Session 3 : Food

In this session we will look at the where and how of our food

Global food production doubled from 1960 to 2000 as we industrialised agriculture, but climate change impacts, and population growth, predict a further 70% increase will be needed by 2050 if we continue on the same path. However the ecologic cost of having the current huge variety of out-of-season, imported, and convenience packaged foods is huge - 30% of our ecologic footprint .

- processing, packing, transport, storage and waste disposal consumes fossil fuel & energy.
- large scale single product farming - monoculture - has depleted soil & caused erosion.
- modified “high yield” crops need chemical fertilisers and pesticides (most made from oil).
- Industrialisation needs money and so concentrates ownership and control.
- convenience packaging needs salt & fructose for shelf life, and colouring for marketing.
- high turnover, large scale farming needs locked in, large volumes, of water.

More on the industrialisation and ecologic footprint [3.1]

So Where Do You Stand Now on Food?

Let us start with a food audit of your meals and food sourcing [a full detailed audit [3.2]]

What is Your Typical Mix of Food Types?

Tick Your Usual	Meats	Veg	Fruit	Dairy	Grains	Fish	Nuts
Breakfast							
Lunch (workdays)							
Lunch (weekends)							
Dinner							
Tea Breaks or Snacks							

Keep a diary of your meals for a week and make a note of:

- the source of each part - Imported, product of Australia, or sourced local item / home grown
- the type of packaging - all waste (red bin), recyclable (yellow bin), or your bags & handling,
- the degree of pre-processing - raw-fresh, half process (dried,frozen), processed/ready to eat
- the waste part - scraps fully compostable, everything eaten, cooking/washing water waste.
- the cooking energy required - 30 minutes, 1 hour, more than 1 hour

.....and estimate the percentages for each aspect - eg:

Source of Food	[12] imported	[80] Australian	[8] local / home

Source of Food	[ ] imported	[ ] Australian #	[ ] local / home #
Type of Packaging	[ ] all waste	[ ] recyclable	[ ] own bags
Pre-Processing	[ ] raw-fresh #	[ ] half processed	[ ] ready to eat
Waste Component	[ ] compostable	[ ] everything eaten	[ ] water to waste
Cooking Energy	[ ] 30 minutes	[ ] one hour	[ ] more than 1 hr

and, using a Season Food Guide [3.3], check the raw/fresh, local/home, and Australian produce #, and try to estimate how “sunlight powered” In Season vs “fossil fuel assisted” Out of Season / Hot House Grown, your meals might be:

[ ] Seasonal / Sunlight	[ ] Fossil Fuelled

The Issues Around Food

Sources of Food

Food Miles - a study found that the total distance for all transportation for a typical food basket in Melbourne - 29 common food items, was 70,803 km - twice around the earth [3.4] [rice 9700, sugar 2300, chips 2000, tea 8300] this is expected for Imported Foods, but mass produced Australian Products can also gain travel miles between picking, and packing.

Pesticide Residues - are also an issue [apples 15%, lettuce 4%, bread 2%] [3.5] because weeds and pest insects love acres of monoculture, high volume farmed food. The industrialisation of rural regions also sparks social issues like worker exploitation, and animal cruel factory farming.

Local and Home Grown - knowing where your food comes from, meeting the growers and makers, knowing what is in your food, and seeing your money recycle through the community. But what do the claims mean? - **organic**, **chemical free**, **biodynamic**, and **permaculture** [3.6]

Types of Packaging

Some packaging may be necessary for processed and bulk foods, and there are studies that show that the plastic waste is less climate damaging than the effect of 20% of food wasted through damage or spoiling in shipping, storage, and supermarket display. [3.7]
But there is no reason (apart from economic) why the packaging is not fully recycled or reused. There are government standards that label recyclable plastic, and programs like REDcycle that manage soft plastics that otherwise become waste. [3.8]

Do It Yourself options are plentiful - start with local, low food miles, shops and farmers markets; take your own produce and carry bags; reuse your own containers for tricky items - honey, peanut butter, cleaning liquids; and use beeswax or silicone wraps and cloth fridge bags to store foods.

Pre-Processing

Raw & Fresh - hygiene and storage. Wash all food preparation areas, wash and scrub home harvested produce before bringing inside, and wash and rinse produce just before eating or making into the meal. [3.9]

Half Processed - longer life preserved foods - dried fruit, vegetables, and meats; dehydrated products like spaghetti; bottled and canned foods (oxygen, bacteria, and mould free); jams & passata, are convenient and help us extend seasonal foods, but check the ingredients list on commercial items. [**3.10**]

Ready to Eat - basically engineered food. While convenient and tasty, the ingredient list highlights the salts, sugars, colourings, and flavour agents, needed to give these an appealing appearance, a long shelf life, and to use up cheaper base ingredients. [3.11]

Waste Component

Compostable - the most basic is fruit and vegetable peelings and cuttings saved for your compost bin. But by using a Bokashi type fermentation system, prepared foods, meat, dairy, egg, coffee & tissues can also be turned into compost. [3.12]
Everything Eaten - thoughtful planning means no wasted food, just enough for the one meal, or a cascade of left-overs into other meals. [3.13]
Water Waste - hygiene and meal preparation comes first, but develop a plan for the separation and collection of this water, and use it to grow more food.

Cooking Energy

Time is Money & Energy - cooking multiple meals at the same time - so investigate pressure cooking, pans matched to tasks, microwave, solar & turbo ovens [3.14]

Spending On Food Options

Nil Free Food - check out your local Food Swap groups, explore apps for “excess produce” groups, and guerilla gardening, even check out dumpster diving. [3.15]

Nil-$ Go Vegetarian - avoiding the problems of animal rights, factory farming, and hormones in meat, plant farming is 20 to 50 times more efficient than meat production, and contributes 5 to 30 times less in greenhouse gas emissions. Try fewer meat meals and smaller portions, and if you do buy meat, swap quantity for quality, and grain-fed for grass-fed.

$$ Sustainable Seafoods - while an excellent food source, global fish stocks are declining and many species are endangered - shop using a sustainable seafood guide [3.16]

$ Farmers Markets - and local food swaps, farm gate sales, and community gardens - explore your local area and enjoy the fresh, seasonal foods. A food swap described [3.17]

$-$$ Shop via OpenFoodNetwork.org - go online via the search directory or the interactive map, and discover specialist shops, bulk food wholesalers, food co-ops, organic farms, orchards, and vineyards. Plan a visit or order online. [3.18]

Grow Your Own

$ Small Space Container Garden - herbs like thyme, rosemary, basil, mint, and garlic chives, salad & asian greens (rocket, lettuce, tatsoi) and strawberries. If a bit more room go for pots of dwarf tomatoes, and chilli bushes. But check - good sun, not too hot, and water often.

$ No Dig Garden - on a base of wet newspapers (weed barrier) build a “lasagne” of alternating brown (carbon-based - straw, leaves, wood chips, newspapers) and green (nitrogen-rich - manure, compost, worm castings.) layers. Water each as you build. Perfect for potatoes, beans, pumpkins, & in second year for deeper rooted vegetables - carrots, onions, beetroot.

$$ Suburban Bush Tucker - edible Australian native plants like muntries, finger lime, warrigal greens, apple-berry, native pig-face, midgen berry, and sea-celery, can add spice to small gardens. In larger spaces, trees like riberry, and macadamia. [3.19]

Waste & Compost

$$ Worm Farm - go from a basic funnel in the ground, to a three layered structure on legs, Starting with a box of special worms (Tiger or Indian Blue - not garden earthworms) this will rapidly compost fruit and vegetable kitchen waste, and produce highly nutritious liquid fertiliser.

$$ Bokashi System - Collect your fruit and vegetable peelings and buy a Bokashi type fermentation system, so that prepared foods, meat, dairy, egg, coffee & tissues can also be tuned into compost.

Extending Shelf Life

$-$$ Food Preservation - invest in or share a bottling kit, preserving jars, or a food dehydrating cabinet, and take a class or learn online how to process foods into jams, pickles, sauces, and dried fruits and vegetables. [3.20]

Nil Minimalism - sort your pantry, bring older items to the front, sort your fridge and cloth wrap cucumber, herbs, capsicum, celery, beans and eggplant, don’t pack the shelves - let the fridge breathe on the inside. Store potatoes and onions in the dark and cool and away from each other, because like bananas, they give off a gas that quick-ripens and spoils other vegetables.

One important issue is the huge amount of water used to grow food.
In Melbourne per day, our houshold use averages 262 litres,
but the food for that household uses 475 lt per home, per day. [3.20]

Challenges

These are designed to be a fun way of exploring issues, making us aware of how reliant we are on the resources we have, as well as encouraging longer-term behavioural change.

For one meal – Just for you (or organise a multi household street event) - try to source everything from just your local region - maybe only things from your farmers market.

Forever – Make one day a meatless day, and then see if you can add more days.

Over one month – Letter-box survey your neighbours asking who composts, and who has chooks, worm farms, and bokashi bins, then suggest starting a food waste share program - swap food scraps for fresh eggs, or worm castings and juice, or just help someone with no garden manage their scraps.

One weekend - look up the OpenFood Network or online search your town and plan a family walk, bike, or car trip, to visit a community garden, food co-op, organic farm, or just to find a new wholefood grocer.

During the year - look up Permablitz online. Explore going on a blitz to help out and learn garden skills, and then consider using a blitz to build or revamp your own garden

Kids Fun - start a carrot top garden, or plant seeds in soil or potting mix in an egg carton. Give them their own space in your garden. Ask older kids to write out, and illustrate, vegetarian or local food recipes, and make a street recipe book.

Suggested Session Plan	
Catch Up - how has everyone's week been?	10 min
Review Food - what surprised you? what did you discover looking at your eating and food purchasing patterns?	30 min
Issues Around Food - which of these have you already considered when making food choices? did anything change your mind?	30 min
Planned Spending - which of these have you already done? how has it worked out? what actions do you think you might take on?	30 min
Challenges and Fun Ideas - suggest other ideas and activities?	10 min
Before you close Session 3, take time to reflect on how the session went, think of steps that might be taken in the next session, consider how the others are reacting and responding. Think Head, Hands, & Heart.	10 min