FOOD for thought

with Dr. Tamsyn Murray

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Ethical food: how to make the right food choices

As a mother, gardener and commercial farmer, I have spent a lot of time researching and thinking about what to eat, what to grow and how to grow it. In the not too distant past, most of us grew our own food, processed it and cooked it.

Today we have lost this visceral connection to our food, and therefore lost a deeper understanding of the story behind our food. At the same time the choice of foods has greatly increased and the transparency of labelling worsened. It is no wonder we stand at the supermarket shelves, bewildered and confused.

In this monthly series on ethical food, I will explore with you a selection of different meals. I hope to shed some light on the story of our food. Are our food choices ethical? Do they fit with our principles of what is moral, honourable and virtuous? Our choice of food expresses our world view and our values.

I believe most of us would like to know more about our food so that our food choices reflect our values.

I have chosen our first meal to be poached eggs on toast; a seemingly simple meal. However as we delve into the world of hens and eggs we see that there are several complex issues when raising hens. Bread is no less complicated. Is frozen partly baked white bread, that may contain up to 32 ingredients, shipped from China even remotely similar to a spelt sourdough loaf, containing only spelt and water, driven by a fermenting process gently guided by the baker's hand and unique to the wild yeasts in that specific kitchen?

Next month we look at the bread .... meanwhile it's back to those eggs.

I believe there are five main behaviours that make a chicken happy and here they are:

Hens' ability to express innate chicken behaviours by management systems

	Cage	Cage-free/Barn	Free Range*	Organic	Pastured/ Paddock
Foraging	✗	✗	✗	✔	✔
Dust bathing	✗	✗	✗	✔	✔
Roosting	✗	✗	✗	✔	✔
Sunning	✗	✗	✗	✔	✔
Nesting	✗	✔	✔	✔	✔

* these are behaviours that hens may not be able to do even though the eggs are legally labeled "free range"

Some of the facts are distressing. However there are farmers, more every year, that are choosing to raise hens ethically. As farmers are a mere 1.5% per cent of the total population, it will be you as the consumer that drives change, each food choice you make either brings about more ethical food or less. For the sake of the 17 millions laying hens in Australia, let's hope it is more! The good news is that the more ethically raised eggs are better for you too. A recent study in the U.S. that compared barn-laid eggs with pastured/ paddock eggs, found that:

Eggs from hens raised in the pasture had:

- **66% more Vitamin A**
- **200% more Omega 3 fatty acids**
- **300% more Vitamin E**
- **700% more beta carotene**
- **600% more Vitamin D**
- **25% less saturated fat**

Eggs

The array of different egg cartons on the shelf reflects in essence five main management systems: cage; cage-free or barn; free range; organic and pastured/paddock eggs. Overall one can characterise these different management systems in terms of the degree to which the hen's environment is controlled. In the cage environment everything is controlled by the farmer; the temperature, light, noise, and when the hens feed, drink, sleep and lay eggs.

They have even tried to eradicate all bugs (good and bad), as the hens live elevated never touching the ground. At the opposite end of the spectrum are pastured or paddock eggs where hens live outside during the day and therefore experience all the variations of the outside world and are immersed in the complex ecosystem of the soil and pasture.

Management System	Space per hen	Flock size	Description
Cage	0.06m²/hen	10,000-100,000 (in a shed)	Hens are confined to wire cages stacked at multiple levels with usually about 6 birds per cage. There is no natural light in these sheds and often they are quite dark to help control aggressive behaviours among the hens.
Cage – free / Barn	0.14m²/hen	10,000-100,000	Hens are confined inside large permanent sheds. In the larger operations, the sheds will maybe multi-tiered and hens will live at different levels within the shed. Conveyor belts remove manure that accumulates at each level.
Free Range*	0.14m² to 12m²/hen.	750 – 40,000	Hens live in large permanent sheds. Free range is defined as **access** to the outside. It does not refer to how many hens **go** outside or for how long.
Organic	4m² to 6m²/hen	750 – 40,000	Hens may live in large permanent sheds or smaller mobile sheds. Hens are fed certified organic grain. Hens must have access to the outdoors.
Pasture-raised/ paddock	6m² to 100m²/hen	750-2500	Hens are housed in small **mobile** sheds. Sheds are moved to ensure the paddocks have ground cover. Flocks are usually small and hens spend most of their day outside.

Summary of different management systems in egg production

*this is not certified free range but rather what can exist and be legally called free range. Coles and Woolworths free range describe farms where the stocking density is 10,000hens per hectare or 1m²/hen. This is much higher than the 1500hens/ha standards of free range certifying associations.