

The NuVal[®] System

May 12, 2016

**CSPI Canada-Championing Public Health Nutrition Conference
Ottawa, Canada**

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Typical Diet: Southeast Asia



Typical Diet: South America



Typical Diet: Northern Africa



Typical Diet: United States



It's All So Confusing...



Origin of NuVal

2003



2005



2008

- The Overall Nutritional Quality Index (ONQI) concept was proposed.
- Funding was provided **entirely** by Griffin Hospital.
- An **expert** panel, led by Dr. David Katz, was convened to develop the nutrient profiling system.
- The project was coordinated at the Yale-Griffin Prevention Research Center.
- The ONQI was commercialized as the NuVal[®] Nutritional Scoring System by NuVal LLC.

A Science Based Solution

Development: The Scientific Expert Panel (SEP):

Chair: Dr. David Katz, Yale University School of Medicine

Dr. Keith Ayoob, Albert Einstein College of Medicine

Dr. Leonard Epstein, University of Buffalo; inventor, Traffic Light Diet

Dr. David Jenkins, University of Toronto; inventor, Glycemic Index

Dr. Francine Kaufman, UCLA; Former President, American Diabetes Association

Dr. Robert Kushner, Northwestern University

Dr. Ronald Prior, Arkansas Children's Nutrition Center, USDA HNRC

Dr. Rebecca Reeves, President, American Dietetic Association

Dr. Barbara Rolls, Pennsylvania State University

Dr. Sachiko St. Jeor, University of Nevada

Dr. John Seffrin, President & CEO, American Cancer Society

Dr. Walter Willett, Harvard University



**Dr. David Katz,
Founder & Director,
Yale Prevention
Research Center**

Maintenance : The Scientific Advisory Board (SAB):

Dr. David Katz, *Ex Officio*, Yale-Griffin Prevention Research Center

Dr. Keith Ayoob, Albert Einstein College of Medicine -SAB Chair

Dr. Gail Frank, California State University Long Beach

Dr. Frank Hu, Harvard University, Harvard School of Public Health

Dr. David Jenkins, University of Toronto

Dr. Rebecca Reeves, University of Texas School of Public Health

About the NuVal® System

- NuVal is a US food scoring system that helps consumers see at-a-glance, the nutritional value of a food **on shelf tags**.
- NuVal, powered by the ONQI® algorithm, scores food on a scale of 1 to 100. The higher the NuVal Score, the better the nutrition.



The ONQI® Algorithm

- The calculation of a NuVal Score incorporates over 30 nutrient entries from the Nutrition Facts Panel **and beyond**.



Trajectory Scores

- The ratio of the concentration of a given nutrient in a food to the recommended concentration of that nutrient in a healthy diet.

Nutrient Quantity per serving of food/Total Calories per serving of food

Nutrient Quantity recommended per typical day/Total Calories per intake for a typical day

Trajectory Score: Sodium

Nutrition Facts	
Serving Size (35 g)	
Servings Per Container 16	
Amount Per Serving	
Calories 50 kcal	Calories from Fat 0 kcal
Calories from Saturated Fat 0 kcal	
% Daily Value*	
Total Fat 0 g	0 %
Saturated Fat 0 g	0 %
Trans Fat 0 g	
Cholesterol 0 mg	0 %
Sodium 350 mg	15 %
Total Carbohydrate 11 g	4 %
Dietary Fiber 0 g	0 %

Trajectory Score: Sodium

(Sodium 350mg per serving / 50 Calories per serving)

(Sodium 2300mg RDV / 2000 Calorie Diet)

= 6.086

6 times as concentrated in Sodium
as is recommended for the overall diet.

Weighting Coefficients

- **Prevalence, Severity, Strength of Association**

All nutrients weighted differently based on their impact on one or more health conditions.

Eg. Fiber/Lower LDL Cholesterol Levels

Omega-3/Reduced Risk of Cardiovascular Disease

Trans Fat/Higher LDL levels, Coronary Heart Disease

Universal Adjustors

- Adjusts the nutrition score of a food based on the quality of its macronutrients.
 - **Protein**
 - **Fat**
 - **Glycemic Load**
 - **Energy Density**

The NuVal® Scoring Process

Nutrition Facts	
Serving Size 16g	
Servings per Container about 28	
Amount Per Serving	
Calories 80	Calories from Fat 40
% Daily Value*	
Total Fat 4.5g	7 %
Saturated Fat 1g	5 %
Trans Fat 0g	
Cholesterol 0mg	0 %
Sodium 135mg	6 %
Total Carbohydrate 10g	3 %
Dietary Fiber 0g	0 %
Sugars 1g	
Protein 1g	
Vitamin A 0 %	Calcium 2 %
Vitamin C 0 %	Iron 2 %
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:	
Calories: 2,000 2,500	
Total Fat	Less than 65g 80g
Sat Fat	Less than 20g 25g
Cholest	Less than 300mg 300mg
Sodium	Less than 2,400mg 2,400mg
Total Carb	300g 375g
Fiber	25g 30g

Recipe
Development

RECIPE

10 g WHEAT FLOUR
1 mg NIACIN
2 mg REDUCED IRON
1 mg THIAMINE
.5 mg RIBOFLAVIN
24 mg FOLIC ACID
1 g SOYBEAN OIL
.75 g SUGAR
.5 g COTTONSEED OIL
135 mg SALT
120 mg BAKING SODA
100 mg HF CORN SYRUP
70 mg SOY LECITHIN
40 mg NATURAL FLAVOR
10 mg CORNSTARCH

Nutrient
Profile

ONQI



NuVal
Product
Database

INGREDIENTS: ENRICHED FLOUR (WHEAT FLOUR, NIACIN, REDUCED IRON, THIAMINE MONONITRATE [VITAMIN B1], RIBOFLAVIN [VITAMIN B2], FOLIC ACID), SOYBEAN OIL, SUGAR, PARTIALLY HYDROGENATED COTTONSEED OIL, SALT, LEAVENING (BAKING SODA AND/OR CALCIUM PHOSPHATE), HIGH FRUCTOSE CORN SYRUP, SOY LECITHIN (EMULSIFIER), NATURAL FLAVOR, CORNSTARCH.

Trading Up for Health - Snacks



1
NuVal®



26
NuVal®



26
NuVal®



100
NuVal®

Trading Up for Health - Dinner



28
NuVal®

Chef Boyardee Spaghetti
& Meatballs



88
NuVal®

Francesco Rinaldi No Salt Added
Traditional Sauce



91
NuVal®

Ronzoni Smart Taste
Spaghetti



ONQI and NuVal: Validated and Proven

- Numerous published studies that have validated the ONQI algorithm.
- Multitude of published research that proves NuVal makes an impact.
- For a reference sheet, email abernier@nuval.com

Proven: Harvard School of Public Health

- Harvard Study concluded that diets with higher NuVal Scoring foods were correlated with a lower risk of heart disease, diabetes and early death

THE ONLY SYSTEM LINKED TO
BETTER HEALTH!



HARVARD
SCHOOL OF
PUBLIC HEALTH

Proven: McGill University

- NuVal Scores were found to be more favorable in guiding consumers to healthier choices when compared to the Nutrition Facts Panel, Traffic Light, and Heart labels.



Proven: University of Pittsburgh

- Data was collected on the purchasing patterns of 535,000 shoppers that are members of the retailer's frequent shoppers' program.
- 6 months pre and 6 months post NuVal implementation.
- They utilized data from eight product categories: frozen pizza, tomato products, soup, salad dressing, yogurt, spaghetti sauce, granola bars, and ice cream.



Proven: University of Pittsburgh



Nutrition Content of
Purchases

Increased 21.8%



Price Sensitivity
Decreased 19%

Promotion Sensitivity
Increased 73%



Total Sales In the Eight
Categories

Overall Increase

Wrap Up:

- Move from a diet of natural, plant based foods to pre-packaged “ Frankenfoods ” has taken a severe toll.
- There are confusing messages on food packaging.
- Science-based FOP or shelf tag systems like NuVal can help consumers identify better-for-you foods.
- NuVal is proven to lead to better health outcomes, simplify the information, and change purchasing behavior.
- Without a doubt, the epidemic is reversible!
- Innovate and find the best solution.
- NuVal as the universal standard of nutrition density evaluation in the United States (and beyond!).



**For more information:
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