What are phenolics?

Everything that comes into contact with US as human bodies, including foods, chemicals, even thoughts and emotions does so through cells of our bodies. The lotion and personal care products you use come into contact with your skin, hair and nail cells, for example. The food you eat and beverages you drink come into contact with cells of the entire parenteral system. The pollens, smells, exhausts, and inhalants in your environment come into contact with mucous membrane cells, nasal and sinus cells. Even the thoughts you think and the emotions you feel create chemicals of stress or pleasure and are processed through cells. You simply do not exist without cells. Everything you are is made up of cells, and everything that creates you into form does so through cells.

Everything you come into contact with has to be processed for use or waste by these cells. Everything you take in is categorized by the cells as "useful" or "harmful". There is no middle ground. Useful things go on to where they belong and feed cellular process. Harmful things are passed into the eliminative pathways and in some cases, given a "stamp of disapproval", which the body's chemistry records and remembers. Any time a substance with a "stamp of disapproval" comes in, the body's cells recall and remember the harm caused. The cells know to create inflammation, including mucus or fluid, to protect themselves. The body's chemistry is put on high alert to rid the body of these harmful substances, creating inflammatory responses. It does this EVERY TIME this substance enters the space of the body. Repeated intake creates a continued inflammatory response. If the cells do take in any part of this substance, it BECOMES part of the cell for a period of time and the body fights ALL PARTS of the offender, including the parts that are your body's own cells. When the body fights its own cells, that is known to be an "autoimmune condition".

Phenolics are the SUBSTRATES that a substance breaks down into. In this case, we are particularly concerned with food substrates.

When a food comes into the body, the cell acts like a little factory, taking the food particles in, breaking it down further, sending off wastes here, and sending off useful nutrients there. Let's use an apple as an example. The apple is broken down by the teeth, mixed with enzymes from the salivary glands, chewed and swallowed into the stomach where it mixes with stomach acid to continue breaking it down. In the duodenum, digestive enzymes from the pancreas are pulled in to digest the food thoroughly and it enters the small intestine as small particles. The small particles move through the bloodstream and are carried to all the cells in the body that need them. By this time it's no longer an "apple"; it is macro and micronutrients, but it is also food substrate chemicals known as Quercetin, Rutin, Apiol, and Gallic acid, to name a few. An apple has twelve common phenolic substrates! Any one of these chemicals can be mis-metabolized, lending it a "stamp of disapproval" when it reaches the cell. If this happens, the chemical is rejected, the inflammatory response is initiated, and the cells remember to do this each and every time. People experience inflammation differently. Some may experience intestinal upset, colitis, constipation, or bowel dysfunction disease. Some experience inflammation through sinus and respiratory congestion or seasonal allergies. Still others may perceive inflammation through the form of skin conditions are any number of inflammatory diseases.

Once a phenolic is skewed, it can be traced in any other food that contains it along with the other phenolic compounds in THAT food. What once started out as a rutin sensitivity has increased to blueberry because the

blueberry contained rutin AND acedtaldehyde. Now foods containing this new compound have the potential to cause problems as well. Soon a "net" of mis-metabolized food substrates are problematic, but not found to be "allergens" or "antibody generating". This is why some people will be able to eat a particular food, but then start to discover sensitivity years down the road after successfully consuming it their whole lives, or why they didn't show up on an IgG, IgA, or IgE allergy test. For those with advanced sensitivities, this is one possible answer to why one's list of problematic foods has expanded again and again. The act of eating, itself, becomes confusing and fear-inducing, not knowing what is going to cause problems.

What we want to do is optimize the multiple cellular functions by removing hindering impedances. When we improve digestion and metabolism, all parts of a food and its chemistry is more readily accepted and made bioavailable to the cells to do their job. Helping the body digest and metabolize correctly helps the cells to "see" food substrate chemicals as they were meant to be seen: as useful amino acids, neurotransmitter chemical messengers, and/or hormones.