

# Scientists 3D print heart made of human tissue

Scientists at Tel Aviv University in Israel have 3D printed a small heart using human tissue - a breakthrough, [according to Haaretz](#), that they hope could one day render organ donation obsolete.

The technology is still many years out from human transplants, though - the team's rodent-sized printed heart isn't quite there yet.

"The cells need to form a pumping ability; they can currently contract, but we need them to work together," lead scientist Tal Dvir said.

"This is the first time anyone anywhere has successfully engineered and printed an entire heart complete with cells, blood vessels, ventricles and chambers," Dvir said.

To print the heart, the scientists created a "personalised hydrogel" to form "bioinks," according to a paper [published today](#) in the journal *Advanced Science*.

The hydrogel originated from fatty tissues extracted from human test subjects.

