

## Deciphering The Mechanisms of Blood Sugar Homeostasis: The Story of Gerty and Carl Cori

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One of the significant achievements of Gerty Theresa Cori and Carl Ferdinand Cori is the discovery of the basic biochemical mechanisms involved in the use of energy by muscles and the liver, as well as how to synthesize and break down glycogen for use as energy storage, which was a very effective step in the field of understanding the metabolism of carbohydrates. They played a role in the discovery of the process of storing and releasing cellular energy from carbohydrates and what we know as part of the Cori cycle. Their research led to answering one of the most basic questions about the functioning of biological systems. These research achievements resulted in the Nobel Prize in Medicine in 1947 for them, making Gerty Cori the first American woman to win the Nobel Prize. Gerty and Carl Cori's acquaintance and collaboration began when they were students at the Medical School of the German University in Prague, where they published their first joint paper in 1916. They began studying malignant diseases at the Buffalo State Institute after immigrating to America from Prague. However, in the continuation of their studies, they focused on the metabolism of glucose and glycogen in the liver and bloodstream, which led to their important achievements. Gerty and Carl's close collaboration played a key role in their scientific discoveries and successes. Forty-one years of living together and joint scientific cooperation, made a great contribution to the provision of knowledge, including in the discovery and clarification of the active stabilization of blood sugar homeostasis with the participation of the liver and its connection with muscles until Gerty passed away in 1957. In recognition of this scientific couple, their picture was installed in the corridor of the School of Biology of Tehran University in January 1401.

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