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An Evaluation of the McDonald's Low Sugar Drinks Trial: A Let's Beat Diabetes initiative

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1. Introduction

Let's Beat Diabetes (LBD) is a five year, district-wide strategy aimed at long-term, sustainable change to prevent or delay the onset of Type 2 Diabetes (diabetes), slow disease progression and increase the quality of life for people with the diabetes in Counties Manukau.¹ It recognises the significant activity that already exists to prevent and manage diabetes, and creates a long-term vision to align existing activity and a context for new investment, based on evidence and best practice. Fundamental to the plan is its 'whole society-whole life course-whole family/whanau' approach.

LBD and its activity is organised around ten distinct but interrelated action areas. One of its action areas is "Supporting a Healthy Environment Through a Food Industry Accord." This involves the food industry and health sector working together in partnership to make the food environment healthier, and in doing so reduce the rate of obesity.

A key initiative of this action area in 2005/06 was supporting Quick Service Retailers (QSR) to make low or non-sugar drinks available as the default option of their sugar equivalents. McDonald's agreed to be the pilot site for this trial. On 6 December 2006, the Low Sugar Drinks Trial (also known as the 'Sprite Zero Trial') commenced in all 21 McDonald's restaurants in Counties Manukau. In this trial, Sprite was removed from the restaurants and replaced with Sprite Zero. Customers who ordered Sprite were given Sprite Zero instead.

1.1 Overview

This report describes the background information to this initiative and its implications. The evaluation methodology is outlined. The successes and obstacles for the evaluation are also described.²

¹ Counties Manukau District Health Board (CMDHB) manages LBD, and provides the base funding of \$10million over five years to support its implementation. Additional funding and resources is provided by LBD's from partner organisations. For more information, visit www.letsbeatdiabetes.org.nz

² This is an interim report. The evaluation team will conduct interviews with customers about the swap and the perceived health benefits, which will be completed in December 2006.

1.2 Background

The Food Industry Accord (FIA) is a collaborative made up of representatives from food and beverage manufacturers, retailers, producers, advertisers, media, and communications companies. Formed in September 2004, the FIA is a unique collaboration promoting efforts to combat obesity.

Following discussions with CMDHB, the Food Industry Group (FIG) agreed in September 2004 that Counties Manukau would be the pilot region for it to demonstrate its commitment to reducing obesity, and that this would be done as part of the LBD programme. To ensure this new food industry/health sector partnership relationship was effective, sustainable and meets the needs of both partners, the food industry/health sector Joint Initiative Group (JIG) was established; and a co-funded advocacy position established to develop and drive the JIG work programme. The Sprite Zero Trial was one of the nine initiatives in the 2005/06 JIG work programme.

The food industry is an element in the diabetes equation, as increased carbohydrate is one reason for increased obesity rates in the New Zealand population. Chacko, McDuff and Jackson (2003) reported that despite the recent reduction of fat intake by New Zealanders, fatty choices seem to have been replaced with carbohydrates, including soft drinks. In addition to the high sugar content, the drinks are less filling than solid food; which can lead to increased consumption.

Focusing on soft drinks may seem insignificant in the fight to control and reduce the onset of diabetes; however, studies have shown correlations between increased intake of high sugared drinks and weight gain. One such study by (Schulze et al., 2004), reported on a Women's Health Study where a group of 51,603 young and middle-aged women were followed for eight years. The report focused specifically on the women's intake and weight gain with regard to the incidence of diabetes. It found that drinking more sugary soft drinks led to the greatest weight gain, and was linked to higher risk for diabetes.

Internationally, health advocates are taking action against soft drink accessibility. As a result, soft drink vending machines are being restricted or removed from some American schools. Many New Zealand primary and intermediate schools already restrict soft drink supply and the Health Minister Hon Pete Hodgson has called for sugar laden soft drink removal from all schools by 2008 (Hodgson, 2006). The Coca-Cola Company removed sugar sweetened carbonated soft drinks from primary schools at the beginning of 2004 in recognition of the special responsibility when it comes to younger children. Sugar sweetened soft drinks are currently still available in many intermediate and high schools.

2. Methodology

The evaluation sought to clarify how the low or non-sugar drinks trial was implemented and its acceptability and impact for management, staff, and customers at McDonald's restaurants in Counties Manukau.

A mixed methods approach was taken in the evaluation.

2.1 Stakeholder Consultations – pre trial

The key stakeholders involved in the development and implementation of the initiative were consulted throughout the whole process. This included the LBD programme management team³, the LBD JIG advocate and the communications manager for McDonald's Restaurants (New Zealand) Ltd.

These consultations were held in person, by phone, and by e-mail. The LBD JIG advocate provided background information and clarification of what evaluation strategies were possible within the commercial environment.

2.2 Analysis of Sales Data

Analysis of sales data was conducted. The evaluation team gained access to existing McDonald's sales data from the participating restaurants during a specified trial

³ The LBD programme management team is a unit within CMDHB's Planning & Funding division.

period (December 2005 to May 2006) and compared results to the same time period last year. The data was analyzed to discern any reduction of sugar consumption.

The following McDonald's restaurants were involved in the trial:⁴

- Airport Drive Thru*
- Auckland International Airport Arrivals*
- Auckland International Airport Departures*
- Bombay BP Service Centre*
- Botany Town Centre
- Mangere
- Pakuranga
- Pukekohe
- Ti Rakau
- Manukau City
- Manukau Supa Centa
- Manukau Mall
- Manurewa
- Otahuhu
- Otara Town Centre
- Papakura
- Takanini

2.3 Stakeholder Consultations – trial period

Meetings with McDonald's communication manager involved reviewing and providing responses on evaluation methodology. Meetings were also used to organise focus groups, to discuss the results, to verify sugar reduction information, and to brief the results. The communication manager also used these meetings to explain how notification of the trial was focused on posters and flyers in the participating stores and were a "message from Counties Manukau District Health Board" (See Appendix B).

Semi-structured interviews were also undertaken with a group of three McDonald's franchisees⁵ and a group of five crew workers to get their perceptions of the uptake of the trial. Questions were centred customer awareness of the trial, customer reactions to the trial, and the impact on sales. The franchisee interviewees volunteered to be interviewed and the crew worker interviewees were organised by McDonald's.

⁴ Four other restaurants (located in Royal Oak, Penrose, Onehunga and Panmure) also participated in the trial, but were not included in the evaluation because they are not in the trial district (Counties Manukau).

* The restaurants marked (*) service mainly a transient population namely those at the airport and on the main highway at Bombay.

⁵ Franchisees are people who independently own and run a McDonald's restaurant/franchise.

3. Evaluation Results

3.1 Analysis of Existing Data

The evaluation team analyst met with McDonald's management after signing a confidentiality agreement, and reviewed consumption information about Sprite/ Sprite Zero and other beverages, comparing sales from the low sugar trial period to the same time period of the previous year.

3.1.1 Change in Sugar Consumption

The trial commenced on 6 December 2005 and officially ended in May 2006⁶. For the same 26 week period in the year prior to the trial, Sprite represented 19% of the total volume of high-sugar soft drinks (Coke, Diet Coke Fanta, Sprite, L&P, and Raspberry). During the first 26 weeks of the trial, Sprite Zero represented 17% of the same soft drink flavour. This means there was only a minimal change in total volume between these two comparison periods (+1.5%), and that the volume of high-sugar soft drinks sold in the trial restaurants decreased by approximately 17%. The data illustrated that as a consequence of the trial there has been reduced sugar consumption over the duration of the trial.

3.2 Crew and Franchisee Perspectives

3.2.1 Introduction

Three McDonald's franchisees and five crew members were interviewed regarding their perceptions of the uptake of the trial. Questions were centred on customer awareness of the trial, customer reaction to the trial, and the impact on sales.

3.2.2 Awareness of the Trial

When the trial began on 6 December, posters were displayed and flyers available in participating restaurants. All interviewees felt that, in general, most of the public would not have known of the trial.

“People didn't really realise that we were trialling a product. They only ask for Sprite not Sprite Zero.”

⁶ The official trial period was 6 December 2005 to May 2006, however Sprite Zero is still being offered in the restaurants.

“There’s a “presence of the trial” in the public, but needs to be bigger. There needs to be advertisements of the healthier options. [The] Public [is] very advertisement driven, what they see is what they buy. We can see this when we advertise on Drive Thru, when we do, we sell, when we don’t, we don’t sell.”

“Public didn’t really know about the trial before coming into the restaurant. We were the ones who introduced it to them by telling them about it.”

3.2.3 Consumer Reaction to The Trial

All interviewees were asked about their perceptions of how the customers reacted to the swap from Sprite to Sprite Zero. Their comments reflected a range between customers, who didn’t mind to those who swapped to another drink.

“‘True’ Sprite drinkers could taste the difference – all others didn’t notice.”

“Customers comments to what they thought was normal Sprite included ‘tasted off’, ‘taste light’, ‘sprite has gone flat’, ‘old’, ‘watery’ or ‘too much ice’”.

“Customers were either really interested or wouldn’t have it. – when told about it most accepted and liked it.”

They did, however, report a change over time in the way the customers reacted to the trial

“In the beginning some customers who initially ask for "Sprite" and then find out it was Sprite Zero because of the taste, they would usually request their drinks be changed to a regular soft drink. But now, people don't really complain about it”.

Increased knowledge about the purpose of the swap resolved customer uncertainty as a crew worker commented.

“Customers’ tastes [have] effortlessly changed from Sprite to Sprite Zero after they were told about it and had better knowledge.”

3.2.4 Impact on Sales

From the franchisees’ perspective there has been no impact on sales and no customer complaints as a result of the trial.

“Our sales are not going up or down, because it isn’t pushed enough. People don’t know we’re doing the trial. People haven’t really complained in my restaurant.

This was substantiated by McDonald's communications manager who reported that McDonald's customer service line has not received any customer communication (including phone calls, letters and emails) about the trial (Personal communication 10.4.06)

4. Successes and Obstacles Identified

4.1 Successes

Being able to confirm that there has been a reduction of 17% in the amount of sugar consumed in the trial restaurants is a major success of the trial.

Successful interagency collaboration was demonstrated during this project. JIG was formed to link the food industry with health initiatives; this link has placed public health and the private industry working together on the same team. As a consequence of this collaboration observable outcomes were demonstrated. This is a first for New Zealand and the project has illustrated that a useful compromise can be achieved through collaboration and action.

Additionally, McDonald's , Coca-Cola Oceania, CMDHB and the LBD JIG advocate have illustrated a strong commitment to the trial and its expected success, thus enhancing the probability of the trial's sustainability and also the further work of the collaborative.

4.2 Obstacles

Despite the strides made by linking public health and private industry, commercial sensitivity is one of the biggest obstacles for this project. Data was obtained through tightly controlled channels on McDonald's side, including raw data regarding sales. Once data was provided, it was necessary to consider the implications of the data regarding competitor use.

The general public's perceived health concerns related to sweeteners is an obstacle to innovation, with McDonald's communication manager mentioning that any seeming reluctance to wholly embrace the Sprite Zero initiative by McDonald's was based on

this. However, this concern appears unwarranted given that the scientific community and food safety authorities have approved sweeteners like aspartame and ASK as being safe for use (Committee on Food, the Food and Agriculture Organization, and other independent bodies). Numerous studies and reviews have indicated sweeteners such as aspartame and ASK are safe for consumption, with any possible health risks of artificial sweeteners deemed negligible (Butchko et al., 2002; Janssen & Van Der Heijden, 1988). More specifically, the claim that artificial sweeteners bear a carcinogenic risk cannot be upheld by scientific evidence (Weihrauch & Diehl, 2004). Increased public awareness and education on this may help to alleviate any concerns and impact favourably on any future trials of this nature.

5. Conclusions

It is evident that all key stakeholders from the JIG, McDonald's and Coca Cola to the individual McDonald's franchisees, managers and crew were very supportive of this trial, and integral to its implementation and success. As a result, there was a 17% reduction in the amount of sugar ingested through soft drinks as a result of the trial; and agreement amongst stakeholders that increased communications, profiling and public awareness of the trial may have resulted in a greater reduction.

An additional benefit was the unintended value of the exercise. All 21 McDonald's restaurants in Counties Manukau are now promoting healthier eating and introducing much more specific health promotion. Evidence shows that similar swaps can be made without negative reactions from customers and impacting on business viability.

In terms of the general public's concerns regarding the safety of drink sweeteners, increased public awareness and education on this will help to alleviate any concerns and impact favourably on any future trials of this nature.

6. Appendix

6.1 Appendix A – Focus Group Questions

1. Are you aware of the Low Sugar Trial?
2. Are the public aware of the Low Sugar Trial/Sprite Zero Swap?
3. What are your perceptions of the reaction of the public to the Low Sugar/Sprite Zero Trial?
4. Are the customers going for Low Sugar –“healthy” products?
5. Give us an indication of the numbers of people who deliberately go for Low Sugar drinks – what do they request?
6. What are your reactions/thoughts to the Low Sugar Trial?
7. Any stories to tell – customer reactions/comments.
8. How easy was it for you to tell the public about the Low Sugar option in the beginning compared to now?
9. Do you think it is worth while?
10. Does the process McDonald’s used to introduce Sprite Zero work?
11. Is there anything else McDonald’s could do to assist in increasing good nutrition choices?

6.2 Appendix B – Low Sugar Trial poster

Make The Change To SUGAR-FREE

MESSAGE FROM COUNTIES MANUKAU DISTRICT HEALTH BOARD

Currently, more than 12,000 people in Counties Manukau have been diagnosed with Type 2 Diabetes, with an estimated similar number undiagnosed.

These numbers could more than double by 2025. Obesity is a major risk factor for diabetes. Our children are increasingly becoming obese and at risk of getting diabetes at a younger age.

The good news is we can do something about this. *Let's Beat Diabetes* is a five year, district-wide plan to prevent or delay the onset of diabetes and improve the quality of life for people with diabetes in Counties Manukau. Key to this is health promotion, community partnerships and action, and social change.

As part of their commitment to *Let's Beat Diabetes*, McDonald's[®] and Coca-Cola[®] are supporting Counties Manukau District Health Board to encourage people to make the change to sugar-free drinks in all McDonald's restaurants in Counties Manukau.

Q How will I benefit from drinking sugar-free soft drinks?

A If we eat and drink more calories than we burn up, over time we will gain weight. Consuming too much sugar (or other sources of energy) can contribute to becoming overweight or obese, increasing the risk of developing illnesses such as diabetes. Sugar in drinks will increase energy intake. A possible way to reduce your energy and sugar intake is to choose low sugar and sugar-free drinks.

Q Why is this trial happening in Counties Manukau?

A In September 2004, the food industry and Counties Manukau District Health Board agreed Counties Manukau would be the pilot site for the food industry to demonstrate its commitment to work together to address obesity in Counties Manukau, through its *Let's Beat Diabetes* campaign. This trial, the first of its kind in New Zealand, is supported by McDonald's and Coca-Cola.


Q Are the sweeteners used in low sugar and sugar-free drinks safe?

A The sweeteners used in low sugar and sugar-free drinks have been thoroughly tested on whole population groups and key targets groups such as pregnant women and children, and are considered safe when consumed within the acceptable daily intake*.

Q Are they safe for children?

A Yes, The sweeteners have been tested on children and the results indicate they are safe when consumed within the acceptable daily intake. It is highly unlikely children would exceed the acceptable daily intake even if they drank low sugar and sugar free drinks on a regular basis.

For more information visit
www.letsbeatdiabetes.org.nz



Coca-Cola would like to advise: Sweeteners in Sprite Zero, Aspartame, Acesulfame-K, Sweeteners in Diet Coke, Aspartame, Cyclamate, Saccharin, Diet Coke and Sprite Zero contain Phosphates.
*Source: Food Standards Australia New Zealand and American Diabetes Association.

COMMUNITY PARTNERSHIPS AND ACTION IN COUNTIES MANUKAU

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