



Spaceto**Ground**

1
00:00:03,040 --> 00:00:05,350
"HOUSTON, STATION ON SPACE TO GROUND."

2
00:00:05,350 --> 00:00:07,450
WELCOME TO SPACE TO GROUND, I'M ISIDRO REYNA.

3
00:00:07,450 --> 00:00:10,120
THIS WEEK, FRESH-FOOD PRODUCTION IN SPACE!

4
00:00:11,540 --> 00:00:16,100
A HEALTHY, NUTRITIOUS DIET IS ESSENTIAL FOR
LONG-DURATION EXPLORATION MISSIONS TO

5
00:00:16,110 --> 00:00:20,470
THE MOON AND BEYOND, AND SCIENTISTS ARE LOOKING AT WAYS TO SUPPLEMENT AN ASTRONAUT'S

6
00:00:20,470 --> 00:00:22,840
WITH FRESH FOODS GROWN DURING FLIGHT.

7
00:00:22,840 --> 00:00:27,070
THE VEGETABLE PRODUCTION SYSTEM HAS BEEN TESTING GROWING TECHNIQUES ABOARD THE

8
00:00:27,070 --> 00:00:28,680
TO HELP MEET THIS NEED.

9
00:00:28,680 --> 00:00:34,160
CURRENT RESEARCH LOOKING AT IMPACTS FROM LIGHT QUALITY AND FERTILIZER TO NUTRITION.

10
00:00:34,160 --> 00:00:38,020
HALF THE CROPS HARVESTED THIS WEEK WILL RETURN TO EARTH FOR ANALYSIS WITH THE CREW.

11
00:00:38,020 --> 00:00:41,300
SOME FRESH ADDITIONS TO TASTE TEST ONBOARD.

12
00:00:41,300 --> 00:00:45,440
THIS WEEK, THE CREW PERFORMED THE TIME PERCEPTION IN MICROGRAVITY INVESTIGATION.

13

00:00:46,920 --> 00:00:52,040

THIS EXPERIMENT INVESTIGATES THE PERCEPTION OF TIME TO CREW MEMBERS ABOARD THE SP

14

00:00:52,050 --> 00:00:55,810

SOMETHING THAT HAS NOT BEEN STUDIED DURING LONG-DURATION SPACEFLIGHT.

15

00:00:55,810 --> 00:01:00,680

COGNITIVE PERFORMANCE, TOGETHER WITH GOOD OCULO-MOTOR CONTROL, EYE-HAND COORDI

16

00:01:00,680 --> 00:01:05,320

SPATIAL ORIENTATION, AND TIME PERCEPTION,
IS CRITICAL FOR THE CONTROL OF VEHICLES AND

17

00:01:05,320 --> 00:01:08,530

OTHER COMPLEX SYSTEMS DURING HUMAN SPACEFLIGHT.

18

00:01:08,530 --> 00:01:13,390

AS PART OF THE EXPERIMENT, ASTRONAUTS WEAR A VR HEADSET AND HAVE TO RESPOND TO VIS

19

00:01:13,390 --> 00:01:17,410

AND AUDIO CUES WITH THEIR RESPONSE TIME MEASURED BY A SPECIAL PROGRAM.

20

00:01:17,410 --> 00:01:20,920

THE RESULTS ARE COMPARED WITH PRE- AND POSTFLIGHT BASELINES.

21

00:01:20,920 --> 00:01:25,440

EVIDENCE FROM SPACEFLIGHT RESEARCH DEMONSTRATES THAT THESE FUNCTIONS ARE ALTERE

22

00:01:25,440 --> 00:01:27,140

AND ON EARTH.

23

00:01:27,140 --> 00:01:29,070

THIS WEEK'S QUESTION COME FROM BRIANNA.

24

00:01:29,070 --> 00:01:33,410

SHE WANTS TO KNOW HOW LANDING ON THE MOON IN 2024 WILL IMPACT GIRLS AND WOMEN ARO

25

00:01:33,410 --> 00:01:34,570

THE GLOBE.

26

00:01:34,570 --> 00:01:41,060

"I SEE IT AS IMPACTING BY ONE MAJOR WAY AND
I HOPE THAT IT IS INSPIRING FOR ALL PEOPLE

27

00:01:41,060 --> 00:01:42,119

AROUND THE GLOBE.

28

00:01:42,119 --> 00:01:47,990

YOU KNOW, 50 YEARS AGO WHEN WE FIRST LANDED ON THE MOON, NOT ONLY WERE THE ASTRON

29

00:01:47,990 --> 00:01:52,210

NOT FEATURING WOMEN, BUT ALSO YOU DIDN'T SEE WOMEN TOO MUCH IN THE MISSION CONTROL

30

00:01:52,210 --> 00:01:54,670

AND THAT'S ALL GOING TO BE DIFFERENT THIS
TIME AROUND.

31

00:01:54,670 --> 00:01:59,030

WE'RE GOING TO HAVE WOMEN CONTRIBUTING AND BEING RECOGNIZED FOR THOSE CONTRIBUTI

32

00:01:59,030 --> 00:02:04,600

MISSION CONTROL, AS THE ENGINEERS THAT DESIGNED THE ROCKETS AND THE SPACECRAFT, AN

33

00:02:04,600 --> 00:02:08,860

AS THE ASTRONAUTS MAKING BOOT PRINTS ON THE MOON."