## Self-management of health based on the action mechanism of daily behaviors such as food, exercise and sleep

## Breakdown mechanism of homeostasis by circadian misalignment

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## **Summary:**

Modern 24-hour society is accompanied by a dramatic change in human lifestyle, with increases in night shift work and nocturnal feeding/recreational activities. Persisting circadian misalignment leads to deleterious effects on health and healthspan. In this study, we verify that circadian misalignment would the increase the risk for developing multiple diseases and analyze its molecular mechanisms through the prospective studies using "mouse cohort model" as a reverse-translational study. Moreover, we analyze multilayer human physiological rhythms for developing personalized prevention strategy.

