
LIMIT
17500
28000
km/h

1
00:00:05,126 --> 00:00:07,066
>> Hi. I'm Scott Kelly, commander

2
00:00:07,066 --> 00:00:10,186
of the expedition 26 crew aboard
the International Space Station.

3
00:00:11,406 --> 00:00:15,176
What I wanted to try to do today is give you
a sense for what our situation is on board,

4
00:00:15,456 --> 00:00:22,746
with regards to food and
beverages, how we prepare that,

5
00:00:22,856 --> 00:00:26,956
what options we have and
how we eat here in space.

6
00:00:27,556 --> 00:00:32,236
So, first thing I'd like to do is get
started with our, where our food is kept.

7
00:00:32,826 --> 00:00:36,666
The food that we're actually using is
kept in Node 1 of the space station

8
00:00:37,386 --> 00:00:41,316
and it's basically in these food containers.

9
00:00:42,016 --> 00:00:47,786
Metal food containers or in some bags
that we have here staged for our use.

10
00:00:48,516 --> 00:00:56,696
But these food containers are categorized
in different categories, I guess you'd say

11
00:00:57,096 --> 00:01:04,996

and we have some that are side dishes,
meats in pouches and cans, vegetables,

12
00:01:05,556 --> 00:01:10,726
and they're actually packaged in different ways.

13
00:01:11,506 --> 00:01:20,146
For instance, most of the meat we have
and other kind of main dishes are packaged

14
00:01:20,146 --> 00:01:27,486
in these green containers and we
heat these up in a small food warmer

15
00:01:27,646 --> 00:01:28,976
and I'll show you what that looks like.

16
00:01:29,646 --> 00:01:35,906
But basically, they're little green
packages of meat and in this case,

17
00:01:35,906 --> 00:01:41,446
this is beef tips with mushrooms
and we have crawfish etouffee.

18
00:01:42,416 --> 00:01:50,116
And these are what's called "irradiated food,"
so they're hit with large doses of radiation

19
00:01:50,296 --> 00:01:54,726
to kill any bacteria so they can stay
at room temperature and not spoil.

20
00:01:55,186 --> 00:02:01,886
There's also some stuff in here that's kind of
off the shelf, like this tuna fish that we have.

21
00:02:03,026 --> 00:02:07,106
We also have some rehydratable food items.

22
00:02:09,736 --> 00:02:17,826
Water is heavy and I'll talk a little bit
about our water later, but they take the water

23
00:02:17,826 --> 00:02:28,686
out of the food because it's more efficient
to add it once we get on board and I'll talk

24
00:02:28,686 --> 00:02:32,266
about how we make our water
here in a little bit.

25
00:02:32,866 --> 00:02:37,916
But we have these rehydratable food packages.

26
00:02:38,216 --> 00:02:39,156
For instance, here's one.

27
00:02:39,736 --> 00:02:40,926
I'll make this for lunch.

28
00:02:41,866 --> 00:02:53,196
It's asparagus and it's in a little plastic
container with some dehydrated asparagus.

29
00:02:53,196 --> 00:03:01,666
In this case, I'll add 50 milliliters of water
to it and it takes 5 to 10 minutes to rehydrate.

30
00:03:02,976 --> 00:03:06,616
So with that, I'd like to show
you how we prepare this food.

31
00:03:06,876 --> 00:03:13,806
How we add water, warm it up and a little
bit about the beverages on board as well.

32
00:03:15,336 --> 00:03:20,026
So come join me in the lab

where that's accomplished.

33
00:03:26,486 --> 00:03:28,546
Now we're in the US laboratory module.

34
00:03:28,546 --> 00:03:34,916
And the first thing I want to show you is
how we heat up these green packages of food.

35
00:03:34,916 --> 00:03:41,096
And these are a lot like the, what's called
"MREs" in the military, "meals ready to eat."

36
00:03:41,196 --> 00:03:45,996
And you know, matter of fact, I think they come
from the same company that the US military uses.

37
00:03:46,746 --> 00:03:54,736
Whereas these other packages are produced
at the food lab at the Johnson Space Center.

38
00:03:55,846 --> 00:03:58,496
So this is basically, this is our food warmer.

39
00:03:58,496 --> 00:04:05,506
And it's basically a suitcase
with some heating elements in it.

40
00:04:05,506 --> 00:04:10,866
And we can put a number of
different food packages in here.

41
00:04:10,936 --> 00:04:20,376
Basically we just close it up and
turn it on and in about 20 minutes,

42
00:04:20,646 --> 00:04:22,756
that package of food will be warm.

43

00:04:24,606 --> 00:04:27,446
So next, I want to talk about how we add water,

44
00:04:27,496 --> 00:04:31,506
both to our drink packages
and to the food packages.

45
00:04:31,986 --> 00:04:35,586
And that's also done in the
laboratory module, on the ceiling.

46
00:04:36,336 --> 00:04:40,056
And there is a potable water dispenser there

47
00:04:40,056 --> 00:04:43,886
that dispenses both room
temperature and hot water.

48
00:04:44,796 --> 00:04:47,236
So let's go over there and check that out.

49
00:04:52,916 --> 00:05:00,036
So here we are by the potable water
dispenser, which is on the ceiling here

50
00:05:00,036 --> 00:05:03,166
in the laborator module of the space station.

51
00:05:03,266 --> 00:05:07,536
And we get our water from different places.

52
00:05:08,076 --> 00:05:14,566
The resupply vehicles will bring up water,
the shuttle makes water as a function

53
00:05:14,726 --> 00:05:20,236
of how it produces electricity, but we also
get water from the Russian progress vehicles

54

00:05:20,336 --> 00:05:26,396
and soon from the Japanese and the European
resupply vehicles bring up water as well.

55
00:05:27,176 --> 00:05:34,286
The other way we get water is we make it
ourselves, on board, from the condensate

56
00:05:34,656 --> 00:05:40,606
that is produced in the air due to
humidity and also from our urine.

57
00:05:41,616 --> 00:05:48,856
And believe it or not, the water that is
produced from our urine actually tastes better

58
00:05:48,906 --> 00:05:52,006
than any tap water I've ever
tasted in the United States.

59
00:05:52,336 --> 00:05:56,416
It tastes better than the
water on the space shuttle.

60
00:05:57,166 --> 00:06:02,936
It's really clear, good quality water.

61
00:06:03,226 --> 00:06:11,266
So basically we have a way to fill these
little packages and introduce certain,

62
00:06:12,036 --> 00:06:17,676
or specific volumes of both
hot and room temperature water.

63
00:06:18,466 --> 00:06:26,256
So, I'll heat up this, or rehydrate this
asparagus, and I basically just put it in here

64
00:06:27,316 --> 00:06:35,376

and I normally don't do this from this position.

65
00:06:35,376 --> 00:06:47,446
And I'll put 50 milliliters of hot water
in there, heat it up, and as you can see,

66
00:06:47,646 --> 00:06:51,946
it now has water in it and it's rehydrating
and this will take 5 to 10 minutes

67
00:06:53,526 --> 00:06:55,986
and I'll put some water into my drink bag.

68
00:06:59,726 --> 00:07:10,506
I'll put 250 milliliters of water
in this drink bag for lemonade.

69
00:07:13,966 --> 00:07:15,206
Most of the drinks are kind of sweet.

70
00:07:15,276 --> 00:07:20,466
Most of the time I don't
drink these sweet drinks.

71
00:07:20,466 --> 00:07:32,286
Most of the time I just drink water or coffee.

72
00:07:34,286 --> 00:07:41,516
Then what we do is just put a straw in
here and the other nice thing we have

73
00:07:41,516 --> 00:07:46,856
on board is a very small refrigerator.

74
00:07:50,516 --> 00:07:53,416
And it'll cool these drinks up very nicely.

75
00:08:04,506 --> 00:08:14,706
And the next thing I want to show you is how

we eat this stuff once it's both rehydrated,

76
00:08:16,066 --> 00:08:20,806
cooled off in our little fridge
and warmed up in our food warmer.

77
00:08:21,856 --> 00:08:33,446
So, please join me back in Node 1
around the dinner table where we eat.

78
00:08:44,296 --> 00:08:50,046
We're back in Node 1 where we generally
use as our kitchen or dining area.

79
00:08:50,586 --> 00:08:53,226
And I'm going to show you how we eat this food.

80
00:08:56,026 --> 00:09:00,446
Obviously, it's in these
packages that we have to cut open

81
00:09:01,256 --> 00:09:05,486
and basically we just eat all this
stuff right out of the packaging.

82
00:09:05,486 --> 00:09:11,866
So I'm going to cut open my
beef stew and as you can see,

83
00:09:11,946 --> 00:09:14,106
some of it's trying to escape on me already.

84
00:09:19,736 --> 00:09:25,816
I generally will eat these things one at
a time just because it's easier to manage

85
00:09:26,356 --> 00:09:30,726
without having to put this stuff down.

86

00:09:31,096 --> 00:09:36,556
As you can see, it doesn't look too bad.

87
00:09:38,366 --> 00:09:40,936
It's actually pretty tasty.

88
00:09:51,826 --> 00:09:57,946
That was one of my Russian
crew members that went by.

89
00:10:00,466 --> 00:10:03,776
But it ain't bad.

90
00:10:04,246 --> 00:10:07,786
Yep. The one in the lab is mine.

91
00:10:10,376 --> 00:10:12,546
So, that's the beef stew.

92
00:10:14,806 --> 00:10:24,586
[Indistinct talking] This
isn't the asparagus I made

93
00:10:24,586 --> 00:10:27,106
because the asparagus floated away somewhere.

94
00:10:27,106 --> 00:10:28,416
Not sure where it went.

95
00:10:30,666 --> 00:10:33,416
I'm sure it'll turn up in a couple of days.

96
00:10:33,596 --> 00:10:51,336
And we didn't have any more asparagus so
I made some green beans and mushrooms.

97
00:10:51,996 --> 00:10:59,386
So we cut this open and just
eat it right out of the package.

98
00:10:59,386 --> 00:11:03,196
That was Oleg Skripochka again,
going back to the Russian segment.

99
00:11:12,876 --> 00:11:22,086
And what I generally do, especially at
night while eating dinner is watch the news

100
00:11:22,836 --> 00:11:29,726
and ground sends up NBC Nightly News
every day, except on the weekends.

101
00:11:30,856 --> 00:11:32,866
So I watch it on the computer.

102
00:11:32,936 --> 00:11:34,146
They also send up television shows.

103
00:11:34,246 --> 00:11:36,716
>> Brian Williams: On our broadcast
tonight, surprise appearance.

104
00:11:36,826 --> 00:11:40,646
Will two presidents do the trick
in selling Congress on a tax deal

105
00:11:41,046 --> 00:11:46,636
that the current president agreed to?

106
00:11:48,826 --> 00:11:58,886
Just as a long time problem
has come to an end...

107
00:11:58,886 --> 00:12:02,176
>> Scott Kelly: Here's the cooled lemonade.

108
00:12:02,416 --> 00:12:06,346
A little on the sweet side

for me, but not too bad.

109
00:12:06,526 --> 00:12:09,646
And also, we have dessert here.

110
00:12:09,796 --> 00:12:13,706
We've got various kinds of
things to eat for dessert.

111
00:12:13,706 --> 00:12:20,286
Some of it is packaged like the
beef stew, others are rehydratable

112
00:12:20,986 --> 00:12:27,046
and other items are just, you
know, in these individual packages.

113
00:12:27,296 --> 00:12:33,946
So here I got dried peaches
and some candy coated peanuts.

114
00:12:33,946 --> 00:12:37,156
>> Brian Williams: You're President Barack
Obama, you're fighting with Congress

115
00:12:37,226 --> 00:12:42,316
over a tax deal, and some of your own
people are defecting, so who do you call

116
00:12:42,316 --> 00:12:44,276
when you call out the reinforcements?

117
00:12:44,476 --> 00:12:48,576
The answer is: you call the
last Democratic president.

118
00:12:48,576 --> 00:12:51,466
The two men burst in the door...

119

00:12:51,466 --> 00:12:56,226
>> Scott Kelly: Like I said,
peaches and candy coated almonds.

120
00:12:57,316 --> 00:13:04,626
And I'm going to select the almonds
because they look much better floating

121
00:13:04,626 --> 00:13:06,836
around than the dried peaches.

122
00:13:07,016 --> 00:13:09,296
The peaches aren't bad.

123
00:13:09,296 --> 00:13:11,556
>> Brian Williams: ...who witnessed all
this in the briefing room [inaudible]

124
00:13:12,496 --> 00:13:13,286
>> Well good evening, Brian.

125
00:13:13,286 --> 00:13:16,676
Look, for most of the day today,
the tax debate has been dominated

126
00:13:16,836 --> 00:13:22,166
by Vermont's independent self-described
[inaudible] senator Bernie Sanders who's been

127
00:13:22,356 --> 00:13:25,376
speaking on the floor of the
United States Senate, by himself,

128
00:13:25,776 --> 00:13:28,516
continuously, since about 10:30 this morning.

129
00:13:28,976 --> 00:13:31,846
Well about 4 o'clock today, clearly
the White House had had enough.

130
00:13:32,286 --> 00:13:36,356
So instead of briefing reporters about President
Obama's private meeting with President Clinton,

131
00:13:36,906 --> 00:13:39,656
President Obama decided to trot
out President Clinton himself

132
00:13:39,786 --> 00:13:46,826
to greet reporters while it turned into a
de facto ex-Presidential press conference.

133
00:13:46,826 --> 00:13:47,106
[inaudible]

134
00:13:47,106 --> 00:13:52,266
>> President Clinton: ...the best
bipartisan agreement we can reach

135
00:13:52,416 --> 00:14:00,996
to help the largest number of Americans and
to maximize the chances that the economics...

136
00:14:00,996 --> 00:14:01,566
>> Scott Kelly: Pretty good.

137
00:14:01,836 --> 00:14:07,416
>> President Clinton: ...create more jobs and
to minimize the chances that it will slip back.

138
00:14:07,716 --> 00:14:16,846
There's never a perfect bi-partisan bill...

139
00:14:18,346 --> 00:14:22,626
>> Scott Kelly: Dealing with the garbage
here on board is somewhat of a challenge

140
00:14:22,716 --> 00:14:25,696
that you don't have the garbage

man coming a couple times a week.

141
00:14:25,746 --> 00:14:33,066
We actually have to store our
trash on board for several months.

142
00:14:33,256 --> 00:14:37,116
So it's important that it doesn't
take up a whole lot of space.

143
00:14:37,786 --> 00:14:44,916
So, we already put the green beans in
there, in this, kind of in the plastic bag

144
00:14:44,916 --> 00:14:46,566
that one of the other food items came in.

145
00:14:47,236 --> 00:14:52,786
And we also want to get as much of the
moisture out of these, this garbage,

146
00:14:53,416 --> 00:15:02,966
so it can then be turned back into
drinkable water with our system

147
00:15:03,226 --> 00:15:09,316
that converts the humidity
and urine into potable water.

148
00:15:09,776 --> 00:15:16,836
So, try to get as much as of the moisture out
of these stuff as we can and so just make sure

149
00:15:17,526 --> 00:15:20,766
that the packages are as dry as possible.

150
00:15:24,186 --> 00:15:28,526
And obviously, if I drink this,
eventually it's going to wind up back

151
00:15:28,526 --> 00:15:35,956
in the potable water system versus coming
to a fiery end in the reentry of one

152
00:15:35,956 --> 00:15:38,386
of the progress vehicles
that carries our garbage.

153
00:15:42,506 --> 00:15:46,106
Well, it is basically as dry as possible.

154
00:15:47,096 --> 00:15:53,046
And then we separate our wet
trash from our dry trash.

155
00:15:53,626 --> 00:15:58,356
Because the wet trash, you
know, can get more smelly.

156
00:15:59,176 --> 00:16:11,776
And so we put our wet trash in these Russian
waterproof bags and one of these will last me,

157
00:16:11,776 --> 00:16:15,936
as the only US crew member on
board here, well over a week.

158
00:16:18,126 --> 00:16:23,256
Get this as small as we possibly can, filled
up and eventually will go in the progress.

159
00:16:23,366 --> 00:16:29,726
Dry trash is stored separately
in a long plastic trash bag,

160
00:16:29,726 --> 00:16:31,366
but I don't have one of those
right here to show you.

161

00:16:31,366 --> 00:16:40,306
In any case, I hope you enjoyed joining me here
for lunch on the International Space Station