



Information for chefs

Cooking medium rare burgers

MPI will work with chefs and others to develop specialist sections in its Simply Safe and Suitable Template to allow the safe cooking of medium rare burgers and other red meat specialities, such as beef tartare. The new section will be freely available to chefs and cooks. We'll keep you updated.

In the meantime, before the specialist sections are available, medium-rare or rare hamburgers can be sold if they are safe and suitable.

The Food Act 2014 requires that you take responsibility for ensuring food is safe and suitable – it's easy to assume that everything you do/make is safe if you're not aware of people getting sick from your food. But they might be and are just not telling anyone about it – about 86% of people that get sick from food don't report it (except in anonymous surveys like the one conducted in NZ last year). You need to be aware of the risks and be able to show how you are managing them.

Minced or ground meats are generally not considered safe because, even with the best processing (like we have in New Zealand) there will still be bugs that have transferred from hides and the gut during the slaughter and dressing processes onto the surfaces of meat. The centre of red meat muscles is usually sterile. Searing will kill these bugs – which is why it's OK to serve steaks blue or rare. Mincing causes the bugs that were on the surface of the whole cut of meat to be distributed throughout the mince – so searing won't kill all the bugs present in a patty. Some bugs, like Salmonella or E.coli, only need a few

cells to cause illness, so you will need to have some steps in place to ensure they either never get to the centre of a patty, or are killed if they do. This can be achieved in a variety of ways – you could consider:

Mincing/dicing your own meat using a sear & shave, sear & ice, or blanching preparation method

This method keeps bugs out of the mince – so you can serve meat prepared this way raw, or cook it to any level of 'doneness'.

- Buy whole fresh cuts of beef to prepare burger mince. Do not use trim meat or meat that has been mechanically or chemically tenderised.
- Before mincing, keep the raw meat refrigerated until just before you need it.
- Prepare the meat as close as possible to the cooking time.
- Clean and sanitise surfaces and equipment (chopping boards, knives, mincing machine, containers, push-sticks etc.) immediately before use - or use dedicated mincing equipment.

- To prevent cross-contamination of the sterile internal meat, cook or sanitise the outer surfaces of meat before mincing, either:
 - » Sear on a hotplate, transfer the meat to a fresh chopping board and shave the seared meat from the piece of meat
 - » Sear and rapidly chill the meat e.g. in an ice slurry.
 - » Blanch by cutting the meat into 2-3cm cubes and dipping them into simmering water for about 30 seconds.
- Make sure any other ingredients used in the burger patties (e.g. spices, binder, etc) are safe and suitable too (sterile is recommended – so they don't introduce bugs into your carefully prepared mince).
- Use minced meat or patties immediately, or cover and chill. Don't store for long periods.

Using low temperature long time cooking methods

Whether you sear the patty and put it on a foil wrapped tray in a low oven, or use a sous vide technique you can achieve a medium rare patty while still killing harmful bugs at the centre of the patty. You might need to try a few techniques to find one that works every time – and you will need to pick a time and temperature combination proven to be safe (you might want to use the sous vide section of the template Food Control Plan as a guide).

Use meat with higher pH (around 6.2) and lower fat

Some research (including NZ research) shows that 'pink' burgers can be achieved even at the cooking temperatures described in the Simply Safe and Suitable template – it depends on the meat. Meat with a pH around 6.2 and lower fat content commonly remains medium rare to rare at higher temperatures. Maybe you can talk to your supplier about sourcing meats with a higher pH.

Some other hints and tips for making safe rare burgers:

- Follow good hygiene procedures when making and cooking the patties to avoid cross-contamination from the kitchen environment. For example, use different tools/utensils for cooked and raw products and always clean and sanitise your hands before handling meat.
- It's a good idea to keep a record of how you manage food safety for your verifier, or in case of a foodborne illness investigation.

If in doubt, cook the burgers thoroughly.

[Note: Remember that if you don't have a liquor licence you don't need to register for the new Food Act, until 30 June 2018. If you do have a liquor licence you should be registered by now.]