What you need to know about your microwave’s WATTAGE...

The wattage of your microwave is the most important thing you need to know when you are doing any microwave cooking. It is just as important as knowing the oven temperature when you are baking.

The AVERAGE WATTAGE of a microwave is 700-1200 watts. This is the power that is the basis for cooking times in most microwave recipes, unless specified differently. This would be like an “average” oven temperature of 350 degrees.

For comparison…

700 Watts in microwave >> like cooking at 350 degrees
800 Watts >> 450 degrees
900 Watts >> 525 degrees (Self clean)
1000 Watts >> 575 degrees
1100 Watts >> 625 degrees (Blow torch!!)

The big problem is that very few people know what the wattage of their microwave is, much less what to do to compensate for today’s high powered ovens. The “Tim Taylor Philosophy!” More power is not necessarily better.

To find your oven’s wattage look on the inside of the door, on the back, or in “an under the hood fan” model, underneath

For each 100 watts your microwave is over the average of 700, you should decrease EITHER the cooking TIME or POWER LEVEL by 10% (i.e. If you have a 100 watt microwave, that is ~300 watts over the average. Therefore, when following a recipe, cook on POWER 7 or 8, depending on the time of day.) Reverse for lower wattage (500 – 600) ovens.

Remember – It takes two minutes to boil a mug of water in a 700-watt oven. In a 1200-watt oven, it will take 45-50 seconds!! Two minutes on HIGH power is an eternity in a 1200-watt microwave!!
A Microwave Oven: is a six-sided metal box, with metal screen in door. Microwaves are generated by the magnetron from behind control panel. From top down and outside into center.

Wattage: 700-725 watts is full-power microwave. Look for wattage on back of oven - key word – WATTAGE (OR POWER) OUTPUT. Less than 625 watts just means longer cooking times. More wattage = less cooking time.

-Turntable or no? . . If none, a rotating metal fan at top of oven to disperse microwaves evenly. Essentially no difference in cooking. Slight disadvantage with turntable -- limits size and shape of cookware.

-Ovens built since early 1980’s have stringent manufacturing standards. SAFE! (as much chance of radiation as tanning by moonlight)

-Glass tray in the bottom of oven makes clean up easier, plus elevates food for more efficient cooking.

Microwave Trivia: - A Microwave is 4 ½ inches long, ½ inch wide. Produced by magnetron, emitted at rate of 1 ½ billion per second. Travel at speed of light, only go 5 feet before dissipating. Too wide to go through holes in screen on door.

-Microwaves are reflected off metal, pass through glass, Styrofoam, plastic, etc.

-ONLY WATER, FAT, and SUGAR molecules absorb microwaves. Microwaves penetrate foods 1-1/2 inches and the energy absorbed cause molecules to rub together… creating FRICTION & HEAT… which cooks food.

-STAND TIME – 20% of cooking time after timer done, during which food continues to cook.

-If microwaves have nothing to work on, they will go back home to magnetron. Therefore, never run microwave empty, including popping plain popcorn.

-PEAK POWER CONSUMPTION PERIODS: Breakfast time, lunch, and suppertime. Not as much power available and you will find that during off times, foods will cook faster.

Rules Of Thumb:
1. The more dense the food, the longer to cook (e.g. Potatoes longer than broccoli). Liquids heat fastest, especially sugary and fatty ones.
2. The smaller the pieces, the faster it will cook (e.g. Diced potatoes faster than baked)
3. Liquids attract microwaves first, therefore always DRAIN BETWEEN BATCHES.
4. Arrange thickest parts of food to outside of casserole. Cone in center if necessary.
Microwave MAGIC TRICK:
Demonstrates use of foil in microwave, plus illustrates microwave EFFICIENCY vs. SAFETY

You need – 2 Styrofoam cups, ½ cup chocolate chips, water, Tupperware Cone, a piece of Pyrex or Corning ware

Fill one cup with cold water, other with chocolate chips. Wrap chips cup completely in foil (Shiny side or dull side irrelevant.)
Temperature test water, chips, Cone, Pyrex. Place all in microwave, cook on High power 2.25 minutes. Temperature test again.
CAUTION: If any arcing occurs, stop microwave IMMEDIATELY, and smooth out foil.

FOIL USE Rules of thumb:
1. Must have 4 times more EXPOSED food mass as foil mass.
2. Keep foil 1 inch from sides of oven

APPLICATIONS: - Large quantities of hamburger, defrost just what you need. Shield thin parts of chickens or hams. Use on corners of rectangular pans to deflect microwaves to center. Foil pie plates, T.V. dinners.

SAFETY vs. EFFICIENCY: Many materials are microwave safe, very few are microwave efficient.
-Being efficient means that energy and time are not wasted heating the container itself.
-Pyrex, Corning Ware, Visions etc. all like to be hot first and longest. They contain metal (nickel) which creates ‘invisible light shows.’
-20% cooking time is spent heating container, out of oven container draws heat from food.
-To test at home: Place your container in microwave, (along with a cup of water to absorb microwaves), cook on High for 2-2.5 minutes. If container is not virtually the same temperature as when you put it in, it is not microwave efficient.

ADVANTAGES OF TUPPERWAVE COOKWARE: Cuts cooking time by 15-20% over Corning etc.
-Handles stay cool, no potholders needed. Food stays hot longer. Keep covered after cooking, TupperWave becomes a THERMO-INSULATOR. Stack-cook by weight to increase or decrease portions (6 min./lb. Of food)
**MICROWAVED CINNAMON PULL-APARTS**

¼ cup butter or margarine, melted in the bottom of a Large ROCK ‘N’ SERVE.  
1/3-cup brown sugar (or Brown sugar twin)  
1 pkg. Pillsbury Crescent Dough  
Nuts or raisins if desired

Mix sugar & cinnamon into melted butter. Cut dough into ten rounds. Distribute over melted butter mixture, turning to coat. Sprinkle with raisins or nuts, if desired. Cover with Seal and vent. Microwave on High for 4-4 ½ minutes. Do not overcook! Enjoy!!

**MICROWAVED RICE KRISPIE SQUARES**

¼ cup butter or margarine   5 cups marshmallows   6 cups Krispies

Melt butter in Large Deep Rock & Serve Container for 1 minute on High. Add in marshmallows, stirring to coat. Microwave on High for 1-½ minutes. Stir in Rice Krispies and 1 tsp. Vanilla until well blended. Wet hands and press into bottom of container. Cut with plastic knife (Sandwich Spreader) when cool.

**MICROWAVED ANGELFOOD CAKE**

½ box (1 ¼ cups) one step Angel food Cake Mix  
2/3-cup cold water

Mix together in Large Mix and store Pitcher, for no more than 30-40 seconds, or just until well mixed. Do not over beat. Pour into ungreased Tupperware 3L casserole that has the Cone in it. Let stand 3 minutes. Cook on High power for 4-5 minutes. Do not overcook. Cake will still be sticky on top. Invert onto a tumbler or Snack Cup until cool.