

# **Transcript**

# **Rough Science**

Series 1

# Female presenter:

Toothpaste, toothbrushes, can we come up with something like that?

# Young girl:

Seaweeds again.

## Female presenter:

Seaweed toothpaste, oh god!

# Young girl:

Yeah, it'll be great.

### Anna:

I'm sure I can find something to flavour it too.

# Female presenter:

What and take away the seaweed? It won't be quite so repulsive

### Female presenter:

Not so bad.

The first job for Vanessa, our intrepid marine biologist is to harvest some nutritious seaweed. She could survive on it if she had to, but it is also in her recipe for toothpaste.

But searching for food along the shore of a Mediterranean island, has certain limitations.

# Vanessa:

Because the tide doesn't move up and down, you can't explore a large area. Whereas in Britain, you can have a tidal range of sort of eight or nine meters. In the Mediterranean, everything is just at the water so you either have to sort of get in, and swim around looking for stuff, or you have to risk life and limb climbing around on the rocks.

## Female presenter:

Vanessa's back from the coast with the first of her toothpaste ingredients.

#### Vanessa:



I've got some \_\_\_\_ in here, which is a red seaweed that I found. A lot of the red seaweeds in Britain I know give alginates when you boil them. I'm not sure whether this one will, it's one I'm not accustomed to but I'll give it ago, hopefully it'll make a nice jelly for the toothpaste.

Used in loads and loads of things like beer and yogurt, and shampoos and stuff.

It's soo gloopy, it's just all jelly, it's brilliant.

#### Female presenter:

At least the toothpaste's coming together.

#### Vanessa:

I'm going to be able to get loads of jelly out of this. Plenty for the toothpaste and some leftover to eat. Well if that doesn't give them an appetite. I don't know what will.

#### Female presenter:

To disguise the taste, Anna's working on another essential toothpaste ingredient, the flavour.

#### Anna:

Well I've got my mint here, and what's I'm doing is, I'm putting in these little shoots, and breaking up the leaves up a little bit. I'm putting them into this olive oil that I extracted earlier, and the idea is then to place this pot into the boiling water, and the water will heat up the oil with the mint in it, so the mint oil will infuse into the olive oil and give us a lovely flavoured concoction that we can use for our toothpaste.

#### Female presenter:

Our toothpaste ingredients: finely ground seashells to make a calcium based abrasive powder and Anna's mint oil flavour enhancer.

#### Vanessa:

I'm going to take these big bits out, because I think they might be a little too abrasive, abrasive is one thing and pulling your gums off is another.

#### Female presenter:

And for a kinder more gentler abrasive, finely ground vegetable charcoal.

# Vanessa:



So it needs to be mostly the abrasive ingredient, then a little bit of flavouring, and just enough of the seaweed alginate to bind it all together basically.

I don't really know how much I need. Just put a little bit in it first, looks great doesn't it. Very useful stuff, alginate.

Perfect toothpaste I reckon, all I need is now, is a little bit of flavouring in there.

Can I use a bit of your mint oil? Oh it smells lovely. It's floating on the top, I'll just stir it a little bit. Oh that gives it a great colour.

# Female presenter:

I'm about to become a guinea pig, for the homemade toothpaste and Anna's disposable toothbrushes.

#### Anna:

We do have another variety here, this is a piece of myrtle bush.

## Female presenter:

And this one's pine needle is it? Is everyone going to try this, I'm not going to be the only one to die

# Vanessa:

You should do it first.

# Female presenter:

This is our toothpaste ad.

#### Anna:

It's not bad is it, very good.

## Female presenter:

You've got the wax stuff.

# Man:

What?

### Vanessa:

You look like you've been eating liquorice.

#### Man:

I've been eating charcoal.



	The Open University
Anna: Oh you poor chap. It doesn't taste too bad does it?	
Man: It tastes very pleasant actually.	
Man 2:	

Man: What do I do with this?

Man 2: Ooh look at you, you look evil.

It doesn't taste like calcium now.

Look at him.

Vanessa:

Female presenter: Erm now, hang on...and...