

# Factors influencing women's decisions to purchase specific children's multi-nutrient supplements in the Gauteng Province (South Africa)

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## Abstract

**Background:** Faced with an extensive array of various children's multi-nutrient supplements, all with their 'unique' properties and formulation, mothers are expected to select one that best meets their children's needs. Little research has been done to identify the factors women use to select a particular multi-nutrient supplement for their children.

**Aim:** To establish which factors influence women's decisions most often when selecting children's multi-nutrient supplements, what choice tactics are used in the decision-making process, and into what groups women can be classified according to the factors used to select specific brands.

**Setting:** A point-of-purchase survey was conducted among 128 women who were interviewed in large discount pharmacies once they had selected a children's multi-nutrient supplement with the intention of buying it.

**Results:** Women who purchased multi-nutrient supplements for their children were mostly working, white women, between the ages of 34 to 49 years, and were in general educated and affluent. Subjects were influenced by 12 factors [form (91%), nutrient content (80%), child's preference (69%), packaging (50%), price (39%), health benefits (38%), advice from others (38%), free from certain ingredients (28%), organic or natural properties (21%), herbal content (18%), advertisements (14%), and promotions (14%)]. Form had the greatest influence on the decision to purchase. Forms that were most popular were chewable tablets (50%) and liquid/syrups (35%). Price, performance and brand loyalty, affect and normative factors were most often used as choice tactics. Women were classified into four groups (quality shopper/information gatherer, bargain shopper, convenience shopper and child-sensitive shopper).

**Conclusion:** Many women spend time and effort gathering information about children's multi-nutrient supplements. However, less appropriate factors are often considered in decision making and labels are not interpreted correctly. To show competence in the field of prescribing children's dietary supplements, dieticians ought to be aware of the supplement choices available and determine which factors play a role in a client's decision to purchase a particular brand, e.g. free from certain ingredients, and what form their children would prefer, e.g. syrup. Once this has been determined, and after having assessed the child's usual dietary intake, the dietician can identify the most appropriate dietary supplement in a particular supplement-delivery category.

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## Introduction

Dietary supplement use is extensive and continues to grow worldwide.<sup>1</sup> Previously available mainly in pharmacies, multivitamin and mineral supplements are now ubiquitous in the marketplace, found in large discount stores, supermarkets, speciality stores and on the internet.<sup>2</sup> The Third National Health and Nutrition Examination Survey (NHANES III, 1988–1994) found that among two- to eleven-month-old infants, the use of dietary supplements was 28% for boys and 25% for girls.<sup>3</sup> This survey also reported that 42 to 51% of children of one to five years of age and 24 to 38% of children aged six to twelve years took supplements. Statistics for these groups are unavailable in South Africa.

Considering the vast choice of children's dietary supplements available, many women are unwilling to spend enough time and

effort assessing product information and comparing products before deciding which one to purchase.<sup>4</sup> They report wanting more guidance in the decision-making process when selecting dietary supplements,<sup>4</sup> and they are often not comfortable with their selections.<sup>1</sup>

Little research has been done to identify the criteria used to select a particular multi-nutrient supplement for children. This research aimed at identifying the factors that influence women's decisions to purchase specific multi-nutrient supplements for their children; what choice tactics are used in the decision making, and which groups the women can be classified into according to the influencing factors.

For the purpose of this study, a children's multi-nutrient supplement was defined as "any product containing natural-occurring molecules and molecules synthesised by chemical or biological means, or botanical extracts, derivatives, concentrates, enzymes, coenzymes, co-factors, naturally occurring hormones and precursors, animal

source substances or metabolites intended to be consumed for its nutritional value in the maintenance and improvement of infants' or children's health, includes more than one vitamin and/or mineral, and can include co-factors, essential fatty acids, amino acids, enzymes, animal or botanical extracts and derivatives, probiotics and non-nutrient dietary phytoprotectants in a dosage form such as capsules, tablets, liquids, gums or powders".<sup>5</sup>

### Research design

A cross-sectional descriptive survey at point of purchase was done in the quantitative research domain. Interviews took place inside large discount pharmacies in three different regions in Gauteng (South Africa), namely Fourways, East Rand Mall and Northgate. Permission to conduct the survey was obtained from the general manager of the discount store. The protocol was approved by the Research Ethics Committee of the Faculty of Health Sciences, University of Pretoria (number S102/2004).

### Sample

Purposive sampling was used.<sup>6</sup> Women of any age and race, who selected a children's multi-nutrient supplement with the intention of purchasing it and who were willing to participate in the survey, were included in the study. A sample size of 120 respondents (10 subjects for each of the 12 fundamental questions in the questionnaire) would obtain findings that would adequately verify the questionnaire.

### Methodology

**Development of the questionnaire.** Initially a mini pre-questionnaire had been developed to determine the use of children's dietary supplements among mothers of children at a nursery school in Sunninghill, Sandton (Johannesburg). Twenty-five completed questionnaires were returned. The main questionnaire was then compiled to determine factors influencing the decision to purchase children's multi-nutrient supplements. This was developed using the responses given in the pre-questionnaires, literature on factors that play a role in consumer choice,<sup>4</sup> and a questionnaire previously used to determine decision-making patterns in women purchasing dietary supplements.<sup>4</sup> A pilot study was conducted after which the questionnaire was finalised.

The first section of the questionnaire comprised questions designed to determine factors possibly influencing women's decisions to purchase the particular products selected. Section two included one question that related to the factor having the greatest influence on subjects' decisions to purchase particular children's supplements. The third section included questions relating to the specific children's multi-nutrient supplement selected. Section four included questions on the socio-biographics of the subjects, including the age of the children for whom the supplements were bought. Based on the factors used to select children's multi-nutrient supplements, women were classified into subgroups according to a study by Miller et al.<sup>4</sup>

**Validity.** Face validity was controlled for during the pilot study.<sup>6</sup> Content validity was controlled by a dietitian with research experience, and a biostatistician from the Medical Research Council (MRC) (SA).<sup>6</sup> There was no external validity due to the small sample size and the sampling technique.

**Reliability.** This was enhanced by the researcher ensuring that all interviews were conducted in a consistent fashion by the researcher

herself; that there was standardisation in the use of the questionnaire from one situation or person to the next; and that interviews were conducted at the time products were selected, i.e. when thought processes used in decision making were still fresh in subjects' minds.<sup>6</sup>

### Data collection

All interviews were conducted over a six-month period (September 2004 to March 2005). All participants gave written informed consent. The duration of each interview averaged three minutes. It was assumed that all questions asked were answered honestly and that participants gave their full co-operation.

### Data analysis

Data were captured by the researcher using Microsoft Excel, and analysed using Stata (StataCorp. 2003. Stata Statistical Software Software: Release 8. College Station, TX: StataCorp LP). The data was presented as frequencies. Fischer's exact test was used to investigate associations between level of education and various factors influencing women's decisions to buy multi-nutrient supplements.

### Results

**Socio-biographical description of sample.** The sample included 128 women who were interviewed at their point of purchase (Table I). The sample was predominantly white ( $n = 84\%$ ). The racial skewness of the sample was not intentional, but rather represented the various racial groups who purchased multi-nutrient supplements for their children. Working women accounted for 83% ( $n = 106$ ) of the sample, most of them working full day ( $n = 72$ ). More than half of the women ( $n = 80$ ) had a combined monthly household income of more than R17 000. The largest portion of the sample ( $n = 42$ ) had finished matric, with almost equal proportions having a university degree ( $n = 32$ ) and college diploma ( $n = 35$ ). The age of the children for which the multi-nutrient supplement was bought is summarised in Table II.

- **Factors influencing women's decisions to purchase specific children's multi-nutrient supplements.** Table III shows the portion of the sample that was influenced by various factors (rank-ordered) when deciding which children's multi-nutrient supplement to select (column A), as well as the percentage of respondents with respective factors having the greatest influence on their decisions (column B). It appeared that form (91%), nutrient content and child's preference (80% and 69% respectively) were the three main factors.

**Form.** Form (tablets, syrup, gums, etc.) influenced the decision to purchase in 91% of women interviewed ( $n = 116$ ). However, only 6% ( $n = 8$ ) of women said that it in fact had the greatest influence, while 23% ( $n = 30$ ) claimed that their children's preference had the greatest influence. This stands to reason since the form of a supplement directly influences whether a child likes it or not.

**Nutrient content.** Nutrient content influenced the decision to purchase a particular brand in 80% ( $n = 102$ ) of women. Of this group, 50% ( $n = 51$ ) selected a particular product because of its general range of vitamins and minerals, and 27% ( $n = 27$ ) because of its vitamin C content. Among the women who were influenced by nutrient content, 91% ( $n = 93$ ) of them were "happy with the fact that it merely contained certain nutrients". None of them considered

Table I: Socio-biographic characteristics of study participants (n = 128)

Characteristic		n	%
Age (years):	< 18	1	0.8
	18–34	57	44.5
	34–49	66	51.6
	> 49	4	3.1
Education:	Lower than matric	7	5.5
	Matric	42	32.8
	University degree	32	25
	College diploma	35	27.3
	Postgraduate diploma	12	9.4
Employment:	Full day	72	56.3
	Half day	10	7.8
	Flexi time	24	18.7
	Unemployed	22	17.2
Race/ethnicity:	White	108	84.4
	Black	11	8.6
	Coloured	4	3.1
	Indian	5	3.9
Monthly household income:	< R5 500	3	2.3
	R5 500 – R9 000	5	3.9
	> R9 000 – R13 000	8	6.3
	> R13 000 – R17 000	15	11.7
	> R17 000	80	62.5
	No response	10	7.8
Unsure	7	5.5	

Table II: Age of children (n = 162) for whom multi-nutrient supplements were purchased

Age of child	n
Less than 1 year	4
1–3 years	48
4–6 years	54
7–12 years	56

the bioavailable form of the nutrients, and only a small number (n = 8 or 8%) considered the quantity in which the particular nutrient(s) was present. Only 14% (n = 18) stated that nutrient content had the greatest influence on their decision to purchase specific brands.

**Child's preference.** A large portion (n = 88 or 69%) purchased a particular supplement because they claimed "their children like it". Although the child's preference did not influence as many decisions to purchase as form did (91%, n = 116), 23% (n = 30) said that the child's preference had the greatest influence on their decision to purchase a particular brand. However, the child's preference, which is most likely influenced by form, appeared to outweigh all other factors that possibly influenced a woman's decision to purchase a particular brand of children's multi-nutrient supplements.

**Packaging.** Packaging could affect how appealing the supplement is. Packaging influenced 47% (n = 60) of women's decisions to select

Table III: Factors influencing women's (n = 128) decisions to purchase (column A)(%) and factors indicating the greatest influence on decision to purchase (column B)

Factor	Column A Respondents influenced by this factor (%)	Column B Respondents who claimed that this factor had the greatest influence (%)
Form	90.6	6.3
Nutrient content	79.7	14.1
Child's preference	68.8	23.4
Packaging	46.9	3.9
Price	45.3	1.6
Health benefit	39.1	8
Advice	37.5	14.8
*Other	33.6	12.4
Free from certain ingredients	28.1	0.8
Organic/natural	21.1	0
Herbal content	18	3.1
Advertisements	14.1	0
Promotions	14.1	1.6

\* Refer to text

specific brands. Only 4% (n = 5) indicated that packaging had the greatest influence on their decision to purchase specific brands.

**Price.** Price influenced the decision to purchase in 45% (n = 58) of women. However, only two subjects stated that price had the greatest influence of all the factors influencing their decision to purchase a selected supplement.

**Health benefit(s).** The claim to provide a health benefit influenced 50 (39%) of women's decisions to purchase specific brands. Of this group, 34 (68%) were influenced by a claim relating to immunity. Claims relating to illness and disease influenced decisions to purchase in only five of the 50 respondents (10%).

Of the selected products (claiming to have specific health benefits), 36% (n = 18) had no such health claims anywhere on the packaging. It appeared that women made assumptions or drew conclusions about the effects of certain children's multi-nutrient supplements. These assumptions could be related to certain nutrients, ingredients, perhaps a preconceived idea about a product due to past experience (e.g. a child seemed to get sick less frequently when he or she took a particular supplement) or external factors such as positive feedback from a friend or relative. Even the name of a product could have influenced a woman's perception of its health benefits. For example, the word "vite" or "vital" appeared on some of the brands selected for immune-related benefits, but no claims relating to immunity appeared anywhere on the packaging. Only 18% (n = 23) reported that health benefits had the greatest influence on their decision to purchase a specific brand (Table III).

**Advice from others.** Advice received from somebody else influenced the decision to buy specific multi-nutrient supplements in 38% (n = 48) of all women interviewed. Of this group, 27% (n = 13) were advised by friends, 25% (n = 12) by family members, 25% (n = 12) by pharmacy employees, 17% (n = 8) by medical doctors, and 10% (n = 5) by other health professionals and teachers, while none of them had received advice from dietitians. Only 15% (n = 9) indicated

that advice from others had the greatest influence on their decision to purchase specific brands.

**Free from certain ingredients.** Products' claims to be free from certain ingredients influenced the decision to purchase a particular product in 28% (n = 36) of women interviewed. Absence of the following additives in particular, in descending order, had the greatest influence on decisions to purchase children's multi-nutrient supplements: preservatives, colourants, tartrazine and sugar. A small number of respondents (n = 14) also considered whether a product was free from either toxins, additives in general, flavourants, allergens, honey, monosodium glutamate, yeast, lactose or alcohol.

In 21 of the 36 cases where women's decisions to purchase specific brands were influenced by the fact that they were free from certain additives, these products did not state that they were indeed free from the specified ingredients. (This was determined by the researcher after having read all the information on the packaging of the particular products selected by these 36 participants.) It appeared that women were aware of the presence of certain additives in children's multi-nutrient supplements, but did not necessarily assess products accurately in terms of the content thereof.

**Organic or natural properties.** Actual or perceived organic or natural properties influenced 21% (n = 27) of women. Of the 27 products selected by this group of women, only 15 (56%) stated on the label that they were organic or natural, or simply contained the words "organic" or "natural" somewhere on the packaging. One brand listed cod liver oil as an ingredient and claimed to provide natural resistance to infections. Another claimed to naturally assist with relief of colds and flu. "Sweetened with natural fruit sugar", "coloured with natural grape skin extract", "originated from nature", were some other statements included on product labels which perhaps lead the consumer to believe that a product was natural. The presence of certain ingredients also seemed to create the impression among women that a product was organic or natural, e.g. ingredients such as echinacea extract, green algae, and grape seed tincture. None stated that the organic or natural properties of selected products had the greatest influence on the decision to purchase.

**Herbal content.** The herbal content of children's multi-nutrient supplements influenced decisions to purchase a particular brand in 18% (n = 23) of women interviewed. Herbal ingredients with the most influence were echinacea (n = 12 or 52%) and propolis (n = 7 or 30%). Sterols, olive leaf extract, bee pollen, green algae, camomile, green tea and rodeola were also considered by some of the women (n = 8). Most selected products by this group of women in fact contained the herbal ingredient they stated influenced their decisions to purchase particular brands. Only 3% (n = 4) of the sample claimed that herbal content had the greatest influence on their decision to purchase a specific multi-nutrient supplement.

**Advertisements.** Advertisements (mostly in magazines and on television) influenced 14% (n = 18) of women's decisions to purchase specific children's multi-nutrient supplements. Advertisements did not have the greatest influence on the decision to purchase. However, it is not known whether the question regarding the influence of advertisements was answered in light of whether the women had seen advertisements that influenced their decision to purchase a particular product, or whether their children had seen adverts that influenced their preference for the brands selected. Therefore the findings might not be a true reflection of the influence of advertisements on the choice of children's multi-nutrient supplements.

**Promotions or specials.** Promotions influenced the decision to purchase specific brands in 14% (n = 18) of women, although less than 2% indicated that promotions had the greatest influence on their decision to buy a specific children's supplement. "Buy one, get one free" promotions seemed to have had the greatest influence on this group of women (14 women or 78% of women who were influenced by promotions were influenced because they received one product free with the purchase).

## Other

**Brand satisfaction,** which occurs in the post-purchase evaluation stage of the decision process, influences the development of choice tactics.<sup>7</sup> Some subjects (n = 12 or 28%) bought a particular brand because they claimed that "it worked". However, only 3% (n = 4) of women said that the fact that it worked had the greatest influence on their decision to purchase the selected brand. It would therefore seem that although brand satisfaction influenced the decision to purchase in some women, other factors also played a role, and performance of a product was not largely used as a choice tactic when selecting a children's vitamin or mineral supplement.

A small portion of the sample (n = 5) bought a particular children's multi-nutrient supplement because they claimed it was **family tradition**. Only two respondents selected a particular brand out of habit. Three women (7%) selected a specific dietary supplement to **replace the fruit and vegetables** their children did not eat. A small number of women selected particular brands because they claimed to **reduce hyperactivity** (n = 1), **improve concentration span** (n = 2), **increase appetite** (n = 1), and **prevent constipation** (n = 1).

- **Factors with the greatest influence on the decision to purchase specific children's multi-nutrient supplements.** The factor that appeared to reflect the greatest influence on the purchase decision was the child's preference (Table III). However, form and child's preference are probably closely related because if a child does not like gums, for example, the mother will not buy this particular form of supplement. Therefore, although form as a factor appeared not to have the greatest influence on the decision to purchase a specific supplement, this factor was probably implicated in the child's preference for a particular brand.
- **Level of education.** There was a significant relationship (Fischer's exact test) between level of education and the influence of tradition (p = 0.008), however only in women who had university qualifications.
- **Classification of women purchasing children's multi-nutrient supplements.** Miller et al identified five subgroups of buyers based on the similarity of use of certain criteria (i.e. factors influencing choice).<sup>4</sup> Subjects in this survey were classified into four subgroups according to 19 factors, which they claimed had the greatest influence on their decisions to purchase specific children's multi-nutrient supplements (Table IV).

The quality shopper frequently wanted the best quality product with the highest dose per tablet.<sup>4</sup> Therefore the product information, dosing instructions, ingredients and package information were studied more carefully compared to other participants.<sup>4</sup> In this study the quality shopper and information gatherer were combined as one sub-group. These subjects (n = 53 or 41%) spent more time and effort studying information on the label regarding health claims, nutrient content, herbal content and whether it was free from certain ingredients.

Table IV: Classification of women (n = 128) purchasing children's multi-nutrient supplements

Factor with the greatest influence on decision to purchase	Quality shopper / Information gatherer n = 53	Bargain shopper n = 5	Convenience shopper n = 32	Child-sensitive shopper n = 38
Health claim	23			
Nutrient content	18			
Herbal content	4			
Free from certain ingredients	1			
Advice		19		
Packaging			6	
Promotion/special		2		
Form				8
Child's preference				30
Price		2		
* Three month old	1			
Replace fruit & vegetables			3	
Tradition			2	
Manufacturer	1			
Small dose	1			
# Combination		1		
It works	4			
Habit			1	
Δ Availability			1	

\* Since most children's multi-nutrient supplements are indicated from one-year-old upwards, the fact that this could be given to a three-month-old was the factor with the greatest influence on decision to purchase.

# The combination of a multi-nutrient supplement plus a vitamin-enriched fruit juice in the same pack had the greatest influence on decision to purchase.

Δ The subject bought the best of what was available at the time of the interview.

The bargain shopper in Miller et al's study primarily considered price, quantity and dose of supplements and wanted to purchase the supplement with the greatest number of tablets for the least amount of money,<sup>4</sup> whereas the bargain shopper (n = 5) in this study claimed that price and promotions solely had the greatest influence on the decision to purchase.

The convenience shopper (Miller et al's study) considered the price, quantity, and dose of supplements but was not brand loyal. They preferred a brand with a simple dosing schedule and one with complementary ingredients in the same tablet.<sup>4</sup> The convenience shopper (n = 32 or 25%) in this study used choice tactics (such as affect: influenced by packaging, normative factors: the advice from others, habitual purchase, etc) to simplify decisions and reduce the time and effort required to make a decision.

The child-sensitive shopper was identified as a sub-group in this study. These subjects (n = 38 or 30%) were influenced by what the child liked and by the form that the child would accept.

#### • Selected supplements

**Brands selected.** Certain products were more often selected than others. Junglevites, multi-coloured animal-shaped chewable tablets were the most popular (selected by 27 women or 21%). Orange flavoured Scotts emulsion was selected by 14% (n = 18). Six women (4; 7%) selected Spiderman chewable tablets, and the same number of women selected Gummyvites with propolis and echinacea.

**Regularity of purchase.** Monthly supplement purchases were reported by 45% of the women interviewed. Thirty women (23%) bought supplements for their children when theirs were finished. Eighteen (14%) bought every second month and only two were unsure how often they purchased these supplements. In very few cases (women who bought multi-nutrient supplements for their children when they got sick, n = 2) dietary supplementation seemed to be used as a cure for illness.

**Dosage.** Eighty-eight per cent (n = 113) of women claimed to always give their children the recommended dose. Only six women stated that they gave their children more than the recommended dose, and these were mostly in the form of chewable tablets. The only product that was given in a dose less than the recommendation was a liquid form which contained cod liver oil.

**Form.** The most popular form of children's multi-nutrient supplement was chewable tablets (50% of women or n = 58). Thirty-five per cent (n = 40) chose a supplement in liquid form or syrup, 12% (n = 14) selected gums, and only 3% (n = 4) capsules. The latter were bought mainly for children between the age of seven and 12 years.

#### • Brand loyalty

Half of all the women interviewed in the survey (n = 65) claimed that they always bought the same brand. Among these brand loyal women, form influenced 94% (n = 61) of their decisions to purchase a particular brand. The fact that their children liked it (child's preference) influenced 91% (n = 59) of brand loyal respondents, and 88% (n = 57) were influenced by the nutrient content. Almost half (n = 30) of the brand loyal women were also influenced by claims regarding health benefits.

When asked which factor had the greatest influence on decision to purchase, 26% (n = 33) of brand loyal women stated that it was their children's preference (the fact that they liked it), 20% (n = 26) claimed it was health benefits, and 18% (n = 23) reported it was advice they had received from somebody else. In 15% (n = 19) of brand loyal women, nutrient content had the greatest influence on decision to purchase, and form had the greatest influence in only 6% (n = 8) of this group. Although form seemed to have the greatest influence on only a small percentage of the brand loyal respondents, a child's preference was probably influenced by the form of the supplement, and form as an influencing factor was probably masked by child's preference.

#### Discussion

The use of dietary supplements is a popular health behaviour and varies by several demographic and lifestyle characteristics.<sup>4</sup> The women who purchased multi-nutrient supplements for their children in the current study were mostly working, white women, between the ages of 34 and 49 years, and were in general educated and affluent.

Warnick et al reported that women's use of micronutrients is determined by their perceived need for supplements, decision making regarding the purchase and use of micronutrients, and ability to obtain micronutrients.<sup>10</sup> Purchase behaviour can be the result of numerous experiences and evaluations that occur over a repeated number of purchases.<sup>7</sup>

It is assumed that the major goal in repetitive and relatively unimportant decisions is not to make an 'optimal' choice, but rather to make a satisfactory choice while minimising cognitive effort.<sup>7</sup> The findings of this study revealed similar trends. The external factors (i.e. processing outside the immediate choice context<sup>7</sup>) that influenced the women in this study were advice received from friends (27%) and family (25%). This can be regarded as a haphazard 'simplifying strategy' that provides a satisfactory choice while allowing a quick and effortless decision to purchase. Brand satisfaction or dissatisfaction and brand loyalty, which occur in the post-purchase evaluation (or usage) stage of the decision process,<sup>7</sup> influenced 50% of subjects. Promotions and specials were other 'simplifying strategies'<sup>7</sup> that were used by 14% of the subjects. To make the decision-making process quicker and easier, consumers often develop 'choice tactics' that reduce the amount of time and cognitive effort required to make a decision.<sup>7</sup> The factors identified in this study that influenced choice tactics were price, performance and brand loyalty, affect, normative factors. Therefore, over time, consumers refine their tactics until a satisfactory decision can be made with very little effort.<sup>7</sup> They apply simple heuristics and 'adjust' these rules on the basis of outcome feedback.<sup>7</sup>

Women most often make decisions regarding supplement use for their families, but little investigation has been done on whether they accurately interpret the information on supplement labels to make informed health care choices.<sup>9</sup> Miller and Russell found in a study to determine knowledge of dietary supplement label information among female supplement users that the consumers often had limited knowledge of the active ingredients and that label information was also often misinterpreted. Similar findings were revealed in the current study. Compared to the study by Miller and Russell,<sup>9</sup> it was found in this study that advice regarding supplement use was not frequently obtained from physicians and/or other healthcare providers.

It seemed that the purchasing of multi-nutrient supplements was not a formal, routine practice. Less than half of the women interviewed bought supplements monthly for their children, and since most products are sold in units that provide a month's supply, this indicated that most children were not necessarily receiving multi-nutrient supplements daily.

## Conclusion

Many women spend time and effort gathering information about children's multi-nutrient supplements regarding health benefits, nutrient content, presence of certain additives, etc before deciding on a particular brand for their children. However, they appear to be influenced by external factors as well. Their children's influence seems to play an important role in their decision to purchase specific products, since 69% purchased a specific supplement because their child liked it or it was in a form that their children accepted well (91%). They therefore use their children's preference as a choice tactic in simplifying their decisions to purchase specific products. It seems that their final decision to purchase a specific brand might be

influenced to a greater extent by what the child liked or would accept than by the information they had gathered. It appears that children like chewable tablets the most.

Subjects in this survey were classified into four subgroups based on the choice tactics they used in their decision to buy multi-nutrient supplements for their children, namely the quality shopper and information gatherer, the bargain shopper, the convenience shopper and the child-sensitive shopper.

Half of the women claimed that they were brand loyal and always bought the same brand. However, with the continual bombardment of the dietary supplement industry with new products, and the great influence of child's preference, brand loyalty is perhaps short-lived.

Consumers report wanting more guidance in the decision-making process when selecting dietary supplements.<sup>4</sup> When recommending multi-nutrient supplements for children it is essential to determine which factors play a role in a client's decision to purchase a particular brand, e.g. free from certain ingredients and herbal ingredients, and whether their children would take a particular form, e.g. syrup. Once this has been determined, and after having comprehensively assessed the child's usual dietary intake, dietetic professionals can identify the most appropriate dietary supplement in a particular supplement delivery category<sup>11</sup>; however only after healthful food choices have been emphasised as the preferred option for optimal health. Since product information is not always read or interpreted correctly, it is important that dietetic professionals effectively communicate information to clients in respect of recommended products. Dietetic professionals should have adequate knowledge and understanding of the content and characteristics of various children's multi-nutrient supplements available to the public to effectively advise clients on multi-nutrient supplements for their children.<sup>11,12</sup> Consumers can only make informed health care choices when fully informed about the safety, efficacy and quality of nutritional supplements.<sup>11</sup>

Although the findings of this study cannot be generalised, they reveal insight into the factors that influenced the purchasing behaviour of women who bought multi-nutrient supplements for their children. It would be interesting to compare decision-making patterns of men versus women. It would also be interesting to determine whether women would be willing to spend more time and effort assessing the label information if various products are grouped together according to form.

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