Scientist as Chef

Selected Culinary Experiments from the laboratory of Dickson Despommier

At work, I study movable beasts.

At home, my interests turn to movable feasts.

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2009
Introduction:

I am a research scientist trained in microbiology and for some 30 years I was immersed in a world that consisted largely of test tubes, reagents, chemical formulae and exotic machinery, trying my best to outwit a well-known parasite, *Trichinella spiralis*. It is the causative agent of trichinosis, a potentially deadly worm infection acquired by eating infected raw meat products, especially pork. There used to be a fair amount of trichinosis in the United States, but the employment of modern public health practices has all but eliminated it from our shores. Nonetheless, it has not gone away. It continues to cause disease in other places such as China, South East Asia, and certain parts of Europe. Prevention involves freezing the meat, and in pork products that’s enough to kill the critter. For other meats, particularly wild game animals such as bear, you should cook it well before eating. More on all this later in the section on food safety. What I really want to get to is my love for cooking and how similar it is to the work I used to carry out at the bench.

About ten years ago, I left the lab for another subject area in which infectious diseases are still the central focus; namely the ecology of how microbes and other parasites are transmitted from person to person. I even wrote a book on one of them – *West Nile Story*. It documents the introduction of the West Nile virus into the New World. In fact, come to think of it, now all I seem to do is sit at my desk and write, but I still remember how much fun hands-on lab work was. A colleague of mine said it best; laboratories are places where work becomes organized play, and experiment-based revelations elicit child-like joys because you were probably the very first person to observe whatever it was that triggered the “eureka.”
Throughout most of my professional life, I have also cooked, mostly for my family, but also on occasion for a room full of guests. Working in the kitchen is a natural extension of my love for experimentation. I derive great satisfaction in preparing and consuming meals that also bring joy to my friends. Discovering that an “experiment” you conceived of from beginning to end actually worked is a savory treasure worthy of repeating many times. I suppose that is why I became a scientist in the first place. I approach cooking the same way I tackle my science. Only the environment is different. Cooking and bench work require a similar mentality, with the major difference, of course, being that with cooking you get to eat the results. With research, you could very well end up eating your own words; far less savory!

In addition, cooking relaxes me, but I’m always conscious of the process, even when the thing I’m working on is finally in the oven for a couple of hours. Just like waiting for the next result, I am sometimes impatient and manage to slip in a premature taste or two. Fortunately, this often guides me to alter the original formula, thus saving what could have been a bland dish from being relegated to the cold, dark underworld of uneaten leftovers. In this case, microbes usually have their day and take over the experiment. Ultimately, these concoctions end up in nature’s recycling bin.

Through the years I’ve accumulated a few “protocols” that I now want to share. As with all experimental science, I’ve written down the procedures that worked at least twice - so much for statistics. My "lab manual" was generated mostly by weekend and nocturnal activity, and is largely intended for those who thought they couldn’t, or even worse, shouldn’t cook. I was one of those latter unfortunates until I discovered
THAT ITS ACTUALLY ENJOYABLE TO COOK FOR YOURSELF, AND WHAT’S MORE, ITS MUCH MORE REASONABLE THAN EATING OUT!

ACQUIRING THE RIGHT KITCHEN GADGETS, STAINLESS STEEL COOKWARE (I PREFER ALL-CLAD), KNIVES, AND OTHER NECESSARY SUPPLIES POINTS UP THE NEED FOR A PROPERLY OUTFITTED WORK-STATION, JUST AS IN THE LABORATORY. YOU CANNOT CONDUCT RESEARCH WITHOUT SPECIALIZED EQUIPMENT, AND SO TOO FOR COOKING. ACQUIRING A PANTRY FULL OF SPICES AND “REAGENTS” ADDS A CHALLENGE TO THE MIX, AND I ENCOURAGE ONE AND ALL TO SHOP WHEREVER WE MIGHT FIND OURSELVES, BE IT IN EUROPE, MEXICO, ASIA OR OTHER DISTANT PLACES. AUTHENTIC INGREDIENTS REALLY DO MAKE THE DIFFERENT BETWEEN A NOT-SO-GREAT MEAL AND ONE YOU CAN SERVE AGAIN AND AGAIN. MANY OF MY RECIPES DERIVE FROM SHARED COOKING PARTIES I'VE ENJOYED WITH FRIENDS AND, SOMETIMES, WHEN I WAS REALLY LUCKY, FROM PROFESSIONALS WITH WHOM I'VE TAKEN COURSES. ALL OF THEM HAVE BEEN MODIFIED TO MY OWN TASTES, WHICH RUN TOWARD THE ROBUST, SPICY, AND HOT. NONE OF THEM INVOLVE RED MEAT. I DO ENJOY A GOOD STEAK NOW AND THEN, BUT NOBODY NEEDS A RECIPE FOR THAT EASY-TO-COOK ITEM. I HAVE ONE EXPERIMENT THAT REQUIRES VEALE, BUT IT IS AT LEAST HEART-SMART MEAT. EACH HAS RECEIVED ITS SHARE OF PRAISE. SO, GOOD LUCK AND DON'T BE AFRAID TO MODIFY ANY OF THE PROTOCOLS THAT FOLLOW.

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PART I. LIQUIDS

EXPERIMENT 1.

TITLE: "KILLER" HOT AND SOUR SOUP

AUTHOR: Eileen Lo (as modified by DDD)

ABSTRACT:

This is my “go to” soup when I am entertaining a large crowd of hungry guests who have a penchant for Chinese food. It is easy to make and requires input from whoever wants to help out in the kitchen. I usually serve it with home-made fried wanton noodle strips (just like the restaurants) and a good drinkin’ beer (quote from Jimmy Breslin).

MATERIALS AND METHODS:

1. Chicken stock - homemade is best, College Inn is next best (low salt, no fat). Homemade stock: Take one whole free-range chicken (minus
THE INNARDS) AND SUBMERGE IT IN A POT OF PURE WATER (ENOUGH TO COVER THE
CARCASS) AND SIMMER FOR 4-6 HOURS. KEEP ADDING WATER IF THE LEVEL GOES
DOWN BELOW THE BIRD. REMOVE THE CHICKEN CAREFULLY AND PLACE AS MANY
SUPER CLEAN CHICKEN FEET AS WILL FIT INTO THE POT AND SIMMER ANOTHER 3
HOURS (A WEEKEND PROJECT!). THE CHICKEN FEET LEND THEIR TYPE II COLLAGEN
FIBERS TO THE BREW. PLACE BROTH INTO THE REFRIGERATOR AND LEAVE OVERNIGHT.
THE NEXT MORNING, SKIM OFF THE FAT (SCHMALTZ), AND THERE YOU HAVE IT, LOTS
OF STOCK AND ENOUGH CHICKEN FOR SANDWICHES FOR THE NEXT THREE MONTHS! I
HAVE YET TO FIND A USE FOR COOKED CHICKEN FEET!

2. 3 CENTER CUT *PORK CHOPS WITH ALL THE FAT TRIMMED OFF, CUT INTO 2”
LONG X 3/4” WIDE

THIN STRIPS.

3. 8 DRIED SHITAKI MUSHROOMS (RE-HYDRATE IN HOT WATER BEFORE
SLICING).

4. DRIED TIGER LILIES - ONE GENEROUS HANDFUL.

5. 2 EGGS, WHISKELED LIGHTLY TO HOMOGENEITY.

6. WINE VINEGAR - TO TASTE.

7. CORN STARCH IN COLD WATER (MAKE INTO A THICK SLURRY).

8. MUSTARD PICKLE - CALLED "SZECHUEN PRESERVED VEGETABLE"
(White Rabbit Brand is a good one). INGREDIENTS INCLUDE

CHINESE RADISH, CHILI POWDER, SALT AND SPICES. THIS MAKES A
WORLD OF DIFFERENCE TO THE
SOUP.

9. SOFT, HARD, AND DRIED TOFU (YES, THREE KINDS OF TOFU!), ONE PACKAGE
EACH OF THE SOFT, A HANDFUL OF THE HARD, BROKEN INTO STRIPS
AFTER

SOFTENING IN WARM WATER.
10. Ginger root, peeled, cut into 2” X 3” chunks
11. Garlic, peeled and cut in halves
12. Chili peppers, to taste (small red Italian ones are the absolute best and toughest on the tongue!)

PROCEDURE:

Place the chicken stock (about 5 qt.) into a large pot and simmer at medium heat. Place chunks of ginger and garlic halves in a sieve and place the sieve on to the rim of the pot so as to keep the garlic and ginger submerged in the soup. Slowly boil for about 30 mins. Remove the sieve with flavoring ingredients and discard (i.e., save the sieve). Cut tofu (hard and soft) into small logs, add to the soup. The dried tofu can be broken up into small, rectangular chunks and added directly, or it can be hydrated first in hot water, then sliced into thick strips and added. Try it both ways first and see which effect you like best. It’s mostly for visual and textural effects, anyway.

Place thinly sliced strips of pork in a dish. Make a marinade from dark soy (2 table spoons), light soy (2 table spoons), and sesame oil (3 tablespoons). Make ginger juice: shred some fresh ginger, then squeeze it in your hand over the pork, mix with the marinade, then blend in the pork strips and add a pinch of corn starch with a small amount of water. Let stand for one hour, then add to the soup.

Slice mushrooms into thin strips and add to the soup. Don’t use the stem portions, as they are too tough to soften. Slice both tips off all tiger lily flowers after soaking them in hot water and washing them. Washing frees them of that musty odor they apparently acquire by storing
them in the back rooms of Chinese grocers. Add them to the soup. Add chili peppers to taste - go slow, add one at a time until you can feel the power.

**WARNING:** DON'T FORGET TO WASH YOUR HANDS IMMEDIATELY AFTER CRUSHING THE PEPPERS WITH YOUR FINGERS, OR YOU WILL UNFORTUNATELY LIVE TO REGRET IT, ESPECIALLY THE NEXT TIME YOU DO YOU-KNOW-WHAT, TOUCHING YOU-KNOW-WHERE!

Thinly slice a golf ball-sized piece of mustard pickle into thin narrow strips and add to soup. Each piece should be about one inch long and about 1/8\textsuperscript{th} inch cubed.

**SEE ABOVE FOR INSTRUCTIONS AS TO WHAT TO DO AFTER SLICING MUSTARD PICKLE!**

Add wine vinegar to taste. Dribble it in and taste every so often until you like it. Add eggs by dribbling them into the rapidly boiling soup. Make a clock-wise figure eight with the stirrer as you do so, for to do otherwise is considered bad luck. Add the solution of cornstarch slowly until the soup thickens to the desired consistency. Add some dark soy until the desired color is achieved - a darker soup is better than a lighter one; it looks richer.

* **Caution:** Pork is sometimes contaminated with a potentially life-threatening parasite, *Trichinella spiralis*, and thus all pork should be frozen until solid prior to using in any recipe.*
Discussion and conclusions:

This is my favorite soup and my kids would "kill" for it, hence its name! You can freeze it, and unlike many other soups, this one can be eaten immediately. As you might guess, it is a hoot to make with a group of friends, and they will be shocked and surprised at how good it tastes, considering how fast it went together. This experiment is highly reproducible, but the mustard pickle and wine vinegar do make a big difference for the better.

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Experiment 2.

Title: Eileen Lo's Wonton Soup

Author: Eileen Lo is a very famous chef who taught at The China Institute in New York City from whom I had the pleasure of taking a course.

Abstract:

A cup of simplicity mixed with a dash of complexity.

Materials and methods:

1. Wonton (means 'light as a cloud' in Chinese)
   
   A. 1 pound ground pork
   
   B. 1 pound of ground fresh shrimp
   
   C. 1 cup water chestnuts, julienned.
   
   D. 2 green onions, finely minced.
   
   E. 2 tablespoons of sesame oil.
   
   F. 2 tablespoons dark soy.
G. 1 TABLESPOON LIGHT SOY.
H. 1 TABLESPOON CORN STARCH.
I. WONTON SKINS, THE THIN ONES.

2. SOUP:
   a. CHICKEN STOCK (VOLUME WILL VARY ACCORDING TO THE NUMBER OF PARTICIPANTS).
   b. ICE BERG LETTUCE (FINALLY, A GOOD USE FOR THAT BLAND LEAFY VEGETABLE)
   c. 3 CLOVES WHOLE GARLIC
   d. SHREDDED FRESH GINGER ROOT
   e. *SHREDDED CENTER CUT PORK CHOPS (2)

PROCEDURE:

A. WONTON: MIX INGREDIENTS THOROUGHLY, THEN PLACE A TEASPOON OF THE FILLING IN THE MIDDLE OF A WONTON SKIN AND FOLD INTO A "PILGRIM'S HAT" BY MOISTENING THE CORNERS OF THE SKIN AND FOLDING EACH UPON THE OTHER. HOLD ALL THE CORNERS TOGETHER WITH YOUR THUMB AND FOREFINGER. THE WONTON USUALLY SEALS AFTER THIS MANEUVER. A TRIANGULAR-SHAPED WONTON SHOULD RESULT, BUT ANY WAY YOU CAN FOLD THEM TOGETHER TO SEAL OFF THE FILLING IS OK. BOIL THEM IN A WOK FOR THREE MINUTES, OR SO, THEN ALLOW THEM TO DRAIN AND DRY. THEY CAN BE STORED IN THE FREEZER FOR MONTHS AT A TIME IN A ZIP-LOCK FREEZER BAG WITHOUT ANY LOSS OF FLAVOR OR TEXTURE. (NOTE: FRIED QUICKLY IN VERY HOT PEANUT OIL OR RE-HEATED IN A MICROWAVE, WONTON MAKE GREAT SNACKS).

B. THE SOUP PART IS MADE SIMPLY BY SIMMERING CHICKEN STOCK WITH WHOLE CLOVES OF GARLIC AND SHREDDED GINGER ROOT FOR 10 MINS. TO ASSEMBLE, REMOVE THE FLAVORING INGREDIENTS, THEN BRING SOME OF THE STOCK TO A GENTLE
boil, add lettuce leaves and wonton. Sprinkle a few chards of shredded pork (cooked, of course) and diced stems of green onion in for garnish and serve immediately.

Discussion and conclusions:
This soup is as good or better than any I have had at the better Chinese restaurants in New York City. It is very tasty and the other ingredients add their textures and flavors in a most satisfying manner.

Experiment 3.
Title: Lime Chicken Soup
Author: DDD
Abstract:
Straightforward and tasty.

Materials and Methods:

1. 2 quarts chicken stock
2. 2 chicken breasts, finely diced
3. 6 carrots, peeled and finely diced (alternatively, parsnips will do nicely).
4. 1 Spanish onion, finely diced
5. 1 2" x 3" piece of fresh, peeled ginger, finely diced
6. 4 cloves garlic, finely diced
7. Juice of one fresh lime
8. 10 sprigs of celantro, finely chopped
9. 1/4 cup Basmati or Texmati rice (optional)

Procedure:

Combine chicken stock, lime juice, onions, ginger, garlic and celantro and bring to a slow boil; reduce heat and simmer for 45 mins.

with top on pot. Remove solids and place in food processor together with one cup of stock. Puree ingredients and return to pot. Add chicken, carrots or parsnips and basmati rice, bring to boil, reduce heat and simmer for 1 hour. Serve with sprig of cilantro and slice of lime.

Discussion and Conclusions:

This soup is quick to assemble and has a nice tangy flavor. It goes well with fried or boiled wonton as a side dish and a good hearty, yeasty lager beer.

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Experiment 4.
Title: Black Bean Soup Mexicana
Author: ddd
Abstract:
A rich mélange of textures, flavors, and picante! Muy simpatico!

Materials and Methods:

1. 1 pkg. dry Black Beans, soaked in water overnight
2. 1 quart chicken stock
3. 1 smoked ham hock, washed and scrubbed to remove most of the salt

4. 1 pkg. chicken legs and thighs

5. 1 medium sized Spanish onion, finely minced

6. 3 small carrots, coined thinly

7. Two sprigs fresh cilantro, finely minced

8. 6 cloves garlic

9. 1 tablespoon chili powder, hot

10. 1 Italian red chili, crushed

11. Coarsely cracked black pepper, to taste

**Procedure:**

Place all ingredients, except garlic, in a large pot and bring to a boil, then simmer for two hours, partially covered. Remove and reserve the ham and chicken parts, and strain the beans, carrots and onions. Reserve the fluid and place the strained vegetables and the six cloves of garlic in a food processor and puree with a small portion of the fluid. Return the puree to the pot and add the rest of the fluid and the slivers of chicken and ham. Reduce under low heat until the soup reaches a thick consistency. Add salt to taste. Just before serving, in each bowl, add a tablespoon of cooked Texmati rice and a pinch of freshly minced Spanish onion and cilantro as garnish.

**Discussion and conclusions:**

This thick, dark soup eats well with a dense, chewy, black bread and a locally produced amber brew. It is a meal in itself, it’s so robust and full of tangy ingredients. Serve a bowl full of it accompanied by some
CRUNCHY TACO CHIPS AND BREAD IN THE DEN NEXT TO A ROARING FIRE IN THE
AFTERNOON PROCEEDING A GOOD HIKE IN THE WOODS ON A WINTRY DAY!

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EXPERIMENT 5.

TITLE: ASIAN NOODLE SOUP(S)

AUTHOR: DDD

ABSTRACT:

OFF-THE-SHELF SOUPS ON-DEMAND ANY TIME OF THE DAY OR NIGHT (WITH MANY
PERMUTATIONS).

MATERIALS AND METHODS:

1. 1 PACKAGE DRIED NOODLE SOUP (RAMAN BRAND IS EXCELLENT, BUT KOREAN
MARKETS HAVE A FANTASTIC VARIETY AND IT'S WORTH THE EFFORT TO TRY MOST
OF THEM).

   OPTIONAL: USE THE FLAVOR PACKET OR SAVE IT FOR ANOTHER TIME.

2. 2 PT. CANS (COLLEGE INN BRAND IS THE ONE I USE) OR 1 BOX OF CHICKEN
BROTH (LOW SALT, LOW FAT). MANY BOXED BROTHS ARE NOW AVAILABLE. OF
COURSE, HOMEMADE IS ALWAYS A WELCOME ADDITION.

3. PEELED SHRIMP (4-6 PER SERVING) – THE PackAGED FROZEN AND CLEANED
ONES NOW AVAILABLE AT MOST SUPERMARKETS ARE GOOD TO KEEP AROUND.

4. ALTERNATE SOUP: 1 WHOLE BROILED CHICKEN (STORE BOUGHT IS OK, HOME-
MADE IS BEST). NO SPICES ADDED. TAKE OFF THE SKIN, BREAK UP INTO BITE-
SIZED PIECES, SAVE OUT THE AMOUNT YOU WANT TO ADD AND FREEZE THE REST FOR ANOTHER TIME.

5. 2 TEASPOONS SESAME OIL

6. 1 TABLESPOON SOY SAUCE (LOW SALT)

7. 10 SNOW PEAS, TRIMMED AT BOTH ENDS

8. 5 STRIPS OF GINGER, SLICED THICK INTO 2” X 1” STRIPS

9. 5 CRUSHED AND PEELED CLOVES OF GARLIC

10. 8 LARGE SHITAKI MUSHROOMS. CUT OFF THE STEMS, SLICE CAPS INTO 1/2” STRIPS

11. CILANTRO – 10-12 STEMS WORTH, ROUGH CUT.

11. HOT SAUCE OF YOUR CHOICE (NOT TABASCO!). THERE ARE SO MANY GOOD ONES OUT THERE. CHILI PASTE WILL DO, AS WELL.

PROCEDURE:

Pour the chicken stock into a saucepan, bring to a slow boil and add garlic cloves and ginger strips. Simmer for 10 mins, then remove the solids. Add shitake mushrooms and snow peas, cook 5 mins on low heat, then add the dried noodle cake. When the noodles break up as the soup cooks, add the shrimp or pieces of broiled chicken. Cook another 3-5 mins. Garnish with cilantro and serve immediately with a good Asian beer. Flavor according to taste with hot sauce. Chopsticks and an authentic Chinese soup spoon are absolutely required to get that Chinese restaurant mood going!

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EXPERIMENT 6.
Title: Hybrid Marinara Sauce

Authors: DDD, Paul Newman, Tomato and Basil

Abstract:
Marinara sauce brands abound, but few are worthy of serving as the beginning ingredient for a wonderful, full-bodied pasta sauce. Paul Newman knew what he was talking about! I have come to rely on the other brand, Tomato and Basil, for many of my red pasta sauce needs. In summary, the hybrid marinara sauce is a blend of quality available ingredients and essential enhancements from your own reagent shelf!

Materials and Methods:

1. 1 large jar of Paul Newman brand marinara sauce.
2. 1 large jar Tomato and Basil brand marinara sauce
3. 12 ripe plum tomatoes, peeled and crushed
4. 6 cloves of garlic, passed through a garlic press
5. 1 package of white field mushrooms, thinly sliced
6. 10 large shitaki mushrooms, thinly sliced (discard stems)
7. 6 whole Italian fungi, re-hydrated, thoroughly washed in hot water, then finely minced
8. 3 to 5 small Italian red chili peppers, crushed (optional)
9. 1 large Spanish onion, finely minced, then gently sauteed in a good virgin olive oil until translucent
10. 1 medium sized can Italian tomato
sauce (Contadina brand is good)

11. 8 cups water

12. Finely cracked pepper to taste

Procedure:

Place brand-named sauces and water in a large pot, add rest of ingredients sequentially. Cook slowly with gentle stirring for about two hours. The more stirring the better, as it helps to break up the tomatoes and refine the sauce. Add salt to taste.

Discussion and Conclusions:

It ages well in the 'fridge, and can also be frozen flat in freezer bags with out any loss of specific activity. Serve with your favorite pasta, or use in other dishes calling for marinara sauce - veal, shrimp, mussels, etc.

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Part II. Solids

Experiment 1.

Title: Dick's Chick Sticks

Author: ddd

Abstract:
A SOLID STANDBY FOR PARTIES OR QUICK TO-FIX-MEALS.

MATERIALS AND METHODS:

1. 1/4 CUP EXTRA VIRGIN OLIVE OIL
2. 1/2 TO 1 TEASPOON SEA SALT DISSOLVED IN SMALL AMT. OF WATER
3. 1 TEASPOON PAPRIKA
4. 1 TABLESPOON CURRY POWDER (MILD)
5. 1 TABLESPOON CUMIN
6. 1/2 TEASPOON CORIANDER POWDER
7. CAYENNE PEPPER, OR TWO TO THREE SMALL HOT CHILI PEPPERS, TO TASTE
8. 4 CLOVES GARLIC, MINCED FINELY
9. A DASH OF TURMERIC, FOR COLOR, MOSTLY
10. 1/8 CUP MINCED FRESH CILANTRO
11. 1 SPANISH ONION, FINELY MINCED
12. 2 PKGS. FREE-RANGE CHICKEN BREASTS. SKIN EACH PIECE, THEN SLICE INTO ROBUST STRIPS

PROCEDURE:

MARINADE CHICKEN STRIPS FOR AT LEAST 1 HOUR, THEN GRILL OVER A CHARCOAL FIRE IF POSSIBLE, OR ALTERNATIVELY, USE YOUR INDOOR GRILL ON THE STOVE. STRIPS CAN BE LEFT IN THE 'FRIDGE OVERNIGHT AND COOKED THE NEXT DAY IF NECESSARY.

DISCUSSION AND CONCLUSIONS:
Serve chick sticks hot with Texmati rice. A nice side dish might be steamed Victoria Island asparagus, and a mixed green salad. A wonderful suggestion from a good friend of mine is to serve the sticks with a side of chunk style mango chutney. A fine Chardonnay such as Petaluma (Australian; not cheap but worth it!) to augment the rich flavors of the curry is awesome!

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Experiment 2.

Title: Grilled Marinated Fish (the one you just caught is best!)

Author: ddd

Abstract:

Simple is the secret to success in this one!

Materials and Methods:

1. Juice from 2 limes
2. 1/8 cup soy (light)
3. 4 cloves garlic, minced fine
4. 2 small hot chili peppers, crushed
5. 4 teaspoons juice from freshly shredded ginger root
6. Coarse ground black pepper, to taste
7. Filets of fish

Procedure:
Wash fish, pat dry and place into plastic zip-lock bag with marinade and leave in the 'fridge for two hours or more. Drain and grill. It is that simple!

Discussion and Conclusions:

Some experiments are easier than others. This one required only lower brain functions to execute. It has never failed. The fish should be crisp on the outside and tender and moist on the inside. Don't over-cook. Serve with a good white wine (burgundy, perhaps) and stir fried vegetables over rice: healthy and tasty.

Experiment 3.

Title: Stir-fried Vegetables “Orientale”

Author: ddd

Abstract:
A fair amount of prep work but cooks up fast. Disappears off the plates even faster!

Materials and Methods:

1. 1 cup fresh snow peas
2. 1 head broccoli, cut into small bite-sized bunches
3. 1 egg plant (Chinese if available), cut into 2” cubes
4. 1 zucchini, cut into logs
5. 1 green pepper, cut into small cubes
6. 1 red pepper (sweet), cut into small cubes
7. 1 PKG. FIRM TOFU, CUT INTO 1” INCH CUBES

8. MARINADE:

1 CUP WATER
1 TBS. LIGHT SOY
1 TBS. DARK SOY
2 TBS. SESAME OIL
1 CRUSHED HOT RED PEPPER
2 TBS. CORN STARCH
3 TBS. GINGER JUICE

9. PEANUT OIL (PLANTERS IS A GOOD BRAND - LOTS OF “PEANUT” FLAVOR)

PROCEDURE:


DISCUSSION: NONE NEEDED!

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Experiment 4.

**Title: Shrimp or Chicken Nicoises**

**Author:** DDD

**Abstract:**
A hearty Provencale-type meal. It really eats well!

**Materials and Methods:**

1. 1 cup chicken stock
2. 8 ripe plum tomatoes, peeled and coarsely minced
3. 6 shallots, finely minced and sauteed in extra virgin olive oil until translucent
4. 1 handful Nicoises olives, pitted, drained and washed
5. 6 chicken thighs, skinned and browned in a hot saucepan with a splash of olive oil

**OR:**

6. 10 peeled and butterflied medium-sized shrimp
7. 6 cloves garlic, finely minced
8. 3 sprigs thyme, stripped and minced
9. 3 sprigs marjoram, stripped and minced
10. 1 cup of Pouilly-Fuisse (drink the rest while you cook)
11. Salt and finely cracked black pepper, to taste
12. Optional: 2-3 hot chili peppers (Cajun style) or: 2-3 splashes of good
**balsamic vinegar (French country style)**

**Procedure:**

Saute minced shallots over low heat in a deep, large saucepan then add the rest of the ingredients, including the chicken thighs. If shrimp are used, add them last 3-5 mins. before serving. Cook for two hours under low heat with the lid on, then remove the lid and add water as needed to keep the melange at a consistency of that of a thick soup.

**Discussion and Conclusions:**

This flavorful, satisfying dish can be served over rice or pasta, depending on your mood. It is self-contained and needs only a salad to complement the meal. A good sour dough bread helps to soak up the extra sauce after the solids have been ingested. Merlot or Cabernet Savignon of your choice is a perfect complement.

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**Experiment 5.**

**Title:** Shrimp Creole, my way

**Author:** ddd

**Abstract:**

There are at least a thousand formulae for this famous Louisiana dish (I’m from New Orleans) but everyone has their favorite. This one is mine.

**Materials and Methods:**
1. 2 green bell peppers, finely diced
2. 6 stalks of celery, finely diced
3. 8 shallots, finely minced
4. 1 small Spanish onion, finely minced
5. 1 can whole tomatoes, drained, washed, coarsely minced
6. 6 cloves garlic, passed through a garlic press
7. 5 sprigs of fresh thyme, stripped, the leaves added whole
8. 5 sprigs of fresh marjoram, stripped and the leaves finely minced
9. 5 sprigs of fresh oregano, stripped, and the leaves finely minced
10. Coarsely cracked black pepper, to taste
11. 1 Italian (hot) red pepper, crushed (optional)
12. 1 table spoon roux, must be golden in color. Make with vegetable oil. Excess is stored frozen indefinitely.
13. 1 small can tomato sauce.
14. 2 pounds of medium to large, fresh shrimp (whenever possible, peeled and butterflied. Other seafood items (e.g., lobster, scallops, crab, etc.) can be substituted for shrimp to add variety to the recipe.

**Procedure:**

Place minced shallots, crushed tomatoes, tomato sauce, green peppers, and minced Spanish onion in a large, deep sauce pan, and simmer over a low flame for two hours, adding water to keep the consistency to that of a thickened stew. Stir frequently. Add peeled, butterflied shrimp and cover for another five minutes. Add salt to taste. Serve over rice.

**Discussion and Conclusions:**
Accompany the creole with a fine dry white wine and a crusty Italian bread. It may not be exactly the traditional recipe for New Orleans-style shrimp creole, (too much garlic and Italian spices in mine), but I think you’ll make it again if you try it once.

Experiment 6.

Title: Vertical Chicken

Author: ddd

Abstract:

The chicken sits above the vegetables and spices as it cooks, lending its essence to the mix. The bird literally glows with golden crispiness when finished.

Materials and Methods:

1. Whole free-range chicken
2. 4 carrots, washed, cut into lengths and halved
3. 20 large Cremini mushrooms, cut in half
4. 3 medium-sized red potatoes, not peeled, cut into fourths
5. 1 stalk of celery, halved, then cut into 2” lengths
6. 5 shallots, peeled and diced
7. 2 large tomatoes, diced
8. 4 large cloves garlic, minced finely
9. 1 hand full Nicoise olives
10. 1 CUP OF WHITE WINE (REAGENT GRADE PINOT GRIGIO OR SAVIGNNON BLANC)

11. 1 CUP CHICKEN STOCK

12. 1/4 STICK OF UNSALTED BUTTER

13. MARINADE:
   a. 1/2 CUP FINE OLIVE OIL
   b. 2 TABLESPOONS SHERRY VINEGAR
   c. 2 TABLESPOONS BALSAMIC VINEGAR
   d. 4 STALKS OF FRESH SAGE
   e. 2 TABLESPOONS THYME (COARSE LEAVES)
   f. FINELY CRACKED BLACK PEPPER, TO TASTE
   g. HOMOGENIZE ALL INGREDIENTS IN BLENDER

PROCEDURE:

PLACE ALL VEGETABLES AND MUSHROOMS INTO A DEEP CERAMIC BAKING DISH
AND PLACE THE METAL FLUTED CHICKEN STAND IN THE MIDDLE. ADD THE WINE AND
CHICKEN STOCK TO DISH, THEN ADD GARLIC AND MINCED SHALLOTS. SPREAD ALL
INGREDIENTS EVENLY IN DISH, THEN PLACE THE INTACT CHICKEN ON THE EIFFEL
TOWER-SHAPED STAND. MASSAGE THE MARINADE INTO THE CHICKEN AND LIGHTLY
COVER WITH A DUSTING OF CRACKED BLACK PEPPER. PLACE IN A PRE-HEATED OVEN AT
300°F FOR ABOUT 2 HOURS, OR UNTIL THAT LITTLE PLASTIC "THING" POPS UP. STIR
THE BOTTOM INGREDIENTS AROUND OCCASIONAL TO EVENLY DISTRIBUTE THEM. THIS
ALLOWS THE DrippINGS FROM THE CHICKEN TO FLAVOR THEM. REMOVE THE CHICKEN
AND DRAIN THE VEGETABLES. STRAIN THE LIQUID AND RETURN TO A DEEP SKILLET.
BRING THE LIQUID TO A GENTLE BOIL AND ADD THREE TEASPOONS OF ALL-PURPOSE
FLOUR. STIR VIGOROUSLY UNTIL THE LIQUID THICKENS. REDUCE TO THE DESIRED
VISCOSITY AND SERVE THE GRAVY OVER THE CHICKEN.
Discussion and Conclusions:

This dish goes well with a round sour dough or peasant bread and the remainder of the Pinot Grigio (if there is any left!).

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Experiment 7.

Title: Marsala a la Suzanne (Chicken or Veal)

Author: Susanne Holmes-Giannini – world-class chef

Abstract:

Collaborative efforts don’t often result in single author publications. But exceptions are the rule and especially when the less experienced investigator (that’s me!) realized his own limitations. I learned this valuable lesson one afternoon while visiting my good friend, Suzanne. She could cook circles around most professional chefs, and certainly did around me, all the while trading Gary Larson jokes with me and pouring more wine in my glass when it appeared to be empty to mollify my feelings of extreme inadequacy! It worked. Here is her super marsala for fish or fowl.

Materials and Methods:

1. 1/4 cup dry Marsala wine
2. 2 sprigs of thyme, stripped and minced
3. 8 sage leaves, minced
4. 1 CUP ALL-PURPOSE FLOUR

5. 2 CUPS CHICKEN STOCK

6. 1 CUP SHITAKI MUSHROOMS, SLICED. DISCARD THE STEMS

7. 1/4 CUP RE-HYDRATED, ITALIAN FUNGI THOROUGHLY WASHED IN WARM WATER, THEN

   FINELY MINCED

8. 2 CUPS WHITE FIELD MUSHROOMS, THINLY SLICED. DISCARD THE STEMS

9. 1 STICK UNSALTED BUTTER

10. JUICE FROM ONE LEMON (CRITICAL INGREDIENT!)

11. THINLY POUNDED TENDER MEAT OF YOUR CHOICE

PROCEDURE:

   Rinse and dry cutlets, then dredge in flour laced with spices. Saute cutlets in olive oil and butter mixture until brown on both sides. Place them on absorbent toweling and reserve. Place chicken stock in a deep pan and add Marsala wine and lemon juice. Add all mushrooms and cook over a low flame. Remove mushrooms after reducing and reserve. Save the fluid, return to pan and thicken with flour. Add back the mushrooms, cutlets and the rest of spices and butter. Cook another 15 mins. over low flame.

DISCUSSION AND CONCLUSIONS:

   After Suzanne taught me this recipe, I immediately went home and made a batch of chicken Marsala. Over the years since then I only goofed it up once by leaving out the lemon juice. This really makes a difference, since the lemony sourness adds so much taste that to omit it really creates a bland meal. Fresh rather than dried spices add a lot of zest,
also. Besides veal and chicken, I've tried this formula on fish, particularly monkfish filets, and it does quite nicely, thank you.

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**Experiment 8**

**Title:** Puta Neska Sauce

**Author:** Bradley Despommier, chef extraordinaire

**Abstract:**
I have two sons, Bruce and Bradley. They both love cooking and eating. Bradley loves to experiment in his own kitchen and he shared this exemplary puta neska sauce with me, which I now share with you.

**Materials and Methods:**

1. 1/8 cup extra virgin olive oil.
2. 1/4 cup pitted large Greek olives, finely minced.
3. 6 oz. fresh tuna steak, 1/4" cubes.
4. 4 cloves garlic, thinly sliced.
5. 2 oz. capers
6. 2 oz. anchovies, finely minced.
7. Fresh basil, chaffonad style.
8. Black pepper, coarsely ground, to taste.
9. 4 peeled ripe plumb tomatoes

**Procedure:**

Heat oil in a high walled skillet with medium heat, then sear tuna on all sides. Add sliced garlic and cook until translucent. Add anchovies, then crush the tomatoes with your hands, discard the hard cores and add the rest to the skillet. Add capers, pepper and basil, and saute until all ingredients are blended nicely. Immediately serve over fettucini or linguini along with a fine Italian red and some delicious round peasant bread.

**Discussion and Conclusions:**

What can I say? Talk about good! This is a sauce that anyone would be proud to take credit for!

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**Experiment 9:**

**Title:** Angle Hair Pasta and Shrimp Marinara

**Author:** DDD

**Abstract:**

The marinara sauce described here differs slightly from the Hybrid version. No matter, they are both interchangeable in this experiment.

**Materials and Methods:**
1. 2 LBS. PEELED, MEDIUM TIGER SHRIMP.
2. 6 SMALL, RIPE PLUMB TOMATOES, PEELED, DICED.
3. ONE BUNCH FRESH BASIL, ROUGH CUT.
4. 6 STALKS OF FRESH OREGANO, STRIPPED, NO STEMS
5. 6 STALKS FRESH MARJORAM, STRIPPED, NO STEMS
6. 6 CLOVES GARLIC, CRUSHED WHOLE.
7. 1 MEDIUM SPANISH ONION, FINELY MINCED.
8. 1 CAN CHICKEN STOCK.
9. OLIVE OIL.
10. ANGEL HAIR PASTA, DRIED.
11. 20 DRIED, PITTED ITALIAN OLIVES.
12. PINOLA NUTS (ROASTED), OPTIONAL.
13. JUICE OF 1 LEMON
14. 2 TABLE SPOONS BALSAMIC VINEGAR
15. CRACKED BLACK PEPPER TO TASTE.
16. SALT TO TASTE.

PROCEDURE:

PLACE OLIVE OIL IN DEEP SAUTE PAN, HEAT, THEN ADD MINCED ONION AND
SAUTE WITH GARLIC UNTIL TRANSLUCENT. ADD CHICKEN STOCK, OLIVES, DICED
TOMATOES, BASIL, LEMON JUICE, BALSAMIC VINEGAR, PEPPER AND SALT. BRING TO
BOIL, THEN LOWER HEAT AND REDUCE VOLUME BY ONE HALF. JUST BEFORE SERVING,
ADD RAW SHRIMP AND COVER PAN, THEN REMOVE FROM BURNER. STIR OCCASIONALLY,
AND LEAVE FOR 5 MINS. SHRIMP WILL BE TENDER, NOT RUBBERY. BOIL PASTA TO AL
DENTE CONSISTENCY, DRAIN PASTA AND ADD TO PAN. MIX ENTIRE CONTENTS WITH
TONGS, ADD ROASTED PINOLA NUTS, SERVE IMMEDIATELY. ACCOMPANY WITH A CRUSTY
Italian bread and a fine Pinot Grigio or California / Australian Chardonnay

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In the words of Julia Child, *bon appetit!!*

May all your experiments be edible ones!!