



1

00:00:00,510 --> 00:00:15,490

\h (Music and sound of space shuttle liftoff)

2

00:00:15,490 --> 00:00:16,950

\h Elmo: How you doing Mr. Leland?

3

00:00:16,950 --> 00:00:17,990

\h Astronaut Leland Melvin: Ahh.

4

00:00:17,990 --> 00:00:20,000

\h Elmo: Listen. How do you exercise in space?

5

00:00:20,000 --> 00:00:21,350

\h Melvin: I'm feeling strong right now.

6

00:00:21,350 --> 00:00:22,280

\h Elmo: Really? Why?

7

00:00:22,280 --> 00:00:25,650

\h Melvin: Well, in space you get to exercise, just like you do on the ground.

8

00:00:25,650 --> 00:00:28,850

\h But in space, there's no gravity.

9

00:00:28,850 --> 00:00:32,070

\h Elmo: So you can't run really fast like that in space huh.

10

00:00:32,070 --> 00:00:34,840

\h Melvin: You can't run. If you run in space, you're just running in the air.

11

00:00:34,840 --> 00:00:36,100

\h Elmo: Really?

12

00:00:36,100 --> 00:00:39,310

\h Melvin: So in space, on the treadmill -- you know you run on a treadmill in the gym like

13

00:00:39,310 --> 00:00:44,070

\h this -- you have to hold yourself down to the tread with bungee cords.

14

00:00:44,070 --> 00:00:49,220

\h So you have a band that goes around your waist, and then the bands hold you down so

15

00:00:49,220 --> 00:00:52,120

\h your feet are actually running on the treads.

16

00:00:52,120 --> 00:00:53,230

\h Elmo: Oh!

17

00:00:53,230 --> 00:00:56,820

\h Melvin: Because if I bounce, if I stepped on the tread, I would float away.

18

00:00:56,820 --> 00:00:59,590

\h Elmo: So you need something to keep you down.

19

00:00:59,590 --> 00:01:00,730

\h Melvin: To keep you down.

20

00:01:00,730 --> 00:01:01,900

\h Elmo: So you don't float away.

21

00:01:01,900 --> 00:01:05,470

\h Melvin: Right. So that's cardiovascular. That helps you run, stay in shape in space.

22

00:01:05,470 --> 00:01:07,190

\h Elmo: So that's how you exercise in space.

23

00:01:07,190 --> 00:01:09,610

\h Melvin: Okay, well that is exercise, right? Other exercise we do,

24

00:01:09,610 --> 00:01:12,280

\h we have to do weightlifting.

25

00:01:12,280 --> 00:01:16,220

\h Because your bones and your muscles start to degrade in space.

26

00:01:16,220 --> 00:01:17,850

\h They're not as healthy in space.

27

00:01:17,850 --> 00:01:19,210

\h Elmo: But what do you mean, degrade? What does that mean?

28

00:01:19,210 --> 00:01:23,070

\h Melvin: Well, what it means is, if you don't have gravity pulling you down,

29

00:01:23,070 --> 00:01:25,690

\h it makes your muscles kind of relax.

30

00:01:25,690 --> 00:01:27,590

\h They're not, you don't have to use them as much.

31

00:01:27,590 --> 00:01:29,230

\h They're not as -- you don't have to work as hard.

32

00:01:29,230 --> 00:01:31,430

\h So in space you have to do exercise.

33

00:01:31,430 --> 00:01:35,150

\h You do things like bench press, where you press a bench like this, you do

34

00:01:35,150 --> 00:01:38,910

\h Elmo: So you have to keep your circulation going, is that what it is?

35

00:01:38,910 --> 00:01:39,850

\h Melvin: Yeah.

36

00:01:39,850 --> 00:01:42,430

\h Elmo: Elmo loves that word. "Circulation."

37

00:01:42,430 --> 00:01:45,100

\h (Laughing)

38

00:01:45,100 --> 00:01:48,420

\h Elmo: So you really have to -- so it's really important to exercise in space too, huh?

39

00:01:48,420 --> 00:01:50,160

\h Melvin: Very important because you have to be strong.

40

00:01:50,160 --> 00:01:53,890

\h You have to keep the calcium in your bones. Your bones have to be strong in space too.

41

00:01:53,890 --> 00:01:57,580

\h Elmo: So exercise keeps you healthy on Earth and in space.

42

00:01:57,580 --> 00:01:58,790

\h Melvin: That's right.

43

00:01:58,790 --> 00:01:59,970

\h Elmo: That's great!

44

00:01:59,970 --> 00:02:00,750

\h Melvin: Awesome.