

朝一の、アミノ酸補給

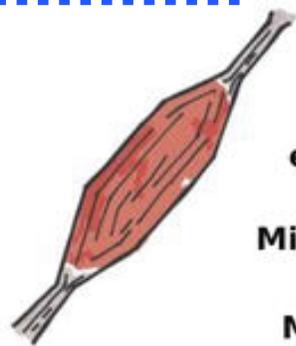
(BCAAの中でも特にロイシンが有効)

朝一の、プロテイン補給



Protein Synthesis

タンパク質
合成の促進



Muscle wasting in cancer cachexia

mTOR activity

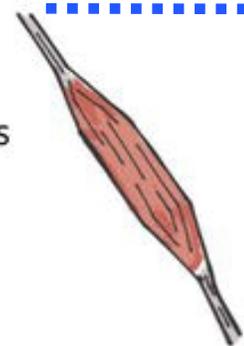
4E-BPs, eIF4A, eIF4B, eIF4E and S6K1 activity

Mitochondrial biogenesis

Muscle function activity

Protein Degradation

タンパク質
分解の抑制



PI3K/Akt signalling in PIF-like-treated muscle cells

Proteasomal proteolysis:

E2 activity

MuRF1 transcription

19S, 11S and 20S expressions

Chymotrypsin activity

Autophagy:

Cathepsin B activity

Calpain activity

Myostatin action:

Smad2/3 pathway

ロイシン

LEUCINE

種々の 作用機序

Cachexia-induced damage in the heart:

heart mass loss

ventricular reduction

wall thickness

Normal electrocardiography

Improves echocardiography



Cardiac Cachexia

Cachectic state

Markers of hepatic damage functions

Liver antioxidant response

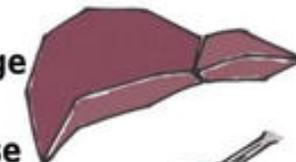
Skeletal muscle mass in adult offspring:

mTOR and p70S6K

Proteolysis:

Tyrosine release

Maintains the cardiac mass in adult offspring



Maternal Influence