

# Food and our ecological footprint

Adapted from *Ecological footprint* (EPA Victoria 2008).

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## Why food is important to our ecological footprint

We eat every day but often don't realise that the food that is so readily available in supermarkets is often there at a cost to the environment. As Rosemary Stanton (in HEIA, 2008, p.181) notes, what we consume is highly relevant to our ecological footprint and climate change. Our choice of foods has the potential to increase or decrease the effects of global warming. Issues such as feeding the expanding world population and having enough food and water are also part of the bigger picture about using our resources wisely. By choosing food that has less packaging, has not travelled vast distances and has been produced in a sustainable way, we can help reduce our footprint. The following practices are associated with being a responsible citizen with respect to ecological sustainability.

## What you can do

### Buy food that is locally produced

The closer the farm is, the less fuel is needed to transport the food to the table. Although Australia only imports about 10 per cent of its fresh fruit and vegetables year round, the vastness of the country means that, in many cases, food travels long distances, requiring refrigeration and storage. Ask the supermarket to sell locally grown products.

### Buy from your local farmers' market

A farmers' market is one in which local farmers or producers sell their own produce. All products sold should have been grown, reared, caught, brewed, pickled, baked, smoked or processed by the stallholder.

### Plant a garden and grow your own fresh produce

Growing your own fruit and vegetables reduces the energy and waste that normally goes into getting food from the field to your plate, such as transport, refrigeration and packaging. You can also monitor the amount and type of fertiliser and nutrients used to grow your food.

### Avoid processed food

The manufacture of processed foods uses large amounts of energy, water and materials in production, chilling, packaging and transport, as well as producing large amounts of waste. Buy fresh fruit and vegetables rather than canned or frozen (although the latter are sometimes a necessity in remote communities).

## Ecological footprint

Ecological Footprint measures resource consumption of human activities across the whole lifecycle of a product or service and converts this to the amount of land needed to supply the resources consumed and assimilate the waste generated.

Australia's Ecological Footprint in the Living Planet Report 2004 was 7.7 global hectares (gha) per person per year. This is over 3 times the average global Footprint (2.2 gha), and well beyond the 1.8 global hectares per person per year that the planet can regenerate.

The most significant factor contributing to the Australian Ecological Footprint is carbon dioxide emissions from fossil fuels (constituting approximately half of the total Australian Footprint).

Food accounts for approximately 30% of the Australian ecological footprint.

Source: EPA Victoria (2008).



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## Eat food in season

If the fruit and vegetables you want are not available, choose those that are in season. If you eat fruit and vegetables out of season, remember that they have either travelled long distances from a place where they are in season and/or have used energy in cold storage. Buying locally grown, seasonal food means a reduction in food miles, less energy used in storage and less packaging required to preserve fresh produce.

## Buy organic food

Organic and other forms of low-input farming that use minimal or no pesticides and fertilizers—which are energy-intensive in their manufacture—consume up to 40 per cent less energy, and support higher levels of wildlife on farms. Organic and other holistic farming approaches tend to prioritise animal welfare more than conventional methods. Buying more organic food can reduce your food footprint by around 5 per cent.

## Choose foods that have no or minimal packaging

Large amounts of resources are required to produce the packaging and package the product. The disposal of the packaging has further negative impacts on the environment.

## Drink tap water instead of bottled water

Bottled water costs around 500 times more than tap water, and the industry emits thousands of tonnes of CO<sub>2</sub> every year. In Australia we have a reliable and safe supply of mains drinking water and drinking bottled water offers no proven health benefits. Because no materials are used in its individual packaging and it is generally sourced locally—rather than in Fiji or the European Alps—drinking tap water is a greener, cheaper option.

## Eat less meat and eat more plant-based foods

Meat and dairy products are the most resource-intensive and the least fuel-efficient food we have. Large quantities of energy are required to cultivate, harvest, and ship animal feed; house, transport and slaughter animals; process and package their meat; and refrigerate it until it's cooked. A single serve of meat is estimated to create five kilograms of greenhouse gases. It takes 1350 litres of water to produce a kilogram of wheat but it takes 16,000 litres of water to produce a kilogram of beef.

## Don't waste food

Buy only what you will eat. Check the use-by date on the product label. The production of food uses water and energy and the food we don't eat creates waste. In Australia \$5.3 billion worth of food was thrown away in 2004. Many individuals and families could reduce consumption of food overall.

## Change consumption patterns to accommodate scarce water resources

The amount of water required to produce one kilogram of food varies from 500 litres for potatoes to 1350 litres for wheat, 2,000 litres for soy, 3,500 litres for chicken and 100,000 litres for grain-fed beef.

## Compost your kitchen waste and garden cuttings and/or get involved in community composting projects

Kitchen scraps such as vegetable peelings, apple cores, eggshells and most garden waste biodegrades into a rich fertiliser which can be used in gardens and can reduce the amount of organic waste in landfill sites.

## Buy fairly traded food and drink

When you buy food from overseas, try to buy fairly traded products, such as those certified by Fairtrade. These products encourage investment in people—promoting social justice, local economic development and fair prices.

## Buy sustainable fish

Over three-quarters of the world's fishing grounds have been so overfished that they are now below sustainable levels. You can use your consumer power to protect endangered species. Say 'No' to Orange Roughy, which is close to endangered, but 'Yes' to fish like flathead. The Australian Seafood Guide is available from the Australian Marine Conservation Society at [www.amcs.org.au](http://www.amcs.org.au) or by calling them toll-free on 1800 066 299.

## Lobby schools to provide local, organic and/or fairly traded food

Providing an outlet for local, organic and/or fairly traded food helps promote excellent sustainability practices.

## Reuse glass jars as storage containers

## References

EPA Victoria. (2008). *Ecological footprint*. Accessed 14 June 2008 from <http://www.epa.vic.gov.au/ecologicalfootprint/>

Home Economics Institute of Australia Inc. (HEIA). (2008). *Nutrition—The inside story*. Canberra: Author.