

Use of the 4Leaf Survey: A New Vital Sign?



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Introduction/Background

Numerous studies over the last ten to twenty years have demonstrated that a whole food, plant-based diet can prevent and reverse many of our chronic medical conditions. In the United States, these conditions account for about 80% of our \$3.2 trillion healthcare costs, not to mention the increased morbidity and mortality to Americans. In addition to these studies, our federal government has recommended more fruits, vegetables, whole-grains and legumes, with less animal-sourced foods.

The concept of a whole food, plant-based diet with reduced salt, oil, and sugar has been advocated by a growing group of people. Some of the leaders in this field include: Dr. T. Colin Campbell of Cornell, Dr. Caldwell Esselstyn of the Cleveland Clinic, Dr. John McDougall, Dr. Dean Ornish, Dr. Neil Barnard, Dr. Joel Fuhrman, Dr. Michael Greger, and many more.

In the early 2000s, J. Morris Hicks (Jim) researched the healthiest diet for humans and planet Earth, and concluded that as Dr. Campbell says “the closer we get to eating a diet of whole plant-based foods, the better off we will be.” Jim adopted this diet and then became an author and an advocate for this lifestyle. In 2011, he published *Healthy Eating Healthy World* and launched an on-going blog on this subject at hbjmh.com.

I first got to know Jim in 2012 after replying to one of his blogs. Coincidentally, I didn't realize it then, but I had read his book about a year earlier. Obviously, I just didn't connect the dots.

My plant-based journey began in 2010 after reading *The China Study*, by Dr. T. Colin Campbell. After reading most works of the aforementioned authors listed above, and many more, I too, became an advocate for whole food, plant-based nutrition. As I began recommending that lifestyle to my patients in my rural family practice, I was amazed at the medical transformations that I witnessed, as patients adopted a whole food, plant-based diet. Interesting vignettes of weight loss, cholesterol normalization, improvement of diabetic hemoglobin A-1Cs, better sleep, more energy, blood pressure normalization, and reduction or complete elimination of pharmaceutical medications were seen.

All of this was achieved by simply changing the diet from the Standard American Diet (SAD) to a Whole Food, Plant-Based Diet (WFPBD). It seemed that the closer one came to 100% compliance to that superior diet, the better were the results. However, there was no way for me to quantitate a patient's compliance. Until I discovered...

The 4Leaf Survey

About a year after our brief email introduction, Jim Hicks called me. Knowing that I was a rural family physician advocating this lifestyle, he asked if I would read the manuscript of, and consider endorsing, a new book he had co-authored with Kerry Graff, MD: the *4Leaf Guide to Vibrant Health*. I was fascinated by the

book and by the *4Leaf Survey* that was introduced in the book.

It is a 12-question, 2-minute tool that allows one to initially see their nutritional status, with regard to SAD vs. WFPBD. The survey is simple, quick, and “estimates” the percentage of whole, plant-based calories in your diet. Done initially, it identifies where the patient is currently—and if the patient chooses to adapt to a more healthful diet, it will easily track their progress. Each question is scored with either “plus” points or “minus” points.

People can easily move up the 4Leaf scale by adding more whole, plant-based foods to their diet. At -44 points, we know that zero whole plants are being eaten and, at +44 points, we know that ONLY whole plants are being eaten. Here are the top four levels with the “estimated” percent of calories from whole plants.

4Leaf level begins at +30 with 80% whole plant calories
3Leaf level begins at +20 with 60% whole plant calories
2Leaf level begins at +10 with 40% whole plant calories
1Leaf begins at net “0” points, 20% whole plant calories
(For more details, visit 4leafprogram.com)

Not surprisingly, most Americans initially score below the 1Leaf level, mostly at the Unhealthful Diet (UD) level, where whole plants are estimated to comprise less than 10% of total calories.

So, using these results, one can easily see: 1) the general nutritional status of the patient, 2) in subsequent visits, how compliant the patient was with the diet, and 3) whether I should spend more time with dietary intervention (particularly if they scored *Unhealthful Diet*). For those reasons, I have begun to use the 4Leaf numerical score as another *vital sign*.

Generally, as one goes up the 4Leaf scale, other vital signs (Weight, BP, BMI, pulse) normalize. Lastly, the patient's other biomarkers (Glucose, Cholesterol, Hgb A1c, BUN/Cr) improve as one goes up the 4Leaf scale. The Survey can also be taken online, results tabulated, and pointers on how to improve one's score e-mailed back to them. Thus, one's 4Leaf score proves to be *not only diagnostic, but also therapeutic and prognostic*—and therefore a great tool for both patient and practitioner.

The Future of the 4Leaf Survey

As the only dietary assessment tool included in Dr. T. Colin Campbell's online plant-based nutrition course at eCornell, it is well on its way to becoming the dietary tool of choice for individuals as well as healthcare providers.

The medical profession is gradually moving to the conclusion that “food can be our medicine and our medicine can be our food.” This *food medicine* can actually improve, and indeed, cure, many of the chronic diseases that plague us today. The morbidity, mortality and cost burden can be shifted in a positive direction utilizing this splendidly simple tool!

I predict that within the next decade, the 4Leaf Survey, or some similar tool, will be added to the patient's chart. This new *vital sign* will have diagnostic, therapeutic, and prognostic qualities that can be utilized by both the patient and the practitioner.

In closing, I commend J. Morris Hicks on his 4Leaf Survey and for the *4Leaf Guide* that he co-authored with Dr. Graff— and I highly recommend both to patients and practitioners alike.