

The Potential of Aquaponics in Space Abstract
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With advancements in space technology and the increasing drive to get humans into space and on the planetary bodies that inhabit it comes a lot of questions. One of those questions being: How can we sustainably create and supply food in space? Aquaponics is considered a solution to this problem for its self-sustaining properties as well as its ease of use. Consisting of only a few steps, aquaponics includes having vegetable plants that are fertilized by fish waste, which in turn, clean out the water that the fish reside in. This process eliminates the need for soil, making it a compatible solution for space stations and places like Mars with no readily available soil. This research project focuses on the potential pros and cons of applying aquaponics systems during space missions as a means of self-sustainment during prolonged missions.