HE AO ITI NOA Small World

The journey

food!

Te haere nui a te kai!

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Discover food's journey from the world to your mouth!

How does food's journey affect our environment?

> What in the world can we do about it?

global

A world of food He ao kai te ao

Everyone needs food. We need it for energy, for health and for survival. But did you ever wonder how the food on your plate finds its way to you?

In this issue of Small World we're going to follow the journey of food, from the world to your supermarket trolley. We'll answer these questions:

- Where does the food we're eating come from?
- Who is eating food made in Aotearoa New Zealand?
- How do these journeys affect our environment?

It's a lot to think about, but don't worry! This issue of Small World will help us get to the bottom of these questions.

The future of food...



out tor: Original of the second secon

make a difference!

We've been By 2050 all food will be ... By 2100, experimenting in people will live in lab to see what food will look like in made as tiny pills, houses made from the future. Come, with all the flavour and nutrition of giant vegetables! See what we discovered when you're hungry you full meals! won't just go to the kitchen-you'll take a bit 200 0 food in 8 pill? err. , and by That's come on Haw! Haw!! 2150 everything enough now! I'll show will be edible You're I'm just being you the real Oh like this beanbag just making Journey which tastes just like silly Oka of foo stuff up. strawberr. milkshake

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Food matters He kaupapa nui te kai

Our right to food

Have you heard of the Universal Declaration of Human Rights? It says that everyone is born free and equal, and everyone has rights - like the right to food!



Does that mean I have the right to your sandwich?

Did you know...? I mohio rānei koe?

Silk worms are a tasty snack in the Republic of Korea! Some people in Cambodia eat fried crickets – they're tasty *and* healthy. And right here in Aotearoa NZ, some West Coast locals tuck into steaming possum pies. It's true!

Finding out about food in other places is a great way to understand how other people live. To see cool photos of food around the world, visit www.time.com. Search for 'hungry planet'.



silkworms

Keeping it fresh? Kia mata tonu?

An experiment in the movie *Supersize Me* showed that a serving of McDonald's French fries didn't rot at all, despite being in a jar for ten weeks!

How is this possible? *Sometimes* it's because preservatives are added to food to give it a longer shelf life. That means that food can last a long time without going off. It can travel all over the world, and still be safe to eat. Learn more at www.nzfsa.govt.nz. Search for 'list of food additives'.

Investigation station Teihana tühura

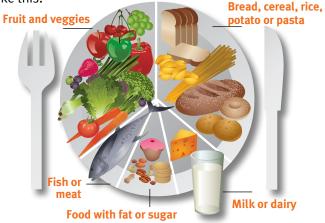
You can try this experiment with any food. Compare home made food, like biscuits, with a store-bought version that has preservatives (it will say on the back of the packet). Which lasts longer? Use the chart to help you.

-			
What I want to know	What I think will happen and why	The experiment: how will I test this?	What actually happened
Does food with preservatives last longer than food without?	I think that		

What is a good thing about food that lasts a long time? What might be not so good about it?

What's on the menu? He aha kei te rārangi kai?

Do you know about the food pyramid? That's what some people use to figure out what foods are good to eat. Our food plate will show you the same thing. It looks a bit like this:



It seems that the foods we like the most and that seem to taste the best, like chocolate, we're meant to eat the *least*. Fruit, veggies and **cereals** are supposed to make up most of our **diet**. (Visit www.kidshealth.org/kid for more about healthy food.)

Making food choices A tātou kōwhiringa kai

People don't always eat from all of the food groups. Maybe they're allergic to some foods; it might be too expensive; or maybe their parents don't want them to

eat it. Sometimes, people don't get to choose because there isn't enough to eat, or enough healthy food where they live. What other things might help us decide what to eat?



Key words Ngā kupu matua

Universal Declaration of Human Rights (UDHR)	adopted in 1948 by the United Nations, it contains 30 statements on your rights. They include the right to food, education, clothing and housing.
Preservative	something added to food to stop things like mould from growing
Shelf life	the time food can be stored before it starts to go off
Cereals	grains, like wheat or maize, that are used in many foods
Diet	the food that living things usually eat

Sources Ngā Rauemi: Human rights Issues. Volume 65. Craig Donnellan. Independence. Cambridge, 2003. Discovering the food system: an experiential learning program for young and inquiring minds. Jennifer L. Wilkins, Marcia Eames-Sheavly.Cornell University, 2003. Supersize me: a film of epic proportions. Special features. Morgan Spurlock. Kathbur Pictures, 2004. www.saidwhat.co.uk. www.globaleducation.edna.edu.au. www.pukekura.co.nz/ possum/. www.nzfsa.govt.nz

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Global impact Ngā take o te ao

The journey of food Te haere nui a te kai!

Our food travels, from the world to Aotearoa NZ and back again. Let's look at the journeys of a fruity favourite, the banana, and our own home-grown goodies. Where is our food going, and where does the food we're eating come from?

Long distance banana He panana haere tawhiti

In Aotearoa NZ, we eat a banana called the Cavendish banana. It grows in warm **climates**. On the map below are three of the countries that grow this lunchtime favourite. wifruit

Today – Aotearoa NZ; tomorrow – the world! Hei Aotearoa i tēnei rā āpōpō- hei te ảo!

While bananas are winging their way to us, we're sending our own food out into the world. Take a look at the goodies we grow, and where they're all going.



Australía

On the move I te nekehanga

A food 'mile' or food kilometre is all about the distance food travels from where it grows to where it is sold and eaten.

Shipping dairy products (e.g. milk, cheese) to China 9,129 Km The same as travelling from Invercargill to Auckland eight times.

Getting bananas from Costa Rica 11,729 Km The same as travelling between Auckland and Invercargill ten times.

Work it out! Tauria! If Costa Rica sent bananas to us two times a year, how many food kilometres would be travelled? How many kilometres would be travelled if Aotearoa NZ sent butter twice a year to China?

united Kingdom united States of America chína Losta Ríco Ecuador pacífic Islands Samo

The real 'leftovers' Ngā tino 'toenga'

Whenever we use electricity or fuel to make or move food, a gas called carbon is left behind. Things like fridges, stoves, kettles and blenders all use electricity, and all leave a carbon trail. Aeroplanes, cars or ships use fuel. They leave carbon behind too.

Powering food Te whakapakari i te kai

A carbon footprint is about how much carbon is left behind. The more power we use, or the further we travel, the bigger the footprint. If we make too much carbon, it gets trapped in our air, and slowly heats our planet. This

is known as **climate change**. This is because scientists think that the build up of gases, like carbon, will change the earth's weather.

Put on your thinking cap Kuhuna tō pōtae whakaaro

How can we eat the exotic foods we enjoy without making all of that carbon? Talk with your classmates and come up with some creative ways of growing food, without harming the environment.

Did you know? I mohio rānei koe?

Undercover banana Banana trees aren't trees at all, they're giant herbs!

And the banana fruit is actually a false berry! How sneaky is that?

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Putting food on the table Te hoatu kai ki te tēpu

Whether they're living in Aotearoa NZ or on the other side of the planet, people are working hard to grow food for the world. It's an important job. Without them, we could all go hungry.

Look at the photos. What are some of the different areas involved in making our food?

Imagine that you work in one of these places. What would your day be like? Write a story, a diary entry or draw a picture of 'a day in the life' of your chosen job.

> Kiwifruit weren't always kiwi! Their name is actually Yang-Tao, and they arrived from China 100 years ago. We liked them so much that we gave them a name of our own!



A farm or plantation source: Maxnathans', www.creativecommons.org

source: Lab2112, www.creativecommons.org





A cargo ship source: C Farivar, www.creativecommons.org

Track it Whāia atu

Next time you're in the fruit and veggie section at the supermarket, find out what other countries are growing your goodies. Then visit www.mapcrow.info and work out how far it's all travelled.



A supermarket

Key words Nga kupu matua

Climate	the kind of weather different places have, e.g. hot climates or cold climates
False berries	don't have hard stone centres like true berries. Bananas, blueberries and cranberries are all false berries
Carbon	a gas that is leftover after using power or energy
Carbon footprint	how much carbon each person makes
Climate change	a change in the world's weather due to a build up of some of the gases that surround the earth.

Growing local Te whakatupu ā-takiwā

People all over the world are thinking of clever ways to cut down on food kilometres, keep their carbon footprint small, and still eat great food.

Slow food

Slow food is a movement where people are eating the local, natural way – that means no preservatives – just fresh and healthy food they grow themselves. People in 65 countries are already hooked: Argentina, the Philippines, the Ivory Coast in Africa, and Aotearoa NZ, are just some of the nations who are into slow food.

Find out more at www.ecofriendlykids.co.uk. Look under 'food'.

100 mile diet

In the USA, some folk are looking closer to home for their meals. They are only eating food that grows within 100 miles (160 kilometres) of where they live. This means finding local fruit and vegetables, bread and milk, meat and anything else they fancy eating. It's tricky to do, but it cuts down on their food miles and carbon footprints!

www.100milediet.org will tell you all about this amazing diet.

Sources Ngā Rauemi: www.mapcrow.info www.bananatree.info www.banana.com www.carbonfootprint.com www.teara.govt.nz www.stats.govt.nz www.creativecommons.com

Local action Heimahiitörohe

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The fruits of Matariki Te kai o te Matariki

Nā Hīria McRae, Te Kura Māori, College of Education, Victoria University of Wellington

Matariki is a star cluster that appears in the sky in late May or early June. To some Māori iwi, it means the start of a new phase of life. Matariki can be understood in two ways – Mata Riki (Tiny eyes) and Mata Ariki (Eyes of God). Either way, the eyes are thought to watch over the land and its people.

Celebrations begin at the next new moon after Matariki has risen, usually in June. Traditionally, Matariki arrived at the end of the **harvest**, so it was a time of plenty. Kūmara and other root foods were harvested. There were big catches of fish, and native berries and **pikopiko** were gathered.

Matariki was a time to share and an important way of showing **manaakitanga**, welcoming and showing respect to visitors. It was also a time to store food and prepare for less plentiful times of the year.

Today Matariki is a popular event for many people in Aotearoa NZ. It is a time to gather, to feast and to celebrate the next year together. Celebration activities that could happen in your community include:

Hākari where everyone brings their favourite dish of in-season and local food. Try a themed



Source: www.astronomynz.org.nz

hākari, by bringing a traditional dish from your own culture, or a Māori food themed hākari, using in-season foods like kūmara or pikopiko.

- Aarket garden days, where people can bring their produce to sell, donate or barter (swap) with others.
- Help out with the Meals on Wheels service in your community. Offer to donate food, or help with cooking or deliveries.
- Publish a newsletter, a calendar of Matariki events in your community or seasonal food recipes.
- Make it a celebration to farewell the old year and see in the new one, by including a concert, a dance, a party or a combination of all of these things.

What's for lunch? He aha te tina?

Food is important to everyone, and no two people eat the same way. Take a look inside these lunchboxes.



1 banana 2 peanut butter sandwiches 1 homemade muffin 1 sausage

2 biscuits

Digest this Kainga tenei

Which of these lunch foods might be grown in Aotearoa NZ? Which might come from another country?

Compare your lunch box with a friend or classmate. What is the same or different? Which of your lunch items might come from another country? What might be locally made?

Sources *Ngā Rauemi:* www.tki.org.nz/r/wick_ed/matariki/index.php www.korero.maori.nz/news/matariki/background.html

Key words Ngā kupu matua

Matariki	a group or cluster of stars seen in the winter	
lwi	the Māori word for tribe	
Harvest	gathering food that has finished growing and is ready to eat.	
Pikopiko	fern fronds	
Manaakitanga	welcoming and showing respect to visitors	
Hākari	a feast	

What do you think? He aha ou whakaaro

NAME: Bella Maresca

AGE: 7 SCHOOL: Rata Street School

What is your favourite food to get in your lunchbox? What is it made of?

On my birthday, my parents give me lollipops - but only for my birthday.



Bella

Sugar. You get green, yellow and red lollipops - my favourite is red. Food colouring makes them red.

Is all the food you eat made in Aotearoa NZ?

Yes - it comes from New Zealand. But not bananas -I've never seen them grow in New Zealand.

NAME: Stefanija Paleaae

AGE: 9 SCHOOL: Thorndon School

What is your favourite food to get in your lunchbox? What is it made of?

Sandwiches. I like brown bread with cheese and ham. Inside the bread might be seeds - like sunflower seeds. Dífferent sorts of chemicals make the cheese.

Stefaníja

Where does it come from? Is all the food you eat made in Aotearoa NZ?

The supermarket - and the supermarket gets it from all sorts of companies. It's not all made in New Zealand because some are made in China and Australía, they're just wrapped in New Zealand.

How big is our carbon footprint? Pēhea te nui o tō tātou tapuwae waro?

We already know that food is coming in and out of Aotearoa NZ from all over the world. It's great that we're helping to get food to other places, but we have to reduce the impact of our carbon footprint on the environment.

Luckily, the government is already thinking of some solutions.

Aotearoa NZ has signed the Kyoto Protocol, a set of rules about how to help reduce climate change. Signing it is a step in the right direction. It means that we have agreed to think up ways to make less carbon, or help clean up the carbon we do make. That's great news.

Name: Billy and Max Robinson

Age: 10 and 12 School: Mount Cook School

What is your favourite food to get in your lunchbox? What is it made of?

Billy: Bacon croissant. The bacon croissant is made of pork (the bacon) and butter.

Max: Fair Trade chocolate. Chocolate is made of cocoa.

Where does it come from? Is all the food you eat made in Aotearoa NZ?

Billy: The pork is made in New Zealand. I don't know about the croissants.

Max: I don't know - Ghana for the cocoa?



Bílly



Max

So, what do you think? Nā reira he aha ōu whakaaro?

You've heard what these children have to say. So what do you think? Answer the questions yourself, or interview your friends or family, and find out about the journey of their favourite lunchtime treats.

> People have been munching more than 300 types of bananas, for over 4,000 years! Some Banana types are disappearing very fast. Crikey!

Key words Ngā kupu matua

Kyoto Protocol a set of rules for stopping global warming. It is named after Kyoto, Japan where it was started. 55 countries have signed it so far.

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Taking positive action Te mahi pai in the interview

What can I do? Me aha ahau?



Get into food!

- Respect your food! It travels a long way, so don't waste it – enjoy it!
 - Be part of food's journey. Why not help your parents cook dinner, or if you can, cook it for them. You'll have fun, and they'll love you for it.
- Start a garden at home or at school. Growing your own grub is good for the environment and it tastes wonderful!
- Find out about what food means to other people. Research foods from other cultures and create an international menu of food for your classroom. Stage a food of the world day at school and discover these tasty dishes for yourself.
- June 5th is World Environment Day so get involved and do something about carbon footprints! When you can, get your family to walk to the shop instead of driving. Or try to buy food from your local farmers' market. Your family will save petrol and cut back on carbon.

Treat or trash? He kai rangatira, he kai koretake rānei?

Our lunches travel a long way to reach us, so it's important that we respect it. Instead of throwing perfectly good food in the rubbish, take it back home for someone else to eat. Better yet, why not tell your family not to put it in your lunchbox? That way, it won't be wasted.



Spongebob respects food.

"Gary, you better call an astronomer, because this clotted cream is OUT OF THIS WORLD!" SpongeBob

Source: Latka, http://en.wikipedia.org/wiki/GNU_ Free_Documentation_License

Sources Ngā Rauemi: www.whatnow.tv



"I really wanna work on making my carbon footprint smaller you know, recycle more or bike to work" *Charlie P, 'What Now' presenter.*

Source: www.whatnow.tv

Websites Te ipurangi

Organic.org www.organic.org/kids

A site just for kids. Games and recipes will keep you busy and learning about tasty organic food.

The Greens www.meetthegreens.org

Flash animation of ideas for clean, green living! Each episode has heaps of activities and ideas to keep you on track with composting or shrinking your carbon footprint.

Dr E's energy lab www.eere.energy.gov/kids

All the way from America, this is a website about saving energy and reducing carbon footprints. The site has loads of games, videos and easy ideas for saving the planet.

Eco Bunnies www.youtube.com

(search for eco bunnies). A short video with two switched on rabbits. They'll tell you all about carbon footprints and give easy action ideas for making them smaller.

Sustainability.govt.nz

www.sustainability.govt.nz/energy This site has tips for things your family can do to use less energy and 'do your bit' for the environment.



Change for a just world

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