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Calorie Restriction Promotes Cardiolipin Biosynthesis and Distribution Between Mitochondrial Membranes

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Keywords

Calorie restriction, mitochondria, cardiolipin, membrane, phospholipid.

Highlights

- Mitochondrial membranes in aged animals present higher levels of oxidative damages.
- Calorie Restriction promotes mitochondrial biogenesis.
- Cardiolipin biosynthesis is upregulated by calorie restriction.
- Mitochondrial outer membrane is enriched in cardiolipin.

ABSTRACT

Calorie restriction (CR) has been amply demonstrated to modify mitochondrial function. However, little is known regarding the effects of this dietary regimen on mitochondrial membranes. We isolated phospholipids from rat liver mitochondria from animals on CR or *ad libitum* diets and found that mitochondria from *ad libitum* animals present an increased content of lipoperoxides and

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