



# A Gut Feeling

1  
00:00:05,230 --> 00:00:03,100  
it's thought that there are 10 times

2  
00:00:07,930 --> 00:00:05,240  
more bacteria in our gut than there are

3  
00:00:10,150 --> 00:00:07,940  
sales in our entire body there's like

4  
00:00:13,900 --> 00:00:10,160  
three pounds of this bacteria in our gut

5  
00:00:15,670 --> 00:00:13,910  
the size of our brain we know that the

6  
00:00:18,130 --> 00:00:15,680  
composition of the bacteria and the gut

7  
00:00:21,339 --> 00:00:18,140  
is related to a wide variety of diseases

8  
00:00:23,200 --> 00:00:21,349  
diabetes cardiovascular disease once we

9  
00:00:24,700 --> 00:00:23,210  
started sequencing everything that was

10  
00:00:27,399 --> 00:00:24,710  
in there we found we were just shocked

11  
00:00:29,439 --> 00:00:27,409  
if you go into a rainforest and you just

12  
00:00:31,239 --> 00:00:29,449  
look at thousands of thousands of plant

13  
00:00:36,880 --> 00:00:31,249

and animal species in the rainforest

14

00:00:38,410 --> 00:00:36,890

that's what you've got in your gut we

15

00:00:40,840 --> 00:00:38,420

need to find out what is the effect of

16

00:00:42,549 --> 00:00:40,850

space environment and so Scott was the

17

00:00:44,709 --> 00:00:42,559

wonderful opportunity because he was up

18

00:00:46,509 --> 00:00:44,719

there for a year if there's no changes

19

00:00:48,069 --> 00:00:46,519

in the microbiota from the beginning to

20

00:00:49,720 --> 00:00:48,079

the end of the mission that's a good

21

00:00:51,639 --> 00:00:49,730

sign that we don't have to worry baby

22

00:00:53,829 --> 00:00:51,649

about the fact that going to Mars and

23

00:00:55,239 --> 00:00:53,839

back over to your period is going to be

24

00:00:57,520 --> 00:00:55,249

a problem but we find there are certain

25

00:01:00,220 --> 00:00:57,530

bacteria that are out competing other

26

00:01:02,110 --> 00:01:00,230

bacteria in the zero-gravity radiation

27

00:01:13,590 --> 00:01:02,120

environment well we've got to perhaps

28

00:01:18,820 --> 00:01:16,390

I'm NASA's Dan Huot and I am taking you

29

00:01:21,220 --> 00:01:18,830

behind the scenes of a Soyuz landing