## UNIT 1

## BIOGRAPHY: EDWIN COHN

BIOCHEMIST EDWIN COHN WAS BORN IN NEW YORK ON DECEMBER 17, 1892. HE SPENT MOST OF HIS CAREER AT HARVARD UNIVERSITY, WHERE HE HELPED DEVELOP THE FRACTIONATION PROCESS TO SEPARATE PROTEINS FROM BLOOD PLASMA. THESE FRACTIONS OF PLASMA PROVIDED TREATMENT TO MANY PEOPLE, SAVING LIVES DURING WORLD WAR II. COHN DIED AT AGE 60 ON OCTOBER 1, 1953, IN BOSTON.

Edwin Cohn attended the universities of Amherst and Chicago, and it was at the latter one that he decided to pursue a scientific career. After completing his undergraduate studies at the University of Chicago, Cohn received his doctorate in 1917. The scientist chose to focus his work on the study of proteins.

Coinciding with the US entry into World War I, Cohn studied proteins in bread, hoping to discover a way to address the shortage of wheat during the war. In 1920, Dr. Cohn moved to Harvard Medical School, where he began studying amino acids and peptides, which are the basic components of proteins.

At around the time World War II broke out, Dr. Cohn helped to develop a blood fractionation process, which separates the different proteins in blood plasma. This separation of human blood plasma components offered valuable medical treatments. Specifically, the fraction of serum albumin helped to save patients who were in shock during the war. Serum albumin from Dr. Cohn's lab was used to treat some of the wounded in the attack on Pearl Harbor.

Dr. Cohn supervised the efforts to produce large amounts of this fraction of plasma and thoroughly ensured that industrial production centers complied with his high quality standards. As it became more available, serum albumin was often used on the battlefield, saving



countless lives. Another plasma fraction that helped patients was gamma globulin. This protein, which is the same as antibodies, was used to treat measles during the war. Gamma globulins were later the main resource in the fight against polio, until the arrival of the polio vaccine.

In 1948, President Harry S. Truman awarded Edwin Cohn with the Medal of Merit for his work on the fractionation of blood. Driven by the importance of continuing his contribution to public health, Cohn continued his investigation, which included working with a machine designed to separate blood into its cellular components.

Edwin Cohn died in Boston, on October 1, 1953, at the age of 60, after having a stroke. He is remembered for his work and the treatments that helped to save the lives of soldiers and civilians alike.

Edsall, J. T. (1961). Edwin Joseph Cohn. A biographical memoir. National academy of sciences: Washington D.C.

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