



Culinary Foundations I

Class 8: Steaming, Simmering & Boiling; Pasta

Steaming

- ▶ Moist-heat method associated with tender and delicately flavored foods like fish or vegetables.
- ▶ Enhances natural flavors and preserves nutrients
- ▶ Clean & Clear Flavors
- ▶ Plump, moist, tender & maintains size/shape
- ▶ Avoids the use of cooking fats
- ▶ Steaming liquid may be flavored

Steaming Procedure

1. Cut & Trim Items
2. Bring Liquid to a Boil (Unless in a Convection Steamer)
3. Place food on rack or perforated pan in a single layer
OR, in a shallow pool of liquid.
4. Cover and cook until desired level of doneness is achieved.

Dim Sum

▶ Steamed Red Bean Buns



Commercial Convection Steamer



Bamboo Steamer in a Wok



En Papillote

- ▶ **Cooking in Parchment (or Foil)**
- ▶ **Steams food and traps aromas**
- ▶ **Presentation Quality for Diner**
- ▶ **Difficult to Gauge Doneness**

En Papillote



Simmering

- ▶ Moist-heat method associated with items that may need tenderizing
- ▶ 185° to 205°
- ▶ Simmering liquids will often use a rich broth or stock, mirepoix, herbs & seasoning.

Simmering Procedure

1. **Cut & Trim Items**
2. **Have sufficient liquid for cooking time**
3. **Some items may start in cold liquid and be brought up to temperature.**
4. **Add the food and maintain temperature.**
5. **Cover and cook until desired level of doneness is achieved.**

Boiling

- ▶ Most Items “Boiled” are actually simmered. No Hard-boiled Eggs!
- ▶ Starches and Potatoes are truly boiled
- ▶ 212° at *Sea-Level*
- ▶ Every 1000’ of Altitude, BP drops 2°F
- ▶ In Denver, water boils at 203°
- ▶ Salt raises BP, Alcohol

Boiling Procedure

1. **Cut & Trim Items**
2. **Have sufficient liquid to recover BP rapidly**
3. **Add the food and maintain temperature.**
4. **Cook until desired level of doneness is achieved.**
5. **Items can be refreshed in cold water and held for service.**

PASTA



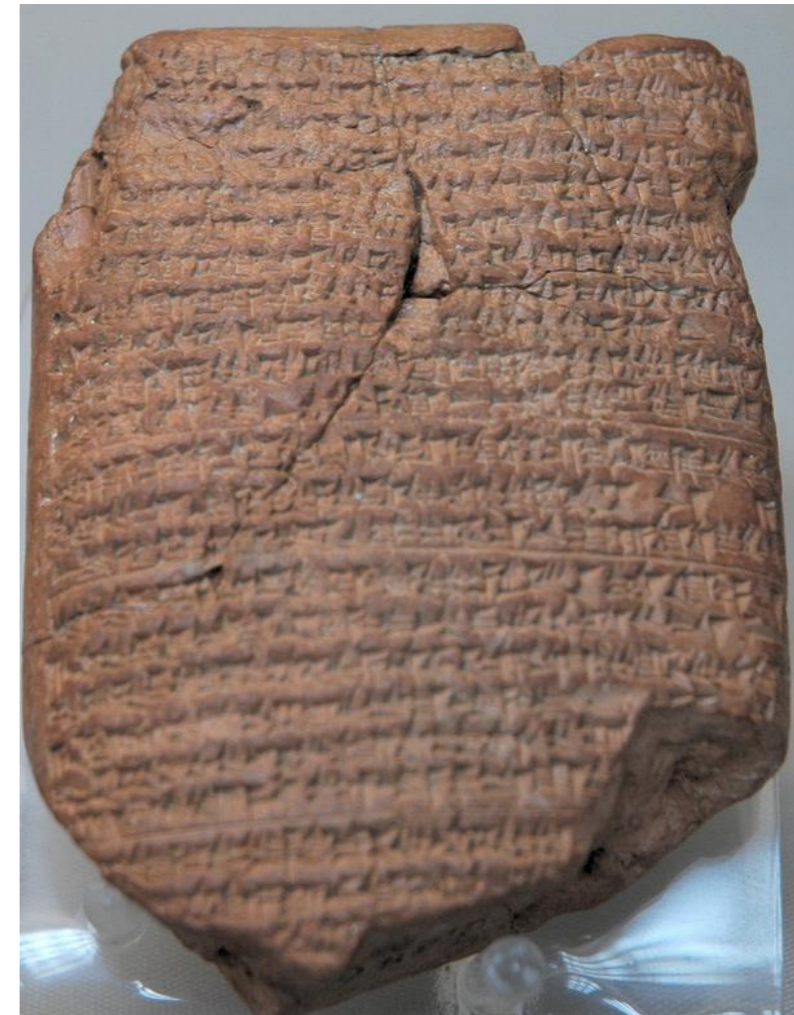
Pasta

- ▶ Pasta is a generic term for noodles made from an unleavened dough of flour, water and/or eggs.
- ▶ Pasta means “paste” in Italian.
- ▶ There are approximately 600 different shapes produced worldwide.



Pasta History

- ▶ First record of noodles cooked by boiling is in the Jerusalem Talmud, in the 5th century AD.

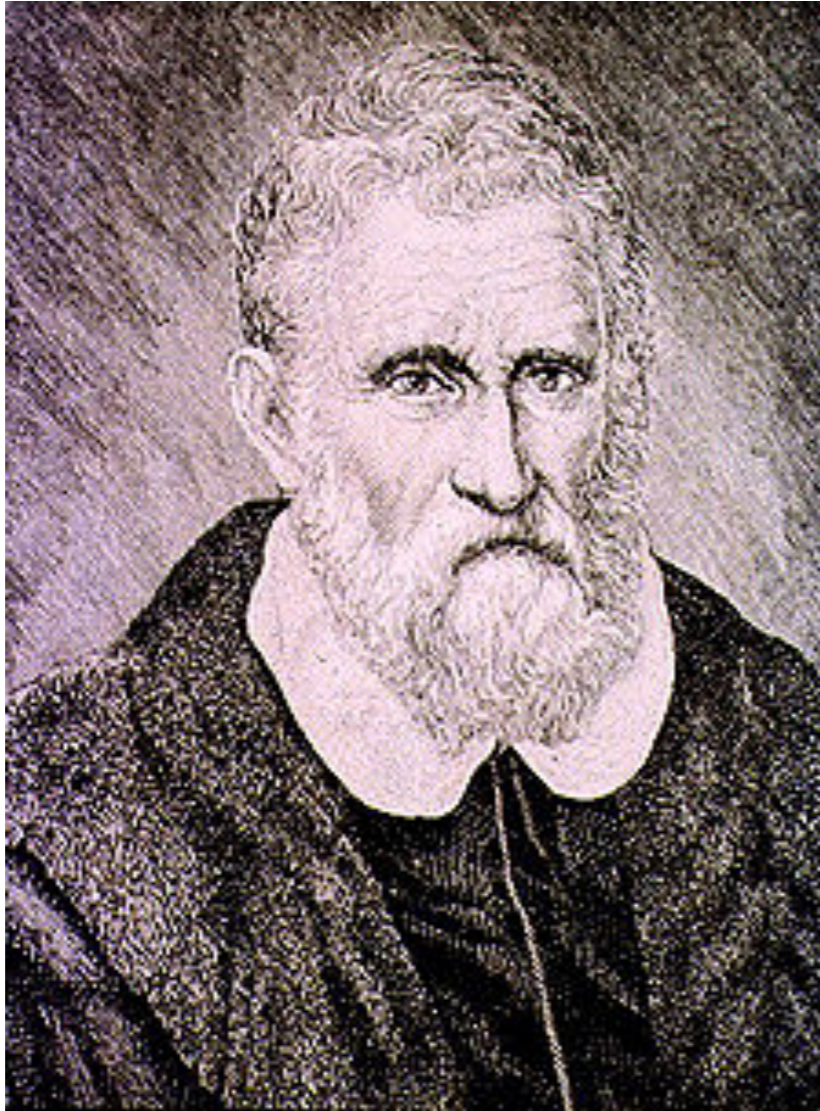


Pasta History

- ▶ Likely that noodles were introduced into Italy by the Arabs when they conquered Sicily in the early middle ages, (500AD)



History of Pasta



The romantic myth that Marco Polo brought pasta on his return from China in 1295 has long been debunked.

Pasta History

- ▶ The Sicilian word “macaruni” which translates as “made into a dough by force” is thought to be the origin of our word macaroni.
- ▶ In the ancient methods of making pasta, force meant kneading the dough with the feet – a process that could take all day!



History of Pasta



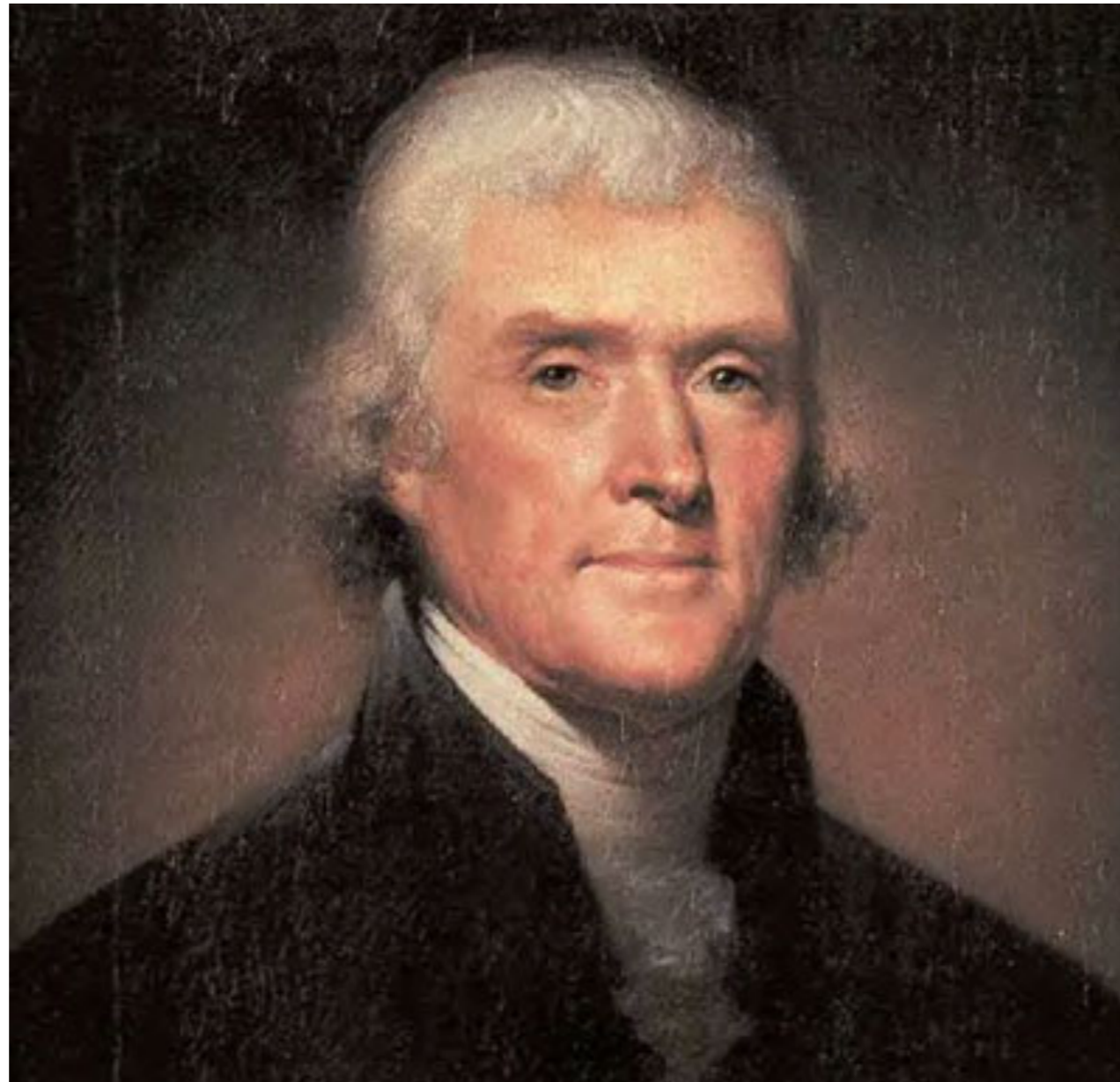
- Dried pasta became popular because it could be easily stored on ships and the kind of wheat needed to make dried pasta grew perfectly in Italy.
- By the 17th century, pasta had become part of the daily diet throughout Italy because it was economical, readily available and versatile.

Old World Pasta Meets the New World Tomato

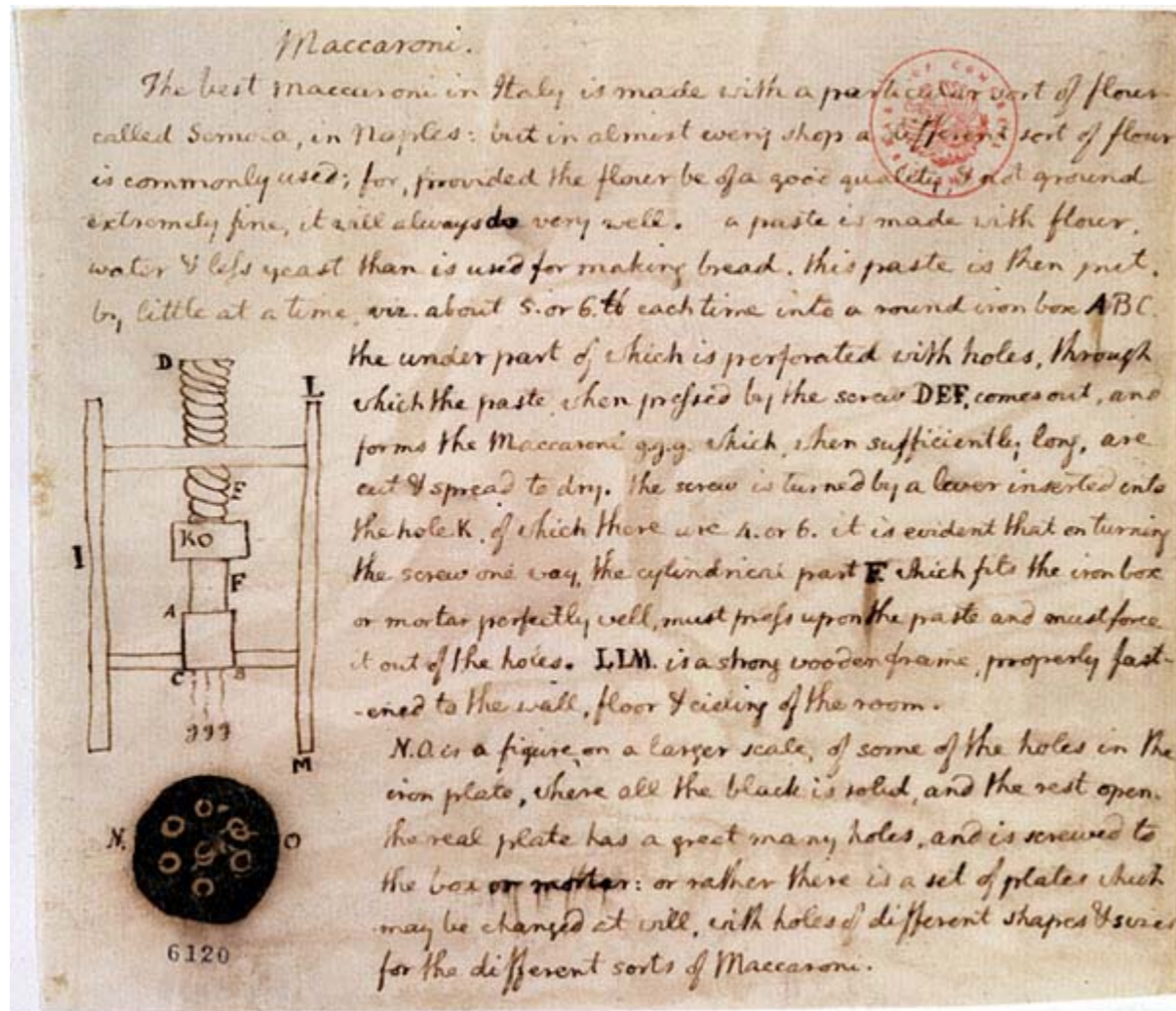
- The Spanish explorer Cortez brought tomatoes back to Europe from Mexico in 1519.
- Even then, almost 200 years passed before spaghetti with tomato sauce made its way into Italian kitchens.
- Before sauces, pasta was eaten by hand.
- Sauces demanded pasta be eaten with a fork – and the manners of the common man were changed forever!



Thomas Jefferson is credited with introducing macaroni to the US



Thomas Jefferson and Pasta



- He served as ambassador to France and upon his return to America in 1789 he brought back the first “macaroni” maker along with crates of macaroni.
- He even designed a pasta maker and had it built in Brooklyn, New York!

Pasta



- ▶ “Macaroni”, any dried pasta made with wheat flour and water. Only in the US is it elbow-shaped pasta.



Yankee Doodle – Macaroni and American History

- Before the revolutionary war, if you enjoyed travel to Europe, fashion, manners and tastes of the Europeans – you were referred to as a “macaroni” which means “*dearest darlings*” in Italian.
- “Macaroni’s” called the simple American colonists “Yankee Doodles.” Yankee was the mispronunciation of the word “English” in Dutch and “doodle” came from a German word meaning “simpleton.”
- The song “*Yankee Doodle*” was used by the British to ridicule the American colonists, who adopted it in self-defense.

Pasta in America

- ▶ The first pasta manufacturer in the US set up shop in 1848 in Brooklyn, New York.
- ▶ To dry the pasta the owner spread spaghetti strands on the roof to dry in the sunshine.



Pasta is one of America's favorite foods...

- In 2008, 1.3 million pounds of pasta were sold in American grocery stores. If you lined up 1.3 million pounds of 16 oz. spaghetti packages, it could circle the Earth's equator almost nine times!



The Average American...



Eats 19 1/2 pounds of pasta every year.

In comparison, the average Italian...



Eats 62 pounds of pasta every year!

But isn't pasta fattening?



The average serving of pasta in the US
is 2 cups

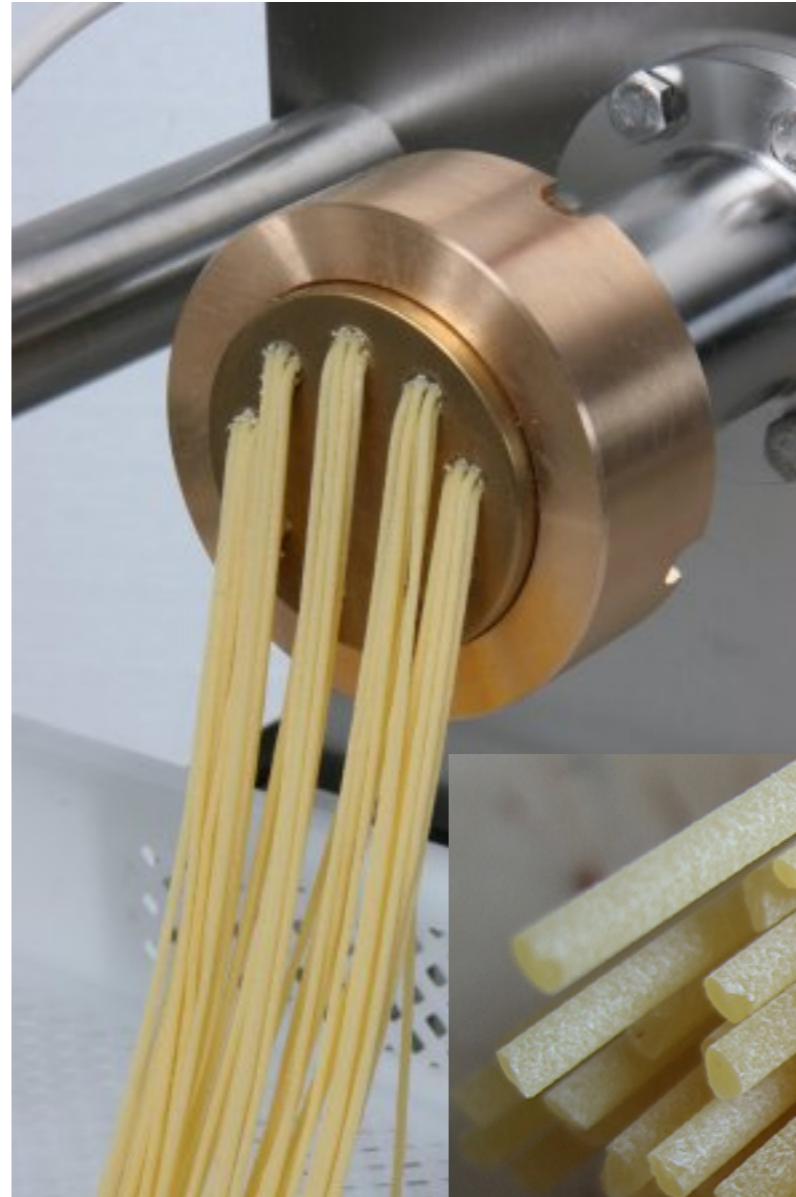


How does Whole Wheat and Regular Pasta Compare Nutritionally?

	Regular Enriched Pasta (per 1-cup cooked serving)	Whole-wheat Pasta (per 1-cup cooked serving)	Advantage goes to:
Calories	197	174	Draw
Protein	7 g	7 g	Draw
Carbohydrate	40 g	37 g	Draw
Fat	1 g	<1 g	Draw
Fiber	2 g	6 g	Whole-wheat
Folate	108 mcg	7 mcg	Enriched regular
Magnesium	25 mg	42 mg	Whole-wheat
Vitamin E	<1 mg	<1 mg	Draw
Lutein + zeaxanthin	10 mcg	113 mcg	Whole-wheat
Overall			Whole-wheat because of its extra fiber

Dried Semolina Pasta

- ▶ **Made from Durham Wheat**
 - ▶ High in Protein
 - ▶ aka, Semolina
- ▶ **Springy texture, modest amount of starch**
- ▶ **Extruded**
- ▶ **Preferred for most uses, especially**
 - ▶ **Chunky Sauces made with Tomatoes**
 - ▶ **Best for Oil-Based Sauces**



Fresh Egg Pasta (Italian)

- ▶ **Soft and Supple Pasta**
 - ▶ Absorbs more liquid sauces
 - ▶ Formed from sheets of pasta cut into shapes
 - ▶ Best with cream and butter-based sauces



Fresh Non-Egg Pasta (Italian)

- ▶ Rural South Italy
- ▶ Flour & Water Only
- ▶ Hearty Pasta
 - ▶ Cut and Shaped by Hand
 - ▶ Best for Hearty Tomato and Oil-Based Sauces



Couscous

- ▶ Semolina
- ▶ Precooked (No Boiling)
- ▶ North Africa & Southern Italy
- ▶ Used Like a Grain



Gnocchi

- ▶ **Dough Made from:**
 - ▶ Potato and Flour
 - ▶ Ricotta and Flour
 - ▶ Semolina, Milk, Butter, Eggs and Parmesan
- ▶ **Light-Textured**



Spätzle

- ▶ German Dumplings
- ▶ “Little Sparrow”
 - ▶ Like the worms they eat
- ▶ Batter pushed through a grate



How Do You Cook Pasta Perfectly Every Time?

- 1.** One Gallon Boiling Salted Water per Pound of Dry Pasta
- 2.** Add the pasta with a stir and return the water to a boil.
- 3.** Stir the pasta occasionally during cooking.
- 4.** Follow the package directions for cooking times. If the pasta is to be used as part of a dish that requires further cooking, undercook the pasta by 1/3 of the cooking time specified on the package.
- 5.** Taste the pasta to determine if it is done. Perfectly cooked pasta should be "al dente," or firm to the bite, yet cooked through.
- 6.** Drain pasta immediately.
- 7.** Do not rinse pasta after draining unless stated in the recipe.

Pasta Cooking Tips

- Don't overcook pasta.
- Oil, can be added to cooked ???
- When making cold salads, add the salad dressing while the pasta is still hot.
- Different kinds of pasta can be used interchangeably in most recipes that call for a given weight. In recipes that call for a given volume measurement, you may not be as successful trying to substitute pasta shapes.

Il segreto è quello di trascinare la pasta con la salsa

- ▶ **Trascinare**
 - ▶ To “drag” or merge pasta with sauce



Pairing Pasta with Sauces

- ▶ **Flat Long Shapes**
Fettuccine,
Fettuccine
Rigate, Linguine,
Linguine Fini
- ▶ Dairy-based, oil-based or tomato-based sauces
- ▶ Sauces combined with meat, vegetables, seafood or cheese
- ▶ Tomato sauces
- ▶ Oil-based sauces
- ▶ Fish-based sauces



Pairing Pasta with Sauces

- ▶ **Round Long Shapes**

Angel Hair,
Spaghetti,
Spaghetti Rigati,
Thick Spaghetti,
Thin Spaghetti



- ▶ Extra virgin olive oil with fresh aromatic herbs and garlic
- ▶ Fish-based sauces
- ▶ Carbonara
- ▶ Simple tomato sauce, with or without meat or vegetables – medium-size chunks

Pairing Pasta with Sauces

- ▶ **Baking Shapes**
- ▶ Lasagna, Manicotti, Jumbo Shells



- ▶ Meat-based sauces like traditional Bolognese
- ▶ Dairy-based sauces like a classic béchamel
- ▶ Vegetable-based sauces

Pairing Pasta with Sauces

- ▶ **Elbow Shapes**
Elbows, Pipette



- ▶ Dairy-based sauces (butter or cheese)
- ▶ Tomato-based sauces with or without vegetables
- ▶ Chunky fish/meat-based sauce.

Pairing Pasta with Sauces

- ▶ **Shell Shapes**
Large Shells,
Medium Shells



- ▶ Dairy-based sauces
- ▶ Tomato based sauces
- ▶ Pasta salads
- ▶ Meat sauces

Pairing Pasta with Sauces

- ▶ **Soup Shapes**

Pastina, Orzo,
Ditalini



- ▶ Soups

- ▶ Stews

Pairing Pasta with Sauces

- ▶ **Specialty Shapes**
Campanelle, Farfalle (Bow Tie), Fiori, Tri-Color Fiori



- ▶ Dairy-based
- ▶ Vegetable
- ▶ Meat sauces
- ▶ Fish-based sauces
- ▶ Tomato-based sauces
- ▶ Pasta salads

Pairing Pasta with Sauces

- ▶ **Tube Shapes**

Mezze Penne,
Mezzi Rigatoni,
Mostaccioli,
Penne,
Rigatoni, Ziti



- ▶ Chunkier meat or vegetable-based sauces
- ▶ Dairy-based sauces
- ▶ Fresh, light sauces
- ▶ Tomato sauces or spicy sauces
- ▶ baked casserole
- ▶ Pasta Salad

Pairing Pasta with Sauces

- ▶ **Twist Shapes**

Cellentani,
Gemelli, Rotini,
Tri-Color Rotini



- ▶ Light tomato sauces with or without vegetables (small diced)

- ▶ Dairy-based sauces

- ▶ Oil-based sauces

Storing Pasta

- **Uncooked pasta** – store in cupboard in tightly closed container and use within 1 year for highest quality.
- **Cooked pasta** – refrigerate cooked pasta for 3 to 5 days. Store cooked pasta separately from sauce.
- **Freezing pasta** – best to freeze dishes before baking. Thaw dishes in refrigerator and bake as the recipe directs + 10-15 minutes. From a frozen state, bake 20-30 minutes longer.

Storing Pasta

- **Reheating pasta** – portion out amount needed and place in boiling water for 40 to 60 seconds. Drain, toss with sauce and serve.
- **Reheating pasta in the microwave** – reheat a single serving on High for 45 seconds.



Making Fresh Pasta



- ▶ 1 pound (3 cups) flour
- ▶ pinch salt
- ▶ 4 large eggs
- ▶ ½ oz water as needed
- ▶ 1 oz olive oil (optional)

2 Types: Dried & Fresh

- ▶ Maybe be cut fresh and used or dried.
- ▶ Dried Pasta is firmer and holds heavier Sauces
- ▶ Fresh Pasta Cooks faster
- ▶ 1 ½ Fresh = 1# Dry



Pasta

- ▶ Dough may be Colored



Pasta

- ▶ Pastas may be filled.



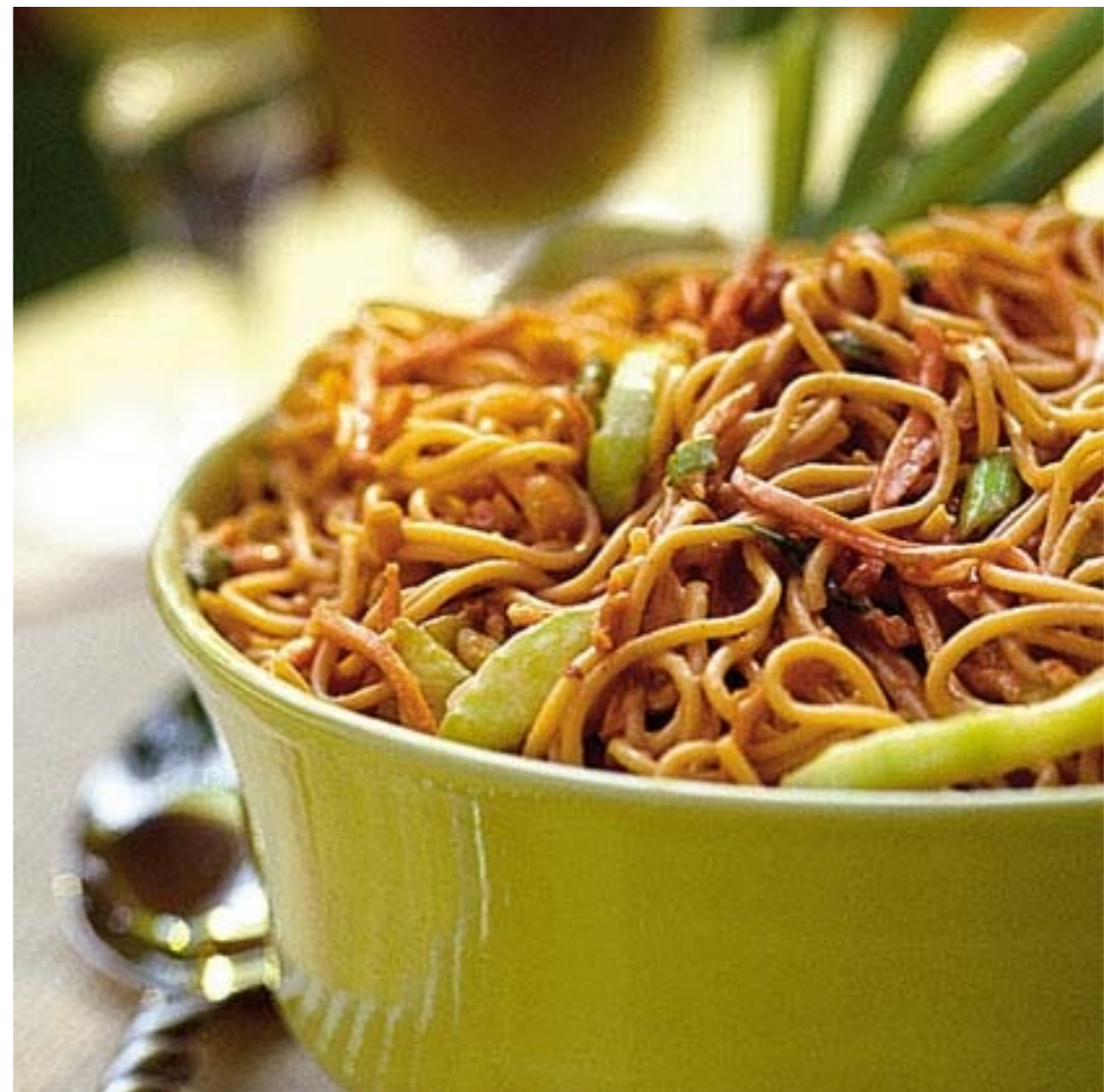
Asian Pasta or Noodles

- ▶ Made from Wheat, Rice, Bean or Buckwheat Flour
- ▶ Available Fresh or Dried
- ▶ Chinese 3000 BC!



Chinese Wheat Noodles

- ▶ Range from thin to thick
- ▶ Usually boiled then used in Stir-Fries
- ▶ Yellow-with Egg
- ▶ White-no Egg



Udon

- ▶ Japan
- ▶ Used in Soups
- ▶ Boiled (no salt)
- ▶ Substitute
 - ▶ Chinese Wheat Noodles
 - ▶ Dried Semolina Pasta
 - ▶ ex. Bucatini



Ramen

- ▶ Japan
- ▶ Similar to Chinese Wheat Noodle
- ▶ Fresh or Dried



Somen

- ▶ Japan
- ▶ Thin and Delicate
- ▶ Served Cold
- ▶ Substitute
 - ▶ Spaghettini
 - ▶ Angel Hair Pasta



Rice Noodles

- ▶ SE Asia & Southern China
- ▶ aka, “Rice Vermicelli”
- ▶ aka, “Rice Sticks”
- ▶ Stir-Fries, Salads & Soups
- ▶ Same Dough for Rice Paper Wrappers
 - ▶ Used in Vietnamese and Thai Spring Rolls



Cellophane or Glass Noodles

- ▶ Or “Bean Threads”
- ▶ Made from Mung Bean
- ▶ Little Flavor
- ▶ Used in Brothy Soups and Cold Salads



Soba Noodles

- ▶ Japanese
- ▶ Made from Buckwheat
- ▶ Brown with Earthy Flavor



Ragù alla Bolognese

- ▶ Italian Meat Sauce (Ragù) from Bologna, It.
- ▶ Minced Beef, Pancetta, Onions, Carrots, Celery, Tomato Paste, Meat Broth, white wine, and MILK! or cream.
- ▶ Served with Tagliatelle Pasta
- ▶ Recipe predates Tomatoes
- ▶ No Garlic!



Class 8 Lab

Mise en Place

Knife Skills

Simmering Procedure

Pasta Dough Method

Amatriciana Sauce

Bolognese Sauce

Alfredo Sauce

Puttanesca Sauce