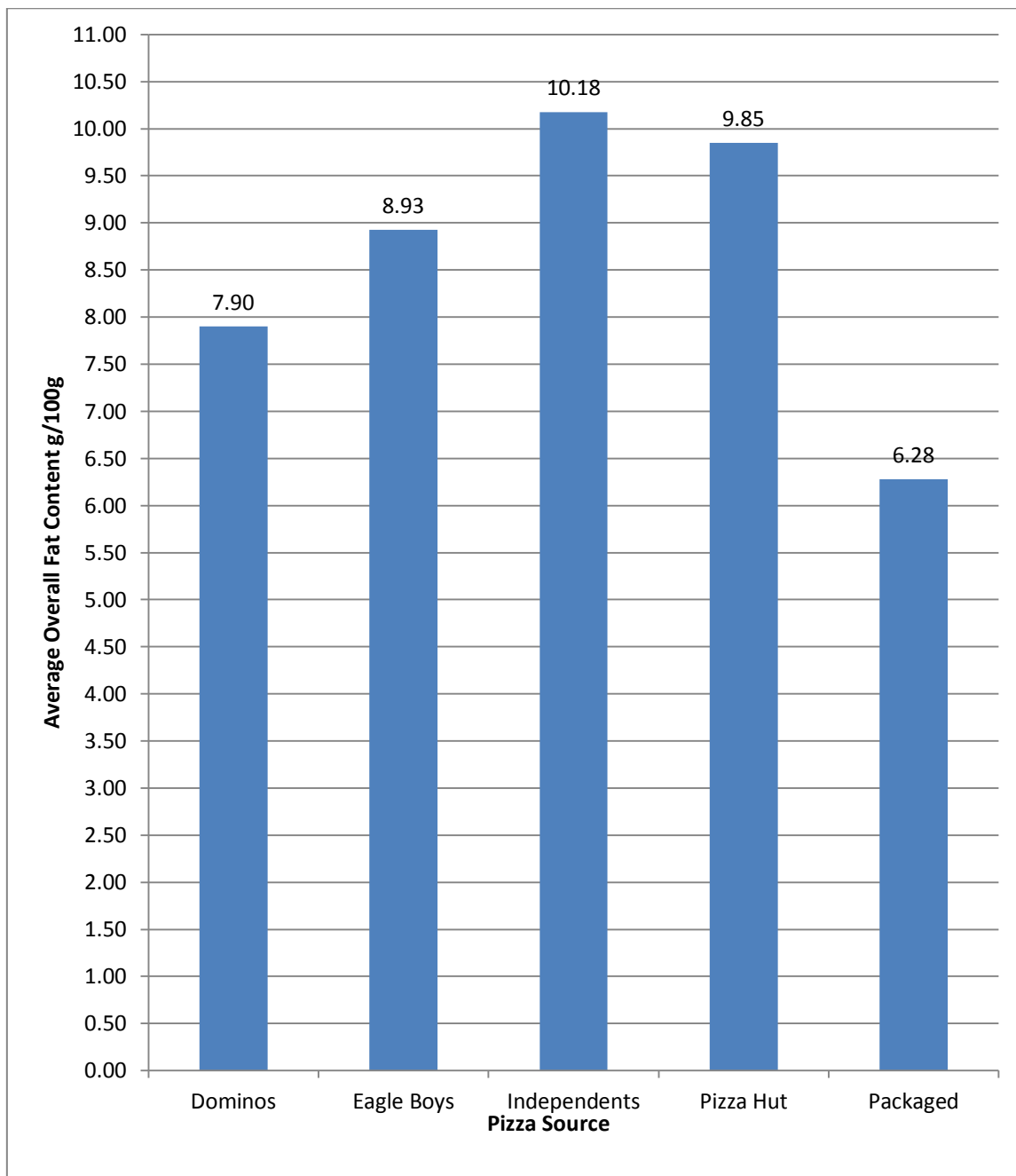


Table Six: Average Sugar Content by Manufacturer Type

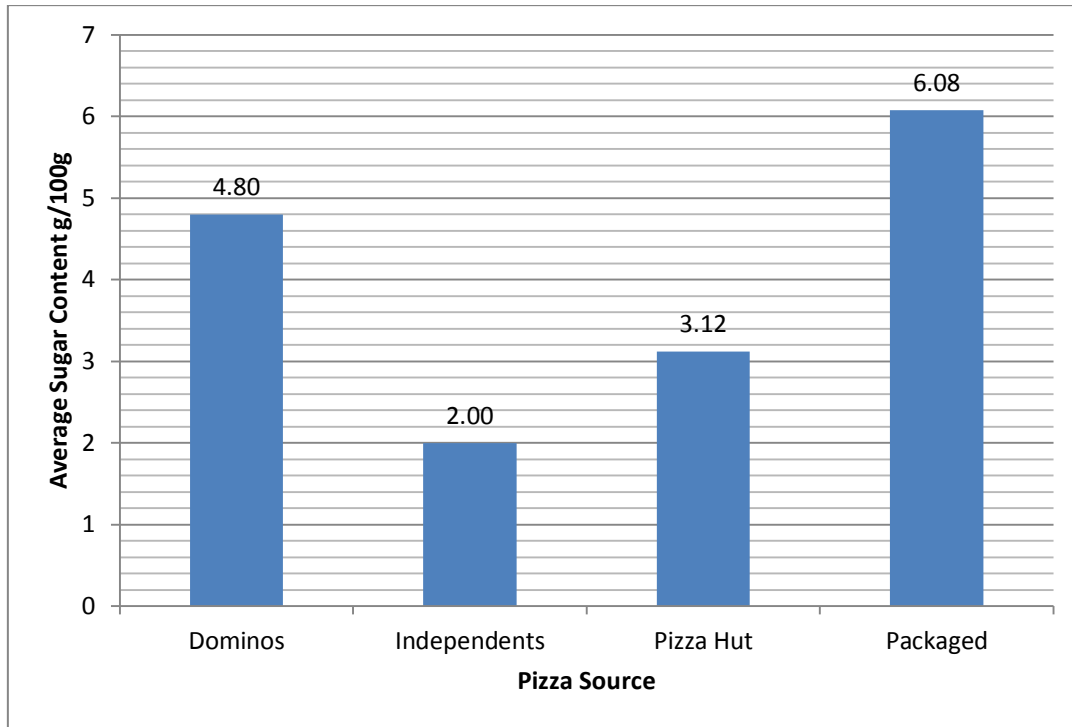
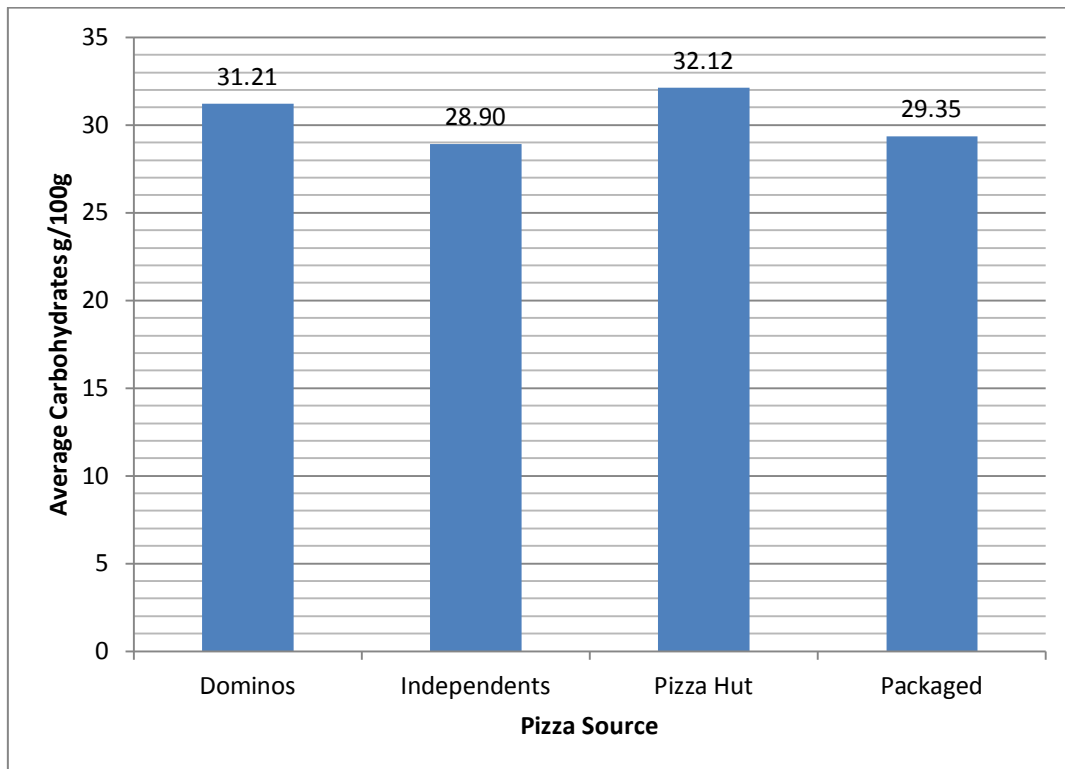


Table Seven: Average Carbohydrate Content by Manufacturer Type



NOTE: Eagle Boys results are not included in Tables 2, 6 and 7 as NIP data was not provided.