



1

00:00:00,679 --> 00:00:04,049

SpaceX-3 also is launching the Vegetable Production System

2

00:00:04,049 --> 00:00:06,970

(Veggie for short) to the space station.

3

00:00:06,970 --> 00:00:11,130

This is a plant growth system that will provide the necessary lighting and

4

00:00:11,130 --> 00:00:15,820

nutrient delivery for plant growth in space, supporting a wide range of uses,

5

00:00:15,820 --> 00:00:20,600

from research to education to a fresh food source for astronauts.

6

00:00:20,600 --> 00:00:24,990

The Veggie system will be the simplest plant growth system on the space station to date

7

00:00:24,990 --> 00:00:29,520

but will provide the largest surface area yet to grow plants.

8

00:00:29,520 --> 00:00:34,070

The first that will be grown is lettuce, which will be harvested and returned

9

00:00:34,070 --> 00:00:38,020

to Earth for nutrient and microbial analysis to determine their

10

00:00:38,020 --> 00:00:39,940

fitness as food.

11

00:00:39,940 --> 00:00:43,890

The system can be deployed and stowed as needed on the space station, and can run

12

00:00:43,890 --> 00:00:46,870

on less power than a desktop computer.

13

00:00:46,870 --> 00:00:50,450

The plants are grown in individual “pillows” that act as little pods of

14

00:00:50,450 --> 00:00:54,480

nutrients and root matting for each plant.

15

00:00:54,480 --> 00:00:58,640

In addition to plant growth for producing edible crops, scientists are also

16

00:00:58,640 --> 00:01:02,760

exploring the future research that looks at behavioral impacts of plant