

# Is Mitochondrial Dysfunction a Common Root of Noncommunicable Chronic Diseases?

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## Abstract

Mitochondrial damage is implicated as a major contributing factor for a number of noncommunicable chronic diseases such as cardiovascular diseases, cancer, obesity, and insulin resistance/type 2 diabetes. Here, we discuss the role of mitochondria in maintaining cellular and whole-organism homeostasis, the mechanisms that promote mitochondrial dysfunction, and the role of this phenomenon in noncommunicable chronic diseases. We also review the state of the art regarding the preclinical evidence associated with the regulation of mitochondrial function and the development of current mitochondria-targeted therapeutics to treat noncommunicable chronic diseases. Finally, we give an integrated vision of how mitochondrial damage is implicated in these metabolic diseases.

## Palabras clave

**Palabras clave de autor:** [mitochondria](#); [obesity](#); [insulin resistance](#); [cancer](#); [cardiovascular diseases](#)

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