

# *David Brown Willem J. Kolff*



Doctor Invented Kidney Dialysis Machine,  
Artificial Organs

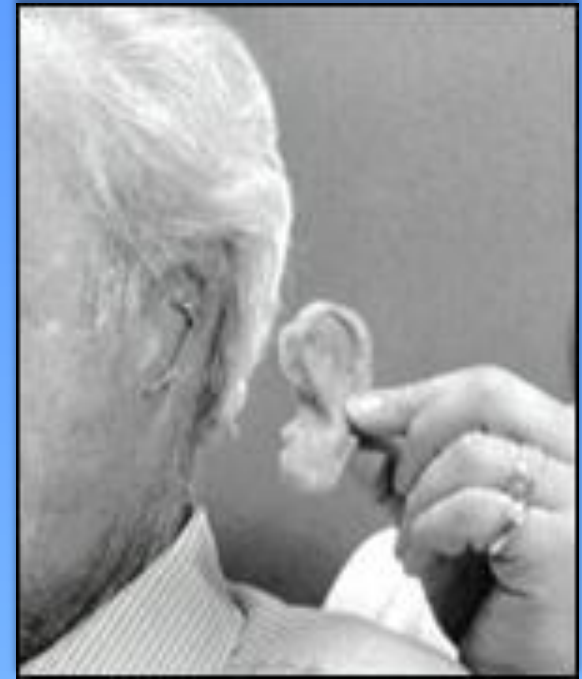
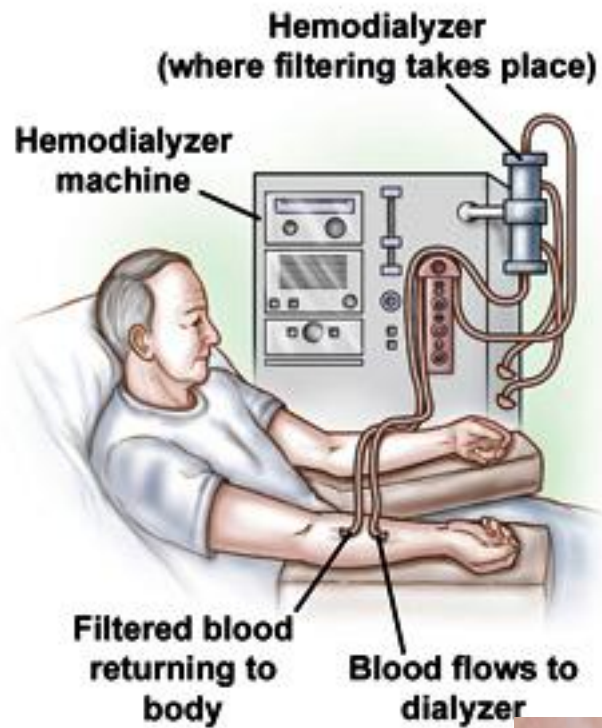
Willem Johan Kolff was born on Valentine's Day 1911 in Leiden, the Netherlands. He was the oldest of five children. His father was a doctor who operated a sanitarium.

Willem J. Kolff, 97, the Dutch-born doctor who saved and prolonged countless lives as the inventor of the modern kidney dialysis machine and chief designer of the first mechanical heart implanted in a human being, died Feb. 11 in Newtown Square, Pa. He had congestive heart failure.

Dr. Kolff spent much of his career in the United States and became distinguished professor emeritus of internal medicine, surgery and bioengineering at the University of Utah. Sometimes called "the father of the artificial organ," he was a mentor to Robert Jarvik and other pioneers in that field.

- He made a major contribution to the surgical pump oxygenator, also known as the heart-lung machine.
- He invented the intra-aortic balloon pump, used to temporarily rest the heart of someone on the verge of death from congestive failure. Both devices are routinely used around the world.
- He also invented an artificial ear and an artificial eye, each implanted in a few patients. They worked to a measurable degree, but not well enough to commercialize

- Dr. Kolff was director of the university's Institute for Biomedical Engineering at the time.
- Don E. Olsen, a retired 79-year-old researcher who succeeded him, recalled yesterday that his predecessor always referred to the different versions of the mechanical heart by the name of the person under him who was doing the most work on it at the time.



Project by Klaudia Habanikova and Martina Strizencova from Gymnazium Ludovita Stura  
Trencin Slovakia.