

Three ways to maintain the NAD⁺/NADH cycle



Change Pyruvate into Lactate

Pyruvate is a product of glycolysis. Conveniently, changing pyruvate into a closely related compound, lactate, helps change NADH back into NAD⁺.



Use NADH to make energy with mitochondria

NADH can be used in another energy-producing process involving structures in the cell known as the mitochondria. This also changes NADH back into NAD⁺.



Increase the blood flow

A third way to change NADH back into NAD⁺, only recently identified by Washington University scientists, is to trigger a set of chemical chain reactions that increase blood flow.