

# UNDERSTANDING MECHANICALLY TENDERIZED BEEF

Mechanical tenderization has been used to tenderize meat for many years at retail stores, meat processors and restaurants. Mechanical tenderization can also be done at home, using just a fork for piercing or special tenderizing tools designed for home-use. Regardless of where it is used, mechanical tenderization is typically performed by piercing the meat with blades or tines to break up muscle fibres.

## LABELLING OF MECHANICALLY TENDERIZED BEEF

Meat that has been mechanically tenderized will not necessarily look any different from meat that is not. In order for mechanically tenderized beef to be recognized at time of purchase, it is required to carry a label that states 'Mechanically Tenderized' on the package. The labels also include cooking instructions which indicate that the beef

should be cooked to a minimum internal temperature of 63°C (145°F) for both steaks and roasts. This temperature corresponds to a medium-rare doneness level. For steaks, the cooking instruction will also recommend that they be turned at least twice during cooking to ensure even cooking throughout (see image A vs image B). This method enhances both eating quality and food safety. These recommendations are the same for all Grilling or Pan-fry steaks both tenderized and non-tenderized cuts.

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## WHY MECHANICALLY TENDERIZE?

There is a real benefit to this type of tenderizing versus marinating as it improves the tenderness of beef without altering the flavour or the calorie content. Mechanically tenderizing cuts through meat fibres and tougher tissues making moderately tender steaks and roasts such as Eye of Round, Inside/Outside Round and Sirloin Tip more consistently tender.

***Turning mechanically tenderized steaks over at least twice while cooking enhances both eating quality and food safety.***

## FOOD SAFETY AND MECHANICAL TENDERIZATION

Due to the potential for bacteria on the exterior of beef roasts or steaks to be transferred to the centre of the meat, it is important that mechanically tenderized beef cuts are cooked to at least medium-rare 63°C (145°F). If a steak is turned over only once the temperature reached throughout the steak can be inconsistent. By turning over the steak at least twice the temperature will be more even which is helpful from both a food safety and an eating quality perspective.

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(A) Steak turned over every four minutes while cooking to an internal temperature of 63°C (145°F) is not cooked evenly throughout.



(B) Steak turned every 60 seconds while cooking to the same 63°C (145°F) internal temperature is cooked more evenly throughout.

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