

FOLIC ACID vs FOLATE in Juice Plus+

It is the way that compounds are called in chemistry. Example, ascorbic acid (vitamin C) exists in that form only in very acidic environment; if the environment is close to neutral, it loses a hydrogen atom, and now it is called ascorbate. Citric acid, citrate, folic acid, folate, glutamic acid, glutamate, etc etc. You state in your note that in the medical community folic acid and folate are considered interchangeable terms, that is also the case in food labeling. Here is a link to the Code of Federal Regulations, where you can see that ; <http://www.accessdata.fda.gov/.../cfCFR/CFRSearch.cfm...>

The reason for that is that they all contribute in the exact same way to Dietary Folate Equivalents, and the body uses them in the exact same manner. The commercial product that is manufactured through fermentation is typically referred to as folic acid, and that is why we call it folic acid on the ingredient list. There is nothing commercially available that would be derived from spinach or kale for example, and I suspect if there was, it would probably be sold in the folic acid form (and would be outrageously expensive too).

The body can take the folate from plants, and the folic acid from supplements, and convert them both to 5-methyl tetrahydrofolate, which is the starting point of the folate cycle (and the way that it is absorbed in to the body).

The answer to your last question depends on where you draw your line, and you can probably spend a fair amount of time splitting hairs on this. Take the example of bread; bread does not exist in nature, it has to be man-made, so is bread synthetic? Corn tortillas are a staple in my native country (Mexico), and have been made there for centuries. But for some reason the natives do not grind corn husks or corn cobs, only the corn kernels, so does that qualify as "whole food"? All the ingredients we use in Juice Plus+® are plant derived (except the capsule shells which are animal derived). But none of those ingredients are in the exact form that it was harvested; some man-made process has to be followed to produce a powder and put in a capsule.

Carlos F. Madero

The Juice Plus+ Company

Folate is measured in DFE's (dietary folate equivalents). Folate itself is a large molecule that we have to digest to get Folic acid. Therefore folate has a DFE of 1.0 and folic acid of 1.7 (almost twice as bioavailable). So the label must express DFE's as Folate. The FDA requires the same amount of DFE's in every batch of JP+ so a tiny amount of folic acid is added to the batch (last ingredient listed). Everything in JP+ is whole food plant derived, including the folic acid.

Dr. Rick DuBois