

Everyone's  
Guide To  
Growing  
Food  
Anywhere



**Food4Wealth**

Jonathan White

# Food4Wealth

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# Foreword

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Imagine a garden so full of plants that it doesn't look like anything you've seen before. It's far too beautiful to be a vegetable garden because every possible spare space is filled with lush, healthy foliage...

...but everything in it is edible.

When a plant is removed for eating, the small empty space that it left in its place is quickly covered with compost. The owner of this garden is so proud and so protective of the precious soil underneath they can hardly bare to see it exposed for even a day. This person understands the Food4Wealth method and they treat their soil like it is the jewel of the garden. They know that this soil will provide life-giving nutrients for their whole family for years to come.

However, nurturing their lovely soil takes no effort at all. They don't dig it, or turn it, or add chemicals to it. They simply lay compost on the bare patches. This may happen only once or twice per year, because their Food4Wealth plot is perpetually bursting with life.

Apart from adding compost to the bare patches, there is little else for the Food4Wealth practitioner to do. The plants thrive and there are no pests. There is no need to add fertilizers or pesticides. It requires far less watering than you could ever imagine and it can go for months and months without you even looking at it. But of course, you will be looking at it. In fact, you will be picking fresh, healthy organic food from it every day, even during the cold months. Imagine how much time that will save you, not needing to pop down the shops to buy fresh produce. Imagine how much wealthier you'll be too. We are all aware that the price of good quality food is forever on the increase. Your Food4Wealth plot will give it to you in bucketfuls, absolutely free. But best of all, you will be healthier than you've ever been in your life.

The Food4Wealth method...*it's not magic, but it sure feels like it.*

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# Introduction

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**T**raditional vegetable growing techniques require an enormous amount of hard work and maintenance - weeding, feeding and strict planting schedules. There is also the problem of seasonality, allowing beds to rest during the cooler months, producing nothing at all. Then we are told to plant green manure crops, add inorganic fertilizers and chemicals to adjust imbalanced soils. It takes a lot of time, dedication and a year-round commitment to grow your own food the traditional way.

But does it really need to be that difficult?

Let me ask you this question. Does a forest need to think how to grow? Does its soil need to be turned every season? Does someone come along every so often and plant seeds or take pH tests? Does it get weeded or sprayed with toxic chemicals?

Of course not! And neither will your Food4Wealth plot.

Your Food4Wealth plot will be so full of fresh organic produce that weeds will not stand a chance. It will be crammed

with fresh organic produce all year round and after a few seasons it will look after itself, with minimal attention. I only give my Food4Wealth plot a few hours attention twice per year - once in spring and once in autumn. But I pick fresh produce from it every single day. I live in an extremely cold area with harsh cold, dry winters. But even in the dead of winter my Food4Wealth plot is dense with fresh produce, unlike other people in my area who strip their vegetable gardens back to bare soil.

## **Why is the Food4Wealth method so unique?**

Here a few reasons why this method is so different.

### The design maximizes opportunities for microclimate variation and protection

The Food4Wealth plot offers more micro-climate variation and protection. Your plants will be far more protected from the elements. They will last much longer than plants in traditional vegetable gardens. Greens will not bolt to seed as soon as a hot spell hits. In fact, your plants will not behave like the text book says they should. Some annuals will act like perennials and just keep on producing year after year. The life of your plants will be greatly extended.

### It's self perpetuating

Yes, you read correctly. This system seeds itself. One of the important principles you will learn is to identify the best crops and allow them to go to seed. This gives you next season's crop. An additional bonus to having flowering crops



present is that the flowers attract pollinators who also often act as pest controllers, eliminating the need for toxic pesticides.

### It's manageable

Your Food4Wealth plot doesn't need to be big to produce all the vegetables your family will need to eat. In fact, it is better to keep the beds small and manageable. If they are too big, the average person won't be able to provide enough compost to keep them going. This will result in the plot not running at peak performance. However, if the plot is too small, you won't gain as many microclimate and self-perpetuating benefits. I will tell you the ideal dimensions so that your Food4Wealth plot maximizes the ecological processes that will work towards its success.

# Dimensions and Site Selection

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## The best dimensions

A square shape is best! Why?

A square shaped plot is ideal because it creates a better ecological model. The centre of the Food4Wealth plot will be quite protected. This creates micro-climate opportunities that cannot be achieved in an exposed narrow garden bed. Micro-climate variation is an important part of the success behind the Food4Wealth plot. Your plants will feel like they are in heaven.

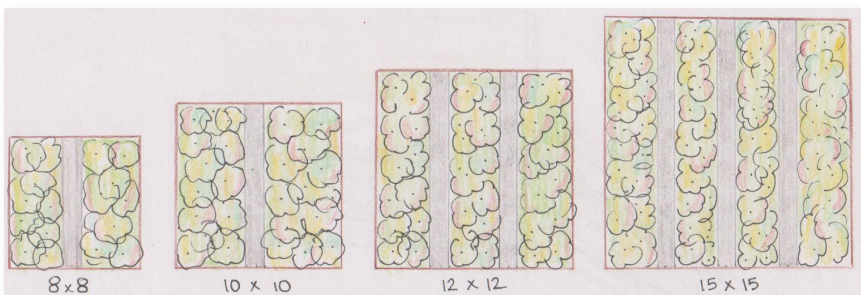
The other reason a square shape works well is that seed collection is easier. When you allow your plants to go to seed, you want to make sure those seeds fall within the plot. There is more chance that the seeds will fall within the plot if it is a square, as opposed to a narrow rectangle.

The size of your Food4Wealth plot should ideally be no smaller than 8 by 8 foot, and no larger than 15 by 15 foot. My plot is about 15 by 15 foot, which is a very small space

considering I live on 14 acres and have a large house garden. But that's all the space I need to grow vegetables. The rest of my garden is ornamental. So forget about needing a farm and operating some sort of commercial venture. We are talking about a space that could fit into most suburban backyards many times over.

## Pathways

Obviously you will need pathways through your Food4Wealth plot otherwise you could never get near the centre of it to harvest your food. A small plot, 10 by 10 foot or less will require just a single path through the middle. This would create two individual beds either side of the path. A 12 by 12 foot plot will require two paths and a large 15 by 15 foot plot will require 3 paths. You should try to keep each individual bed no wider than about 3 foot, otherwise access to the middle of the bed will be too difficult. Pathways are one foot wide and orientated so they roughly point towards the sun at midday, although near enough will be good enough. It's not a critical factor.



Various dimensions of the Food4Wealth plot showing the path layout, ranging from the small 8 by 8 foot plot to the big 15 by 15 foot plot.

## Site selection

Find the sunniest position you can. Try to select a site that catches the morning sun and at least four to five hours of sunlight per day. A fairly level site is best. Mark out your square with a hose or several pieces of wood and stand back. In fact, I suggest you leave it lying there for a few days so that you can study how much sun it is getting, and also to make sure it fits in with the rest of your landscape and landscape components. It doesn't matter what condition the ground is - lawn, bare dirt, rocky, sandy, clay etc.

Don't worry if you can't quite find the ideal spot. I created a test plot that broke every rule in the book. I placed an 8 by 8 foot plot on the shady side of a tall shed wall. It doesn't get sun until midday. I didn't dig the soil. I didn't water the plot. I didn't fertilize it or weed it or do anything the texts books say you should do. It took me an hour or two to put together and costs me a few dollars in seeds. Five months later I have a plot that is full to the brim. It appears to be a little overrun with swiss chard but hidden amongst the jungle are tomatoes, cucumbers, squashes, carrots, lettuces, chinese cabbages, onions, artichokes and pumpkins. That's not bad for a few hours work and a shady position.

Try to select the best position, but don't be put off if your site is less than perfect.

## What if I already have a vegetable garden?

If you already have a vegetable garden, the Food4Wealth method can easily be adapted to it. You will not need to implement the following steps, although I do suggest you read them. You can go straight to the section titled Adapting your existing vegetable garden.

# Construction of the Food4Wealth plot

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## Site Preparation

There is minimal site preparation. If the Food4Wealth plot is going over existing lawn, simply mow it nice and short. If the plot is going on bare dirt or rocky ground, simply rake it so it's fairly level and remove any obvious large rocks. Don't do any digging - it's completely unnecessary.

## Create a frame

The frame is simply to contain everything. It acts as a barrier and stops the lawn from creeping into the organic farm. It also holds the organic matter that you will be growing your vegetables in. However, I have built these plots without barriers and they still function well (my 8 by 8 foot test plot has no frame), although some manual edge weeding may be required from time to time.

Your frame should be about 8" inches tall and can be made from a range of materials: timber, brick, steel. There are even commercially produced plastic garden borders sold at hard-

ware stores which would be very long-lasting, provided you could secure them firmly.

## **A word about timber**

A timber frame is probably the most attractive, easiest to construct and most affordable. However, if you use a commercially treated timber you are potentially adding a toxic chemical into your soil, and probably making your produce ineligible for organic certification. However, if you are simply growing the produce for your own consumption and not concerned about gaining organic certification, then it is purely a question of personal standards. Another alternative is to use hardwood, although it is more difficult to work with than a soft wood such as pine. Thin hardwood fence palings could be used but would offer little strength and would need a number of upright supporting posts. An easy and effective solution is to use 2 by 8 inch pine, painted with a non-toxic environmentally safe product. There are several non-toxic paints and oils available in hardware stores these days. Paint the individual pieces of wood before assembling the frame so that all the cut ends get covered. Use galvanized nails or screws to secure together.

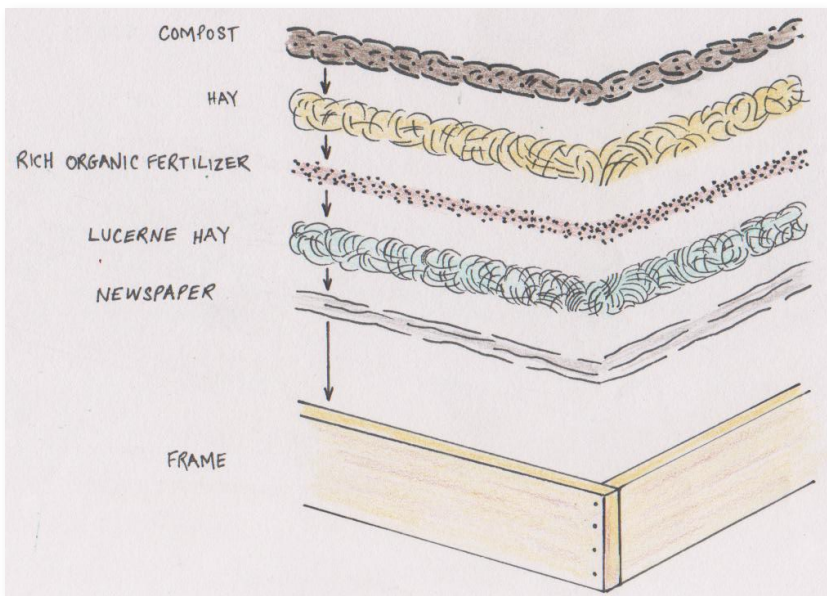


## Putting the frame together

Construct the frame into the size square you have chosen. There is no need to dig it into the ground if the area is flat. However, if you have a slight slope you may need to dig one end into the ground. Try to get the frame to sit flush on the ground all around.

## What goes in the frame?

You will be growing your plants in layers of organic material. Over the years you will simply add compost to the surface of the beds. Eventually, your plot will look just like soil once all the organic material has decayed.



Layers of organic material will be used to build up the plot.

## Laying the newspaper

Lay newspaper down at least 10 sheets thick. Go all the way to the edges of the frame and up the side an inch or two to ensure no grass will be able to grow up the inside edge of the frame.

If it is a little windy you may find the newspaper trying to fly away. In these instances I just have a watering can nearby and wet small sections as I proceed. Spray thoroughly with a hose once the newspaper is completely laid. Then, stab small drainage holes with a sharp knife or garden fork. The holes should be spaced at least every square foot.

## Laying the pathway

Using a strip of old carpet, thick cardboard, or any other material you can think of, lay your path/s (one foot wide) directly onto the newspaper. You will now be able to see the shape and dimensions of your beds. Make sure you are happy with their width. Walk down your new paths and reach into your imaginary beds, making sure you can easily reach halfway.

The material you use for your pathways can be removed after a year or two leaving a hard soil pathway.

## Laying the lucerne hay

Although lucerne hay is more expensive than ordinary hay, it is a very important component of the plot. Lucerne hay is nitrogen rich and contains many other important plant growth elements. It will get your plot yielding nicely in the very first year.



Break off thin biscuits of hay about two inches thick. Lay them like tiles on the beds, leaving the pathway clear. If you don't have access to Lucerne hay try using pea straw instead. If you can't get hold of either material, don't worry – just use ordinary hay.

## **Spreading the rich organic fertiliser**

You will need to purchase some type of rich organic fertilizer that any hardware store or garden centre will be able to provide. I would suggest an animal byproduct such as Blood and Bone or Hoof and Horn, mixed with pulverized cow manure. A cheaper alternative is pelleted chicken manure. Any type of grazing animal manure can be substituted, so just use whatever you can obtain for the best. I use a ratio of 90% pulverized cow manure (store-bought) to 10% Blood and Bone. I just lay the manure a half an inch thick, then sprinkle a light layering of blood and bone over the top.

## **About animal manures**

Thousands of years ago, ancient organic farmers used animal manures as a mandatory and essential ingredient to assist in soil conditioning and plant fertilization. Today many people are fearful of the use of any animal manures in gardening, due to more and more reports of potential diseases. Only an active hot composting process can totally guarantee a safe, healthy, mature compost. Horse/cow/sheep manures are safer than the manure from animals that eat both meat and plants (i.e. pigs and chick-ens). However, any manure can be safely used if put through a super-hot composting system. If this is too difficult for you, it may be best to stick to store-

bought manures, or at the very least, allow your horse/cow/sheep manure to decompose in a pile for around 6 months. Under a well managed hot composting system, animal manures can still play a part in modern vegetable gardening, as it did centuries ago.

Horse manure can often be collected free of charge from stables and sheep manure can often be scavenged from shearing sheds. Likewise, cow manure can often be collected at no charge from milking sheds.

### **Laying the hay**

Any cheap hay will do, although it would be better if it didn't contain hundreds of seed heads as they may germinate in your plot. Straw that is sold for animal bedding is suitable.

A cheap alternative is to use grass clippings, although they should be dried out in the sun first. Spread them thinly over a warm hard surface and rake them over each day. They are ready when the grass feels dry and brittle and crunches when you grasp it.

Lay the straw (or dried grass clippings) just as you did for the lucerne hay. It will need to be about 4 inches thick when laid loosely.

### **Spreading the compost**

Most people will not have had time to create the volume of compost necessary to cover the beds, and therefore will need to purchase some from a landscape supplier. There are a range of products available that are derived from organic

wastes. Most are a blend of different materials such as manures, decomposed pine fines, mushroom compost, and even such things as coffee grounds. Try to avoid any that use pine fines or forestry products. In my experience, these composts repel water. My belief is that the oils in the trees are present in the compost and will not allow water to penetrate into them. Mushroom compost is a better alternative if you are unsure. Choose one that looks dark and rich. You will need a two inch layer.

### **Putting up a climbing frame or fence**

A climbing frame or fence for peas and beans can be erected at this stage. Some wire mesh strung up between two steel or timber posts is ideal. I suggest running it down the centre of one of your beds. That way you can grow other vegetables on either side. It will actually take up very little room.

Another technique I love to do is to create a pyramid using three stakes tied at the top. Garden twine can be wrapped around and around the three stakes, moving in an upward direction until you reach the top. Peas and beans can be planted at the base and will train themselves up the twine.

### **Adapting your existing vegetable garden**

If you already have a vegetable garden you will not need to go through all of the above steps. The first thing is to assess how healthy and productive your soil is. If you've been successfully growing vegetables and your soil seems dark and rich, then I suggest you simply add a layer of compost to the surface.

However, if your vegetable garden seems poor I would suggest the following mini-upgrade:

- Rake the beds over so they are fairly smooth.
- Spread around some organic fertilizer (like the ones mentioned above). Just sprinkle a thin layer and don't dig it in.
- Add a layer of hay (use Lucerne hay for a real kick, or normal hay if you think your soil is reasonable).
- Add a layer of compost over the hay.

### **Upgrading your Existing Plot**

If at any stage you feel that your plants are not thriving as they once did, it is probably because your soil has become depleted of some essential minerals. This is most likely to occur if you cannot create sufficient volumes of good quality compost. Compost is required to replace lost nutrients and creating your own is an important part of this method. If your plot isn't performing as it should, a light sprinkling of pelleted chicken manure and a good layer of Lucerne hay on any bare spots is an affordable and easy upgrade.

# Composting

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## Creating compost

*I am crazy about compost. I love the stuff because I know how valuable it is.*

Creating compost is a big part of the Food4Wealth method. It is an integral part of the whole philosophy and practice. It is just as important as the actual plot itself. I have included this section early on in the book so you can start to get your composting system up and running. You won't actually use your home-made compost for a while, but you will need to get composting right from the beginning. If you follow my composting method you can have your first batch ready to use in 4-6 weeks.

Compost is simply organic material that has broken down into a lovely, rich soil-like substance. Organic material is anything that is living, or once was living, or came from a living thing. And just about any type of organic material can be put through your compost to create future nutrients that will someday be used by you and your family. So the next time you are going to throw something organic into the

garbage, you should ask yourself if you are able to compost it instead, and keep the nutrients in your plot. The only thing that I don't put into my compost is meat, bones and woody plants. Even these things can eventually break down and turn into compost, but it would take too long. We want to get things breaking down quickly so that the nutrients that are locked inside of them can be released and fed to our plants. Compost also has the ability to unlock nutrients that are locked in our soils, also making them available to our plants.

### **Creating a composting system**

I'm a little nutty about compost because, for me, the stuff is like gold. My philosophy is: 'look after your soil and your plants will look after themselves'. And compost is the best, and cheapest, soil conditioner you could ever find. I have a few compost bins, although you will probably only need two standard, shop-bought, plastic compost bins (like the one in the photo which sits inside my plot). You need two so that one can be breaking-down while the other is filling up. Standard plastic compost bins with a lid have their good and bad points. I like them because they heat up nicely and get things cooking quickly. With the right mix (and I will show you how to do this) you can have ready-to-use compost in a month. Quick compost means quick nutrient flows, which means higher fertility and higher yields in your plot. The downside to these plastic compost bins is that they don't aerate quite well enough which means that things turn sloppy for a while and you can attract fruit flies and other insects that feed on decaying material. However, you will get

good compost fairly quickly and the inconvenience of a few fruit flies is a small price to pay, in my view. I also have a few home-made larger compost bins made from sheets of second-hand corrugated iron. I am able to generate large quantities of compost with these bins because I try not to throw any organic material away. I am in the habit of adding organic materials to my compost bins so it really doesn't seem like any effort at all. Turnable compost bins are also available, and are probably the best, and quickest compost producing bins of all, although they are quite expensive when compared to the alternatives.



Shop-bought plastic compost bins are an easy way to get started.

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These larger compost bins were constructed from second-hand corrugated iron sheets. They cost very little to construct and can produce large amounts of compost. My 8x8 foot test garden can be seen behind the corrugated iron compost bins. Perfect compost

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## Perfect compost

When you add organic material to your compost bin, add it in layers. Each layer should be a different material to the last layer, so that you don't get too much of the same thing in a giant clump. Big clumps of the same material take a long time to decay. You will get useable compost eventually, but it will take many times longer. Each layer shouldn't be thicker than about 6 inches of loose material.

The organic material you put into your compost bin should be a mix of hot and cold materials. By hot materials I mean fresh grass clippings, kitchen scraps and manures. Cold materials are things like dried grass clippings, shredded newspaper and leaves. Fresh grass clippings really get the compost cooking nicely, but on their own will not break down well. Mix them with some leaves and manure and you will get very nice compost, very quickly.



I am fortunate enough to have easy access to manure. We have a horse, some chickens and a few pet rabbits. For people in the suburbs, manure may be difficult to come across. However, manure is not essential to making good compost. A good mix of leaves, shredded newspaper, dry and wet grass clippings, and kitchen scraps will do the job nicely. To speed things up you could throw a handful of pelleted chicken manure (bought at the hardware) between each layer. It may seem strange to feed fertilizer to your compost rather than your plants, but the nutrients will eventually end up in the same place anyway. And if it helps to get the nutrients flowing more quickly, then it is a very worthwhile investment. If I lived in the suburbs, I would probably make the effort to get hold of some horse manure. It can often be scavenged at no cost from stables. I would store it in a three sided bay and add it to my compost between layers of grass clippings and kitchen scraps. It might seem like a bit of trouble, but I have learnt to appreciate the benefits of good compost.

If your compost is taking longer than you would like it to and not heating up, you probably should empty out the bin and put it all back in again. This will give it a good stir up and aeration. When you are forking it back in, throw some handfuls of pelleted chicken manure in between layers. This should get some anaerobic activity happening and things should start heating up nicely. Also, if your compost is very dry you should water it. This is generally only necessary during hot, dry spells.

When you remove dead plants from your plot, most of them can be put straight into the compost bin. There are just two

things to consider before doing this. Firstly, be sure that the plants are not too woody. The lower half of corn stems are too woody to put into a compost bin. They will take too long to break down. I put mine through a small electric shredder that I purchased from a hardware store. I also put sunflower stalks through it, but rarely use it for anything else. A shredder is not a necessary piece of equipment in being a successful Food4Wealth practitioner, but handy at times nonetheless.

The second thing to consider when adding dead plants to your compost is the quantity that you put in. Remember not to put too much of any one type of material in a clump. If you have a massive amount of plant material ready to go into the compost, you may need to store it some-where and add it in between layers of grass clippings and kitchen scraps when you have them available. It's just a small inconvenience for a huge return. Believe me when I say compost is like gold, and it is worth investing a little time and effort into its production.

## **Using your compost**

Compost is only to be used as surface mulch and never dug into the soil. Use it liberally on any bare patches, no matter how small these bare patches are. You can easily plant through the compost layer using seedlings, and after a few seasons your Food4Wealth plot will have enough seed stores in the soil that self-seeding will occur automatically in these bare patches, even through the compost layer. I have found that weeds don't like compost, but good plants seem to be able to come up through it.

## **A word about Manure**

Most people only use manures from herbivores (plant eating animals) such as cows, horses, rabbits and chickens (although chickens aren't strictly herbivores) Using the manure from carnivores (meat eating) and omnivores (meat and plant eating) such as cats, dogs and pigs comes with a higher risk of spreading disease. Whilst it is possible to safely use these manures, a super-hot composting system is needed to ensure all harmful pathogens are killed. Alternatively, these manures can be composted separately and either used on ornamental plants or used to grow legumes such as clover or lucerne, which can be cut and used as mulch on your Food4Wealth plot.

The average backyard food-growing enthusiast is probably better to stick with herbivorous animal manures, such as cow, horse, chicken and rabbit. But remember; always put it into the compost first. When fresh, manures are not chemically balanced and cannot provide plants with the correct nutrients. There is also the risk of your plants being burnt from high levels of ammonium.

# Planting and Propagation

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## **Planting out your Food4Wealth plot**

**T**he planting out of your Food4Wealth plot differs dramatically from traditional vegetable gardens. The Food4Wealth plot is far more densely planted. It uses succession planting schemes to achieve a far higher yield than traditional vegetable gardens. It's this dense planting arrangement that also reduces or eliminates weeds, keeps the soil surface protected and moist, extends plant life and builds the biological mass. What we are doing is filling up all the available niche spaces within the system, just like you would find in a pristine natural ecosystem. A pristine natural ecosystem doesn't have weed problems - everything is in perfect balance. It's only through human intervention that natural systems get out of balance.

Another important aspect of natural ecosystems is the succession layering and diversity that occurs. Put simply, this is the way that different plants grow together, creating mutual benefits for one another. Sometimes horticulturists call this

companion planting. I don't like this term because it conjures up images of mythical relationships between specific plant varieties that only an academic could understand. And the truth is, that most of these myths aren't even true. It's by understanding the ecology of plants and their environmental relationships that we can create a system that's harmonious and balanced.

Sure, the processes are complex, but we don't need to fully understand them. In a rainforest we have massive diversity. There are thousands of different species from huge towering trees providing a protective canopy, to middle storey shrubs and smaller ground cover plants. If a niche space becomes available, say, from a large tree falling, dormant seeds in the soil will burst to life and quickly fill the available niche spaces. Balance is rapidly restored. The same thing happens in the Food4Wealth plot.

The diverse planting style of the Food4Wealth plot also protects the plants from pests. Plants benefit from each other when one plant disguises another, making it more difficult for pests to find. The crowded nature of the Food4Wealth plot ensures that the specific shapes of the individual plants are all blurred into a shapeless mass, making it more difficult for pests to identify. This planting style also disguises the smell of individual plants. In fact, the smells are so different and varied that some plants will actually repel pests that may be attracted to other plants. In summary, the mixed up, crowded nature of the Food4Wealth plot makes it very difficult for pests to see and smell their target food.



The diverse and crowded nature of the Food4Wealth plot outcompetes weeds, confuses pests and produces high yields.

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## **How do we achieve balance and harmony?**

Initially you will just replicate the planting guide offered in this e-book, but over the years you will develop an innate understanding of ecological processes, simply by observing your Food4Wealth plot.

You will witness niche spaces being filled. Nature won't tolerate empty niche spaces like bare soil, and if the conditions are right, and the right resources are available, the niche space will be filled with something desirable. However, if we try to create a monoculture, such as perfect rows of just one plant species, what happens is that nature will try to fill the empty

niche spaces. But because the right resources and conditions are not available, weeds will fill the niche spaces instead. Weeds are really just colonizing plants for unbalanced systems. The Food4Wealth method does not have this problem because there are very few empty niche spaces.

## **Let's get started**

Now that you have your beds in place and you have the knowledge to make compost, you are ready to start planting out your Food4Wealth plot. But you will need to know where to get your plants from and how to plant them.

## **Where should I get my plants from?**

If you want to get up and running quickly you will need to buy established seedlings in punnets (a small container that plants in nurseries are sold in, sometimes called a six-pack) from a nursery or hardware. They may seem expensive, but if you follow the techniques in this e-book, your seedlings will go on to create future generations, meaning that you will rarely have to buy them again. In that regard, seedlings are a very cost effective and easy way to get your Food4Wealth plot up and running quickly.

Alternatively, you could grow your own seedlings from seed. This is quite simple and inexpensive, but it will take a month to six weeks for the seedlings to be ready to plant out.

If you are growing from seeds sown in punnets, find a position that gets good morning sun, but protected from really hot sun. They need to be kept moist and never allowed to totally dry out. I use a small plastic hot house that I purchased

for around \$40. It has four levels. I only need to use one level for my vegetable seedlings. The rest is generally used to propagate ornamental plants which can be sold for very good money. A little hot house like this can literally propagate thousands of dollars worth of plants each year.



An inexpensive hot house that is ideal for propagation.

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Sow your vegetable seeds in punnets. A punnet is a small plastic tray that hold about 6-8 plants - just like the one that established seedlings come in. If you can't get hold of any punnets, simply make your own out of old margarine and yoghurt containers with some drainage holes punched in the bottom. Follow the sowing guidelines on the seed packets. If unsure, plant them shallow, at about the same depth as they are big. For example, plant a 2mm seed 2mm deep. You can sow them in propagation mix bought from the nursery or make your own using sieved compost mixed with a bit of



potting mix or sieved garden soil. Fill the punnet up with the propagation mix and plant the seeds on the surface. Cover with the desired depth of soil, firming gently. Water them every day. Once they germinate you can water them with a weak solution of liquid sea-weed or fish emulsion to speed things up. When they seem strong enough to handle and there are good roots coming through the drainage holes, they are ready to plant into the plot.

Before removing the plants from the punnet, you should put the whole punnet underwater to thoroughly wet the soil. Then carefully remove the entire contents by turning upside down into your hand. Put it down carefully. Don't try to pull the plants apart. Get a knife and cut through the soil so that each plant gets its own clump of soil. This will minimize root disturbance.

If there are two plants really close together, and you don't feel as though you can separate them without breaking them, here's what to do. If the plant is a smallish plant that came from a smallish seed (for example lettuce, spring onion, swiss chard) then you can simply plant them together and let them grow right next to each other. Sure, they will be crowded, but they will find a way to grow together - it happens all the time in nature. This problem rarely happens with plants from bigger seeds (such as pumpkin, zucchini, cucumber, corn) because you can easily sow the seeds one at a time, ensuring they are not put too closely together. However, if you do have two of these plants that are right next to each other, you should sacrifice the more inferior-looking one by cutting it off at the base with some scissors. Don't pull it out because it will disturb the roots of the other.

## What to plant from seedlings and what to sow directly

A packet of seeds is very cheap and will usually last for 2-3 years. There are certain plants that are so easy to grow straight from seed that it's not really worth spending money on buying established seedlings. Plants with bigger seeds usually fit this category, and they include; pumpkin, zucchini, cucumber, peas, beans and corn. They can be planted directly into the plot, exactly where you want them to grow. I usually place a small stake or stick in the soil next to where I have planted the seed so I can remember where it is.

Plants with smaller seeds are easy to germinate too, but are probably best started in punnets. These plants include swiss chard, spring onions, lettuce, celery, carrots and tomatoes. If you don't mind spending a few dollars it might be good to get yourself a few established seedling pun-nets of these plants as well as a packet of seeds. That way you can get the seedlings into the plot straight away (as long as it's the right time of year) and at the same time, get your own punnets started. You will then have staggered planting with the established shop-bought seedlings maturing first, followed by your home-grown seedlings a month or so later. Once you've done this for the first year you will have more experience with growing from seed and can organize yourself better for the following year. Also, some of your plants will have dropped seeds into the plot by the second year and you will get the benefits of automatic self-seeding.

I still buy the odd seedling punnet from the nursery if I like the look of something. I also do it because I'm always look-

ing to diversify my plot. Last year I saw some beautiful swiss chard with bright yellow, red, pink and crimson stems - almost fluorescent. I will allow them to go to seed and will be able to keep those varieties going for years and years. It was definitely a well-spent couple of dollars. I also bought a punnet of spring onions because I saw one that literally had more than 50 plants squeezed into it. That's a pretty cheap and easy way to boost my spring onion reserves. The money you spend (usually around \$2-3) is well worth it, as it will produce vegetables worth many times the initial cost.

My advice is to buy a few established punnets to get yourself started, especially the small seed varieties. Many of these will go on to produce their own seed and give you years of future crops. Try growing seeds in your own punnets too, especially lettuce, carrots and swiss chard. They all germinate quickly and easily and a packet of seeds will give you hundreds of plants for little cost. As for the bigger seed varieties, don't bother buying established seedlings. Just get a packet of seeds and plant them directly where you want them to grow.

Before buying your seeds I encourage you to read the chapter on 'seed selection', which discusses the importance of using open-pollinated seeds.

<b>Seeds to sow directly into plot</b>	pumpkins, zucchini, cucumber, squash, corn, sunflower, peas, beans
<b>Seeds to sow in punnets or buy established punnets</b>	swiss chard, spring onion, celery, carrot, lettuce, tomatoes, parsnip

## How to plant a plant

Planting in the Food4Wealth plot is slightly different than a traditional garden in a few ways. Firstly, the number 1 rule is no excess digging. Digging a garden bed all over is simply disturbing the ecology. Digging promotes the germination of weeds. After digging a garden, the first colonizers to hit the disturbed scene are weeds. That's why the old fashioned hoe for weeding is the number 1 tool for the traditional gardener. You won't need to use a hoe in your Food4Wealth plot. When you dig a hole to plant a seedling, you only dig a hole big enough to plant the seedling. I actually use a 2" wide paint scraper to plant my seedlings. I simply dig it into the soil to a depth of about 2" and pull it to the side to open up a hole. Then I pop the seedling in and press around the soil to firm it up. The whole process takes me about 5 seconds per seedling. As you can image, I can get a lot of planting done quickly with this method.

If you have just put together a plot like the one mentioned in this book, you may dig down and hit the straw pretty quickly. You can't plant the roots straight into straw so what you need to do is make a small hole (about 3 by 3") and fill it with a handful of compost or garden soil. Then, plant the seedling into the compost or garden soil.

It's best to avoid planting new seedlings in the hottest part of the day and always water them as soon as they have been planted.



Planting in straw. Firstly, make a small hole in the straw.

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Secondly, put a few handfuls of compost into the hole.

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And lastly, plant the seedling into the compost.

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# Care of Your Food4Wealth Plot

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## Watering your Food4Wealth plot

**T**he Food4Wealth plot requires less water than a traditional vegetable garden. This is because the Food4Wealth plot has little or no exposed soil. The crowded nature of this method means that the soil is never exposed to the sun. The dense understory creates an ideal humid environment. Traditional gardens have vast areas of exposed soil which bakes in the sun. The top layer of soil usually gets crusted and compact. Digging over the crusted surface is a poor remedy, as this just brings the lower, wetter soil to the surface to be dried out further. The result is soil that loses its structural properties. When a soil loses its structure, it loses its ability to hold water. It also loses its ability to release nutrients to plants.

The Food4Wealth plot never suffers from this problem because the soil is always protected. Your soil is precious. It's the most important part of your plot's success. Look after it, and it will look after you.

When you first put together your Food4Wealth plot and it is just sup-*porting* seedlings, you will need to water it regularly. Young seedlings don't have a very extensive root system and need help to get their roots to grow big enough to be able to find deeper water reserves. Give your new seedlings a quick water every day for at least the first few days. You should continue this daily watering cycle until it is obvious that they are starting to grow and thrive. A weak solution of seaweed or fish emulsion solution can get things going nicely, but it is not absolutely necessary. When your plants are thriving you can back off to watering every 2-3 days. When there is a good ground cover and no bare patches, your Food4Wealth plot will live easily on weekly watering, although more frequent watering during extreme heat-waves would be advisable. If you are not sure whether or not your plot needs watering, just dig down into the soil. If it is dry and difficult to dig then it should be watered. If, on the other hand, it is dark, crumbly and moist it probably doesn't need watering at that time. Your plants are also a good indicator. Leafy plants, such as swiss chard, will wilt (but not die) when conditions are very dry. A good soak for at least half an hour is better for your plants. This gives the water time to soak deeply into the soil.

My 15 by 15 foot plot is watered by a single sprinkler set on a post in the middle. It's set at about three foot high, but you could make yours higher if you wish. Any lower and the spray tends to hit foliage, which causes dry spots around your plot. The other good way to water your plot is to use a form of weeping hose or drip-line. In fact, this type of watering is superior as the water goes straight to the root zone where it



is needed. There are numerous products available that slowly emit water at ground level. As your Food4Wealth plot has permanent beds and requires no digging, these drip-lines don't get in the way too much. They just stay in their position and you work around them. You would need to run at least two lines per bed so that the entire area was watered.

I don't have a strict watering schedule. I simply respond to the circumstances. During heat-waves I may water every few days, but generally speaking, weekly watering is more than adequate. When I first constructed my plot I didn't have a sprinkler set on a post. I simply placed my plastic compost bin right in the middle of the plot and sat a portable lawn sprinkler on top of it. It was an easy, cost-effective way to water my plot.

Recently, we had the worst heat-wave ever recorded in this area, with days over 100 degrees for a two week period. I allowed my 8 by 8 foot test plot to go without water for the period, just to see what would happen. The swiss chard wilted (but didn't die), the tomatoes produced lots of ripe fruit (tomatoes do that in hot weather), but the rest of the plants went on as usual. When we finally got a small drop of rain and some cooler weather, the swiss chard stood up again and everything went back to normal instantly. It confirmed in me just how resilient the Food4Wealth method is.

## **Weeding**

Your Food4Wealth plot will get far less weeds than a traditional garden, for a few reasons. Firstly, it is so crowded that weeds are outcompeted by the good plants. Secondly, the soil

is less disturbed because we don't dig and turn it. Disturbed soils excite weed seeds that are present. They spring into life as soon as the soil is disturbed because weeds are the ultimate niche filler. And thirdly, bare patches are quickly covered in a layer of compost which acts as a weed suppressant mulch.

However, in the first few months, your Food4Wealth plot will not be thickly covered in plants and the odd weed may find its way in. If you have put together your plot using layers of hay and organic matter (as described earlier in the e-book), then weeds will be minimal and very quick and easy to remove. It's best to get down and pull them out by hand. It should be just a few minutes work to weed an entire bed. Simply pull them out, roots and all, and leave them lying on top of the bed. They will dry up in a few days and add to the organic content of the plot.

My Food4Wealth plot is mature and I have hard compacted soil on my pathways. Your plot may have carpet pathways until it rots away, or you may decide to replace the carpet every few years to stop weeds. In any case, I do get a few weeds growing along the pathways from time to time. About 2-3 times a year I simply scrape a shovel along the paths and slice the weeds off. This takes about 5-10 minutes. I then leave the sliced off weeds lying around the pathways for a few days while they dry out. Then I simply rake them up onto the beds to act as a mulch layer. Alternatively, I could pop them into the compost bin.

The wonderful thing about my Food4Wealth plot is that it can go for months at a time without any attention. Twice a year I spend a few hours removing finished plants and cover-

ing the bare patches with compost. That's all. The rest of the time I just pick vegetables from it.

## **Pests**

The Food4Wealth method works very effectively to confuse insect pests; however, there are some pests that will require physical exclusion. I'm talking about larger pests such as rabbits, monkeys, squirrels, pos-sums, gophers, kangaroos, bears, deer; the list could go on and on. It is impossible for me to give detailed information on all of the world's potential problem animals, as each location will differ from the next. At my own property the only animal I have to exclude from my plot are my own chickens. For this I use a four foot fence. If I didn't exclude them, they would scratch out any new seedlings, and eat certain plants. In some regions, more elaborate netting will be required to exclude animals that can jump or fly over fences.

It is therefore essential that you do your own research into these potential animal pests. The best way to do this is to see what other local vegetable gardeners are doing. They are likely to have encountered the same problems that you will encounter in regards to these larger animals.

# Top 10 Plants

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## **What should I plant?**

To get you started I have listed the top ten plants I believe will get you up and running successfully. I encourage diversity and urge you to add more varieties to your plot over time. However, if you have never grown vegetables before, these ten plants will give you good results in the first season.

## **My top ten plants to get you started**

The following plants are ideally planted out in springtime. Generally speaking, the frost hardy ones should be planted out in early spring and the frost sensitive ones should be planted out in late spring. There is a table at the end of the chapter to assist you.

### 1 - Swiss Chard (Silverbeet)

“Oh no”, I can hear you say, “That’s a boring plant”. Yes, I agree swiss chard is something I would never buy from a supermarket. Commercial-ly-grown swiss chard is tough and leathery and is only fit for a goat. However, there are a few

reasons why this is the number 1 plant in your Food4Wealth plot.

Remember when I said we will be using succession layering. Well, swiss chard is your primary ground cover. It will act as a living green mulch. It will shade your soil, keep weeds out and provide micro-climate opportunities and protection for your other plants. But we can't let it get big and tasteless like the supermarket ones.

Firstly, we need to plant it thickly and start picking it young, when the leaves are only 4 inches long. They are so much more tender than shop-bought swiss chard leaves and so much more versatile. It's much easier to use small tender leaves in cooking than big leathery ones. In fact, the really young leaves can be eaten raw just like lettuce.

Another reason swiss chard scored number one is that it is so unbelievably healthy. Packed with iron and foliate, nutritionists generally agree that we simply don't eat enough fresh green leafy vegetables. With your own endless supply, it's easy to get into the habit of picking a few leaves every day and adding it to every meal you prepare. It's simple when the leaves are young and tender, and to be honest, you won't even notice them in most dishes. But your body and general well-being will notice.

If the middle stem shoots up tall very quickly, it is trying to go to seed. If that happens, cut out the seeding stem and feed it to the compost or any other herbivore you may have around the place (rabbits, chickens, goats, horses etc.). You may like to allow one plant to go to seed to create future

seedlings, but only one. It's a very dominating plant and germinates easily. It's the ultimate niche space filler. If too many seedlings emerge you may need to scratch them out while they're young, or carefully pot them up and sell them as established seedlings.

If you have a swiss chard plant that is getting massive, has old rubbery leaves and is taking up too much space. Rather than pulling it out of the ground and disturbing the soil, you can actually slice it off at ground level, leaving a short stump and all the roots in place. A few weeks later it will start to re-shoot and you will soon have lovely juvenile leaves to eat.



Spring onions happily growing amongst other vegetables.

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## 2 - Spring Onions

Let's face it; you need to add some sort of onion to just about everything you cook. Spring Onions offer so much to the home grower because they are easier to grow than other bulb onions and they are very versatile when used in food preparation. They also regenerate fairly easily in your plot, so you should get some free plants each year. If you are finding that they aren't re-seeding you could try growing some in a punnet from seed in early spring. Otherwise, buy an established punnet each spring and plant them individually wherever you have space.

Spring Onions don't take up much room so you can plant them in the tiniest spaces between other plants. I find that a great way to plant them is rising up through the Swiss Chard jungle. It looks wonderful. If you don't eat them, they will go to seed. But hey, that doesn't really matter because the bottom white bit usually tastes good even after they go to seed. Occasionally one will be tough at the base. If this is the case, just feed it to the compost and try another. If you leave one or two seeded ones for long enough the seeds will mature and fall into the plot. They have smallish, nuggety black seeds which you can bang off into your hand and spread to other areas of the plot, if you wish.

The trick to picking, Spring Onions is to cut them off at soil level. Do not pull the whole plant out of the ground. Just cut them off and leave the bottom half-an-inch or so and the roots in the soil. After some time they will reshoot, sending up three or four new plants from the original plant. They won't grow as strong and as thick, but they taste just as good

and can be used in exactly the same way. It's a pretty easy way to get free plants with no effort.

### 3 - Carrots

Carrots are another vegetable that don't take up too much room and should be planted in the small spaces between other plants. My suggestion is not to worry too much about where you put them and how you arrange them. I often run a line of carrots along the edge of a bed simply because there isn't enough space to fit much else. I also place them here and there, wherever there is the smallest space available. In early spring I will sow my own carrots seeds into a half a dozen punnets. They germinate very quickly and will be ready to plant in less than a month. I will usually have a dwarf rapid growing variety and a bigger, slower growing variety. However, I mix them all up and sow them wherever I can fit them. I also pick them at various stages of maturity, not really worrying whether they are fully grown or not. Carrots are best sown and planted while it's still cool. Once the hot part of summer comes along they tend to turn fibrous and tasteless. Allow one to go to seed for future crops.

Carrots don't like soils with fresh manure or half-decayed compost. It contains too much soluble nitrogen, mostly in the form of ammonium. Your carrots will tend to be all tops and no bottoms. Don't worry too much if this happens to you. You can still eat them, although they are small. Over time your soil will become better balanced as the chemical make-up of the nitrogen in the manure changes. The manure will eventually break-down and provide a better balanced



source of food for your plants. As your compost system develops you won't have the need to use manure on your garden as any manure you have will always go through your compost where it can break-down fully before use.

When you plant a carrot, don't worry about digging the soil to any extraordinary depth. Simply dig as deep as the root on the seedling (approximately 2 inches). The new carrot will push through any lower compact soil as it grows

#### 4 - Snow Peas

Snow Peas are easy to grow but expensive to buy. And besides, the supermarket snow peas are old and rubbery. Snow Peas are one of those vegetables you need to eat fresh off the plant to really enjoy. Of course, you will need to grow them up a fence or some type of supporting framework. They have tendrils that they use to grab onto the wire and climb. They can be planted out in spring, but it's best to start sowing seeds earlier in mid-winter, followed up by an additional sow in spring. You should always plant the seeds directly into the soil at the base of the fence. A packet of seeds should last you a few seasons. Plant them very closely, about 2-3 inches apart. Once they start cropping you should be out there picking every day. You eat the pod and all. They mature quickly and should be picked before they develop mature, round seeds inside the pod. The perfect Snow Pea is quite flat, unlike the bumpy ones you buy at the supermarket. They are a good source of protein and they are great for your soil. They are a legume, and like all legumes (which include all peas and beans) they take nitrogen from the atmosphere

and fix it into their cells. The old dying plants are put into the compost and the nitrogen eventually makes its way back into your plot.

## 5 - Lettuce

Lettuce is another handy green leafy vegetable that's very good for you. The most common variety is Iceberg, which forms a lovely dense heart. It's a lovely lettuce, but to start with you are probably better off growing some of the heartless varieties. If you live in a tropical or sub-tropical area, forget about even trying to grow Iceberg. In these areas the best lettuces are the oak leaf-shaped lettuces. Lettuces come in all shapes and colours, from bright-green narrow-leafed frilly ones to deep-red broad-leafed flat ones. These pretty, open-hearted varieties are easier to grow and better suited to the home grower because you can pick just a few leaves at a time. This will keep your lettuce supply fresh and lasting longer.

A good way to get started is to buy a mixed punnet. This will give you half a dozen or so different lettuces to get growing in your plot straight away. You can start picking them at quite an early age, taking outer leaves. I plant my lettuces very closely together, about six to seven inches apart. As they mature they form a dense ground cover. I find this an ideal situation as it keeps the lettuce quite insulated from the weather, and outcompetes weeds. They don't like hot weather and, by protecting them from extreme temperatures, will not bolt to seed so readily. I also like to plant them near the centre of my Food4Wealth plot. This offers even more protection. They are easy to grow, but taste much better when

they have not been allowed to dry out too much. Too much drying turns them bitter. Keeping them protected and cool by dense planting will help to prevent this problem. When they finally go to seed, choose one or two plants to develop seeds and pull the rest out. They can be fed to the compost or any other herbivorous animal.

## 6 - Celery

Celery is a plant that I love to grow. I find that it is always present in my Food4Wealth plot without me doing a thing. It works well with the Food4Wealth method and is trouble-free. I find it best to grow it in clumps. That way the inside stems are protected from too much sunlight and heat. I suggest starting with a shop-bought established punnet and dividing it into about three clumps. Plant them in various positions around your plot. They will be quite happy in the shadiest corner as well as sunny spots. Once growing, start picking them young. The stems only really need to be as thick as a pencil, and you can eat the whole plant, including the leaves. The leaves are quite nice on the young tender stems, but not as nice on older stems. If a stem turns round and tall, it is trying to go to seed. Cut it out at the base. The inner white flesh of these stems are actually very tasty once the fibrous outer is removed. Keep picking the stems as often as you can. As you move into summer they will bolt to seed more vigorously and the seeding stems will become unpalatable. At this stage, simply allow them to go to seed and stop using them. If the seed head gets too big and starts falling over other plants, you may need to trim them back with a pair of hedge clippers and stake them up high. After sum-

mer has ended and the seeds have matured and fallen, the plant will magically start to produce edible stems again. At that stage cut off all the older, inedible stems and it will be quickly restored into a food producing plant. It should keep producing right through winter and into the next spring. If you live in a cold area, this could go on for many years.

## 7 - Zucchini

If you have never had a vegetable garden before, you simply must try growing zucchini. But beware, they are a massive cropper and you will probably only need one, or perhaps two plants at the absolute most. They can take up a bit of space so I would suggest planting one on the outside of your Food4Wealth plot. Zucchini is frost sensitive and needs to be planted out after the frost period has finished. There are no real tricks to growing zucchini. Virtually anyone can do it, as long as you don't plant them until the frost season has finished. The biggest challenge is picking them fast enough. The best way is to keep picking them young, and I mean really young - about the size of your thumb. They are so much more tender and easier to cook when they are young, and by picking them young you will encourage the plant to keep cropping. You will be surprised at how many zucchinis a large healthy plant can produce in one season- probably far more than you can eat. We turn many of ours into Zucchini Chutney which is a great way to make them last throughout the year. If you ignore your plant for a week or so during cropping season you will find a giant zucchini has developed, sometimes two foot long and as thick as your leg. These are tougher and not so easy to use in the kitchen. Don't worry,

you can always collect seeds out of them (for future planting) and feed the rest to the compost. Some people stuff these giants and bake them. Others turn them into soup.

Zucchini germinate easily from seeds planted directly into the plot. Plant a group of 2 or 3. After they have germinated, select the best and snip out the others. There are also round zucchini varieties that are fun to grow. They are just as simple as growing the normal type, although the fruits are round and possibly not as prolific (but prolific nonetheless). Harvest them when they are the size of a tennis ball or smaller.

Your plant will usually die of exhaustion during autumn, after a long season of producing abundant food for you and your family. Remove the exhausted plant and place it in the compost.

## 8 - Tomatoes

Tomatoes are the quintessential home-growers crop. They would have to be the most commonly grown home produce. I guess it's because they are so versatile in the kitchen and the excess can easily be turned into bottled sauces and chutneys. But, the real reason that home-grown tomatoes are popular is because shop-bought tomatoes taste so poor in comparison. Shop-bought tomatoes have a tough exterior and sloppy, watery interior. Commercially grown tomato varieties are chosen for their outer presentation and their long shelf life.

The types of tomatoes sold in seed packets would not make very good commercial varieties. Their skin is too soft and

they don't have a long shelf life. But they taste great!

Tomatoes are very frost sensitive and need to be planted out after the frost period has finished. Plant your tomatoes down the middle of one of your beds. This way you can plant other crops either side of them, giving them more protection as well as making good use of space. If you stake them they will not take up too much room and other shorter plants can be grown quite close to their stems. Go for about 4-6 plants at first to get a feel for how many you need. Get a few different varieties so that you are increasing the diversity in your plot.

Pick them when they are half ripe and still quite hard. Bring them inside and place them on a warm window sill until they are ready to eat. By doing this you are far less likely to lose any to pests.

Tomatoes tend to self-seed very easily and will happen without you doing anything. Often a few rotten tomatoes will fall off a plant without you noticing. The seeds from these rotten fruits will create next year's crop. You may also get some tomato seeds in your compost. Whilst you may not want to rely on self-seeding initially, I have found the self-seeded plants to be very tough and reliable croppers. Perhaps you may want to buy a couple of established tomato plants in your second year until you feel confident in relying on the self-sown plants.



A self-sown tomato growing amongst other plants.

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## 9 - Potatoes

Potatoes are a staple food, and with good reason. They are easy to grow and they store well. Without potatoes, many civilizations wouldn't be what they are today. Home-grown potatoes are delicious and tasty, unlike so many you buy in the supermarket.

Potatoes need their own space, so it's often best to assign a part of your plot that is just used for potatoes, and only potatoes. And anyway, they're difficult to get rid of once you have them so it's best to keep them contained in their own

position. I'd suggest assigning a third to a half of one of your individual beds solely to potatoes. Put them on an outside bed, leaving the inner beds for the diverse plantings. Create rows going across the bed so that each row is about two foot wide and three foot long (as three foot is the width of the larger bed). Dig a path (across the bed) and throw the soil from the path onto the potato rows. Make three to four potato rows. They should now look like mounds. If your plot is brand new and you have built it using the straw method, simply plant the potatoes in the straw, under the top compost layer.



Potato mounds running adjacent to the main path.

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In early to mid-spring plant certified seed potatoes about 3-4 inches below the surface and about 5-6 inches apart. Certified seed potatoes can be purchased from a nursery or garden centre and look just like ordinary potatoes. They are certified to be disease-free and of a true variety. The official time to



plant them is four weeks before the last frost. This is almost impossible to predict but it gives you a general idea. The potato plants will grow very quickly once they get started. The plants are frost sensitive, but don't worry if they get burned by a late frost, they will bounce back. When you have available compost, place it onto the side of the mounds that the plants are growing in, even covering up the stem of the plant. If you see exposed potatoes in the soil at any stage, quickly cover them over with compost, soil or even straw. Exposed potatoes will turn green and be poisonous if eaten.

You can harvest potatoes early by carefully digging in the soil and picking them one by one. However, most people do a single big harvest at the end of the season (usually early to mid autumn) when the plant dies down. You can use a fork to loosen the soil, then comb through it with your fingers hunting for potatoes. Don't wash them. Just give them a light rub. If the soil is wet, dry them in the sun just long enough to dry the soil, then hang them in a hessian bag (or any other sort of breathable bag, such as a pillow case) in a cool, dark, dry place with good ventilation. They should keep all through winter and not start shooting until the weather warms up in spring. The shooting potatoes can be replanted the following year along with any green ones.

When you have finished harvesting your potatoes, cover your potato mounds with plenty of compost and leave them unplanted for winter. When spring comes you can plant out any shooting potatoes and any green potatoes you have in your stores. If you don't have enough to plant out your entire mounds, simply buy some additional certified seed potatoes.

After a few seasons you may not need to buy certified seed potatoes again.

## 10 - Rhubarb

The reason I have chosen rhubarb is that it is an easy plant for the novice to grow, they crop prolifically and they are used as a sweetener rather than just another staple vegetable. Once they're in the ground they require very little attention to keep producing for years.

Rhubarb is a perennial plant, meaning that it keeps producing year after year unlike many other plants in your plot. Therefore, it requires a space all to itself. I would suggest placing it on an outer corner of your plot because it doesn't require the benefit of the interior micro-climate protection. It's best to buy some crowns from a nursery and plant them about one foot apart. Six crowns would be an adequate amount to get you set up. When you pick the stems, try to break them off (not cut) so the sheath at the base come away clean. By choosing an outer stem and bending it away from the core and pushing down at the same time, you will find it breaks away easily. Cut the leaf off immediately and put it in the compost. The leaves are poisonous. Make sure you alert everyone in your family about the poisonous leaves.

Rhubarb dies down in winter completely in cold areas, and slows down in temperate areas. During this dormant period you should add plenty of compost or old manure. You can cover the area quite thickly as the new shoots will easily push through once the soil warms up in the following spring. Feeding with compost or manure is very important as rhu-

barb is a heavy feeder. If you don't have enough compost or manure, a few handfuls of pelleted chicken manure purchased from your local hardware or garden centre would be highly recommended.

## Here Are Some Other Good Spring Plants

### Parsnip

Parsnips are easy to grow, but will only germinate from fresh seed. Buy the newest seed packet you can find and try to get them going in a punnet first. You will probably only get a small percentage that will germinate, but that's plenty. Once you've got them growing in your plot choose a big healthy one and allow it to go to seed. It will take quite a while and will get pretty big, but once it has seeded you will have parsnips for the rest of time (as long as you repeat the process of allowing one to go to seed every year). Harvest the rest of your parsnips when they are smallish to medium in size. Dig around the soil surface and see how big the root head is. If it's more than about one and a half inches then the parsnip is probably a good size. If you allow them to get too big they can be quite difficult to pull from the soil, in which case, you will need to carefully dig around with a hand spade until the parsnip pulls out easily.

### Cucumber

Cucumbers need fairly good sunshine, although I've grown them reasonably well in very shaded, overcrowded conditions. Try them on the outside of your plot on the sunny

side. They germinate very easily from seed. Cucumber is very frost sensitive and needs to be planted out after the frost period has finished.

## Corn

Corn needs to be grown in a block because it is wind pollinated. You can't just spread them around the plot like most other plants. For this reason you need a reasonably large clear space (3 by 3 foot minimum). Plant them about 8 inches apart. The corn will dominate the entire space and feed hungrily on your soil. You probably should feed it with pelleted chicken manure during and after the crop, until you have good compost stores available.

The corn cobs will grow along the stems, sticking out at an upward erect angle. Wait until the hairy tops (silks) have shriveled up before being tempted to pick. Pull down a few outer leaves while the cob is still attached to the plant to see if the corn is ready to pick. Immature corn will have white skinny kernels. Don't pick until the kernels are round and yellow. Corn is very frost sensitive and needs to be planted out after the frost period has finished.

## Pumpkin

Pumpkins are a wonderful staple vegetable that has been an important food source for many civilizations. They are fairly easy to grow and, after picking, can be stored in a cool ventilated position for months and months. They are planted out in late spring (after the frost period is finished) and allowed

to roam free all summer. They will not really gain momentum until the soil is warm. By the end of summer they will be growing very quickly. The plant will die down when the weather cools. You should leave the fruits on the vine as long as possible, although it is best to harvest them before any hard frosts, because in extreme cases the fruit can get frostbitten. Leave harvested fruits out in the sun on a hot concrete surface or tin roof for at least two weeks, bringing under cover each night. This cures the skin making it tough and protective. Store in a cool ventilated place only after the stem has withered. Do not eat pump-kins that have gone off (soft spots, green mould spots etc.) They are poisonous. Discard them if you have any doubts.

Regular pumpkin varieties take up too much space to grow in your Food4Wealth plot. Either grow them in another position where they can ramble, or grow one or two of the bush varieties. They produce small, nugget-like pumpkins and will take up about the same room as a zucchini plant. Plant them on the outside of your plot.

## And some more good plants to plant in spring

*Parsley* - should keep coming back year after year

*Chives* - a perennial plant, so situate in a permanent position.

*Garlic* –is usually planted in autumn and grown through winter. However, if you planted some bulbs in spring you would find that they would grow. The bulbs may not develop properly, but you can actually eat the bits above the ground, the same way that you eat a spring onion. And, you still get the garlic taste.

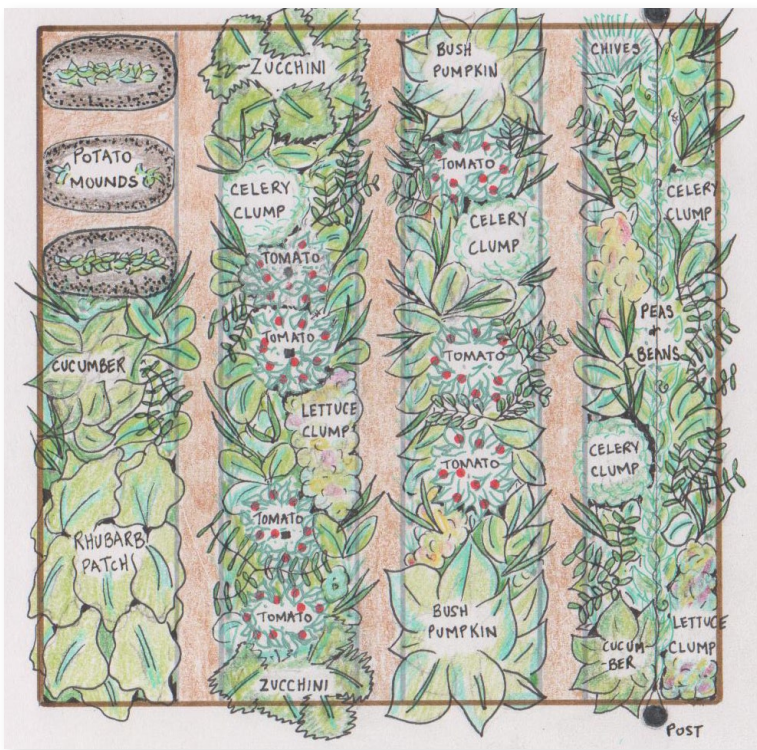
*Capsicum* (peppers) – grown in the same way as tomatoes.

## Table of Frost Hardy and Frost Sensitive Plants

<b>Frost hardy plants that can be planted in early spring</b>	swiss chard, lettuce, carrot, spring onion, snow peas, celery, parsley, chives, garlic, parsnip, rhubarb
<b>Frost sensitive plants that should be planted out after the frosts have finished</b>	Zucchini, tomatoes, potatoes, cucumber, pumpkins, corn

## Planting guide

Here is a diagram of a 15 by 15 foot Food4Wealth plot showing a typical planting formation. Note how closely the plants are planted together. The potato and rhubarb beds are permanent and placed on the outside of the plot. The pea and bean fence has also been placed on an outer bed and will stay in that position. The inner beds are generally thick and diverse and contain a mixture of swiss chard, tomatoes, lettuce, carrots, spring onions, parsnip and celery. These diverse areas will be constantly in a natural state of change, just like a natural ecosystem.



A 15 by 15 foot plot showing a typical planting formation.

When you plant out your plot, I suggest that you do it in this order. Firstly, assign the areas and plant out (if the timing is right) all the plants that need to be group-planted and/or have their own permanent positions. This includes potatoes, corn, snow peas (or other climbing peas and beans) and rhubarb. Then, plant all the larger plants. These include tomatoes, zucchinis, cucumbers and bush pumpkins. The remaining areas will be planted out with the dense mix. This is mostly made up of green-leafy vegetables such lettuce, swiss chard, celery, spring onions, parsnips and carrots. These plants are mixed up randomly and can be planted about 4 inches apart. When planting, you simply have all of your punnets nearby and randomly take a seedling from one and plant it. Move along 4 inches (in any direction) and plant another seedling from a different punnet. Continue over and over until all available areas are completely full. When planting out this mixed-up jungle, you can go fairly close to your, already planted, tomato plants; to about 15 inches from the base. Bush pumpkins and zucchini will need more room so leave a space of about 24 inches from their base. In summary, get your permanent plants in first, plant your large plants next and then fill all available spaces with the mixed-up jungle.

If you are just starting out in spring and you live in an area that has frosts, you may have the problem of wanting to get your frost hardy plants in straight away, but are not able to plant the frost-sensitive ones for a while. My suggestion is to use stakes to mark out all the positions where your frost-sensitive plants will go. Then, plant all your frost-hardy plants around these stakes, leaving the necessary amount of space around each stake.



# Seasons

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## **What to do at the end of summer**

Although your Food4Wealth plot is full at the end the end of summer, you might want to start thinking about your winter crop. Your winter crop will be planted in early to mid-autumn, but if you intend to sow seeds in punnets, they will need 4-6 weeks to be ready for planting. So late summer is the time to start sowing winter crop seeds. A winter crop guide will be discussed later in the e-book. However, if you are just going to buy established seedlings in a punnet from a nursery or hard-ware, you can forget about your winter crop at this stage. Simply buy the seedlings you require in early to mid-autumn and plant them straight away.

Sometime during autumn you may notice some of your plants finishing. They may be past their use-by date. Zucchini leaves will turn silver as the plant takes its final few breaths. Cucumber and corn leaves will turn yellow and stop producing. Many plants will die overnight at the first frost. All of these plants should be removed from the plot to make way for the winter crop. However, there is a very important step you need to take before you plant your winter crop.

After your expired summer plants are removed, you will have patches of bare soil. Bare soil is not good. It is an empty niche space that is just inviting weeds into your plot. So how do we treat this bare soil? Firstly, remove any weeds that may have been hiding amongst your crops. This should take only a few minutes. Do not dig the soil, simply pull the weeds out, and if necessary, loosen the soil with a hand spade (I just use a paint scraper for this job) just enough to be able to pull out the weed, roots and all. Remember, minimal soil disturbance is an important key to the success of this method.

Once the area is clear of plants and weeds just smooth it over a little. You can sprinkle a layer of organic fertilizer over the area if you feel that the crops weren't as lush as they should have been. This may be a good thing to do for the first couple of years, but shouldn't be necessary once your Food4Wealth plot is well established and you are producing good quality compost. Next, you need to add a layer of compost (about 2-3 inches thick) over the bare area. This is an extremely important step. The compost will regulate the soil temperature, keeping it moist and holding nutrients. The compost will also keep the weeds away.

So remember, cover bare patches with compost immediately.

## **Autumn planting**

Your zucchinis and cucumbers finally keeled over, your corn has all been eaten and your peas and beans have collapsed - it's autumn. You have pulled out the expired crops and covered your bare areas with compost. Your Food4Wealth plot should be still generously covered in swiss chard, spring on-

ions, celery, parsnips and lettuce. There may also be the odd plant with mature seed heads creating future generations. The days are still warm with cool nights and brisk mornings - you are ready to plant your winter crops.

Many people don't bother with winter crops. They usually clean out the vegetable garden entirely and leave it sitting bare all winter. The Food4Wealth plot, however, is never bare. It may go through a thinning transition in autumn, but it's still providing you with food. Many people also say that winter vegetables such as cabbage and broccoli bolt to seed and are too much trouble. That's simply because they get them in too late. You need to get them in while there is still a bit of warmth in the soil. They need to get growing during autumn so they are reasonably mature when winter hits.

Once again, plant your winter crop more densely than a traditional gardener would. You can plant out cabbages, broccoli, brussels sprouts and cauliflower all mixed up together at 10 inch intervals, but squeeze in some leek, baby spinach, pak choy and spinach between them. Your bare patches should only look bare for about 3-4 weeks. You can plant some more lettuces and carrots at this time of year as well.

<b>Winter Crops to be planted in autumn</b>	cauliflower, cabbage, brussels sprouts, broccoli, leeks, onions, spinach, baby spinach, beans
<b>Spring plants that can also be planted in autumn</b>	Lettuce, carrots, pak choy

After your Food4Wealth plot has been established for a few years and you allow plants to go to seed each cycle, you will find that the bare patches will automatically self-seed. Sometimes it happens too thickly and you need to thin the area out, but there is little effort in doing this. You will get a feel for what plants you can rely on to self-seed and what plants you will need to replant. Some plants such as Pak Choy are vigorous self-seeders and you will never go without. They are an excellent green leafy plant that is both versatile and opportunistic.

Many varieties of beans can also be planted out in autumn but check the seed packet directions for your zone. Plant bean seeds directly in the soil at the base of your climbing frame or fence.

## **Winter**

In the middle of winter you can start planting snow pea seeds and follow up with another planting in spring. Your winter crops will be feeding you well in late winter and early spring. You should be harvesting the crops whilst they are young and tender. Take clumps of broccoli often and your plants will keep producing much longer. The same goes for all the other winter plants. As your winter crops stop producing, select the ones you will be allowing to go to seed and remove the others. Immediately cover bare ground with compost. In late winter/early spring you could start sowing some spring plant seeds in punnets, in a fairly protected position. Most of the small seed plants such as lettuce, carrots, spring onion, swiss chard and parsnip can be sown at this time. The bigger seed plants such as zucchini, cucumber and pumpkin can be

sown later in mid-spring and planted out after the final frost. It doesn't matter if you sow too many seeds in punnets, because it's so inexpensive and, with the Food4Wealth method, you can squeeze a lot of plants into a small space. With each year you will get a better feel for how much you need to sow. Once your plot is well-established you may not need to sow any at all. Your plants will self-seed automatically.

Winter can be a time of less diversity but you should always have, at the very least, greens to eat and your plot should always have a reasonable cover of plants.

## **After winter**

As you enter spring, your plot is ready for its next cycle. You will have some self-seeding happening even in your second year, from the progeny of last year's crops. Spring is a magical time and plants know it. They just wake up all of a sudden and your empty niches begin to fill.

At this stage you won't have a good idea of what plants you can rely on for self-seeding and what plants you need to buy. My advice is not to rush out too quickly. Most people plant spring crops too early anyway. They get excited by the first hint of warm weather and rush off to the nursery with their credit card firing on all cylinders. Just slow down and see what the season brings. There are often another few cold snaps to follow and the early plantings will often do poorly. Being patient also gives you more opportunity to see what is self-seeding. The self-seeding plants will always come at exactly the right time of year (they are much better at this than we are) so it gives you time to check out your situation and add a few additional seedling punnets should it be necessary.

# Extreme Climates

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The Food4Wealth method will work in any climatic region, but slight modifications may be necessary in extremely cold or tropical areas.

## **Cold Climate**

In extremely cold climatic regions certain plants cannot be grown, simply because the growing season isn't long enough to take the plant right through its complete life-cycle. This is often the case with very frost-sensitive plants such as tomatoes, pumpkin, capsicum and corn. At my previous property this was the case. I could grow green tomatoes, but the season was never long enough to have them ripen on the bush. Pumpkins, capsicum and corn were impossible. In this situation, it is best to stick to a garden that is full of frost-hardy plants, such as: swiss chard, celery, lettuce, snow peas and other peas and beans, spring onion, rhubarb (although it dies down in winter, the plant will survive to re-shoot the following spring) and baby spinach.

Cold climates are ideal for growing green leafy plants. They will last much longer than the same plants in warmer cli-

mates. Plants such as celery and swiss chard will literally last for years. The dense planting arrangement, typical of Food4Wealth, is ideal for cold climate regions and will protect your plants from the harshness of the weather.

## **Tropical Climates**

Tropical regions offer year-round warmth, a thing that most people living in cold-climates would dream of. However, when people actually attempt to grow vegetables in tropical regions, they often try growing the types of food they are used to eating, such as: lettuce and tomatoes. Whilst it is possible to grow these things in tropical regions, there are much more suitable plants.

There are more insect pests in tropical areas, however, that is balanced out by longer growing seasons and better rainfall. And of course, half of those insects should be good insects that feed on the bad ones. So you may have to have a certain amount of faith that nature will work in your favor. Good soil definitely makes your plants less susceptible to insect attack and as long as you follow the Food4Wealth method, you will have good soil.

There are certain plants that just don't like the heat. Lettuces will never form a nice dense heart in tropical regions, so it's best to stick to the open varieties. The oak-shaped leafed varieties do best. Other plants such as cauliflower and tomatoes don't like the humidity, and if stressed, will attract pests. Pests can actually smell stressed plants. If you really want to grow tomatoes, look for a heat tolerant variety and grow it in the winter/dry season. Cherry tomatoes will do much better

than the bigger varieties. As far as green leafy, spinach-style vegetables go, you would be better off planting a tropical equivalent, such as: ceylon spinach or salad mallow. There are a range of Asian green-leafy plants, such as mizuna, mibuna, tatsoi, wong bok and bok choy. They can be used as a cabbage alternative or the young, tender leaves can be used like lettuce. Sweet potatoes are the staple food group of tropical climates and they are healthier than traditional potatoes.

Here is a list of plants that will grow in tropical environments:

- Amaranth
- Arugula (rocket)
- Asian Greens
- Beans (snake beans and winged beans are good)
- Cassava (starchy tubers)
- Ceylon Spinach
- Swiss Chard
- Chinese Cabbages
- Cucumbers
- Eggplant (aubergine)
- Endive
- Kang Kong (water spinach)



- Lettuce (open varieties)
- Luffa (a zucchini substitute)
- Okra
- Peppers (capsicum)
- Pumpkins
- Radish
- Squash
- Sweet Corn
- Sweet Potatoes
- Swiss chard
- Tomatoes (cherry tomatoes are best)
- Water Chestnuts
- Zucchini

If you live in a tropical area, you can follow the Food4Wealth method by using the above plants as a substitute.

# Mini Food4Wealth Plot

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If you live in a condominium or unit and don't have any yard, you can still adopt the Food4Wealth methods to container-grown plants. A porch or courtyard is the ideal place to situate it. Set up a series of containers, such as polystyrafoam boxes - the type that fruit and vegetables are transported in. They have drainage holes in the bottom already. Prop them up on bits of wood, broken tiles or rocks so that there is air-space between them and the ground (otherwise they will stain the ground surface). Arrange as many as you can to fit into the area, butting right up against each other. Try to create a squarish shape if possible.

To fill them, add a layer of organic material such as lawn clipping, lucerne hay, or soft leaves (such as swiss chard leaves), to about 2 inches thick. Then fill the rest up with good quality potting mix. You will need to water it with a seaweed or fish emulsion solution, as it won't be able to supply all the nutrients the plants will need on an ongoing basis.

If you want to create your own compost for your mini Food-

4Wealth plot, self-contained worm farms are sold at hardware stores. They take up very little room and produce a rich organic substance.

Once your mini Food4Wealth plot is set up, simply apply all the principles outlined in this e-book, such as: minimal soil disturbance, plant thickly, mix up plant varieties and cover bare patches with compost.

# Food4Wealth Fruit Farm

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This section has been included to show you a way to produce maximum fruit in a small area. I will also show you ways of turning your excess fruit into cash.

The principles behind the Food4Wealth method also work for growing fruit. Like vegetables, you can plant your fruiting plants densely, mix up the varieties and blend plants of differing size and shape together. It is best to find three different types of fruit producing plants that all grow in your area. These three plants will form a 3-tiered garden that is quite similar to a natural ecosystem.

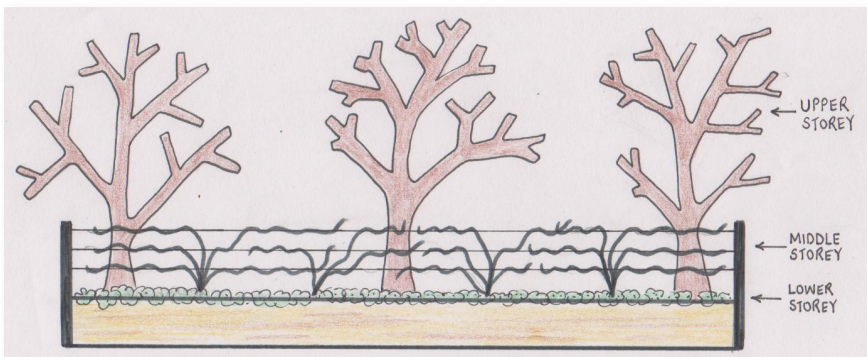
The first level is the ground storey. You will need a low ground-cover plant, such as strawberries. Strawberries are ideal as there are varieties that suit just about any climatic conditions. They also form a thick ground-cover to suppress weeds and protect the soil.

The second level is the middle storey. It should be a medium sized fruiting plant that can be pruned and trained to stay in

its middle storey. Good examples are brambleberries such as thornless blackberries and loganberries. Kiwi fruit and passionfruit could also be used. They will need the support of wires or a wire fence.

The third level is the upper storey. This should be a small to medium tree such as apples, pears, peaches, plums, citrus or tree nuts.

Let's use strawberries (ground storey), loganberries (middle storey) and apple trees (upper storey) as an example. Create a square Food4Wealth plot exactly the same way as for vegetables. You will need at least a 10 by 10 foot square. Plant three apple trees along each bed slightly off centre so that you can install a few support wires for your middle storey. They will be much more closely planted than in a traditional orchard, so you will need to prune them heavily to keep them small. Ram some steel posts into the ends of each bed and run a series of wires between the posts. These wires may touch some of the apple tree branches but don't worry, everything will sort itself out. Plant a loganberry plant between each apple tree. Now, cover the entire ground storey with strawberries.



A cross-section of a 3-tiered Fruit Farm.

The strawberries will stabilize the whole system, keeping the soil moist and protected. They will start cropping from the very first year. The best (and cheapest) time to buy strawberry plants is in late winter as bare-rooted plants.

Loganberries (like all brambleberries) fruit on one year old wood so will give you your first crop in their second year. After they finish cropping the old stems start dying and the new stems start growing. Train the new stems onto the wires. Cut off last year's dead stems sometime through winter. The best (and cheapest) time to buy loganberry plants is in late winter as bare-rooted plants.

The apples will take 3-4 years to really crop nicely. You will want to keep them well pruned so that they don't completely block all the light to the lower storeys. You could even prune them so that they are more or less two-dimensional, running parallel to the wires. This is quite easily done by removing any branches that grow adjacent to the wires. Apples too, are best bought as bare-rooted plants in winter.

This style of fruit growing can produce a lot of fruit in a small area. You get the benefits of fruit yields in the very first season while you are waiting for your upper storey's to mature.

If you just want a berry garden without the apples trees, simply plant out the bottom two storeys. We have a 15 by 15 foot berry garden (right up next to our Food4Wealth plot) that produces far more fruit than we can eat. The kids will sit in it for ages finding and eating strawberries. We produce quite a bit of jam and give quite a lot away too.

Excess strawberries and loganberries can be processed into jams and stored or sold. Berries are an excellent quick cash crop as they are quite prolific yielders and very versatile. You will need to pick them every day once they start cropping as they ripen very quickly. They are far tastier than shop-bought berries but don't have the long shelf life of commercially grown varieties. You should pick them before they are fully ripe, if possible. They will only store for a day or two before going soft and undesirable. That is why turning them into jam is a very effective way of making money from home-grown berries. Alternatively, you can get people to come to your property and pick their own. This would only be viable if you had a fairly big plot.

# Food4Wealth and Climate Change

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Food production and distribution is a major contributor to climate change. Globally, 14% of all greenhouse gas emissions are attributed to the way we grow, process, distribute and consume food. An additional 18% of global greenhouse gas emissions are due to deforestation largely driven by the clearing of forests for agricultural land. And with a growing world population to feed, it is very likely that these emission levels will increase further. It seems that we can't win. After all, we have to grow food to survive. But if the very act of growing food is harming us, then what else can we do?

In traditional agriculture and gardening, soil is cultivated, tilled or dug as a way of preparing the ground for crops. When this happens, the carbon in the soil oxidizes and is released into the atmosphere, contributing further to climate change. This leaves the soil depleted of essential nutrients, so fertilizers are used to increase the productivity and the whole cycle is repeated year after year: more tilling, more oxidation of the carbon, more greenhouse gasses, less fertility and more fertilizer. Eventually the basic soil structure is lost and



the soil becomes unstable, unable to pass on nutrients, unable to hold water and unable to store carbon. It is no longer soil, but a dead, toxic substance used to grow food in. Most agricultural soils are very low in carbon. Carbon can be increased by a range of changed farm practices, including switching from ploughing to no-till cropping, and retaining crop stubble. But most of us aren't farmers, so the problem seems to be out of our hands, and out of our control.

However, Food4Wealth combats climate change. When you create a Food4Wealth plot you are creating an edible carbon sink in your very own backyard. This carbon sink will take harmful greenhouse gasses from the atmosphere and store them in the soil and plants. The carbon is used by the plants. In fact, it's the basic building block of life. It's ironic that the same stuff that is so harmful when in high levels in the atmosphere is so critical for basic survival. The carbon, now in a safe form, will be passed from your home-grown vegetables and into your body as fresh, healthy, organic food.

There are two key ingredients in creating a good carbon sink. Firstly, there needs to be a fairly dense coverage of plants most of the time. And secondly, the soil must be protected so that oxidization of the carbon doesn't occur.

With a Food4Wealth plot, your soil is never bare. This is achieved by having a diverse range of plants, all mixed up together, just like you would see in a natural ecosystem. If a particular plant is removed for human consumption, it only leaves a small gap, unlike a traditional vegetable garden where whole areas can be cleared at a time. These small gaps are easily managed. Just cover them with a generous surface layer

of compost and plant a seedling directly into that layer. It will soon fill the gap and your garden will be full again.

As an individual, you can create an edible carbon sink in your own backyard simply by following the Food4Wealth method. This means that you won't be so dependent on eating food that is grown in a way that pumps more carbon into the atmosphere. Your Food4Wealth plot will literally suck harmful greenhouse gasses from the atmosphere and turn them into fresh, healthy organic food.

# The Role of Weeds

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Weeds are generally regarded as a gardener's foe. However, I would like you to consider weeds as a friend, and this is why.

Weeds can be incredibly useful and can be used in a number of ways. As I have discussed earlier in this book, weeds are opportunistic pioneer plants. They are the masters of filling empty niche spaces. But they aren't that way just to make you angry. There is a scientific reason behind their role and once you understand the science, you can then use weeds to your advantage.

Most weeds aren't actually the invasive plants that most people believe them to be. They are poor, misunderstood plants that deserve a little more credit for the good job they do. Weeds are experts at extracting nutrients from soils that are depleted. The types of weeds I am referring to are the ones with long tap-roots (such as thistles) that take nutrients from deeper than the growth zone of edible plants. I am not referring to grasses and ground-cover plants. They should be removed as they are very competitive. Generally speaking, weeds with long tap-roots don't have the ability to out-compete edible plants, but occupy niche spaces that no other

plant can occupy. In other words, they take what they can get. Remember, they're opportunists.

As they expertly extract nutrients from down deep, they bring these nutrients up into their stems and leaves. When the weed dies and decomposes, the missing nutrients are released into the upper growth-zone, and hence, the soil is improved. Weeds are soil improvers!

We can use this information to our advantage. If weeds have this function, then they must contain good nutrients. We can use these nutrients to improve our soil. There are a few ways we can do this. We can cut them at ground level and leave their dying stems and leaves on the surface. The nutrients stored in their stems and leaves will be returned to the soil as they decompose. As the weed re-grows from where it was cut, we can cut it again and repeat the process. This is a very good option because you get the benefits of their soil-improving abilities over and over. Secondly, we can pull them out (roots and all) and lay them on the surface as mulch, or put them into the compost, where their nutrients will eventually be returned to the plot.

Weed infestations are really just a sign that your soil is not well-balanced. However, the weeds themselves are not a bad thing. In fact, they can be the solution. All lush forests started out as bare sand, clay or rock. Weeds were always the first plants to get established. As they died, they added organic matter and nutrients to the impoverished soil. This soil slowly got richer and richer until other plants were able to get established. Weeds can do the same for your garden if given the chance. They are nature's fertilizer.

## Weeds can make new plots

I have patches of weeds growing in my paddocks. As I am aware of the benefits of weeds, I see them as opportunities to grab nutrients that I can turn into food. I use those weeds to make new food-growing plots.

Firstly, I mow the weeds with a mower. My mower has a side-shoot, so the shredded weeds get sprayed over the ground. Next, I rake up the shredded material and put it into a wheelbarrow. Then I dump it on the ground where I want to start a new plot, right on top of the grass that's growing there. I keep dumping weeds along with manure and soft-pruning's until I get quite a big pile. I allow my chickens to scratch the area over as much as they like.

After a few months my weed pile has turned into lovely soil. I keep dumping more and more until I think the soil looks good enough to plant into. At that point I will do two things. Firstly, I will fence the chickens out so they stop disturbing the soil. And secondly, I will form my pathways by shoveling out the soil where my paths will go and placing it onto the food-growing areas. My beds are now formed and ready to plant.

The whole process, from bare patch to ready-to-plant plot takes about a year, but the results are well worth it. My garden beds that have been made from weeds are absolutely perfect. Many people may think that they would have weed problems because of all the weed seeds that would be in the soil. However, this is not the case. Sure, the weed seeds would be there by the thousands, but the soil is so good that

the niche spaces are filled with edible plants. The weeds are outcompeted by the more aggressive edible plants. Just as they did in the lush forest, the weeds did their job of improving the soil until the soil became good enough to support more desirable plants.

# Seed Selection

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A seed contains all the genetic information it needs to germinate, produce leaves and stems, flowers and seeds. It's a miracle in a small package, but all seeds are not the same.

Seeds will usually fall into one of the following three categories:

1. Open-Pollinated and Heirloom
2. Hybridized
3. Genetically Modified

Open-pollinated seeds have been able to reproduce naturally. It's the old-fashioned method of plant reproduction. All Heirloom seeds are open-pollinated. If a farmer or gardener likes a particular open-pollinated variety, he/she can take seeds from the plant knowing that the next generation will be more or less the same. Quality will generally remain consistent or be improved through the generations. As the Food4Wealth method uses self-seeding, open-pollinated or heirloom seeds are the best type to use. You can allow your plants to go to seed knowing that the future generations will

be more or less the same. Heirloom and open-pollinated seeds are generally sold by smaller companies and can often be ordered through on-line catalogues and mailed to you. Occasionally you will find them in plant nurseries or garden stores.

Hybridized plants have been created through mechanical means. The technician purposefully crosses two plants from distinctly different breeds. The special qualities of the hybrid plant are dependent on the pairing off of the chromosomes from the two parent plants. If a hybridized plant is allowed to go to seed naturally, there are usually thousands of possible variations, meaning that the next generation may not possess the qualities of the parents, or even resemble them. This makes it very difficult to improve a desirable quality through the generations. Using hybrids is a little more of a gamble. Hybridized seeds are usually (but not always) labeled on the seed packet as F1, which means the first generation of the parent plants.

Genetically Modified (GM) seeds have been engineered in the laboratory by modifying the genetic makeup of the seeds. This is accomplished by introducing genes (sometimes from other plants, but also from animals, humans and bacteria) into the DNA structure of the seeds. The new gene may contain desirable characteristics such as higher yields or resistance to a particular pest.

Many anti-GM scientists believe that genetically modified crops have the potential to cause harmful effects on the human body. Genetically modifying food is seen as an unethical practice by many people. Understandably, many people



feel uneasy about the process of placing animal, human and bacteria genes into crops.

## **The consequences of super-crops**

Playing with the genes of living organisms raises many ethical questions, but my main interest is to determine what is best for the planet. Genetic Engineering and hybridization can create super-crops that give higher yields. Whilst this may sound good for mankind, it does come at a cost. These super-crops feed hungrily. They have the ability to produce more, but as you would expect, that increase has to come from somewhere. And of course, it comes from the soil. Super-crops leave the soil depleted of nutrients. That would be OK if they were allowed to die and return the nutrients back to the soil. However, if the garden or field is stripped bare when the plant is harvested, the soil suffers. That is why super-crops are so dependant on fertilizers.

Super-crops have been selected for a particular trait which comes at the expense of adaptability and durability. Many aid workers with good intentions introduced these super-crops to villages within developing countries. Initially, the villagers were very happy as their yield rose. They stopped growing their centuries-old crops and turned to the super-crops. However, after a few years the soil becomes depleted and the new crops failed. In many instances, centuries of successful food-growing practices have been ruined in less than a decade. It is also disastrous that plants that have been developed over generations and adapted to local conditions have been lost, perhaps forever. There is a very real fear that

with the increase of genetically modified foods, developing countries will start depending more on industrial countries.

Hybrid and GM crops have been patented by the organizations that have developed them. As crazy as it sounds, the company literally owns the genes. Large seed companies can sue farmers if they (the seed company) can find their genes in the farmer's crops. The problem is that the farmer can't stop the genes from finding their way into their crops. Pollination happens when the pollen from one flower is deposited (usually by an insect) into the flower of another and, of course, this happens across boundary lines. However, if the seed company finds their genes in the farmer's crop, the farmer is legally forced to stop using his/her seed. In many cases, farmers have been forced to destroy thousands of dollars worth of seed - seed they have developed over generations. The only way the farmer can keep their livelihood going is to use the patented seeds of such large companies. This is an expense many farmers simply cannot afford.

If too many farmers are forced to use these patented super-crops, the seed companies potentially hold a lot of power over our genetic future. If reliable open-pollinated seed is destroyed and super-crops are used in their place, we are destroying a lot of locally adapted genetic material. There will be far less genetic diversity amongst our major food groups. The result of a loss of genetic diversity in staple crops is potentially disastrous. A single catastrophe, such as a new disease or altered climatic conditions, can literally wipe out a whole variety in one go.

I have no doubt that these large seed companies see them-

selves as the good guys. I'm sure they believe their seeds will better mankind by yielding more food per acre. But do they realize that they are playing with lives, millions of lives? Rejecting hybrid or GM crops is your way of preserving genetic diversity so that the large seed companies don't get to own every single food gene on the planet.

### **What's best?**

The aim of Food4Wealth is to empower people: individual people, communities of people and ultimately all of humankind. This always starts with individual people. Individual people need to have the power to help themselves, because it is on their strengths that communities survive. As an individual small-scale food grower you can't take on the large corporations. However, you can take control of the way your food is grown and, to a certain degree, take control of the genetic health of your home-grown food.

In a small backyard plot, you are best to have varieties that were developed locally over a few generations. You can do this yourself by starting with an open-pollinated or heirloom variety and collecting and reusing the seed from these plants each year. Just as farmers have been doing for generations, you will be developing your own strains that are adapted to your local conditions. These plants should have durability and versatility, and most importantly, the next generation should be as good, or better, than the last. This can best be achieved by using open-pollinated or heirloom seeds.

# Summary

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I really hope you have enjoyed reading about Food4Wealth. It's a wonderful method of food production that I have been experimenting with for many years. I have no doubt that this style of food production will play a huge role in our future quest to survive on this planet. It makes so much sense to use a method that works with nature, and not against her, yields more, uses no harmful pesticides or inorganic fertilizers and requires less effort. If we are to make a difference to our planet and improve our lives we need to start taking action - real physical action. Sitting around philosophizing won't change a thing, but growing our own healthy organic food in an environmentally gentle way will make a huge difference. Especially if a large number of people start doing it. But there's no point in waiting for others to do it first. Be a pioneer of this amazing food production method and feel good in knowing that you contributed towards a brighter future for all mankind.

I have also included a quick reference guide. It's been placed on the last page in table format so you can quickly refresh your memory of the Food4Wealth method. You should read

it periodically just to remind yourself of the key principles behind this amazing technique.

I'd like to say thank you for purchasing and reading this e-book. I hope from the bottom of my heart that you are inspired enough to create a Food4Wealth plot. I sincerely hope our paths cross one day and I get the pleasure of hearing (or seeing) your Food4Wealth plot.

# Quick Reference Guide

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<b>What to do</b>	<b>Why?</b>
Plant densely	To fit more plants into a small space, thus increasing yield. Also, to suppress weeds, create micro-climate opportunities and protect the soil.
Mix up varieties	To make it difficult for pests to find your crops. This happens by blurring their visual outline and disguising their scent.
Never dig	Digging disturbs the soil and invites weeds. It makes the soil dry out quicker and loose its structure.
Create compost continually	Compost is like gold. Putting organic material into your compost system is a way of getting nutrients to flow back into your plot, which in turn, goes into your crops, and eventually into your body.

<p>Cover bare soil immediately with compost</p>	<p>This is so important. This not only suppresses weeds, but adds nutrients and structure to your precious soil.</p>
<p>Plant bare areas through the compost layer</p>	<p>The compost always goes down first so that you achieve a good cover. It's easy to plant seedlings through it.</p>
<p>Allow one plant of each variety to go to seed.</p>	<p>This has a double bonus. Firstly, it creates future generations through the production of seeds that will one day germinate and produce new crops. And secondly, the flowering crops often attract predator insects that feed on pests.</p>
<p>Water seedlings daily until they are thriving. Then back off gradually.</p>	<p>Seedlings have immature roots and will need tender loving care to get them started. Once they are thriving, your Food4Wealth plot will require far less watering than a traditional garden.</p>

# About the Author

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Growing food has been a lifelong passion for Jonathan White. He started his first vegetable garden in his parent's backyard at the age of seven. Most of his childhood was spent bare-footed in the Australian bush, where a deep love of the natural environment was born.

After finishing school he completed a Bachelor of Applied Science in Ecology and Natural Resources, and later gained qualifications in Horticulture and Landscape Design. It is little wonder that he has developed a system of growing food that incorporates his two disciplines: horticulture and ecology.



He has written and published a number of books about Indoor Plants and Interior Landscaping and currently teaches a range of horticulture, landscape design and environmental science courses with Lifestyle Learning Direct, a well respected adult education facility. In fact, he wrote their Garden Design and Landscaping Course and has helped hundreds of students graduate in a range of professional courses.

His main aim in life is to help people of all walks of life experience the wonder and joy of living a simple, healthy life. He lives with his wife and children on a small farm surrounded by a menagerie of animals, and of course, a flourishing Food-4Wealth plot.

