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## 20110808 - Nutritional balance of flavored low-fat soymilk - 2008

[<Normal page] [PEREZGONZALEZ Jose D (2008). <u>Nutritional balance of flavored low-fat soymilk.</u> Journal of Knowledge Advancement & Integration (ISSN 1177-4576), 2011, pages 84-86.]

## Nutritional balance of flavored low-fat soymilk

This article offers descriptive data regarding the nutritional balance of flavored low-fat soymilk. These data were collected for a research on milk and milk alternatives in New Zealand between 2007 and 2008 (*Perezgonzalez*, 2008<sup>1</sup>).

#### <u>Fold</u>

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Flavored low-fat soymilk is an illustrative example of the "unbalancing" effects of added sugar to an otherwise closer to nutritional balance <u>low-fat soymilk</u>. Indeed, the average flavored low-fat soymilk (in this sample) turns out to be adequate in protein, carbohydrate and fat, low in saturated fat, low in fiber, high in sodium, and extremely high in sugar.

On average, flavored low-fat soymilk has a nutritional balance of BNI 79.18s, being particularly unbalanced towards excess of sugar.

### Illustration 1: Nutrition information (flavored low-fat soymilk)

(maroroa ion lacooyiiiii)							
BNI	79.18s	0.00					
Food, 100ml	2008	Ideal					
Protein	3.0	2.7					
Carbohydrate	6.9	7.3					
Sugar	6.4	< 1.3					
Fat	1.5	1.5					
Saturated fat	0.3	< 0.6					
Fiber	0.5	0.8					
Sodium	0.089	< 0.053					
Kcal	53.1	53.1					
kJul	222.2	222.2					

#### Illustration 2: Nutritional profile (flavored low-fat soymilk)

55%					
50%		*			
45%		*			
40%		*			
35%		*			
30%		*			
25%	*	*	*		
20%	*	*	*		
15%	*	*	*		
10%	*	*	*		
5%	*	*	*		
mid	р	С	f	fb	
max		s	sf		na
5%		*	*		*
10%		*			
15%		*			
		*			
20%		*			
25%		*			

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40% * 45% * 50% * 100	35%	*			
43 70	40%	*			
50% *	45%	*			
	50%	*			

#### International standards

Flavored low-fat soymilk appears as unbalanced according to international <u>Recommended Dietary</u> <u>Intakes (RDIs)</u>, although less so according to U.S. and Canada's standards, which allow for a higher content of sugars.

Illustration 3: Nutritional balance across different RDIs (flavored low-fat soymilk)								
Flavored soymilk	average	79.18	94.07	48.70	78.78	75.64		
Product 100ml	Company	BNI	WHO	US/CAN	AUS/NZ	UK		
Vitasoy lush chocolate	Vitasoy	78.87	92.43	48.31	78.31	76.31		
Vitasoy lush caramel	Vitasoy	80.00	96.97	49.41	79.41	77.41		
(Source: Perezgonzalez, $2008^{1\over2}$ )								

#### **Methods**

#### Research approach

• The original research was an exploratory study on the nutritional balance of milk and milk alternatives in New Zealand in 2007-2008.

#### Sample

- The initial research sample included 44 milk and alternative milk products (ie, milk, soymilk and rice milk)<sup>1</sup>. The food products were collected in a convenient manner, looking more for a variety of brands than a random sampling of the same.
- The results in this study simply describe the 'subsample' of flavored low-fat soymilk products within the original sample: ie, 2 brands of flavored low-fat soymilk<sup>3</sup>.

#### Materials & analysis

- Milk products were purchased from local supermarket chains in Palmerston North, New Zealand.
- Nutrition information for each milk product was retrieved from the nutritional information panel on each item, to be assessed using the <u>Balanced Nutrition Index™ (BNI™)</u> technology (see Perezgonzalez, 2011²).
- SPSS-v16 was used for variable computations, including BNI and international indexes, and statistical analysis, which included descriptives and correlations.

#### **Generalization potential**

Most of the products are made in Australia and internationally. Thus, the results of this study may be generalizable to the following populations (in order of decreasing generalization power):

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- Australia.
- Internationally, if one assumes milk to be of approximately similar nutritional composition anywhere.

#### References

- 1. **PEREZGONZALEZ Jose D (2008).** *Milk and milk alternatives in New Zealand in 2007-2008.* The Balanced Nutrition Index (ISSN 1177-8849), 2011, issue 3.
- 2. **PEREZGONZALEZ Jose D (2011).** <u>Balanced Nutrition Index™ (BNI™).</u> Journal of Knowledge Advancement & Integration (ISSN 1177-4576), 2011, pages 20-21. Also retrievable from <u>Wiki of Science</u>.
- +++ Footnotes +++
- 3. The other categories were: standard milk (10 items), semi-skimmed milk (7 items), skimmed milk (9 items), standard soymilk (4 items), low-fat soymilk (7 items), and rice milk (5 items).

#### Want to know more?

#### BNI™ database

The database offers individual nutrition analyses for foods, including the milk and alternative milk products referred to in above article.

BNI™ journal (2011, issue 3) - Milk and milk alternatives in New Zealand in 2007-2008

This issue of the Balanced Nutrition Index<sup>™</sup> journal collates all BNI<sup>™</sup> nutrition information for the original sample in a single book.

Wiki of Science - Balance Nutrition Index™ (BNI™)

This Wiki of Science page offers more information about the BNI™ technology.

Wiki of Science - Nutritional balance of milk and milk alternatives

These Wiki of Science pages offer more information for other milk categories: <u>standard milk</u>, <u>semi-skimmed milk</u>, <u>skimmed milk</u>, <u>standard soymilk</u>, <u>low-fat soymilk</u>, and <u>rice milk</u>.

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