

The NuVal® System

May 12, 2016

CSPI Canada-Championing Public Health Nutrition Conference
Ottawa, Canada

Anne Bernier
Sr Director of Operations, NuVal LLC
abernier@nuval.com



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

 The Overall Nutritional Quality Index (ONQI) concept was proposed.

2005

- 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.

2008

 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

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



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



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	n Fat O kasl
Calories 50 kcal Calories from Saturate	d Fat 0 kcal
% Da	aily 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 o	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

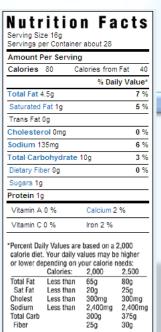


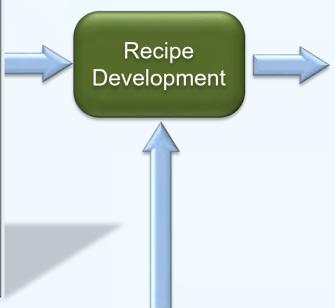
Universal Adjustors

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



The NuVal[®] Scoring Process





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.

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

1 g SOYBEAN

.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





Trading Up for Health - Snacks





Trading Up for Health - Dinner





Chef Boyardee Spaghetti & Meatballs





Francesco Rinaldi No Salt Added
Traditional Sauce



91 NuVal^o

Ronzoni Smart Taste Spaghetti



NuVal's Reach Across the United States





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 <u>abernier@nuval.com</u>



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









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 prepackaged "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: info@nuval.com