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# Modulation of Inflammation Process in Different Diseases and Propose Genetic Alternatives as Treatment

### **Editorial**

When we talk about inflammation, immediately we think about endothelial damage, swelling and redness. However, if we think a little more, we include other complex things like the immunological system, its cells and some molecular components such as cytokines. Even though the factors that could start the inflammatory process or the signals that activate the inflammatory pathways are well described, many researchers focus on the description and classification of the inflammatory process, and now there are many types of the inflammation according to the origin, site, duration and components involved. Due to, this, the concept of low grade inflammation was stablished, which is defined as a lingering inflammatory process that does not cause danger, per se, but this constant state provokes damage in cells and tissues. One of the hypotheses about the origin of this type of inflammation is related to the inability of the organism to restore the homeostasis.

On the other hand, it has been described that diabetes is a metabolic disease that affects many tissues, in which we observed changes in the expression of some receptors, transporters and molecules, including cytokines and hormones, both participate in the regulation of metabolic processes besides, they have an important role in some immunological activities. As a consequence, there is a close relation between the low grade inflammation and diabetes, so it is very important to study the disease from an immunological point of view, because there is evidence that describes the relation between metabolic process such as metabolism of insulin resistance, glucose and fatty acid metabolism, modification of gene expression of receptors, synthesis and release of proteins such as pro and anti-inflammatory cytokines.

#### Editorial Article

#### Aguayo Ceron Karla Aidee\*

Escuela Superior de Medicina, Sección de Estudios de Posgrado, Instituto Politécnico Nacional, Mexico

\*Correspondence: Aidee K, Higher School of Medicine Section of Postgraduate Studies, Instituto Politecnico Nacional, Mexico, Tel: +34 945 00 75 75; E-mail: aidee.aguayo@gmail.com

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In conclusion, the immunological study of diabetes could be an alternative not only to decrease the incidence of the disease, but also helps to the development and design of new therapeutic strategies leads to immunological targets, that allows the use of new genetic individualized and specific therapies which promotes the decreasing of the inflammatory process and the symptomatology of diabetes that causes irreversible danger in tissue and organs that affects the quality of life in persons.

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