

20110807 - Nutritional balance of low-fat soymilk - 2008

[<Normal page] [**PEREZGONZALEZ Jose D (2008)**. *Nutritional balance of low-fat soymilk*. Journal of Knowledge Advancement & Integration (ISSN 1177-4576), 2011, pages 80-83.]

Nutritional balance of low-fat soymilk

This article offers descriptive data regarding the nutritional balance of low-fat soymilk. These data were collected for a research on milk and milk alternatives in New Zealand between 2007 and 2008 (Perezgonzalez, 2008¹).

Low-fat (light, or lite) soymilk is made from soybeans and water, and contains around 1.3% fat. This article, however, analyzes the nutritional balance of low-fat soymilk beyond its fat content. Indeed, the average low-fat soymilk (in this sample) is adequate in fat and low in saturated fat, but also high in protein, low in carbohydrate but high in sugar, low in fiber, and high in sodium (for its energetic content).

On average, low-fat soymilk has a nutritional balance of BNI 27.08s, being particularly unbalanced towards excess of sugar.

[Fold](#)

Table of Contents

- [Nutritional balance of low-fat soymilk](#)
- [International standards](#)
- [Methods](#)
 - [Research approach](#)
 - [Sample](#)
 - [Materials & analysis](#)
 - [Generalization potential](#)

Illustration 1: Nutrition information (low-fat soymilk)

	2008	Ideal
BNI	27.08s	0.00
Food, 100ml	2008	Ideal
Protein	3.0	2.3
Carbohydrate	5.6	6.3
Sugar	2.5	< 1.2
Fat	1.3	1.3
Saturated fat	0.2	< 0.5
Fiber	0.4	0.7
Sodium	0.059	< 0.046
Kcal	46.1	46.1
kJul	192.9	192.9

Illustration 2: Nutritional profile (low-fat soymilk)

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

ideal % = grey cells; actual % = asterisk (*)

International standards

Low-fat soymilk appears as somehow unbalanced according to international [Recommended Dietary Intakes \(RDIs\)](#), an practically balanced according to U.S. and Canada's standards, which allow for a higher content of sugars and fat.

Illustration 3: Nutritional balance across different RDIs (low-fat soymilk)						
Low-fat soymilk	average	27.06	46.79	1.30	26.80	21.73
Product 100ml	Company	BNI	WHO	US/CAN	AUS/NZ	UK
Get Natural light	So Natural	13.47	26.70	2.46	13.02	9.78
So Good essential	Sanitarium	15.75	35.26	1.62	15.84	13.08
Vitasoy calci-plus high fibre	Vitasoy	16.14	36.19	.24	16.12	13.79
So Good active	Sanitarium	31.00	50.80	2.31	30.60	21.70
So Good lite	Sanitarium	35.94	55.74	1.07	35.81	15.89
Vitasoy light original	Vitasoy	50.97	61.11	20.69	50.69	48.69
Soyfresh soymilk	Soyfresh	69.43	89.43	26.05	58.97	54.05

(Source: Perezgonzalez, 2008¹)

Correlations between indexes are positive (and significant at the 0.10 cut-off point, which seems appropriate given the small sample size). These correlations indicate that the soymilk products being compared tend to form a similar hierarchy when indexed using different international standards.

Illustration 4: Correlations between RDIs				
	BNI	WHO	US/CAN	AUS/NZ
WHO	.981			
(sig.)	.000			
US/CAN	.905	.836		
(sig.)	.005	.019		
AUS/NZ	.991	.960	.885	
(sig.)	.000	.001	.008	
UK	.941	.884	.977	.937
(sig.)	.002	.008	.000	.002

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)¹. 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 low-fat soymilk products within the original sample: ie, 7 brands of low-fat soymilk³.

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 [Balanced Nutrition Index™ \(BNI™\)](#) 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):

- 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)**. [Balanced Nutrition Index™ \(BNI™\)](#). Journal of Knowledge Advancement & Integration ([ISSN 1177-4576](#)), 2011, pages 20-21. Also retrievable from [Wiki of Science](#).

+++ **Footnotes** +++

3. The other categories were: [standard milk](#) (10 items), [semi-skimmed milk](#) (7 items), [skimmed milk](#) (9 items), [standard soymilk](#) (4 items), [flavored low-fat soymilk](#) (2 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™ journal collates all BNI™ 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: [standard milk](#), [semi-skimmed milk](#), [skimmed milk](#), [standard soymilk](#), [flavored low-fat soymilk](#), and [rice milk](#).

Author

Jose D PEREZGONZALEZ (2011). Massey University, Turitea Campus, Private Bag 11-222, Palmerston North 4442, New Zealand. ([_JDPerezgonzalez](#) [JDPerezgonzalez](#)).

Other interesting sites



[Journal KAI](#)



[Wiki of Science](#)



[AviationKnowledge](#)



[A4art](#)



[The Balanced Nutrition Index](#)

page revision: 0, last edited: 5 Aug 2011, 09:58 GMT+12 (40 seconds ago)

Unless stated otherwise Content of this page is licensed under [Creative Commons Attribution-ShareAlike 3.0 License](#)