## DNA testing can determine which medication works with your chemistry

## The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis.

People can respond to drugs very differently. A medication that brings relief for some patients might show no benefit at all in others, or even cause harmful side effects.

A growing array of genetic tests is designed to help predict how people are likely to respond to many common medications, from antidepressants and antihistamines to pain relievers and blood thinners. The tests, which are controversial, look for tiny variations in genes that determine how fast or slow we metabolize medications.

Because of such gene variations, codeine, frequently prescribed to relieve pain, has little effect on as much as 20% of the population, while 2% of people have such a strong reaction that a normal dose can be life-threatening. About 25% of people can't effectively absorb Plavix, a clot-busting drug, putting them at increased risk for a heart attack or stroke.

Testing patients for gene variations could avoid some of the 700,000 serious drug reactions in the U.S. each year, some experts say. Proponents of the tests, which are done with a cheek swab, say they also could help doctors rely less on trial and error in choosing the right drug and the right dosage for individual patients.

The Food and Drug Administration has included cautionary information for people with certain gene variations on the labels of more than 100 prescription medications. As yet, only about 20% of doctors order such tests, according to a survey by the American Medical Association, and many patients don't know they exist.

Read full, original post: Is Your Medicine Right for Your Metabolism?

(Full article behind pay wall)