**Summarize the points made in the lecture, being sure to explain how they cast doubt on specific points made in the reading passage.**

The reading states that although scientists are considering the possibility of sending humans to Mars, there are some obstacles that avoid these ideas.

First the author argues that, round trip to Mars mission and back at least has taken two years and its much greater that it does for travelling to the Moon. In this way spaceships are not capable of carrying enough supplies of water, food and oxygen. Conversely, the lecturer argues that, also it would be a challenging mission, but there are some solutions to overcome providing supplies. Astronauts can use hydroponic technique to produce food. In this method astronauts can bring up foods with root in a water rather than soil. It is also required little space to cultivate. Moreover, they can recycle water and provide drinking water and by help of these cultivate plants they absorb carbon dioxide and release oxygen so they would have fresh air too.

Second the reading mentioned that zero gravity of the environment would encounter astronauts with health problem. On the contrary, the professor states that being several months in zero gravity is hard, but several techniques are considered to overcome this challenge. Astronauts can do regular exercise to be healthy and take some vitamin and supplementary drug like calsium to help their bones.

Finally, the reading asserts that astronauts would be exposed to some dangerous level of space radiation. In contrast, the lecturer dismissed the idea due to the fact that, they would not always be exposed by the harmful radiation, and it would happen occasionally, so the spaceship can equip by small shelter, and by doing this, and with the help of monitoring the space, in dangerous situation astronauts can take refuge in that shelter for a while to pass the harmful radiation.

Time: 22 min

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