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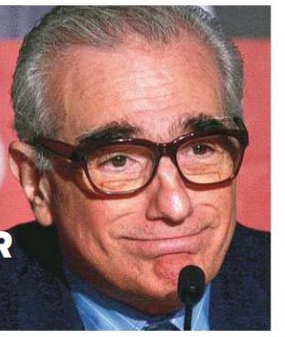

Al Neyadi reveals water's space form

Astronauts use only wet-wipes for six months as 80% of ISS water is recycled

DUBAI

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After the historic first Arab spacewalk and a successful relocation of a spacecraft on the International Space Station (ISS), UAE astronaut Sultan Al Neyadi revealed how water moves in space in his latest post.

Al Neyadi on Friday shared a video of water taking the shape of a blob onboard the space station. In the video, he can be seen squeezing water out of a pouch using a straw. Because there is no gravity to hold liquids in position in the orbital laboratory, water takes different shapes in space.

In the video, the water first takes a spherical shape and Al Neyadi grasps the big blob. As it wraps around his palm, Al Neyadi bursts the water bubble using a cloth napkin.

Earlier on March 31, Al Neyadi had shared a post that revealed how precious a resource water is in space.

"It is used to create clean air by separating oxygen from hydrogen, and it is also recycled to provide a continuous supply of clean water," he had stated while sharing some images of him working on a water recycling tank.

Water from sweat, urine

Up to 80 per cent of the water on the ISS is recycled.

"Astronauts living and working 400km above our planet might prefer not to think about it, but the water they drink is recycled from their colleague's sweat and exhaled breath — collected as condensation on the Space Station's walls," the European Space Agency said.

Astronauts wash themselves only with wet-wipes for six months and often list a shower as the one of the things they miss most from Earth, according to the agency.

UAE astronaut Sultan Al Neyadi shows how water moves in space.

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>
> **European Space Agency**

Meanwhile, Nasa said Al Neyadi's Exploration 69 crew recently worked on the JEM Water Recovery System (JWRS). On Thursday, water samples were taken from the JWRS processed water bag and stowed in the Water Return kit.

Explaining about the Urine Processor Assembly, Layne Carter, ISS Water Subsystem Manager at Marshall Space Flight Center, had said in 2021 that the system was designed for 85 per cent water recovery from crew urine and had been improved to recover 87 per cent because of analysis that showed there was still a margin against calcium sulfate precipitation.

"That distillate is combined with the condensate and processed through the Water Processing Assembly (WPA), which recovers 100 per cent of the water it processes. As a result, our overall water recovery is about 93.5 per cent," Carter had stated back then.