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IN SPACE AND ON THE MOON: MANKIND'S MOST REMOTE PHARMACIES

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The exploration of space is one of the greatest challenges mankind has met in the 20th century. In the 1950s and early 1960, the Soviet Union lead the space race and took the first humans beyond earth’s gravity. In the 1960s, the United States caught up. The Apollo missions set important landmarks in space travel. Apollo 8 was the first manned spacecraft that left earth orbit. Apollo 11 landed the first men on the moon and returned them safely to the earth.

Although there has been some research on the history of the space programmes, little is known about the pharmaceutical aspects. The medical kits on board the spacecrafts might be seen as the most remote pharmacies in history. In order to cope with the unique requirements of weightlessness, specific drugs and appropriate dosage forms have been developed.

A very strict selection process of appropriate drugs generated the medical accessory kit on board the spacecrafts. Interestingly, the National Air and Space Administration (NASA) relied not only on drugs with a longer history or experience in use such as barbiturates or amphetamines, but also added a few new active substances like oxymetazoline, but not benzodiazepines.

Today, the medical features of the International Space Station (ISS) include a wider variety of drugs allowing the crews to treat major and minor health complaints.