Cooking and feasting on the plot

Health and Safety

The first thing to consider when cooking on the plot is health and safety, especially if you’re going to be cooking for guests. As you might expect much of it is common sense. Here’s a quick checklist to avoid dodgy tummies and singed volunteers.

- It’s much harder to poison yourself with vegetarian food so unless you’re feeling really confident meat and fish are best avoided. If you do choose to cook it keep it cold prior to use – that’s under 5°C, colder than a cool bag. At any temperature higher than this pathogenic bacteria can double in twenty minutes and the meat/fish would still look, smell and taste fine! Use separate chopping boards and knives and wash them and your hands with hot soapy water after handling. Then really cook through – the food should reach a temperature of 75°C throughout for at least 30 seconds or 70°C for two minutes. This will kill most but not all bacteria. Meat thermometers are available for under £5.

- Wash hands. Have soap available. Antibacterial gel is a nice easy way to make sure no nasties are getting in with the dinner.

- Have some rules around the firepit/cookstove area, eg no walking through the fire circle, a safe distance to sit, no stuff lying around to trip people up, a way to approach and deal with the fire (on one knee, room to work round the fire).

- Keep a bucket of clean water ready, a first aid kit and some cling film (for keeping burns clean) – make sure everyone knows what to do if someone gets burnt. (Cool the burn with water, not ice, keep it clean using cling film in a layer – not wrapped around the limb, remove clothes and jewellery but not if stuck to burn. Make sure the person is kept warm.)

- Have a little H&S chat before cooking. Don’t assume everyone knows.
the score, especially children. Use your risk assessment as an excuse if you feel awkward telling people what to do.

- Keep some fire gloves (available from DIY shops as welding gloves) handy.
- Try and have an organised cooking space, ie chopping boards on a table, somewhere for rubbish, recycling and compost, a space for washing up and drying, somewhere to store pans, crockery etc.
- If you keep your pots and pans on site give them a wash before using in case mice, rats or birds have been in contact with them
- Chilled items such as prepared salads also need to be kept properly chilled as they can harbour listeria.

If you do intend to feed volunteers/visitors it might be an idea to do a basic Food Hygiene certificate – if nothing else it will give you a bit of confidence and authority when you’re telling people to wash their hands, wash up properly etc! Here are some links to online courses that only cost about £30 – alternatively voluntary organisations sometimes offer Food Hygiene day courses. www.food-hygiene-certificate.co.uk/food-hygiene-level-2.aspx
www.food-certificate.co.uk/catering/online-food-hygiene-for-catering.aspx

Risk Assessment

If you’re cooking with volunteers you should really have a risk assessment. You can write it so that it’s used every time you cook or you can incorporate it into your site risk assessment.

The point of a risk assessment is to make you think clearly about risk and to reduce risk where possible. It is not to stop you doing things and can actually make you feel more confident about activities you may have been worried about. The other purpose of a risk assessment is that if there is any kind of accident you can prove that you took reasonable care – this can also give you more confidence.

Example: Risk assessment for cooking apple chutney on a rocket stove at event at Greenmeadow Farm, Cwmbran

Hazard (1): Food borne bacteria, dirty hands
Risk: As cooking fruit the only risk is stomach upset caused by dirty utensils or hands
Mitigation: All participants to wash hands prior to handling food, all utensils to be clean.
Level of risk with mitigation in place: Low

Hazard (2): Rocket stove
Risk: Burns caused by flames in situ or rocket stove knocked or blown over
Mitigation: Make sure rocket stove is stable and that area around it is kept clear. Have bucket of clean water, fire gloves, cling film and first aid kit available
Level of risk with mitigation in place: Low
Hazard (3) Sharp knives  
Risk: Cuts  
Mitigation: Have stable cutting surfaces  
Level of risk with mitigation in place: Low

Hazard (4) Big pan of hot chutney  
Risk: Scalds  
Mitigation: Make sure cooking area is kept clear – especially when moving pan  
Level of risk with mitigation in place: Low

Getting help  
Nearest A&E: Royal Gwent Hospital  
Mobile reception? Yes  
Nearest land line: in farmhouse

Now on to the fun bits…. 

Cooking methods

Camping stove with gas bottle  
Nice and easy, portable and reliable. You may need wind protection

Solar oven  
A solar oven is basically an insulated box painted black with a window on top to concentrate the heat of the sun. You can also make a version with a reflector. They work brilliantly – on a sunny day. They are a great educational tool and use the free energy of the sun. Fantastic!

Cob oven  
Cob ovens are fantastic for social occasions on the plot and bread/pizza cooked in one tastes fantastic. It’s great fun making a cob oven. If you’re on clay soil all you’ll need to find is some straw, sand, bricks and stones. Make your base out of stones and bricks (you cook on the bricks – stones can have a nasty habit of splitting when heated) and then you make a domed form out of wet sand – or willow/hazel/chicken wire which will eventually burn away. Then mix the clay and chopped straw into a wet but not sloppy mix and commence slapping it on from the bottom, to a thickness of about three inches. Leave a space for a door – or cut one out later. If you used sand as a form you wait at least a week for the clay to dry.
before pulling it out. If you used a hazel/willow/chicken wire form you can light a small fire to speed up the drying process. If you want it to last cover it with a tarp to protect it from the elements or build it a roof. You’ll also need to make a wooden door to keep the heat in.

To cook, light a fire inside and let it heat up for a couple of hours. You’ll get about 40 minutes cooking time, enough for a batch of bread or lots of pizza.

You can also make a version with a raised bake stone or metal sheet. This way you can have the fire underneath, maintain a small fire and keep on baking.

A good resource on the web can be found at: www.lowimpact.org/factsheet_earth_ovens.html

**Open fire**

Romantic and a lovely social focus. An open fire is great to cook on. You can make it bigger or smaller depending on what you want to cook and you get warm as well. Downsides are smoky eyes, heat loss due to pans being too high or fire too small – hard to control temperature and can take a long time to heat things up unless you’re very practised.

If you are going to cook on an open fire it’s worth investing in (or scavenging) a big grill you can raise up with stones to put your pans on (don’t forget to leave space to put more wood on the fire). Other methods include trivets and tripods. Don’t just balance your pan or kettle on the fire – it’s a recipe for disaster.

If you don’t want to create a permanent fire pit or your site is on peat soil which brings a risk that your fire will spread underground, you can invest in a raised firepit, use an old barbecue or even a wheel from the local scrapyard.

You can also cook in the coals.
To cook in the fire itself – or to grill – you want coals rather than flames which will build up gradually and behave like charcoal. This is where to cook your baked potatoes wrapped in foil. You can keep one part of the fire flaming to produce more coals. If you have a dutch oven you can put it in the coals, pile coals on the lid and bake.

Fun things to cook with kids over an open fire are

- dough made with self raising flour, water and salt, wrapped round a stick
- chappattis or flatbreads
- toffee apples on a stick
- marshmallows cooked on sticks until they melt then sandwiched between two biscuits
- popcorn in two sieves wired to each other and then to a stick
- baked bananas slit and stuffed with chocolate wrapped in foil then cooked in the coals
- Baked apples in a Dutch Oven

A good cooking fire is a hot fire. Smoky fires are caused by incomplete combustion - a result of wet wood, lack of oxygen or a badly built fire. Not only is smoke brim full of toxic gases and really irritating, it means your fire is inefficient, and is likely to be harder and less pleasant to cook on. To persuade your fire to burn hot and efficient and therefore produce less noxious smoke, follow these tips.

- Start small: Until your fire is big and hot enough use small pieces of wood to build up the heat. They have more surface area and will produce more heat, light more easily and smoke less.
- Use well-seasoned wood: Fresh cut wood needs at least a year, preferably two, stored outside as logs before it loses enough moisture content to burn efficiently. Obviously sticks will dry quicker. Hard wood (eg oak, beech) takes longer to season than softwood (eg pine). Ash is the only wood that will burn green but it’s still best to season it. You can tell if your wood is seasoned by banging two bits together: dry wood will yield a hollow sounding clop, like two halves of a coconut; wet wood will give you a muted thunk – and will be much heavier. Sticks that bend are wet. Easy snappers with no sign of green inside that make a nice musical clop are dry.
- Don’t choke the fire: Experience will tell you when a fire is big and hot enough to deal with that big log you’ve been dying to put on. Adding big wood will cool down the fire initially. Also if there’s a lot of wood in the firepit that’s not burning it will start to smoulder and produce lots of smoke.
- Do not to burn painted or treated wood – or rhododendron – as they will release really toxic fumes.

Rocket Stoves

Developed for use in developing countries where fuel is scarce and open fires in homes were causing respiratory and eye problems, the rocket stove is super efficient and easy to build. You can make them out of old bricks, clay and straw, or out of old catering oil tins, a stove pipe and clay beads or vermiculite. Permanent ones can have several rings, ovens and can be built
inside, include heated seating or sleeping space. Good places on the web to start your rocket stove research (it’s addictive) are:
www.rocketstove.org/index.php?option=com_frontpage&Itemid=1
www.aprovecho.org/lab/index.php

The basic theory is that the fire itself is super oxygenated due to the shelf in the horizontal pipe – and that the wood has a high surface area because it’s small pieces.

Add to this the fact that the vertical pipe is highly insulated and the pan is surrounded by a skirt that feeds the flames around its surface and you get a very hot cooking flame for minimum input with high combustion and very little smoke.

Rocket stoves mean less wood in, more heat out and are great if all you have is twigs. They are also fun and great for educating people about resource use. The best thing is you can make one on site from discarded materials such as bricks.

Recipes

Apple chutney on a rocket stove

300 g apples - cored and finely sliced
100 g onion - finely chopped
2 tomatoes - chopped
75 ml cider vinegar or white wine vinegar
25 ml balsamic vinegar
100 g golden granulated sugar
1 tbsp yellow mustard seeds
pinch cayenne pepper
1 tsp salt

1. Put all of the ingredients in a large pan and mix all together well.
2. Set over medium heat and simmer for 15 minutes, or until the apple has softened. Check the seasoning
3. Allow to cool in the pan. Spoon into prepared jars. Label with the date and store in a refrigerator for up to 2 months

Toffee Apples on a stick cooked on an open fire

Spear apples with a stick. Dip in sugar and cinnamon mixture. Hold over the fire until sugar caramelizes.