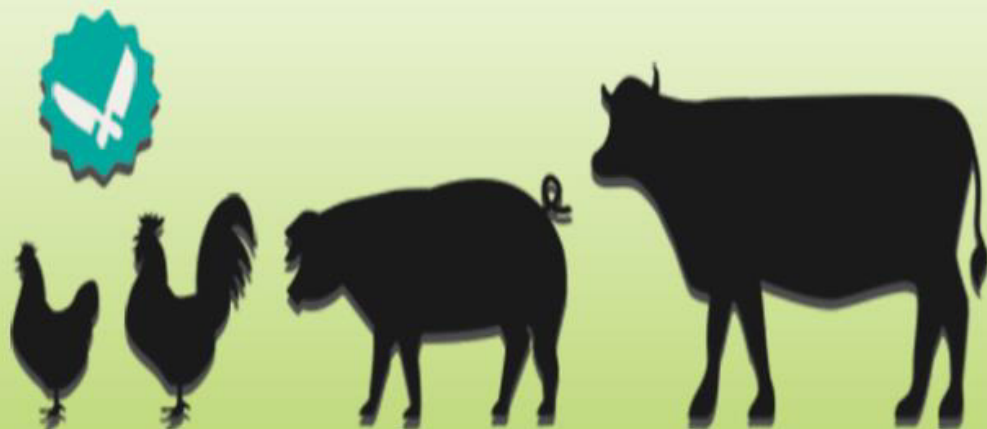


The Basics And Beyond...

SIZZLING

Sausage 1



Steve Gaskin BBQHQ.net

Dear Client

Thanks for your order and *FAST* payment – it is really appreciated! For ease of use Collagen casings can go straight onto the nozzle dry. The shelf life enemies are oxygen and moisture – so **keep** them in a Ziploc® bag inside an airtight container, use within 4 – 6 months.

Collagen casings are super-easy – but **can burst** if not treated carefully. For best results in cooking; start with only a low heat and gradually raise the temperature. Believe it or not – you can even start off by poaching them in a frypan with a small amount of water; then drain and finish by frying! This can also be a great way to reduce the fat content, by releasing some of the fat into the water!

Don't forget - to take up my offer of your extra and FREE - E-Book you'll need to let me know which one you want? Choose from:

- Build a Smokehouse from a Fridge or Freezer
- Make Cheese at Home
- Build a BBQ from a Wine Barrel
- Secrets of BBQ

And for all sorts of other food type info – visit my Blog at the link below.

Cheers

Steve Gaskin

<http://stores.ebay.com.au/BBQHQnet>

Blog = www.bbqhq.net



Sizzling Sausage - Book 1

Make Delicious Fresh Sausage in Your Home Kitchen!

**Written & Published by Steve Gaskin, Warrnambool, Victoria, Australia.
Version SS06015 Revised Edition**

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Accordingly, no person should rely solely on anything contained herewith, as a substitute for specific advice.

Always work safely when attempting any of the tasks described in this book. Your safety is your responsibility – no liability or responsibility is accepted by the author for any event arising from the manufacture or attempted manufacture or use of the product/s described in this publication.

Introduction

Thank you for purchasing my E-book. I trust that it will live up to your expectations, give you value for money and reward you with years of home sausage making satisfaction!

Years ago in Australia, vendors would visit local hotels; carrying tubs of different kinds of sausage for sale, each with its own wonderful aroma. These were true home-made sausages and the makers often of European descent. But – no longer!

Today's environment has been altered because of new legislation implemented after a serious food poisoning scare in Australia involving Mettwurst, which claimed the life of a child, and made several other people seriously ill (Garibaldi 1995), similar situations and alterations to food legislation have occurred worldwide.

It is no longer legal (in Australia at least) to manufacture smallgoods in the home for resale. While I appreciate the need for such actions, I still miss the opportunity to purchase and sample the various types of homemade sausage that these vendors used to offer.

Later on in life the smell of smoked food or sausage would often trigger wonder? Was it possible for me to make these foods at home? If so - would they be cheaper than the items that I saw in supermarkets or delicatessens? So, in my early 40s I began to explore the possibility of the manufacture of sausage, smoked meats, salami, pepperoni, etc in the home.

The inspiration to write books on sausage-making came as a result of my own difficulties in obtaining good, up to date information in Australia. Initial inquiries were sometimes frustrating; with one or two people in the meat industry even trying to put me off of attempting home manufacture! They would usually refer to the incident with Garibaldi as a reason, or use examples of complexity of the process etc!

When I think back to that time, it surprises me, after all here is a skill that was practised for thousands of years in homes all over the world! As someone in an online forum I'm involved with once stated - it's not rocket science!

When I tried to locate good books on the subject (in Australia), I found it difficult. The only local source that had materials was the College at which I was enrolled. But their books were older, and mostly written by Americans, meaning that some of the ingredients listed were hard to find here and still used Imperial measures!

A search of Amazon.com today will show that our friends across the Pacific still dominate this area! It seems that the Americans have not lost touch with their roots and desires to have access to good quality home made sausage! In fact I believe that Americans generally, excel in the area of home meat manufacture and BBQ cooking.

However I now know that it IS possible for you to safely make all kinds of sausage in the comfort of your own home - whether you live in Australia as I do, or any other part of the world. In most cases your sausage will taste better, be less expensive and better for you, than many commercially manufactured sausages made today.

I have designed this E-book to be a simple and safe introduction to the simplest types of home-made sausage - **Fresh Sausage**.

Just follow the steps laid out in the book and you'll soon be making your own sausages with sizzle! I hope that it helps guide you through countless rewarding gourmet sausage experiences for yourself, your friends and family.



Steve Gaskin
Certificate IV - Food Technology

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Sausage Categories

Mention the word sausage to an Aussie and what generally springs to mind is a pink, pasty looking thing - which when cooked oozes copious quantities of fat and has so little flavour that it must be drowned in tomato sauce and cooked onion!

While there may be a place for this type of sausage as a quick, cheap and traditional barbecue snack, many Australians are still discovering the myriad sausage flavours created by people from cultures the world over!

But the Aussie diet has gradually changed over the past 30 - 40 years! We are experimenting with and adopting foods from the cultures of people that have immigrated to this country. As in the USA, the United Kingdom, Canada etc, Australia's immigrants brought with them their traditional foods, and in so doing have enriched and expanded our dietary horizons!

We have been rescued from the bland English based diet that our parents, and grandparents grew up with (though they too make great sausages), and can now draw upon a wider range of taste sensations! I hope that this book in some small way helps Aussies broaden their culinary sausage horizons.

There are literally thousands of sausage recipes in existence throughout the world; I have included a range in this book, as well as links to hundreds more.

Because the range of sausages is so broad and the manner of manufacture varied - it can be tricky to group all sausages into precise categories.

However, the following three types best sum it up.

- ***Fresh Sausage**
- **Cooked Sausage**
- **Dried & Semi Dried Sausage**

This book is aimed mainly at the first category—***Fresh Sausage**.

Fresh Sausage

The simplest type of sausage, produced from selected cuts of fresh meat (including a ratio of fat), along with salt, seasonings and water (or other liquid). These sausages are fresh and should be treated like fresh meat, requiring refrigeration prior to prompt cooking. Recipes and styles include favourites such as; Breakfast Sausage, Pork Sausage, Beef Sausage, and exotics such as Chorizo, Bockwurst and Bratwurst.

Please Note: though not essential, if you are completely new to Sausage making, I would suggest that you start with *Sizzling Sausage Book 1* (this Ebook) and perfect your technique with this simpler category first; before moving on to any of the more complicated categories of sausage that are available.



**A more advanced style — Cooked & Smoked
Kransky**

Source Meat

Sausage can be made from any type of meat including beef, chicken, lamb, veal, deer, even kangaroo, camel and emu (here in Australia). Fellow sausage makers in other countries also have access to their local species, but it is more commonly made from pork or combinations of pork, beef, lamb, etc. Pork has a flavour and fat content that makes it ideal for all kinds of sausage, either by itself or in combination!

There are two basic choices for source meat when making sausage at home:

Pre-minced

Obviously the easiest way to start making sausage is to purchase the meat pre-minced, add the various spices and herbs, wine or beer, water, salt, etc, mix together and stuff into casings!

Portion or Diced Meat

Portions are probably the method of choice for the serious home sausage maker! This method offers far more control over the quality of the final product, through selection of meat to fat ratios, quality and type of cut, as well as the grade of mince (referring to final particle size). As a bonus, it is usually substantially cheaper to purchase! The disadvantage is that you will need to spend some time trimming meat from bone and undesirable trim from the meat.

Pre-diced meat offers similar advantages to portion meats, while removing much of the labour required in trimming. A disadvantage is that it is usually more expensive than portions. Most of my sausage is made from portions, which I mince to my requirements.

Fat

No matter what the latest diet trend may say—fat is essential in sausage; otherwise the finished product can be very dry. Pork shoulder (called Boston Butt in the USA) is ideal and **can** give a good of meat to fat; but it varies too much since many animals are bred to be leaner. To prevent dry sausage I **strongly** recommend you add extra fat—usually in the form of pork back-fat. A rule of thumb is a minimum of 10% to 20% or more - your choice.

Pork shoulder and hind leg is frequently available on special at supermarkets. You may need to get your butcher to order in the Pork back-fat for you though.

Depending on the sausage recipe, choose a cutting plate for your mincer that gives the final particle size according to recipe - or in line with your personal preference.

There is debate among home sausage-makers, as to how many times you should mince your meat to end up at the desired grade. It can come down to personal choice. Some makers go straight from meat chunks to the final particle size required; others prefer a two stage mince; to arrive at the same size. Each has their own reasons for why they do what they do.

I suggest that it depends on the type of mincer you have (hand or electric) and the type of sausage being made. Generally with a hand mincer, you will find the degree of effort required to go from chunks to fine mince is quite high; while an electric mincer will breeze through that same work!

Hygiene

Important Food Safety Notes – Please Read Following Sections Carefully!

It cannot be stressed highly enough, that you must THINK HYGIENE whilst preparing homemade sausage. You will be manufacturing food to be consumed by yourself, your family and friends. Proper care by you - will protect the health of everyone who eats your handiwork, and also save you a high degree of embarrassment!

Care must be taken at all stages to ensure that equipment, hands, work surfaces and containers are clean. Disinfect the work surfaces with a small spray bottle, containing a mild bleach solution (follow directions on pack for disinfection), and spray bench tops, cutting boards and other work surfaces. Leave for a period (as directed), rinse off with hot water, and dry with paper towel.

Wash your hands prior to handling meat, after touching your nose or mouth and especially after using the toilet. Ideally, wear disposable latex gloves while handling meat and sausage mix! NEVER throw back meat chunks that fall on the floor! Ensure all equipment is washed and dried thoroughly again after use, and spray mincer internal parts with a little food grade lubricant to prevent rust! (Note that vegetable oil is unstable and suitable only for short term protection. If your mincer will be stored for long periods between use; food grade, shelf stable lubricants are recommended).

Meat Temperature

This is extremely important! There is a range of temperatures, appropriately called the **Danger Zone** - because it is the range where micro-organisms multiply!

The Danger Zone range is 5 - 60 degrees Celsius (40 - 140 Fahrenheit).

For safety you are advised to **keep raw meat below the lower limit** (i.e. at refrigerator temperature), and ensure that it is not allowed to enter into the Danger Zone for extended periods. Return meat to the refrigerator as soon as possible after all stages of trimming, mincing, etc. Work in small batches where possible, to keep temperature increase to a minimum.

These guidelines also apply to cooked meat, which if not eaten, should be promptly cooled or held at 60 C (140F) or above!

Safe practice is to ensure that meat is kept chilled:

- ◆ During transport
- ◆ At home prior to preparation
- ◆ After mixing ingredients
- ◆ After stuffing into casings.

Follow the simple temperature and hygiene guidelines along with other info to come - and you will enjoy your sausage in safety!

So - now that you have decided to make sausage, you have embarked on the road to serious home sausage manufacture; and there are basic, essential items you must have.

Mincers

Referred to as grinders, in the USA etc - you can use hand mincers for either type of sausage and I have made some great sausage in both categories, using one!



The Porkert #22 (shown above) is a good hand mincer choice for home use, retailing for around \$85 in Australia and readily available. I would suggest the Sizes 12 — 22 as an ideal size range for both hand and electric mincers for home use; with the #22 being best .

Note - Hand mincers can also be modified, by adding an electric motor. To my mind it makes the whole unit a little large though and raises concern at the risk of getting clothing etc., caught in the unguarded mechanism? See what you think at the link below:



<http://www.sausagemania.com/grinder.html>



Kenwood PG 520 Mincer

If you plan to make sausage in any volume; you should give serious thought to an electric mincer. For Aussies, there are small electric units manufactured by Sunbeam and Kenwood and on Ebay.

They are available through most large electrical stores – the base models retail for approximately \$70 up to around \$300. But you really do get what you pay for. They can be quite good at mincing, but in my opinion, are not great at stuffing casings, due to the small throat and auger size. They usually come with 3 plates as standard. The plates determine final chunk size; and in my opinion the largest plate offered (8mm) is too small for some recipes, while the smallest is so small as to be unusable for sausage.

The units also comes with at least 2 sausage nozzles; however the smallest one restricts flow too much! If you decide to buy one of these machines, use only hog casings (discussed later) since collagen casings won't fit the larger nozzles and the speed of fill with the smaller nozzle will drive you nuts!

If the simplicity and smaller size of this unit appeals to you, my advice would be to buy the cheaper base model and try and locate at least one larger mincing plate. However if you can afford it - I would give serious consideration to the more professional mincers shown on this page.

Note: If you are planning on only a few kilos now and then - attachments for the Kitchen Aide or Kenwood Chef Mixer; can also be considered. They handle small amounts of meat quite well, but should be considered entry level, due to lower power and auger size. They are frequently available through EBay, - ensure that you get a sausage stuffing nozzle included when you purchase.

For serious mincing – I recommend a 550 watt (3/4 hp) electric mincer, fitted with a 12 — 22 head (below). This size and power rating are ideal for home use in my opinion. In Australia, many Continental Delis and Wholesalers carry quality models imported from Italy. Brand names include Leonardi and Reber among others.



Sausage Stuffers

If you want to make sausage in volume, you'll eventually decide you want to fill casings more quickly than your electric mincer allows. Many sausage makers use a specialist device called a Sausage Stuffer (see picture page 16).

These machines are simple hollow cylinders, into which you place the sausage mix. A piston (either hand cranked, electric or hydraulically driven) forces the meat paste out of a nozzle, into the sausage casing.

The advantages of this type of device are high speed filling, **less smearing of fat particles** and in the case of the electric or hydraulically activated type - one person operation.

I have a fantastic 2.5 Kg Stuffer available in my Ebay Store—see the link on page 15.



Selection of cutting plates - showing variation in sizes.

BBQHQ Stuffer

Available in my Ebay Store: <http://stores.ebay.com.au/BBQHQnet>

There is also an excellent example of a **water powered** stuffer available online in the USA, at a fairly reasonable price: <http://www.dakotahsausagestuffer.com>

Knives

If you are planning to cut whole portion meats, bone out shoulders, leg meat etc, it is essential to have at least one good quality knife to help you with the task. It is possible to spend a small fortune on a good quality knife, however a good one should last a lifetime!

That said - I prefer to buy my knives from my butcher supplier, the type used by butchers. They are cheap (less than \$20), easily sharpened using a stone or steel and have become a handy tool in the kitchen for all sorts of cutting. For some great knife sharpening tips:

<http://www.knifecenter.com/knifecenter/sharpen/instruct.html>

I suggest you visit your catering supply shop for advice on knives. If you're anything like me - you will also find all sorts of other things that you "need". Items range from chain-mail gloves to help prevent knife cuts, through to sharpeners, butchers twine, gloves etc.



One essential item though, is a suitable large surface for cutting. Today's choices range from large wooden butcher blocks, popular again in kitchens - through to high-tech glass surfaces, and the more common nylon cutting boards. Personally, I find the nylon cutting boards easy to clean, cheap and gentle on knife blades.



2.5 Kg Sausage Stuffer

My Ebay Store — <http://stores.ebay.com.au/BBQHQnet>

Thermometers

These are essential – for food safety; particularly with Cooked or Dried Sausage. I have several, an older type stainless with the red spirit based rising column, a digital probe type thermometer that comes with a cover that clips into your pocket; handy for checking anything, even the temperature in your fridge!

But by far my most versatile thermometer has been the probe thermometer, available in my Ebay Store; <http://stores.ebay.com.au/BBQHQnet>

It has a remote wireless probe that can be inserted into anything (even inside your barbecue) while the sensor unit sits safely away from the heat source. For Cooked Sausage you will find them perfect, insert the probe into the centre of any sausage you make and when the temperature reaches your set-point it will alert you with an audible alarm. Use it to monitor the temperature in your incubation area while you ferment any dry cured sausage or use the handy timer feature to alert you when your programmed time period has passed. They are just perfect for sausage makers!

Scales

You will need a reasonably accurate set of kitchen scales for weighing out the meat. The set I use has a maximum weight of 5 kg or 10 lb., manufactured by Krups. To date they have been sufficient for my needs, though I have had to weigh in batches during times when I've made larger quantities.

For simplicity of measurement in this book, I have included volume measures for ingredients (i.e. salt, cure, spices etc).

I do have a set of digital scales that claim to be accurate to +/- 1 gram, that I use where recipes give a specific weight. Some makers also recommend use of smaller beam type scales that are also readily available online.

Meat Tubs

You will need a couple of reasonably large, food grade tubs in which to mix your meat and spices etc, prior to stuffing the sausage. Stainless steel or food grade plastic is ideal.

Bear in mind that these will need to be of a size and shape compatible with your refrigerator shelving, because in some cases you will mix your ingredients and allow them to sit overnight, prior to stuffing. You may need to alter or even remove shelving to facilitate your tubs of sausage mix. I have a second refrigerator, specifically for my "foodie" projects, so have little problem accommodating the large containers.

These are the sausage skins. The two most common choice of casings for Fresh sausage for home use are;

- Natural animal casings** (intestines of pigs, sheep etc.),
- Collagen casings** (man made, from natural proteins in cattle hides),

Natural animal casings

Natural casings have a near perfect sausage shape, stay twisted in links (hog, lamb and sheep casings), and are far better to cook than alternatives. They take on smoke well, and shrink down with the meat as the sausage dries – (perfect for smoked or dry cured sausage).

Being a natural product, there can be considerable variation in size, shape and quality. They are available in a range of sizes and types to suit most styles of sausage.

Most popular with home sausage makers is the hog casing, its size makes it suitable for both fresh and some smaller cooked and dried styles.

The biggest drawback with hanks of natural casings (hog & sheep etc) is in the unpacking! They are usually packed in salt and tied in long bundles! To use them you need to carefully unravel the bundle and separate each individual casing. While this sounds easy - they are several metres in length and tangle very easily! The task it is best done on a long (clean) bench top or similar.

Next - it is necessary to wash and flush the casing to remove any remaining salt. For best results the end of the casing is carefully slid over the kitchen tap fitting, and a small amount of water is introduced. By moving the casing, it is possible to move the water along and flush out any residues. Care needs to be taken, while this is being done - not to tangle the casing. Poorer quality casings may also have little fibres bristling over the exterior, these can also become tangled together, either during flushing or later while stuffing them!

Once a natural casing has been flushed it is ready to use. The next step is to fit it to the filling nozzle, best accomplished by smearing the nozzle with a little vegetable oil. Open the end of the casing, slide it over the nozzle and continue until the nozzle holds as much casing as possible. Extrude a small quantity of meat from the end of the nozzle, tie a knot in the end of the (hog or sheep) casing and you're ready to make sausage!

For larger cooked and dried sausage types there are larger natural casings available, common choices are: Beef middles or rounds and lamb bungs. These are available from my supplier individually and in bulk, check with your local supplier.

Collagen Casings

These come compressed in a tube and in the smaller sizes, ready to slide onto a nozzle. Their immediate readiness is their biggest advantage and represents considerable time savings over natural casings - in small diameter sausages.

But they are not particularly strong; so you must exercise care when handling and cooking them. Cook them at lower temperatures initially and gradually increase the heat. You can even poach them in water, before draining and frying in oil.

My supplier provides two types (for thick and thin sausages); in pack sizes suitable for approximately 25 - 30 kg and also in bulk.

Each strand of the 30 mm thick casings (shown below), will hold approx. 6 kg (13 lb.). To use, simply apply some olive or vegetable oil to the filling nozzle; and slide onto the appropriately sized nozzle. After this, it is simply a matter of extruding some meat from the end of the nozzle, tying a good knot and filling!



The disadvantages with collagen are that they can and do split (when stuffing and particularly when frying); they do not look as attractive and tend to unravel, after being twisted into links.

On the subject of forming links, many makers just extrude the sausage first (like a large snake) packed slightly looser and then twist them off later into the desired length.

With practice you can develop a twist that starts off holding each sausage at the length you desire and spinning much like a skipping rope! But casings can and do burst while filling, in this event tie off each loose end and either form a patty to taste later, or feed the meat back into the mincer.

When stuffing (using any method) is finished, there is usually an amount of meat paste remaining in the auger or nozzle. You can just remove it by hand and make patties – OR it can be removed by slowing adding a small quantity of breadcrumbs to push out the remaining paste. Be careful with electric mincers though – they can jam up and overload if you overdo it.

Salt

Despite a trend towards lower salt foods today - it is one of the most important ingredients in sausage making! It can be considered a flavour enhancer, since it lifts the flavour of both the meat and herbs and spices added to it. But depending on the level added, also acts as a preservative, binding up the available water and making it less available to micro-organisms.

But salt is also functional in other ways. In certain styles of sausage, it acts on the meat proteins in conjunction with water and fat to form an emulsion, changing the meat structure. This is why the consistency of some cooked sausages (like Polish Sausage) is so different to that of ordinary fresh sausage.

However, this is where the subject of sausage manufacture begins to become food science; and for simplicity - it is not my intention to delve more deeply at this point. Suffice to say, salt is important in sausage manufacture!

It is available in several forms, from rock, flake, granulated and iodised. Generally, it is not advisable to use iodised salt in sausage making, due to interaction of the iodine with other ingredients. You may however, use any high quality form of cooking salt or flake or kosher salt (available in the USA). Personally I find coarse or cooking salt, the type with granules the size of white sugar crystals, ideal!

Important Note:

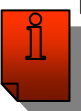
It is generally OK to make reductions to salt levels in fresh sausage if you prefer, because you freeze this style or eat it immediately and therefore do not rely on the preservative action of the salt.

But later on if you move to the Cooked & Dried styles, you rely on the preservative, functional actions of salt (and other ingredients) to protect you from the growth of pathogenic (disease causing) organisms and to help provide certain other characteristics, like texture and taste. For safety with these two categories of sausage - you are advised to follow salt and cure quantities in recipes closely!

Herbs and Spices

Used for thousands of years to help preserve and enhance the flavour of meat, and sausage is no exception! Without them sausage would taste the same and be bland and boring! There is an art to the creation of fine flavoured sausage; and it comes down to appreciation of the individual spice components and careful balance of flavours.

I liken it to the mix of colours, an artist might use in painting. Wonderful colours can be created, by the skilful addition of just a few primaries with an addition of white to lighten or black to darken - however simply adding any colour in any combination, usually results in grey or black. Sausage flavour should be tackled similarly; i.e. unless you are using a proven recipe, apply the herbs and spices carefully and in balance. Subtlety can be beautiful, whereas excess can ruin an otherwise good sausage!



The most commonly used flavour ingredients are:

Black and white pepper	Rubbed thyme
Onion powder & pieces	Ground oregano
Garlic powder & pieces	Rosemary
Ground coriander	Allspice
Ground cumin	Marjoram
Ground mustard and mustard seed	Paprika
Ground ginger	Rubbed sage
Ground cloves	Chopped parsley
Ground chilli	Basil
Cayenne pepper	Cinnamon
Ground mace	Nutmeg
Ground bay leaves	Fenugreek

Recipes for sausage may focus on using the flavour of one or two particular ingredients, or use combinations of several different herbs and spices. Certain styles have become popular because of the flavour created by the particular ingredients. If you are trying to recreate a particular style, I suggest that you adhere to the recipe.

But don't limit yourself to the recipes of others – experiment with single herbs, pairs or perhaps triple combinations; built on a base of salt and pepper. Add chilli also, if you like spicy, since it mostly adds heat rather than taste.

If you do find yourself in a situation where a recipe calls for an herb or spice that you do not have, either leave it out - or replace it with something with a similar flavour. To help – I have grouped some together loosely based on aroma or taste:

Citrus	Liquorice	Mint	Onion-like	Sweet	Pungent
Lemon Grass	Tarragon	Peppermint	Chives	Basil	Coriander
Lemon rind	Liquorice	Spearmint	Garlic Chives	Bay	Cardamom
Lemon-myrtle	Dill	Catnip	Spring onions	Lavender	Oregano
Galangal	Fennel	Calamint	Shallots	Cinnamon	Rosemary
Lemon balm	Star Anise		Garlic	Cassia	Thyme
Sorrel	Anise			Vanilla	Sage
Sumac	Chervil			Juniper	Pepper
Tamarind				Paprika	Ginger
					Cloves
					Mustard
					Chillie
					Fenugreek

There are also several other quite natural additives that you may read about — in the manufacture of sausage. Do not be intimidated by these ingredients, they are safe and functional – and add desirable properties to your sausage.

Non-fat Dried Milk Powder

Added to help bind with meat proteins and can assist moisture retention. Since some types of cooked sausage may be smoked for considerable periods, it can also help minimise weight loss through drying.

Often referred to as: NFD (Non-Fat Dried) Milk Powder. Supermarket brands work well, but buy the powder type (not granulated) it assimilates better into the mix. The **maximum** recommended use, without alteration of meat flavour, is around 10 percent of meat weight.

Soy Protein Concentrate

Extracted from Soy beans and similar in function to milk powder - i.e. protein binding and moisture retention. Soy protein is more effective, but also more expensive and can be a little harder to locate. Maximum recommended is about 5% of meat weight.

Whey Protein Concentrate

A concentrated natural by-product of cheese-making, increasingly in popular with commercial manufacturers, due to its excellent binding and moisture retention making it suitable for use as a fat reducer. The concentrate used is generally 30% or greater protein concentration.

Dextrose

A type of sugar – functional as a browning agent; also added to Dried and Semi Dried Sausage to assist the bacteria used in starter cultures. Dextrose is approximately 70 percent as sweet as a regular sugar (sucrose), but can help reduce the harshness of the salt taste in sausage, like regular sugar. Sugars like salts - can bind water and add to overall moisture retention. In fresh and some cooked sausage dextrose can assist with browning during the cooking. Readily available from Home Brew Shops.

Corn Syrup Solids

As the name suggests, a natural product derived from corn. It aids in binding meat and moisture and is of particular benefit in products that are cured at lower temperatures, for example semi-dried and dried sausages. Like dextrose it also offers nutrients to the bacteria that ferment these sausages and manufacture lactic acid. Known in Australia as dried corn syrup or maltodextrin, and readily available in Home Brew Shops.

Fresh sausage is one of the easiest and safest for the novice home sausage maker to begin with. Techniques learned here will help you later as you progress to the more advanced (and more complicated) styles of sausage.

Technique

Your approach will vary, depending on the type of meat that you start with. For simplicity, I will start from the beginning, assuming you have purchased whole shoulder pork or similar.

If you decided to purchase minced meat - go straight to step 3, then straight to the Add Herbs & Spices - step 5.

1) Choose Recipe

Purchase meat, check recipe and purchase any required ingredients.

2) Trim

Remove any skin from the pork shoulder; carefully remove meat from bone with a sharp knife, initially cutting into large chunks. Next dice meat into smaller chunks - approximately 25-50mm or 1-2 inch. While dicing remove any excess gristle, clots, membrane or other undesirable bits!

Mincing Tip - place meat chunks into suitably sized freezer bag lay flat in freezer if possible, until meat is almost frozen. This step helps prevent mashing of the meat and smearing of fat during mincing, and assists in the cutting.

3) Measure/weigh

- salt, spices and herbs in accordance with recipe. Adjust ratios of ingredients to suit final trimmed meat weight - in fresh sausage, this is important for both flavour and quality.

If the final trimmed weight of the meat is 1.5 times what the recipe calls for, then multiply all ingredients by 1.5 to arrive at ingredient weights. Example: recipe = 4 kg meat, actual = 6 kg or 1.5 times recipe weight. Recipe salt = 30 g per 4 kg, actual salt $30 \times 1.5 = 45$ g per 6kg = 1.5 times 4kg recipe.

If the recipe gives tablespoon or teaspoon measures, then calculate to the nearest quarter spoon. If this appears difficult now, relax - it will come to you later & you will do it automatically!

4) Mince

Set up your mincer. Remove (almost frozen) meat from freezer and mince (grind) meat chunks to whatever grade the recipe or your preference calls for. Generally for fresh sausage I use the coarsest (largest holed) plate on the mincer first, and finish with the desired size last. This will depend on your mincer and your preferences - some sausage makers add the salt and spices at the initial meat chunk stage and then mince and fill

They claim that this better helps incorporate the additives and makes the process easier by eliminating the second mince. There are no hard and fast rules in this area, feel free to try this method if you like? You will find a single mince easier with an electric mincer, but I'd suggest it is easier to do two minces with a hand mincer!

5) Add Herbs, Spices etc.

In between mincing, I usually add salt and other ingredients and mix well by hand or with large s/steel spoon, then complete the final mince, using this mince to assist in mixing ingredients. Many sausage recipes have a liquid component, sometimes water, but often wine or beer etc. I prefer to incorporate all of my dry ingredients with the liquid first, and then add this spicy liquid to the minced meat.

My reasoning is that this method enables me to first thoroughly mix all ingredients into the liquid, distributing it better throughout the meat.

6) Stuffing

Once the meat paste has been thoroughly mixed, you may either - proceed to the next step and **stuff the sausages** and refrigerate overnight - alternatively refrigerate the **meat paste overnight**, and stuff the sausages next day. Either way, the purpose of the delay is to allow some time for salt and spices to properly incorporate and interact with the meat.

- If using **natural casings**, estimate how many you will require, separate them from the bundle, flush casings, and soak casings (30 minutes minimum). Lubricate the filler nozzle with olive or vegetable oil/spray and load casings onto nozzle. Operate filler to push meat paste until it protrudes from end of nozzle. Tie a secure knot in casing end and operate grinder until all meat paste is extruded into casings. Twist off sausage sized lengths, twisting each link in the opposite direction of the previous one to form sausages.
- If using **collagen casings**, estimate how much you will require, (a slug of thin casings accepts around 5 kg (11 lb.), thick casings approx. 6 kg (13 lb.)). They can be used dry. Lubricate the filler nozzle with olive or vegetable oil/spray and load casings onto nozzle. Operate filler to push meat paste until it protrudes from end of nozzle. Tie a secure knot in surplus casing end and operate grinder until all meat paste is extruded into casings. Twist off sausage sized lengths, twisting each link in the opposite direction of the previous one to form sausages.

Stuffing Tip – purge the last bit of meat paste from your mincer or stuffer, by adding ½ - 1 cup of breadcrumbs or a potato to push out remainder - or else just remove it by hand and shape into patties and cook!

Once finished treat the sausages as you would fresh meat, consume within a day or two, otherwise store in the freezer for 2 - 3 months.

Fresh Sausage Recipes

Eight

Breakfast Sausage

2.25 kg pork shoulder
add extra up to 300 g Pork back-fat
1 TBS (Tablespoon) coarse salt
1 + 1/2 tsp. ground white pepper
1 + 1/2 tsp. rubbed sage
1/2 tsp. ginger
1 + 1/2 tsp. nutmeg
1 tsp. thyme
1 + 1/2 tsp. cayenne pepper
1/2 cup iced water or chilled white wine

Follow fresh sausage directions Page 23 and use a fine disk for final mince. Mix all dry ingredients together, add liquid and mix thoroughly through meat. Use your choice of casing.

English Bangers

2.25 kg pork shoulder
add extra up to 300 g Pork back-fat
1 TBS coarse salt
1 + 1/2 tsp. ground white pepper
3/4 tsp. ground mace
1/2 tsp. ground ginger
1/2 tsp. rubbed sage
Pinch nutmeg
2 cups stale or dried breadcrumbs
1 + 3/4 cups chicken stock

Follow fresh sausage directions, using a fine disk for final mince. Mix all dry ingredients together, add stock and mix thoroughly through meat. Use your choice of casing, hog or large collagen is ideal.

Traditional Pork Sausage

2.25 kg pork shoulder
add extra up to 300 g Pork back-fat
2 + 1/2 tsp. coarse salt
1 + 1/2 tsp. ground white pepper
1 + 1/2 tsp. rubbed sage
1/2 tsp. ginger
1 + 1/2 tsp. nutmeg
1 tsp. thyme
1 + 1/2 tsp. cayenne pepper
1/2 cup ice water or chilled white wine

Follow fresh sausage directions outlined above, using a fine disk for final mince. Mix all dry ingredients together, add liquid and mix thoroughly through meat. Use your choice of casing.

Bockwurst

1.25 kg pork shoulder
 add extra up to 180 g Pork back-fat
 500g (1lb) chicken breast
 500g (1lb) veal trims
 1 TBS coarse salt
 1 tsp. ground white pepper
 1 + 1/2 tsp. mace
 1/2 tsp. ginger
 1 + 1/2 cups whole milk
 2 TBS butter
 1/2 cup chopped parsley
 2/3 cup chopped onion
 2/3 cup chopped leek
 2 beaten eggs

Sauté leeks in butter until soft, allow to cool slightly. Grind pork chicken and veal through coarse disk, add salt and spices and run through fine disk. Add cooled leeks, parsley, egg, milk,– then mix well with s/steel spoon, chill for one hour.

Stuff into your choice of casing. Poach in salted water at around 75C (170F) for 20 mins or until firm. Drain well, and chill. Use with 2 or 3 days or freeze.

Bratwurst

1.25 kg pork shoulder
 add extra up to 300 g Pork back-fat
 1 kg beef rump or blade steak
 1 TBS coarse salt
 1 tsp. ground white pepper
 1 tsp. ground celery seed
 2 tsp. ground caraway seed
 1/2 tsp. nutmeg
 2 TBS chopped parsley
 1/2 tsp. cayenne pepper
 1 cup finely chopped onion
 1/2 tsp. lemon zest
 1/2 cup ice water or chilled white wine

Pork & Pepper Sausage

2.25 kg pork shoulder
 add extra up to 300 g Pork back-fat
 1 TBS coarse salt
 1 tsp. garlic powder (or 3 cloves fresh)
 1 cup finely chopped celery
 1 cup finely chopped spring onion
 2 TBS Szechwan peppercorns (ground)
 1/4 cup light soy sauce
 1/2 cup sweet sherry

Follow fresh sausage directions, using a medium disk for final mince. Mix all dry ingredients together, add liquid and mix thoroughly through meat. Use your choice of casing

Italian style Sausage

2.25 kg pork shoulder
 add extra up to 200 g Pork back-fat
 350g (3/4lb) finely diced mozzarella
 175g (6 oz.) chopped semi dried tomatoes in oil
 1 TBS coarse salt
 1 TBS balsamic vinegar
 3 TBS dried parsley flakes or bunch fresh, finely chopped
 2 tsp. ground black pepper
 1 TBS ground fennel seed
 2 tsp. dried basil
 2 tsp. ground coriander
 3/4 cup red or white wine (chilled)

Follow fresh sausage directions, using a medium or coarse disk for final mince. Mix all dry ingredients (except cheese & dried tomato) together, add wine and mix thoroughly through meat. Mix cheese & tomato through meat mix by hand just prior to stuffing. Use your choice of casing, hog or large collagen is ideal.

Hot Italian style Sausage

2.25 kg pork shoulder
 add extra up to 300 g Pork back-fat
 2 1/2 tsp. coarse salt
 2 TBS ground dried chilli (adjust according to preference.)
 5 cloves garlic, minced or 2 tsp. powder
 2 tsp. ground black pepper
 3 tsp. ground coriander
 1/4 cup ground paprika
 3/4 cup red or white wine (chilled)

Follow sausage directions, using a medium or coarse disk. Mix ingredients together, add wine and mix thoroughly through meat. Hog casing is ideal.

Beef Breakfast Sausage

2 kg beef chuck, blade or rump steak
 500 hard beef fat or pork back fat
 1 TBS coarse salt
 2 tsp. dried thyme
 1 TBS rubbed sage
 1 TBS ground black pepper
 2 tsp. cayenne or chilli pepper (optional)
 1/2 cup beer or beef stock

Follow fresh sausage directions, using a fine disk for final mince. Cut fat into 12 mm (1/2 inch) cubes and freeze solid before mincing, separately. Mix minced fat through minced meat prior to stuffing. Mix all dry ingredients together, add liquid and mix thoroughly through meat. Use your choice of casing.

Aussie Lamb Sausage

2.25 kg lamb shoulder, leg or loin
 add extra up to 300 g Pork back-fat
 1 TBS coarse salt
 1/4 cup olive oil
 5 cloves garlic, minced or 2 tsp. powder
 2 tsp. ground black pepper
 1/4 cup fresh chopped rosemary leaves or 1 TBS dried
 1/2 cup red wine (chilled)

Follow fresh sausage directions, using a medium or coarse disk for final mince. Mix all dry ingredients together, add wine and oil & mix thoroughly through meat. Use your choice of casing: lamb, small hog or collagen is ideal.

Lamb & Apricot Sausage

2.25 kg lamb shoulder, leg or loin
 add extra up to 300 g Pork back-fat
 1 TBS coarse salt
 375g dried apricots (soak in warm water 30 mins & finely chop)
 1/3 cup Mango Chutney
 5 cloves garlic, minced or 2 tsp. powder
 2 tsp. ground black pepper
 1/2 cup finely chopped red or white onion or 1 TBS dried
 1/4 cup lemon juice - plus zest of 1 lemon

Similar directions outlined for Aussie Lamb above, using a medium disk for final.

Honey Sesame Sausage

2.25 kg pork shoulder
 add extra up to 300 g Pork back-fat
 2 tsp. coarse salt
 1 tsp. garlic powder
 3 TBS honey
 1/2 cup toasted sesame seeds
 2 1/2 tsp. Chinese 5 Spice powder
 1/4 cup light soy sauce
 1/4 cup rice wine or white wine (chilled)

Follow fresh sausage directions, using a medium disk for final mince. Toast fresh sesame seeds in a dry frypan gently, till golden. Mix all dry ingredients together, blend wine, soy & honey together and mix thoroughly through meat. Use your choice of casing.

Pork, Apple & Sage Sausage

2.25 kg pork shoulder
 add extra up to 300 g Pork back-fat
 1 TBS coarse salt
 2 TBS rubbed sage
 1 cup apple sauce (commercial or homemade)
 2 tsp. ground black pepper
 1/4 cup chilled white wine (optional)

Follow fresh sausage directions, using a medium or coarse disk for final mince. Mix all dry ingredients together, blend wine & apple sauce together and mix thoroughly through meat. Use your choice of casing, hog or larger collagen is ideal.

Spanish style Hot Chorizo

2.25 kg pork shoulder
 add extra up to 300 g Pork back-fat
 1 TBS coarse salt
 3 TBS Chilli flakes (adjust according to preference)
 3 TBS ground paprika
 4 tsp. whole fennel seeds (grind slightly in mortar and pestle)
 1/2 tsp. ground allspice
 1/2 cup sherry

Follow fresh sausage directions, using a medium or coarse disk for final mince. Mix all dry ingredients together, add sherry and mix thoroughly through meat. Use your choice of casing, hog or larger collagen is ideal.

Bush Kangaroo Sausage

2 kg diced kangaroo meat
 500g pork back fat
 1 TBS coarse salt
 1 TBS ground coriander
 2 tsp. ground black pepper
 3/4 tsp. ground allspice
 3 cloves garlic, minced or 1 tsp. powder
 2 tsp. cayenne or chilli pepper (optional)
 1/2 cup beer, red wine or beef stock

Follow fresh sausage directions, using a medium or coarse disk for final mince. Cut fat into 12 mm (1/2 inch) cubes and freeze solid before mincing, separately. Mix minced fat through minced meat prior to stuffing. Mix all dry ingredients together, add liquid and mix thoroughly through meat. Use your choice of casing, hog or larger collagen is ideal.

Indian style Coriander Chicken Sausage

2.25 kg chicken thigh fillets
 add extra up to 200 g Pork back-fat
 4 tsp. coarse salt
 3 TBS ground coriander
 1 tsp. ground black pepper
 1 tsp. ground turmeric
 2 tsp. ground mixed spice
 5 cloves garlic, minced or 2 tsp. powder
 1 tsp. cayenne or chilli pepper (optional)
 1/4 cup peanut or vegetable oil (skip if using sour cream)
 1 cup sour cream or natural yoghurt

Follow fresh sausage directions, using a medium disk for final mince. Mix all dry ingredients together, add cream or yoghurt and mix thoroughly through meat. Use your choice of casing. Best consumed within **1 or 2 days**; there will be a loss of quality if this were to be frozen.

Honey Soy Chicken Sausage

2.25 kg chicken thigh fillets
 add extra up to 200 g Pork back-fat
 4 tsp. coarse salt
 1 tsp. ground black pepper
 2 tsp. Chinese 5 Spice powder
 3 cloves garlic, minced or 1 tsp. powder
 3 tsp. ground ginger or large knob fresh
 1/4 bottle Teriyaki Honey Soy marinade

Follow fresh sausage directions, using a medium disk for final mince. Mix all dry ingredients together, add the 1/2 bottle marinade and mix thoroughly through meat. Use your choice of casing.

Cooked Sausage Recipes **Nine**

If you'd like to test the waters of the next Sausage category — that of the fully Cooked (smallgoods type) sausage, here's a few recipes.

Bierwurst

2.25	kg (5lb)	Veal trim or Venison
2.25	kg (5lb)	Pork shoulder
	add extra up to 300 g	Pork back-fat
3	TB	Coarse Salt
2	tsp.	Cure #1
2 1/2	TB	Ground Black Pepper
1/4	tsp.	Ground Cardamom
6	cloves	Fresh Garlic - minced
1	tsp.	Ground Nutmeg
1	TB	Mustard powder
2	TB	Rubbed Thyme
1/2	cup	Lager (optional)

Ensure meat is very cold (near freezing). Mince pork and veal using a 9mm (3/8) plate. Combine all other ingredients and cure in a small bowl, mix thoroughly. Take half of this spice, cure and salt mix, scatter evenly over the surface of the meat mix and blend thoroughly. Add remaining half of spice mix and blend thoroughly again. Place into fridge overnight to allow flavour and cure development.

Stuff into hog casings or large collagen casings approx. 270 - 300mm lengths; tie in pairs to form a loop. Allow exterior of sausages to dry, before hanging in a preheated smoker at 60 C (140F) dampers fully open for the first hour, then close dampers to 1/4 open and increase temp to 71C (160F), until the sausage reaches an internal temperature of 67C (152F). Remove finished product from smoker and spray with cold water for 5 – 10 mins or into cool bath – refrigerate overnight before use.

German Style Smoked Sausage

2.25	kg (5lb)	Veal trim
2.25	kg (5lb)	Pork shoulder
add extra up to 300 g		Pork back-fat
3	TBS	Coarse Salt
2	tsp.	Cure #1
1	TBS	Ground Black Pepper
1	TBS	Ground Mace
1	tsp.	Ground Ginger
1/4	tsp.	Ground Cardamom
1	TBS	Ground Nutmeg
2	TBS	Rubbed Sage
2	cups	Ice water

Ensure meat is very cold (near freezing). Mince pork and veal using a 9mm (3/8) plate. Combine all other ingredients (except ice water and cure) in a small bowl, mix thoroughly. Take half of this spice and salt mix, scatter evenly over the surface of the meat and blend thoroughly. Add remaining half of spice mix and blend thoroughly again. Mix cure into ice water and mix thoroughly through spiced meat. Mince again using a finer plate (3 - 5mm or 1/8 – 3/16), and stuff into your choice of casings – sheep, hog or collagen, approx. 270 - 300mm lengths, tie in pairs to form a loop.. Place into fridge overnight to allow flavour and cure development.

Ensure sausages are dry externally, before hanging in a preheated smoker at 60 C (140F) dampers fully open, moderate smoke for the first hour, then close dampers to 1/4 and increase temp to 71C (160F), until the sausage reaches an internal temperature of 67C (152F). Remove finished product from smoker and spray with cold water for 5 – 10 mins or into cool water bath – then refrigerate overnight before use.

Jagwurst

3	kg (6 1/2lb)	Pork shoulder
2	kg (4 1/4lb)	Chopped bacon pieces
2	tsp.	Cure #1
3	TBS	Coarse Salt
1	TBS	Ground ginger
2	TBS	Mustard powder
1	TBS	Ground White pepper
1	TBS	Ground coriander
1	TBS	Ground nutmeg
2	TBS	Raw sugar
1	cup	Iced water

Ensure meat is very cold (near freezing). Mince pork shoulder using a 9mm (3/8) plate. Add bacon pieces and all other ingredients - mix thoroughly through meat and mince again using a fine plate (3mm or 3/16). Stuff into large hog to your choice of size or small fibrous casing 80-90mm (3- 3 1/2 inch).

Preheat smoker to 55C (130F) and hang for 30 mins, no smoke. Then increase temperature to approx. 75C (167F) until internal temperature of sausage reaches 65C (150F), applying smoke for approximately last 30 mins only.

Remove sausage from smoker when cooked, chill quickly in a tub filled with ice and water, allowing approximately 30 mins. Remove from tub and refrigerate overnight before use. Keep refrigerated, approximate shelf life 2 weeks.

Kransky

3	kg (6 1/2lb)	Pork shoulder
	add extra up to 300 g	Pork back-fat
2	kg (4 1/4lb)	Beef or lamb mince
2	tsp.	Cure #1
3	TBS	Coarse Salt
1	TBS	Ground Black pepper
6	cloves	Fresh garlic – finely chopped
1	cup	NFD Milk Powder
1	cup	Iced water
1	cup	White wine
1 1/2	cups	Finely cubed Cheddar cheese (optional)

Ensure pork is very cold (near freezing). Mince pork shoulder using a 9mm (3/8) plate. Add minced beef or lamb and all other ingredients - mix thoroughly through meat and mince again using a finer plate (3 - 5mm or 1/8 – 3/16), and stuff into hog casings.

Preheat smoker to 55C (130F) and hang for 30 mins, no smoke. Then apply smoke and increase temperature to approx. 75C (167F) until internal temperature of sausage reaches 65C (150F),

Remove sausage from smoker when cooked, chill quickly in a tub filled with ice and water, allowing approximately 30 mins. Remove from tub and refrigerate overnight before use. Keep refrigerated, approximate shelf life 2 weeks.

Kabana

Australian Kabana is a little different to the recipes for Cabanossi that I've seen from other countries, whereas it seems to be a semi-dried sausage overseas – here it is a moist cooked sausage, with or without smoke flavour.

4.5	kg	Pork shoulder
500	g	Pork back-fat
3	TB	Coarse Salt
2	tsp.	Cure #1
1	TB	Ground Black pepper
2	TBS	Dextrose or 1 TBS Sugar
1	tsp.	Garlic powder or 2 cloves fresh
2	tsp.	Crushed Mustard seeds
1/2	Cup	NFD Milk Powder
1	Cup	Iced water

Ensure meat is very cold (near freezing). Mince meat using a 9mm (3/8) plate. Mince again using a fine plate (3mm or 3/16). Combine all ingredients, in a suitably sized bowl, and mix thoroughly through meat.

Stuff into the smallest natural casing you can buy (lamb) or small collagen.

Allow to dry, before hanging in a preheated smoker at 60 C (140F) dampers fully open for the first hour, then close dampers to 1/4 open, add smoke (optional) and increase temp to 71C (160F), until the sausage reaches an internal temperature of 67C (152F). Remove finished product from smoker and spray with cold water for 5 mins or place into cool bath – refrigerate overnight before use.

If you're interested in Sausage Casings, Cures, Starter cultures and other ingredients — like Liquid Smoke; as well as Marinade Injectors, and Jerky packs etc, visit my Ebay Store below:

<http://stores.ebay.com.au/BBQHQnet>

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