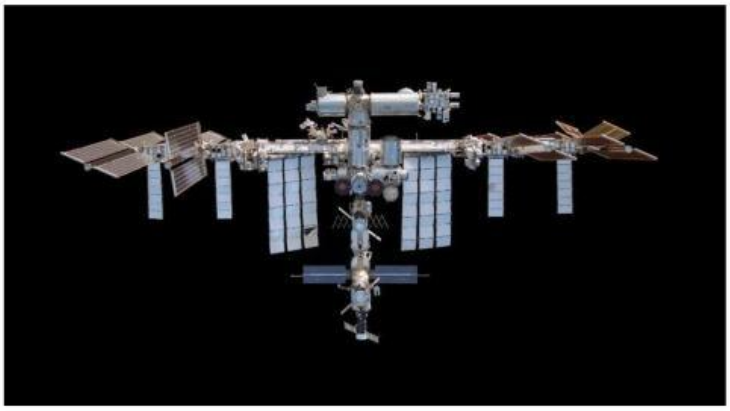
A Day In The Life Of An Astronaut

You think you have a busy day? Just wait till you **find out** what an astronaut's **schedule** looks like. One thing's for sure, it's not just having fun **floating** around in zero **gravity** or having the most spectacular view of the planet anyone's ever seen.



Believe it or not, from eating and brushing their teeth to working and sleeping, pretty much every move an astronaut makes is scheduled. In fact, according to **NASA**, their schedules are planned down to five-minute **increments**. The **occupants** of the International Space Station, or the ISS, perform several tasks as they **orbit** the **Earth**. Planning each astronaut's schedule isn't always easy; there are many **variables** to account for, including when the ISS is in the dark and when it's in the light, and the differing time zones for the mission controls in Houston and other countries.

Today we're going to **take a look** at a day in the life of 11 astronauts floating 400 kilometers above our heads in the International Space Station. They have a routine that is almost recognizable to us but at the same time quite different from ours.

Let's start in the morning: the 6 a.m. wake-up call for the crew. You would have spent the night floating in a **sleeping bag** in a cubicle the size of a phone booth on the ceiling. Once you've woken up, the day starts the same as it does on Earth. You flip over and scroll Instagram and TikTok for a few hours—no, just kidding—you get up and brush your teeth. But it's a little different in space. You realize how much you take gravity for granted when you have to work without it. You can't be running water because it will go all over the place, so you have to **squeeze** a ball of water out of a bag to wet your toothbrush. Then you use regular toothpaste and clean your teeth. But where do you **spit**? Well, you don't—you swallow your toothpaste. It's edible and quite harmless, but probably not the easiest thing to stomach.

Then it's time for your morning shower. Astronauts clean up using items from their personal **hygiene kit**, including what NASA calls their "rinseless shampoo," which was initially developed for hospital patients who were **unable to** take a shower. With just a little bit of water, astronauts comb the no-rinse shampoo through their hair to get it nice and clean. Since there are no actual showers in space, and since they don't **drench** their hair, the little water they do use floats away during the hair washing process. There's no need to break out the



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blow dryer. Their hygiene kits also include **razors and scissors**, so they can give each other a **haircut**; they just have to make sure they **vacuum up** the hair, so it doesn't fly all over the place.

And then it's time for the most important meal of the day—breakfast. Being an astronaut sure works up an appetite. The tenants of the ISS are scheduled for three meals a day: breakfast, lunch, and dinner. How much they eat depends on the astronaut, since calorie requirements differ for each of them. According to NASA, a female astronaut will need only about 1900 calories a day, while a large male would need a maximum of 3200 calories. As for how long it takes for them to eat, well, that depends on what they're eating and the meal prep time. Some snacks like brownies and fruit can be eaten just how they come, so that's a good option if an astronaut is looking to **refuel** quickly. But some things like spaghetti or mac and cheese need water to be added since the food is dehydrated. Typically, the food is already prepared on Earth and you just need to reheat it. One thing you might be happy about being in space is you never have to do dishes—all the food comes in **disposable packaging**, so you'll never have to clean another plate, at least while you're up there.



And then it's time to get to work. After **wrapping up** your morning routine, you begin your assignments for the day, depending on what NASA gives you. The mission control center on the ground sends instructions via email or voice message to the astronauts each day about any work that may need to be done around the space station. The ISS is designed to be a **permanent** orbiting **research facility**, and the astronauts who orbit the Earth on the ISS help carry out those research efforts. You would be spending your days working on science experiments that require you to monitor projects controlled from the ground and take part in medical experiments to **figure out** how well your bodies adjust to living in space for long periods of time.

Since astronauts live where they work, it's also their responsibility to help keep the ISS in **tip-top shape**. So, much like you have to clean your house and keep your living space neat and tidy, astronauts are also tasked with regularly checking support systems, cleaning filters, updating computer **equipment**, disinfecting surfaces, and even taking out the trash. Almost every task on the station is very carefully laid out, and your **to-do list** outlines every activity step by step. Even still, things sometimes get off track. Some astronauts spend their first few days on the space station just losing stuff, so they have to get used to using **Velcro, clips, magnets, and tape** to secure their things.

You can't not stay in shape in space. Floating around is all fun and games, but it also poses long-term risks to your health. Lack of gravity makes your bones **brittle**,

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and because moving around is so **effortless**, you will also start losing strength in your muscles. To put it simply, our bodies are constantly working because they are opposing the gravity here on Earth, but that's not a problem in space. So, astronauts must spend at least two hours a day on fitness. They typically do some cardio, and they lift weights—lots of it actually. Lifting 200 pounds might be **tough** on Earth, but in the weightless environment of space, 200 pounds is no problem. There are three main pieces of equipment you can work out with: **a treadmill**, a bike without a seat (since you can't sit without gravity), and the Advanced Resistive Exercise Device, or ARED for short. ARED is a weightlifting gym that uses vacuum tubes to work without weights.

Right about now, it would be lunchtime. Weeks in space are still divided into weekends and weekdays, so during the week, each astronaut follows their own schedule, so they rarely eat together. The exception, of course, is Sundays, when the whole crew comes together to enjoy a meal. Group meals like these are essential for crew morale since it can get pretty **boring** and **lonesome** up there. Remember how we said the food comes to space already cooked on Earth? These are dehydrated meals that come in pouches to which hot water is added before eating. They also come in cans that can be heated before opening. If you'll miss ketchup and hot sauce, they've got you covered. But things like salt and pepper are a tad different—they're in **liquid** form. They have to be, or else you will have grains of salt floating around the station. Cargo **missions** often also send up fresh fruit, which is quite a treat for the astronauts.

Want to go for a quick walk outside after your meal? Well, you'll have to spend four hours putting on a suit before you can do that. You will also have to run through a safety checklist that is almost a hundred pages long. It's **unavoidable**—sometimes your job will entail repairing parts outside of the station. Once outside, you could spend about eight hours running through a series of tasks. If you aren't going on a spacewalk and making incredible memories, you will likely be in the laboratory running experiments. The **primary purpose** of the **existence** of the ISS is to act as a unique research lab, and each astronaut spends a considerable part of their day as zero-gravity lab technicians for scientists on Earth. There are two research modules: America’s lab is called Destiny, Europe has Columbus, and the newest one is Japan’s Kibo, which also has a platform outside the station for experiments. The experiments they set up and record include checking the impact of zero gravity on living cells, explosions, small animals, and different materials. But more often than not, the astronauts themselves are the subjects of these tests. The ISS aims to discover the long-term effects of zero gravity on the human body, so we can better plan for longer space missions and travel to Mars.

Sounds **hectic**? Don't worry, you still get free time. You can call or email your family from the space station. To do anything other than watch the Earth spin **beneath** you, there's no better feeling than climbing into bed after a long day of work. At least that's something we have in common with astronauts. But instead of beds, you get cozy in a sleeping bag attached to the wall; otherwise, they'd be floating around all night. All astronauts are scheduled for a good eight hours of sleep per

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night, but if you have trouble falling asleep, you can spend that time chatting with family back home or reading.

So, would you want to spend a week in space after knowing an astronaut's daily schedule?

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