

Guidelines: Final Cooking Temperatures Of Potentially Hazardous Foods

Introduction

Potentially hazardous foods, both raw and ready-to-eat, may contain harmful microorganisms, such as bacteria, viruses, or parasites.

Adequate cooking will destroy these harmful microorganisms and is an important step in food borne illness prevention.

Time-temperature Relationship

Both time and temperature are necessary to kill harmful bacteria, viruses, and parasites which may have contaminated food.

Guidelines for Final Cooking Temperatures

The table below provides the minimum recommended time-temperature needed to destroy harmful microorganisms in food that is cooked by conventional methods (i.e., heat sources other than a microwave) and also microwave cooking.

Food Product	Conventional Cooking Temperature F	Microwave Cooking Temperature F	Minimum time
Poultry	165	190	15 seconds
Stuffed meats	165	190	15 seconds
Ground Beef	155	180	15 seconds
Ground Pork	165	190	15 seconds
Pork, ham, sausage, bacon	165	190	15 seconds
Other potentially hazardous foods, including eggs, fish, beans, rice, whole meat and seafood	165	190	15 seconds
Beef roast (rare)	140		12 minutes
Beef roast (rare)	130		121 minutes

Microwave Cooking

Microwave cooking requires additional steps to ensure food is evenly and thoroughly cooked. Follow these simple steps:

- Heat food 25 degrees F higher than conventional cooking (refer to Time-Temperature table).
- Rotate and stir food during cooking.
- Cover the food product to retain surface moisture.
- Allow food product to stand covered for at least two minutes after cooking to obtain an even temperature.

Additional Safe Food Handling Tips

Heat will not destroy:

- Toxins produced by bacteria.
- Bacterial spores which can later produce harmful numbers of bacteria.

It is, therefore, important to maintain the food product:

- At 41 degrees F or below cold or
- At 135 degrees F or more, hot
- Protect from possible contamination by unclean hands, utensils, or overhead drippage.