



# NATURE CURES...HEALTH NEWS

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## REVIEW ARTICLE

### **Studies of Gene Variants Related to Inflammation, Oxidative Stress, Dyslipidemia, and Obesity: Implications for a Nutrigenetic Approach**

Obesity is currently considered a serious public health issue due to its strong impact on health, economy, and quality of life. **Obesity is considered to be a chronic low-grade inflammation state and is directly involved in the genesis of metabolic disturbances, such as insulin resistance and dyslipidemia, which are well-known risk factors for cardiovascular disease.**

Furthermore, there is evidence that genetic variation that predisposes to inflammation and metabolic disturbances could interact with environmental factors, such as diet, modulating individual susceptibility to developing these conditions.

This research study aimed to review the possible interactions between diet and single-nucleotide polymorphisms (SNPs) in genes implicated on the inflammatory response, lipoprotein metabolism, and oxidative status. **(tested in DNA Profiling at Nature Cures with Kathryn Arnel)**

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Therefore, the impact of genetic variants of the peroxisome proliferator-activated receptor-(PPAR) gamma, tumor necrosis factor-(TNF-)alpha, interleukin (IL)-1, IL-6, apolipoprotein (Apo) A1, Apo A2, Apo A5, Apo E, glutathione peroxidases 1, 2, and 4, and selenoprotein P exposed to variations on diet composition is described.

#### **Conclusion**

There is evidence that genetic variation at genes involved in the etiology of inflammation and dyslipidemia could interact with environmental exposures, such as diet, to modulate individuals' susceptibility to developing these conditions. Present data support the notion that more tailored dietary recommendations may be helpful in the prevention of obesity-induced comorbidities.

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