

Eye on the International Space Station: One-Year Mission Miniseries

February 13 2015



Have you ever experienced swelling in your legs, become dizzy when you stood up too quickly or suffered from elevated blood pressure? These common ailments faced on Earth are related to the amount of fluids in our bodies and how they redistribute when we change posture. In space, fluids, such as blood and water, shift to the upper body. Fluids play an essential role in our overall health, including the potential to impact vision. Credit: Brett Redden/NASA

Have you ever experienced swelling in your legs, become dizzy when you stood up too quickly or suffered from elevated blood pressure? These common ailments faced on Earth are related to the amount of fluids in our bodies and how they redistribute when we change posture. In space, fluids, such as blood and water, shift to the upper body. Fluids

play an essential role in our overall health, including the potential to impact vision.

As part of NASA's One-Year Mission, researchers will conduct several Human Research Program investigations on the International Space Station. The goal is to learn more about how the body responds to a long-term, low-gravity environment. These investigations are grouped into seven categories: visual impairment, physical performance, functional, behavioral health, human factors, metabolic and microbial.

The visual impairment category will include the Fluid Shifts and Ocular Health investigations to examine what happens when [fluids](#) shift into the upper body in a low-gravity environment. Researchers will collect physiological data using non-invasive tools to study [visual impairment](#) and intracranial pressure caused by prolonged weightlessness.

Patients on Earth suffering from similar problems, such as hypertension also may benefit from this research.

Provided by NASA

Citation: Eye on the International Space Station: One-Year Mission Miniseries (2015, February 13) retrieved 30 April 2024 from <https://phys.org/news/2015-02-eye-international-space-station-one-year.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--