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## Carnitine and Derivatives in Health and Disease

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Deadline for manuscript  
submissions:

**closed (30 November 2020)**

### Message from the Guest Editor

Dear Colleagues,

Carnitine and its derivatives are nutrients that play an essential role in the transportation of fatty acids across inner mitochondria. The carnitine system is involved in some genetic diseases, energy production, the discharge of accumulated toxic substances, the reduction of chemical damage, the optimization of the processes of muscle tissue repair, and the improvement of physical and mental performance.

The multifaceted mechanisms by which carnitine and its derivatives exert their beneficial effects, such as increased protein synthesis and reduced muscle degradation, represent an important objective of clinical research.

L-carnitine and its derivatives have been proposed as a supplementary treatment to conventional medicine, including liver diseases, diabetes kidney disease, male infertility, sarcopenia, fatigue, neuromuscular disease, and cognitive and memory impairment.

Dr. Michele Malaguarnera

*Guest Editor*



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# Special Issue



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