

Cooking 101

Using The Right Tools

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Cooking Requires Proper Attitude

- An hurried meal prepared in anger imparts stressful flavors and chaotic thoughts.
- A restricted recipe can lead to deprivation, loneliness and isolation.
- If the the cook feels rejected, so will be the meal.
- Cooking is a time of self-reflection.
- If cooking is a chore, then move on.
- Food is art and an expression of self.

The Joy of Cooking

- Respect what you are doing.
- Nourishment for the body and the soul.
- Mistakes happen.
- *Mise En Place*.
- Think of the recipe in total.
- Start simple.
- Never apologize.
- Your tastes are not every one's.



Kitchen Design

- Like any workshop, function is the main goal.

Kitchen of 1930



- Two areas of a home define it's presence...the master bathroom and the kitchen. The rest is just space.

The Cooking Cardiologist 2013



Who Is This Woman? Name the Refrigerator?

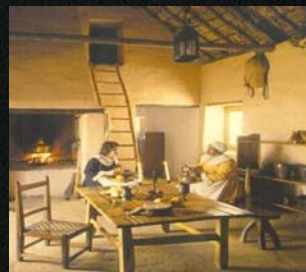


Kitchens of The Past

17th Century Kitchen

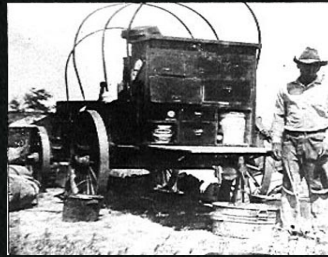


18th Century Kitchen



Kitchens of the 1800s

- Beginning to store items.
- More organized.
- Early prepared foods...flour, sugar, dry goods, spices....
- On the go...the earliest form of tailgating, not much different from now.



Cooking Methods

- Cooking helps to break down the food for easier assimilation.
- Cooking provides inner warmth in comparison to raw foods.
- Cooking can traumatize food.
- It maybe not what we are eating, but how food is prepared.
- We are tough on food...high heat, flames, blackening, and quick cooking.

Steaming

- Adds moisture to the food.
- Maintains nutrients.
- Is rather quick.
- Avoid tap water...chlorine gases.
- Flavors enhanced without oil.
- Not all vegetables steamed equally.
- Avoid over cooking.
- A variety of utensils available.



Steaming Vegetables

- Vegetables have variable steaming times.
- Cook to al dente.
- Artichokes, potatoes, sweet potatoes, beets require 30-40 minutes.
- Carrots 6-8 minutes.
- Asparagus, broccoli same.
- Beans, corn on the cob about 5 minutes.
- Peas are quick, 2 minutes



Steaming Techniques

- Add aromatics to the steaming liquid...herbs, citrus.
- Cut vegetables to shorten steam time.
- Ice water blanch to stop cooking process and maintain color.
- 1 teaspoon vinegar in bath helps to maintain color in vegetables.
- Season after steaming.

En Papillote

- Cooking “in parchment” paper
- Holds in moisture
- Faster cooking
- Great presentation
- Augments herbs and spices
- Cooking in a parchment in a bag, www.paperchef.com



Water Sautéing or Grill Pan Steaming

- Shorter time.
- Vegetables can be sliced into larger pieces.
- Process is steeping with flavors in the pan.
- Start by creating flavor...garlic, onions in large sauté pan.
- Add liquid to create steam. Never let the pan dry. Add chopped vegetables or if caramelizing, add veggies first with sugar.
- Cover with a tight fitting lid.



Poaching

- Ideal for fish or chicken.
- Do not use tap water. and add flavors of onion, celery and herbs.
- It is gentle, proteins do not break down.
- Less carcinogens.
- Helps to remove fishy flavor.
- Great served warm or chilled after poaching.
- Retains moisture.
- A fish poacher is not necessary, but great to have in the kitchen.



Boiling

- Looses nutrients.
- Water boils at a lower temperature as elevation increases. In Denver, water boils at 202 degrees F rather than 212 degrees F depending upon barometric pressure.
- Ideal for pasta/potatoes, salt in solution will raise boiling point.
- Use spring water.
- Add herbs to flavor.
- Boiling meat lets fats float to surface when cooled.



Oven Roasting



- Dehydrates foods.
- Better control of heat.
- Roasting in a clay pot keeps heat and moisture controlled.
- Convection baking more uniform.
- Broiling can burn food if not attentive.
- Consider combination cooking...sautéing to sear and oven roasting to complete.

Clay Pot Roasting

- Maintains moisture
- Roasts without using oil
- Healthier
- Even cooking
- Can serve directly from vessel
- Requires careful technique, roast from a cold oven and avoid extreme changes in temperature



Stir-frying



- High heat sautéing.
- Have everything ready...fast cooking.
- Little oil can be used.
- Be attentive to cooking times and order.
- Stir-frying is not just limited to Asian cooking. Ideal for sizzling fajitas.
- Use the wok for steaming.

Microwave Cooking

- Cooks from the inside out.
- Dehydrates.
- Avoid plastic in the micro-wave...go with micro-wave safe glass or ceramic.
- Pouch cooking easy and keeps moisture locked in....Paper Chef.com
- Avoid metal, bread, meats, contained foods such as whole eggs, nuts, non-vented items.

Newer Teflon Free Pans

- ♥ Non teflon
- ♥ Watch the handles, flame safe?, oven safe?
- ♥ Proper care is essential
- ♥ Avoid oil sprays such as Pam



Teflon

Teflon can't stand the heat...

All temperatures are in degrees Fahrenheit.

Chemical Releases

1,202° CF₄ (carbon tetrafluoride): Global warming gas; affects heart, lungs, and nervous system [1].

1,112° CF₃COF (trifluoroacetic acid fluoride): degrades to HF & TFA
OFCB (octafluorocyclobutane): Linked to heart palpitations
PFB (perfluorobutane): Global warming gas [1].

932° COF₂ (carbonyl fluoride): fluorinated version of chemical warfare agent
HF (hydrogen fluoride): Corrosive gas. Kills tissue on contact [2].

887° PFIB (perfluoroisobutene): Chemical warfare agent [3].

878° SiF₄ (silica tetrafluoride): highly toxic by inhalation and ingestion [1].

680° Toxic gasses released:
TFE (tetrafluoroethylene): animal carcinogen
HFP (hexafluoropropene): worker toxicant
TFA (trifluoroacetic acid): poisonous to plants
DFA (difluoroacetic acid): Animal kidney toxicant
MFA (monofluoroacetic acid): lethal to humans at low doses
PFOA (perfluorooctanoic acid): animal carcinogen [4].

554° Ultrafine particulates released (oxidized Teflon particles) [5].

464° Lowest recorded temperature at which vaporized Teflon particles have been measured [6].

396° Lowest temperature in peer-reviewed literature indicating that non-stick coatings break down and offgas, [11] based on bird mortality.

Common temperatures

1,500° Broiling temperature for high-end ovens [7].

1,000° Drip pans in stovetop burner
Gas flame on range top [8].

800° Electric coil on range top [8].

750° Surface temperature of PTFE-coated pan after heating for 8 minutes on conventional stove [9].

700° Preheated grill [10].

536° Birds killed in DuPont lab experiments [5].

500° Searing temperature for meat in oven or grill
Maximum temperature for many ovens

396° Temperature of Teflon-coated light bulbs under which Missouri birds died [11].

350° Common baking temperature

325° Birds died from preheated oven [12].



Cooking With a Teflon Pan

- Follow manufacturer directions.
- Avoid high heat or medium heat on an empty pan.
- Use approved non-stick cooking utensils.
- Never use an abrasive cleaner or pad.
- If the Teflon surface is cracking, discard.
- Teflon compounds (PFOA) used in manufacture have been found in the majority of American people even in the blood of newborns.

Top 10 Ways To Ruin A Nonstick Pan

- Cutting portions on a nonstick pan.
- Storing pans improperly
- Drastic water temperature changes
- Using metal utensils
- Cleaning with a scouring pad
- Cleaning in a dishwasher
- Cooking on high heat
- Storing foods in your nonstick pan
- Pizza pan nonstick, do not use a pizza cutter
- A bread pan is a bread pan, non-meats, acid free



Panini Grilling



- Heat surface on both sides.
- The George Forman grill is made for high fat foods & will crush the sandwich. Newer models have a double hinged lid.
- Be sure to coat the bread surface.

Frittata Pan



- Available from Williams-Sonoma
- A great omelet pan.
- Allows browning on both sides
- Heavy non-stick pan
- Oven proof
- Makes cooking an omelet easy

Tagine Cooking



- North African style cooking.
- Ideal with Moroccan spices.
- Always cook on low heat.
- Process enhances flavors, conserves moisture.
- Single pot meal with the vessel as a serving dish.

Pressure Cooking

- ✓ Shortens cooking time by 30%
- ✓ Efficient
- ✓ Improved pressure cookers...not your mother's pressure cooker
- ✓ Available in electric & stove top and induction ready
- ✓ More nutritious
- ✓ Seals in moisture
- ✓ Most ignored method of cooking



A Dull Knife Is a Dangerous Knife

- Ask any chef...a set of sharp good quality knives is the first element to successful cooking.
- You can judge the quality of a chef by the knives they keep.
- Storage and care of kitchen knives are essential.



Grilling



- The American Grill...the most dangerous cooking apparatus in America
- Avoid flaming heat and smoke
- Keep food moist
- Indirect heat best
- Have the right equipment, tongs, thermometers, spray bottle
- Grill on the "stone"

Avoid Dangerous Flames



Avoid Inhaling BBQ Smoke



Go Get a Free Grill

- A free grill...yes absolutely FREE
- Pick one up today at King Soopers, Safeway, Walgreen's, Home Depot, Wal-Mart, Target



Cooking Techniques



- No-oil cooking requires gentle cooking, with reduced heat and hydration.
- Oil holds flavors, use extra herbs and spices.
- Get to know your food items, natural sweet foods, oily foods.
- Always have a good vegetable stock ready.
- Cook fresh, try to cook a recipe without a nutritional label on the food product.

More ideas



- Sauté without oil...anything works
- Halve the egg yolks
- Dairy products, fat free
- Add alternative butter or oil substitutes
- Reduced fat cheeses
- For sauces, use evaporated fat free milk or fat free half&half, So Delicious non-dairy creamer
- Alternative sugars, fats

Methods to Cut Back Fat



- Cutting back fat, cuts calories big time. 1 cup of oil has approximately 2,000 calories.
- Hydrate, hydrate, hydrate.
- Use optional sources to sauté...apple juice concentrate, mushroom or veggie broth, caffeine free colas.
- Steam, poach, bake, pouch cooking.

Changing the Protein Source



- Egg whites instead of whole eggs.
- Optional soy products, “meat” substitutes, TVP™, seitan, tofu, tempe, soy milk.
- Replace meat with legumes, beans, etc.
- Whole grains.
- Add the protective fish...salmon, tuna, sardines, mackerel.
- Leaner means drier, the lower the fat, the greater the cholesterol by weight.

Ways To Hold Back Sugar



- Slowly crank down your tastes for sweets.
- Read labels for hidden sugar.
- Use natural foods, fruits, and flavors to lessen the desire for sweets.
- Consider alternative sweeteners...Splenda, Stevia, Agave nectar, Coconut Unrefined Sugar

Converting Recipes



In place of:

Butter

Whole eggs

Cream

White flour

Fat

Sugar

Substitute:

Reduced fat buttermilk, sprays, margarines.

Egg Beaters, 2 to 1 egg

Evap. skim milk, ff cream cheese, yogurt cheese.

$\frac{1}{2}$ whole grain, 25% soy flour or GF

Applesauce, $\frac{1}{2}$ oil, fat substitute

Fresh fruit, Stevia, pureed fruit (baby food)

In summary:

- To do the right job, have the right tools.
- Food preparation should be fun.
- Mistakes happen. Read books...others have done the same mistake.
- Go slowly and follow the rules. Avoid the “Net and You Tube”
- Make changes in recipes in simple steps.
- Write down what you have done and keep a journal recipe book.
- Use your digital camera or iPad to record steps.
- Share recipes with others. Food is community.

