

The Best Jerky

I've worked for the last 10 years to get a good batch of jerky, without success. Somewhere in my childhood I have a memory of jerky -- jerky that tasted like beef, just slightly salty and imminently satisfying. I'm not sure where it went. I've bought every major brand of jerky, and most of it tastes like chemically treated cardboard. I tried making it, and usually it just came out too salty, too dry, or too tough.

Finally, in a stroke of luck, I found the secret: kefili! Soaking the meat in a lacto-fermentation culture does a few things:

- First, it tends to kill off any e-coli that may be present. That was my original goal!
- Second, it tenderizes the meat.
- Third, it gives the meat that wonderful flavor that you probably associate with pepperoni or salami, which are also lacto-fermented meats.

Since that first batch, I've been making jerky regularly, and it has come out great. Jerky is now my favorite "snack food." Since the jerky is made without chemicals, it's as good for you as, say, a beefsteak, but it travels well. It's quite filling, and if I'm on the road I can live off jerky and a few fruits and nuts with no problem.

Jerky in general

Jerky is one of those foods with a long history. Most tribal cultures dry meat in one form or another. In South Africa it is called Biltong, and an acquaintance who grew up there told me how she would grab a strip of Biltong, hanging from the rafters in their garage, to munch on as she walked to school. In any place where it is hot and dry, strips of meat left out in the sun dry nicely, and the North American Indians would dry strips of buffalo and salmon by hanging it from wooden poles.

Nowadays most people who make jerky dry it in their ovens, or with a dehydrator, or sometimes in a smoker. Usually the meat is "brined," that is, soaked in water with salt and/or sugar added before drying.

Many recipe books nowadays recommend making jerky in the oven. This usually cooks the meat -- the temperature of the meat gets over 150 or so. The result is dry cooked meat, which is not, in my opinion, true jerky! Or, people use mixes that contain nitrates and "cure" the meat with chemicals.

However, the reason they recommend these procedures is because of the issues with e-coli. If the meat you are using has been contaminated, then drying at, say, 100 degrees will not kill the e-coli. For this reason, some recommendations have been made involving dipping the meat in a hot vinegar brine to kill any e-coli on the surface of the meat. (see <http://www.ext.colostate.edu/pubs/foodnut/09311.html>). I've also seen tests done where the meat was just dipped in vinegar: the acid in the vinegar does a pretty good job of killing e-coli.

My idea originally, therefore, was to mix the meat with some Kefiri and let it set in the fridge for a day or two. Kefir is rather sour, and it also acts as an antibacterial. I figured the long soak would make the meat safe enough, and it might add some flavor. Actually, the jerky just come out wonderful! One lady who cannot handle any milk products tried the same technique using kimchi juice, and she says it came out great also.

Following are step by step instructions for how I did it. Basically it is very simple:

- Slice some meat
- Mix it with Kefir, Kefiri, or Kimchi juice and spices.
- Let it set a day or three in the fridge.
- Dry it in the dehydrator.

I store my jerky in the freezer, partly because we tend to get bugs in the house and partly because I tend to use fatty meats. The fat in the meat doesn't dry well, and it can go rancid. But I do like jerky fat, myself. If you don't like it, use leaner meat, or save those bits for the dog.

Cutting the Meat

By far the hardest thing about making jerky is cutting the meat. You can avoid this step by buying pre-sliced meat -- some butchers will slice a round roast nice and thin on a special order.

Otherwise, you can also do it with a sharp knife and some patience! If you really like jerky though, you might end up buying a nice meat slicer. I got this one quite reasonably at Costco.



Whether you do this with a knife or a slicer, the trick is to freeze the meat first. My meat tends to be stored in the freezer anyway, so that's easy. Let the meat thaw, but not completely: when the meat is just slightly frozen is the best time to slice it.

If you slice the meat across the grain, it will be more tender. With the grain, it will be more chewy. Bits of cartilage (the white stuff) will be very tough to chew, which doesn't bother me personally but it most people prefer pure meat. Also, the fat on the meat doesn't dry well and a lot of people don't like to eat it on jerky, though again, I personally like it because it makes the jerky more filling.

Slice the meat 1/4" thick, or thinner if you can. 3/8" is the maximum thickness you want to go. It is helpful to have all the slices the same thickness in any case, so they dry at the same time. The thinner the jerky, the more tender it will be, but this is totally a matter of taste.

Note that the cutting board and slicer are all located inside a big aluminum tray. I got the tray at a business Costco also, for about \$7. These are really, really useful. The process of slicing meat is downright messy, and the tray contains the juices and makes cleanup a lot easier!

Mixing the meat



Next, place the sliced meat in a container and add some Kefir. You can also use Kefir, or kimchi juice, or even buttermilk in a pinch. I also add some salt, pepper, and garlic powder, or just use McCormick Montreal Steak Seasoning. Don't over-spice the meat though: add about the same amount of seasoning as you would if you were just cooking a steak.

This is a plastic container, but it is better to use Pyrex if you have one with a good lid that is big enough. Good stainless might work too, but the salt and acid can be hard on metal if it isn't of high quality.

Mix everything up very well. I recommend using rubber gloves, because the mix will be COLD and fairly yecchy too. Put the mix in the fridge for at least a day. The longer you leave it, the more flavor it will have. I don't know how long is

the maximum though: the longest I've gone is 4 days.

One hint: don't show anyone what you are doing at this stage. When people see Kefili-covered meat they get the idea that this is pretty gross and usually make discouraging comments like "I'm *never* eating that stuff!!!!". Come to think of it, if you can hold them to that promise, that's not a bad way to protect your jerky supply.



Dehydrating

Next, just lay the slices in your dehydrator. Mine isn't fancy, but it does have a temperature control. I start the dehydrating on about 110, then turn it down after the surface is a little dry. I do this out in the garage, because the dehydrator is loud and the drying jerky really smells up the house!

Looking at the jerky at this stage, it looks pretty weird. Don't worry about the kefiili on the outside. It just kind of disappears, and there is no need to rinse it off.

The trickiest thing here is trying to figure out when the jerky is done. If it is too well done, it will be crackly and lose some flavor. If it isn't done enough, the texture will be unappetizing and it will go bad easily. You want it to be just moist enough to bend 90 degrees or so without breaking.



However, what happens is that the jerky retains moisture on the inside. So, it can look done, and then after it sets a bit, it will get moister. I usually turn off the dehydrator and let the jerky set for a few hours, then come back and check it. If it still seems nice and dry, I take it in a package it.



At this point you can trim the jerky more. Cutting it into little squares is nice, esp. if you like to snack on it when you are driving. I tend to cut off the fattier and more gristly pieces for myself and save them separately. If you do find you have some pieces you don't like, they are great for dog treats!

If you have a vacuum sealer, you can vacuum seal most of the meat and keep out just one small package. Technically well-dried jerky should keep at room temperature just fine, but it depends on how moist your air is and how much salt and spices you used and how dry the jerky is. At any

rate, like most things, the flavor keeps better if you store it in a cold place. I keep mine in the freezer.

Disclaimers and credits

Use at your own risk

I'm not a doctor, or a microbiologist. I researched these issues to my own satisfaction, and I'm also reasonably sure that the meat I buy isn't contaminated with e-coli anyway. E-coli is mainly a problem in hamburger, and on a big roast, only the outside layer could likely be contaminated. Also it is a problem mainly with grain-fed beef, not grass-fed. We've never had a problem making jerky this way.

However, you should do your own research. I'm not trying to be cavalier about bacteria, and when you are dealing with raw meats and live bacteria you need to be careful, and you have to make your own decisions.

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Credits

The nice folks at *native-nutrition* and *beyondprice*, at Yahoogroups, inspired me to write these recipes down in a PDF. It is amazing how much synergy and encouragement a person can get from groups like that! Although no one specifically inspired this particular recipe, I never would have found the courage to try so many fermented foods and try so many experiments if it were not for those groups.
