Preventive Medicine 81 (2015) 168–173

Contents lists available at ScienceDirect

Preventive Medicine

journal homepage: www.elsevier.com/locate/ypmed

Supermarkets and unhealthy food marketing: An international comparison of the content of supermarket catalogues/circulars☆

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ARTICLE INFO

Available online 5 September 2015

Editor: Eduardo Franco

Keywords:
Supermarket
Circular
Diet
Marketing
Obesity

ABSTRACT

Background. Supermarket marketing activities have a major influence on consumer food purchases. This study aimed to assess and compare the contents of supermarket marketing circulars from a range of countries worldwide from an obesity prevention perspective.

Methods. The contents of supermarket circulars from major supermarket chains in 12 non-random countries were collected and analysed over an eight week period from July to September 2014 ($n = 89$ circulars with 12,563 food products). Circulars were largely English language and from countries representing most continents. Food products in 25 sub-categories were categorised as discretionary or non-discretionary (core) food or drinks based on the Australian Guide to Healthy Eating. The total number of products in each subcategory in the whole circular, and on front covers only, was calculated.

Results. Circulars from most countries advertised a high proportion of discretionary foods. The only exceptions were circulars from the Philippines (no discretionary foods) and India (11% discretionary food). Circulars from six countries advertised more discretionary foods than core foods. Front covers tended to include a much greater proportion of healthy products than the circulars overall.

Conclusions. Supermarket circulars in most of the countries examined include a high percentage of discretionary foods, and therefore promote unhealthy eating behaviours that contribute to the global obesity epidemic. A clear opportunity exists for supermarket circulars to promote rather than undermine healthy eating behaviours of populations. Governments need to ensure that supermarket marketing is included as part of broader efforts to restrict unhealthy food marketing.

Introduction

Unhealthy diets and excess body weight are the key risk factors for the development of major nutrition related chronic diseases such as cardiovascular disease, type 2 diabetes, several cancers, dental disease and osteoporosis (World Health Organization, 2015a,2015b).

An increase in the consumption of energy dense, nutrient poor foods and drinks, coupled with low consumption of fruits and vegetables, has been apparent in high-income countries over the past several decades. This dietary pattern is also now common in low- and middle-income countries with a shift from traditional to westernised diets over the past two decades being accompanied by the rapid rise of large supermarket chains (Harvard, 2015; Hoffman, 2013; Thornton et al., 2013). China, Indonesia, Malaysia, India, Thailand and Vietnam have experienced the fastest growth in the share of supermarket chains, growing from 5%–10% in 1990 to 50% or more by 2009 (The Crawford Fund, 2011).

Supermarkets serve as an interface between consumers and the food system, with their marketing techniques acknowledged as an important influence on food choices and consumer purchasing behaviours (Clarke et al., 2006; Hawkes, 2008; dos Santos, 2013; Govindasamy et al., 2007). Hard copy (distributed) and online circulars are a very common and powerful form of marketing, reaching large populations of consumers worldwide (dos Santos, 2013). A study from New Jersey found that 72% of people read food circular advertisements (Govindasamy et al., 2007). Previous studies in this area have consistently found supermarket circulars to contain a high proportion of discretionary food products and a low proportion of fruit and vegetables, with the contents of supermarket circulars not meeting national dietary recommendations and

Abbreviations: AGTHE, Australian Guide to Healthy Eating; ABS, Australian Bureau of Statistics; WHO, World Health Organization.

☆ *Financial support*: This work was supported by the Australian National Health and Medical Research Council (NHMRC) [training fellowship APP1013313 to AC; AC and GS are researchers within an NHMRC Centre for Research Excellence in Obesity Policy and Food Systems (APP1041020)].

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http://dx.doi.org/10.1016/j.ypmed.2015.08.023
0091-7435/

instead reflecting the poor dietary patterns of most populations (Thornton et al., 2013; Jahns et al., 2014; Gallo, 1999; Martin-Biggers et al., 2013; Ethan et al., 2013; Ravensbergen et al., 2015).

Most studies of the 'healthiness' of supermarket circulars have been limited to assessment of products on the front page only, and there have been no studies outside Europe, North America and Australia. Here, we aimed to assess the 'healthiness' of the entire content of supermarket circulars from the leading chains in a range of high- and middle-income countries worldwide.

Methods

Circular collection

Circulars from 12 countries (Australia, Canada, Hong Kong, India, Malaysia, New Zealand, Philippines, Singapore, South Africa, Sweden, United Kingdom, United States of America) were collected over an 8 week period by two authors from July through to September 2014. Non-random countries were selected based upon the online availability of weekly circulars and the absence of significant language or interpretation barriers. An attempt was made to include countries from all continents, although no suitable circulars were found from South American countries. All circulars were available in English with the exception of those from Sweden (Hemköp). Google Translate was used to translate Swedish circulars into English. We aimed to include circulars from culturally and geographically diverse countries, with representation from most continents. To enable a fair comparison between stores, only traditional supermarkets were included. Discount stores and super-centres such as Walmart were excluded from the study. All circulars were sourced online from the store websites with the exception of those from India where circulars were sourced from an online circular and brochure agency (www.tiendeo.In). Specific stores for which circulars were obtained were chosen based on their presence amongst the top retailers (in terms of market share) in that country according to data from the Euromonitor Passport database (http://www.euromonitor.com/passport). The 2014 market share ("percent value share of brand") is presented in Table 1. One supermarket chain from each country was analysed with the exception for Australia where a clear duopoly exists. As two supermarkets (Coles and Woolworths) have a similar, and extremely large, market share in that country (both >25%, being a higher market share than the leading retailers in most other countries), circulars from both retailers were included in the study. In cases where postcodes were required to access advertising material on the supermarket websites, postcodes were selected from major cities where the retailer was present (either the capital city or largest city in that country). The postcode selected from each city was that of the city centre. As different stores published their circulars weekly, fortnightly or irregularly (refer to Table 1), the number of circulars collected from each store were not uniform.

Coding

All products on all pages of every circular were coded into one of 25 categories (Table 2). Categories were developed by the authors, based on the description of 'core' (non-discretionary) foods in the Australian Guide to Healthy Eating (AGTHE) (Australian Government Department of Health and Ageing and Australian Guide to Healthy Eating Australian Government, 2013), and the description of 'discretionary' foods published by the Australian Bureau of Statistics (ABS) (Australian Bureau of Statistics, 2014). Discretionary foods are defined as "foods and drinks not necessary to provide the nutrients the body needs, but that may add variety. Many of these are high in saturated fats, sugars, salt and/or alcohol, and are therefore described as energy dense" (Australian Bureau of Statistics, 2014). Two authors coded all 89 included circulars simultaneously (i.e. in the same room) to ensure comparable coding decisions were made. Most food products were able to be classified based on the product type, as per the AGTHE e.g., chocolates and crisps classified as discretionary; fruits and vegetables classified as core (see Table 2). In some cases, the ABS classification guide was used to distinguish between core and discretionary foods, with detailed nutrition information obtained from the relevant food manufacturer websites. Breakfast cereals were classified based on their sugar content as follows: <30% sugar without added fruit or <35% sugar with added fruit were classified as a core food product, with breakfast cereals with sugar contents above this limit classified as discretionary. Savoury biscuits were classified based on their energy content: <1800 kJ/100 g was classified as core, with savoury biscuits >1800 kJ/100 g classified as discretionary. For any products where the two coders disagreed or were not sure of the category in which they should be included, all study authors discussed the issue and a mutually agreed upon decision was taken. All advertised products were counted separately unless they were exact replicas (i.e. different sizes of the same product were counted as a single product). Different flavours of a particular product were counted as individual products. If no price was shown in conjunction with an advertised product it was not counted (i.e. pictures of products included as part of a recipe promotion were not included).

Every attempt was made to minimise the number of products falling into the 'other' category which included products that could not be otherwise classified (e.g. pepper) or could not be identified (e.g. could not read the label or recognise the image of the product). Infant formula was not classified as either discretionary or non-discretionary. The World Health Organisation (WHO) promotes breast feeding as the optimal source of infant nutrition and discourages the promotion of infant formula (World Health Organization, 2013). The WHO does however recognise that for some mothers, there is no discretion regarding their choice of whether to use complementary foods to feed their child and for this reason the authors did not categorise infant formula in this analysis.

Analysis

The total number of products in each category was calculated for each circular analysed. The total number of food products (non-food products were

Table 1
Supermarket and circular information by country.

Country	Supermarket chain	Market share[a]	Circular location	Weeks collected	Format	Mean items per circular	English
Australia	Coles	25%	Canberra	7	PDF—Weekly (32 pages)	252	Yes
Australia	Woolworths	26%	Melbourne	8	PDF—Weekly (26–36 pages)	282	Yes
Canada	Loblaws	2%	Vancouver	8	PDF—Weekly (12 pages)	378	Yes
Hong Kong	Park 'N' Shop	15%	Hong Kong Island Central	8	Webpage—Weekly	81	Yes
India	Star Bazaar	<0.1%	Mumbai	8	Interactive online catalogue—Weekly (2–3 pages)	50	English and local language
Malaysia	Giant	8%	Peninsular Malaysia	5	PDF—Bi-weekly (8–16 pages)	293	Yes
New Zealand	New World	15%	Wellington City	7	PDF — Weekly (24-32 pages)	301	Yes
Philippines	SM Supermarket	6%	N/A	4	Webpage — dates varied (3 pages)	12	Yes
Singapore	Fairprice	27%	Singapore	7	PDF—Weekly (2 pages)	120	Yes
South Africa	Shoprite	19%	Gauteng	5	PDF—Bi-weekly (5–11 pages)	221	Yes
Sweden	Hemköp	4%	Stockholm City	6	PDF—Weekly (12–16 pages)	102	No
United Kingdom	Asda	13%	N/A	8	Webpage—Weekly	45	Yes
United States of America	Kroger	8%	Virginia	8	PDF—Weekly (7–9 pages)	287	Yes

[a] 2014 "Percent value share of brand" from the Euromonitor Passport database: http://www.euromonitor.com/passport