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# Molecular Mechanisms and Current Treatment Strategy of Sarcopenia and Cachexia

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## **Message from the Collection Editor**

Two common but distinct conditions characterized by a loss of skeletal muscle mass are sarcopenia and cachexia. Muscle wasting is an inevitable part of aging (sarcopenia). Cachexia is associated not only with chronic diseases, most commonly cancer, but also with other inflammatory conditions, such as chronic obstructive pulmonary disease (COPD), heart failure, chronic kidney disease, AIDS, and sepsis.

Sarcopenia and cachexia occur due to a multifactorial process that involves physical activity, nutritional intake, metabolic homeostasis, oxidative stress, hormonal changes, and life span. The specific contribution of each of these factors is unknown, but more recent studies have indicated an apparent functional defect in autophagy-dependent signaling in both sarcopenic and cachectic muscles. Since many researchers try to elucidate the molecular mechanism of sarcopenia and cachexia, recent understanding is very broad.













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