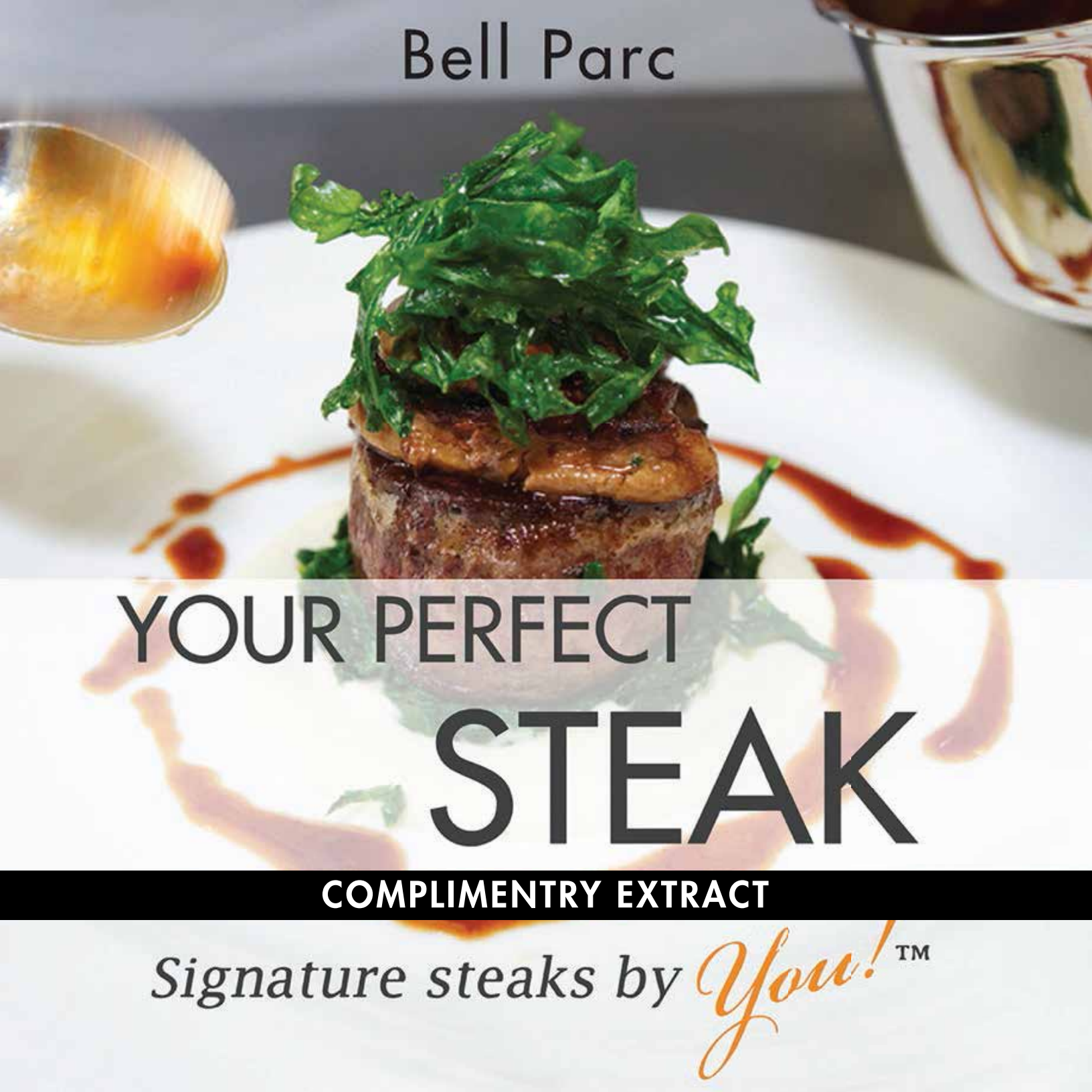

Bell Parc
YOUR PERFECT
STEAK
COMPLIMENTRY EXTRACT
Signature steaks by You! ™

Terms they came up with included ***softness to tooth pressure***, ***feeling on the tongue and cheek,*** and ***ease of fragmentation***[2] when biting a piece of cooked meat. A scientific instrument called the Warner Bratzler Shear Device has even been developed to objectively measure the range from toughness to tenderness of a piece of meat.

If we're preparing for tenderness, then there are some very straightforward and effective things we can control.

These include:

- Selecting steaks classed as prime (not primal) cuts
- Buying steak from animals no older than thirty-six months
- Selecting meat with visible marbling (The study found that intramuscular fat reduced the amount of force required to bite through it and had a lubricating effect, which increased the perception of tenderness.)
- Leaving the meat in the refrigerator for a few days before eating it (The University of Nebraska professors found that this simple technique, called ***Cooler Aging***, was one of the most effective ways to improve meat tenderness.)
- And of course, letting steak rest before serving

2 ***Ranking of Beef Muscles for Tenderness***, by Chris R. Calkins, PhD; and Gary Sullivan, University of Nebraska

How To Cool Age Steak at Home: A Scaled Back Version of Dry Aging Beef

Further on I discuss the processes of dry and wet aging. Dry aging is a very specialised process requiring careful management of temperature and humidity.

It's not that hard however to do a scaled back version of dry aging at home called cool aging, which also yields good results. A word of warning though: it's not a pretty sight. At the end of a week, your beautiful cut of meat is going to resemble something akin to the wicked witch of the west. Fear not. Once you trim away the crusty outer layer, you'll be left with some of the most tender steak you've ever eaten.

Start with a full cut of meat rather than steaks that have already been sliced. We need the meat to be of a decent size because we need remove the outer crust at the end.

1. Select a premium or prime cut, such as a sirloin or scotch fillet.
2. Remove the meat from any plastic wrapping, pat it completely dry with a cloth or paper towel, then wrap it loosely in a triple layer of cheesecloth or muslin and set it on a rack in the coolest part of the refrigerator (towards the bottom at the back). Do not trim any excess fat off the meat.
3. Ensure that the meat is elevated. It needs to be sitting on a rack and have as much airflow around it as possible.
4. The meat can age here quite safely for up to seven days.
5. After the first day, unwrap the muslin or cheesecloth from the meat, and rewrap it so that it doesn't stick to the meat.
6. When you're ready to cook, remove the cheesecloth and trim the meat. It will have formed a dry, hard, discoloured outer layer. Shave this away. Also trim any excess fat.
7. The meat is now ready to be cut into steaks or to cook as a whole roast. Over the aging period, the meat will have significantly tenderised due to the action of enzymes and the breakdown of connective tissue.

applied to what I came to call the ***presentation side*** of the steak while it was still cooking. I'd been experimenting a lot to really try and figure out what worked and why. At the time, this was the technique I came to favour because it did a number of desirable things. It created a shiny gloss on the presentation side of the steak, which made it look amazing and because the salt had been absorbed into the melted butter mix, when it was applied to the surface of the steak, it tended to run into all the nooks and crannies of the meat imparting a beautiful, salty, buttery flavour. The salt and butter basting method[4] is still a really good one, and I encourage you to give it a go. If you like it, by all means feel welcome to adopt it as part of your signature method, because it really works well. It's just that as I've tried different things and learned more, I've been won over by the science of presalting, and I now consider it a superior system. Let me explain why.

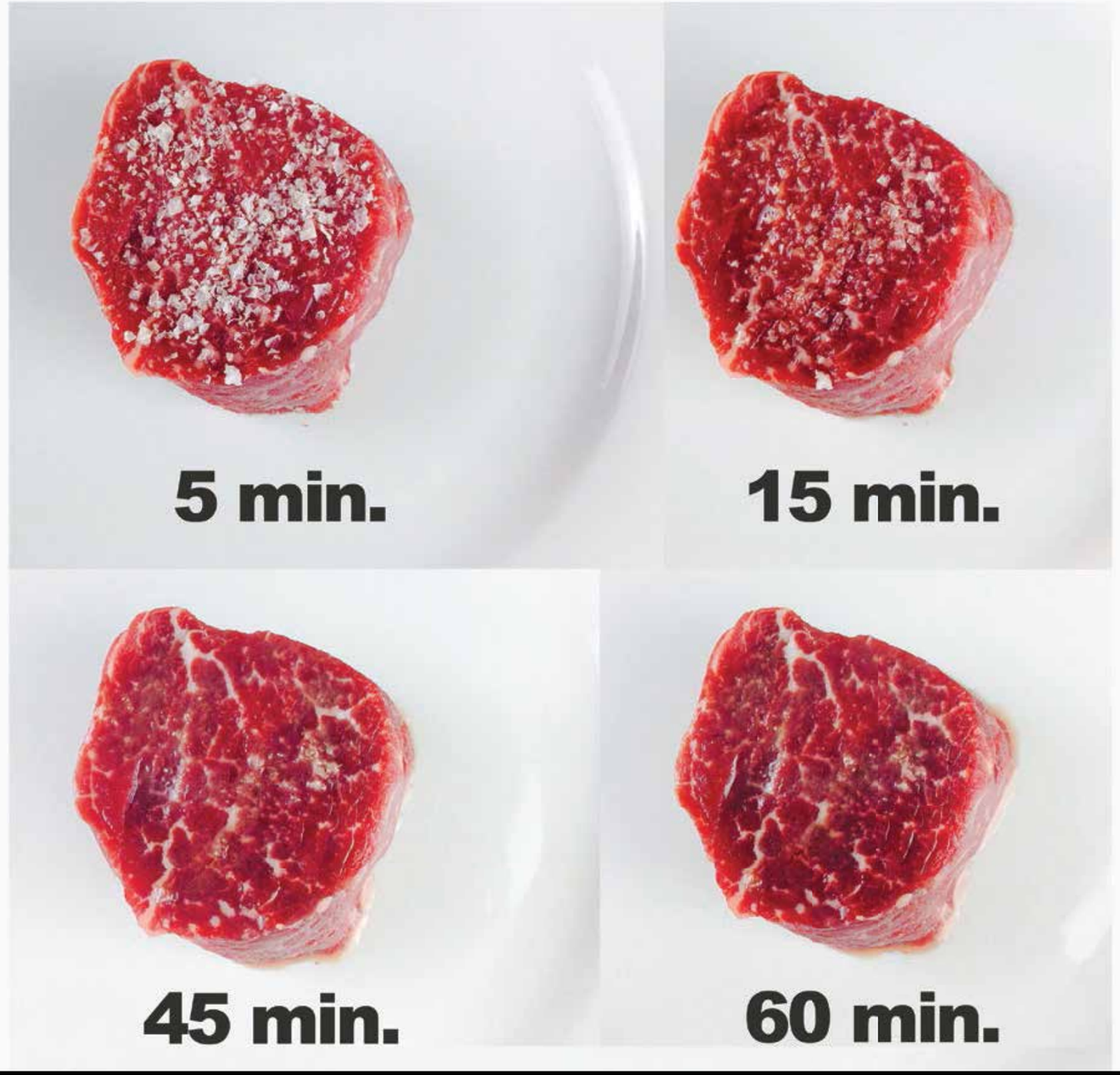
Pre-salting the steak.

When you apply salt to meat, a couple of very interesting things happen. Initially, salt draws moisture out of the meat, which you might consider a bad thing, but given enough time, the moisture that comes to the surface of the meat dissolves the salt, and then, by the process of osmosis, it gets drawn back into the meat again. This is the real process of seasoning meat. No longer is the salt just sitting on the surface, it's actually absorbed into the outer layers of the meat. This process takes time. At least an hour, depending on the ambient temperature.

This image gives you a good idea of the rate at which this process takes place. Initially, the salt just sits on the surface of cold meat. As the meat begins to come up-to room temperature, the juices come to the surface and the salt begins to dissolve. Not until about forty-five minutes into the process does the salt really start to get absorbed back into the meat. After an hour, very few salt crystals remain on the meat surface, but the steak juice has taken on a briny flavour.

4 Described in detail in ***How to Cook the Perfect Steak*** and demonstrated in the videos available at www.theperfectsteak.com.au

SIGNATURE STEAKS BY YOU



Not all the salt actually goes into the meat, and when you pat your steaks dry before cooking (which is one of the most important techniques), a good amount of the excess salt is removed along with the excess juice. What you've just done is to season your meat, and as we know, salt is the only true seasoning. Everything else is just flavouring.

Seasoning the resting-to-room-temperature steak with salt also does another very desirable thing. Salt reacts with the protein cells of the meat, causing them to partially break down or relax. There's a scientific term for this called ***denaturizing***, which in this context means to breakdown a protein by chemical means. We know already that tenderness is ***the*** single most important criterion by which people judge the quality of the steak they eat, so everything we can do to promote this is in our favour. Using salt as an agent to detangle and relax the protein strands of the meat while it comes to room temperature is another simple yet effective method of tenderising it.

A word or two here to the doubters. Yes, I acknowledge that salting meat is a method of preserving or curing it, and in the olden days this was a popular way to store meat, since they often didn't have refrigeration. Salt is a natural drying agent, and when applied to meat, it acts to preserve it by drawing out moisture and inhibiting the growth of microorganisms. That said, what we're doing with salt as we prepare our steaks for the grill is a million miles from anything that will preserve or dry out the meat. We're just applying a modest amount for a short period of time. We're not caking it on and leaving it for weeks at a time. It's all about moderation and management, and as steak chefs, this is an inherent skill that we bring to our craft.

Final Salting Tips

- Use a high quality salt. Don't use the type of salt that's pre-packaged with all sorts of anticaking agents and iodine. Definitely the best type of salt to work with comes in the form of salt flakes. These finely shaven flakes easily dissolve when they come into contact with moisture, and they're easy to grind with your fingertips. I've been using Murray River Salt

A quality salt for a quality steak

Flakes, which I'm informed are from a pristine pure source. Their natural pink colour comes from a unique combination of minerals and elements. I think they're absolutely superb.

- If you're working with steak that's highly marbled, cut back on the amount of salt you use. This is because salt will absorb more quickly into fat than it will into muscle.
- Don't over salt. A generous sprinkle on both sides is perfect. Always bear in mind that you can add more salt later, but it's somewhat tricker to unsalt meat.
- Always dry the steak with a cloth or good quality paper towel before grilling. You need to get that moisture off the meat; otherwise, it will stew.
- Make sure you remove the excess surface salt from the meat if you're going for crisp, diamond-shaped bar marks. This is because salt acts as an insulator and tends to inhibit the branding of the bar marks onto the meat. (It's a small point, I know, but we're not talking about how to cook a pretty good steak; we're going all out for the perfect steak, so the little things count).
- If you're running short on time in bringing the meat to room temperature, be generous with the salt.
- When you are salting the steaks is a good time to also flavour the meat. If you're planning to infuse your meat with a flavouring—such as pepper, garlic, or rosemary—now's a good time. Again, just be mindful that you can always add more seasoning and flavouring later, but it's nigh impossible to unpepper a piece of meat.

Steak and Oil

Using the right type of vegetable oil to grill your steak is another of the secrets to cooking Your Perfect Steak. It's also where a lot of people come unstuck.

When it comes to oil, there are four common mistakes that people make:

1. Choosing the wrong type of oil
2. Using too much oil
3. Oiling the plate and not the steak
4. Using oil that's out-of-date

Choosing the Right Type of Oil

First off, we need to understand the term ***smoke point***. That's the temperature at which oil starts to burn and give off smoke. At this point, the oil goes through a chemical reaction, and the natural flavour of the oil changes

All vegetable oils have different smoke points. That's why we need to choose the right oil for the job. The most popular and well known oil is, of course, olive oil. It's widely used and highly regarded as one of the most versatile and flavoursome of all vegetable oils. When we're grilling steak, however, there's a problem with olive oil—its smoke point.

Grilling Your Perfect Steak necessitates that you cook at a high heat. To sear the outside of the steak and achieve a beautiful crust on the meat you need to have your grill or pan at 400°F (204°C). Extra virgin olive oil has a smoke point of around 385°F. Consult the chart below to check the smoke points of various types of vegetable oils. Some have very high smoke points but are also quite hard to find and very expensive.