MBG COURSES

What Is Raw Food, Really? Science Explains

by **Dr. V.A. Shiva Ayyadurai** *January 16, 2016 4:45 AM*

A few years ago, I was contacted by the community of raw foodists to help them address an important issue: **What is "raw" food?** This is a complicated question. And most complicated questions require a systems approach to finding the truth.

In the old Indian parable of the king who asked six blind men to describe what they perceived when they touched an elephant, each man had a different answer. The one who felt the tail thought the elephant was a brush; the one who touched the legs thought they were tree trunks; the one who touched the trunk thought it was a snake, etc.

In the summer of 2014, we gathered the leading raw food manufacturers at a retreat in San Diego. They were asked, what is raw? Some felt that raw meant those foods that were "living," particularly those that were sprouted. Others felt that it was food not cooked above 118 degrees F.

Some spoke about the maintenance of enzymes. Others talked about it being plant-based and only vegan. In short, like the blind men who were asked to touch the elephant, each had their own view of raw food.

As an MIT-trained systems scientist, with a Ph.D in Systems Biology from the Department of Biological Engineering (formerly known as the Food and Nutrition Science Department), including three degrees in Engineering & Science from MIT, I helped to lead and facilitate this group of manufacturers, as well as other stakeholders (including retailers such as Whole Foods), define raw through a systems approach.

I had been a strict raw foodist since 1993, but encountered problems with defining the ever-changing meaning of raw food, with it sometimes becoming a religious movement, with self-appointed gurus.

This aspect was not serving the ordinary person interested in understanding the real health benefits of raw foods.

In 2014, retailers like Whole Foods were becoming concerned about the non-standardized use of the term "raw" on product packaging, as well as safety in the production and consumption of raw foods. Also, some "raw foods" that are sprouted like **kidney beans**, are dangerous, as they can cause serious illness and even death.

In summary, the raw food industry needed a standard.

Fortunately, science provides a methodology called Multi-Criteria Decision Analysis (MCDA) to support standards development by building consensus on qualitative and quantitative criteria for defining

“raw”.

Using the MCDA approach, over a period of six months, after many dynamic discussions and debates, we converged on five critical criteria that were central to the definition of raw: Safety, Non-GMO, Bioavailability, Organic, and Nutritious.

These five criteria were then assembled into three key groups:

- Real (Safety & Non-GMO)
- Alive (Bioavailability of ingredients)
- Whole (Organic & Nutritious)

Thus, the definition of “raw” is R.A.W. — Real, Alive and Whole. For each of these three criteria, detailed standards were established for a point-based scoring methodology as detailed in a formal International Standards document, which is **available here**.

As of now, the community has established that in order for a product to be Certified R.A.W., it must receive a score of 80 or above.

How is the R.A.W. score calculated? A total of 100 points is possible.

Real can receive a score of either 0 or 50. Real is composed of Safety and Non-GMO aspects. If the product is Safe, it receives a score of 25 (the Safety determination is based on rigorous standards established in cooperation with stakeholders like Whole Foods). If the product has ingredients that are all Non-GMO, it receives an additional score of 25. Thus, the possibilities of scoring for Real are 0, 25 or 50.

Alive can receive a score from 0 to 20. This determination is based on using a new biology methodology called CytoSolve®, which uses a methodological approach to determine the bioavailability (ability to be absorbed) of the major ingredients in a product.

Whole can receive a score from 0 to 30, and is composed of two elements: Organic and Nutritious. The score for the first element organic may range from 0 to 20, and is determined by the percentage of ingredients that are organic in the product.

The second element is its nutrient-density which ranges between 0 and 10 based on the **ANDI score**, determined by the percentage of ingredients (by weight) in the product.

Keep a lookout for the Certified R.A.W. seal at your local retailers.

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