How do you review safety & sanitation? How do you teach knife skills?
Talk about knife cuts, demonstrate with potatoes, practice on potatoes, 2 per person, and then fry potatoes or bake with variety of seasonings.
Use youtube videos to show knife cuts
Paper is used to see the size of the cuts
Review sanitation then make chicken Caesar salad. One person is designated as the safety supervisor.
Case study of student that is doing things that are wrong.
Show the bacteria found on a cell phone. Keep phones put away during labs.
Poison Picnic – CDC Website
Knife skills use knox gelatin in sheet pans, cut then melt down and reuse
Cut veggies then use the next day in a soup lab, make French fries, vegetable tray
Kahoot for review game
Glo germ – toss a ball and then check hands in black light
Set up kitchens with mistakes have students identify them, caution tape to rope off
Kitchen ninja game – New Mexico state univeristy
Knife skills, frittata.
Make all knife cuts with paper and a ruler, cut up and put in an envelope
Relay with knife skills

What labs do you do?
Safety & Sanitation- 3 different dips, chicken stir fry, cream of tomato soup, salsa demo
Steak stir fry, whole wheat turkey wrap, eggs benedict
Yeast breads – 2 day cinnamon rolls, pretzels, angel rolls, scones with cinnamon buter
Consumerism – calzones, different types of mac & cheese
Crunch wraps – like taco bell http://life-in-the-lofthouse.com/taco-bell-crunchwrap-supreme-copycat/
Create your own salad from basic supplies
Chicken strips with Haney mustard sauce
Recipes with less sugar and fat
Salads – black bean salad, Texas caviar, Quinoa salad, snickers salad, broccoli salad, Chinese noodle salad, cottage cheese and Jell-O, pasta salad
Research and find salad dressing recipes
Clean the fridge salad
Breadsticks with herbs
Potato soup, cream of anything soup
Café Rio pork salad
Pies
Video students demonstrating cooking terms
Kabobs
Puff pastries
Cinnamon chips with fruit salsa
Zupa soups
Lettuce wraps
Giant burrito

Fun ideas for teaching life span, sports nutrition & health concerns
Food tasting from each health concern – tasting, research, menu
Case studies for health concerns
Could add food allergies to health concerns
Life span – Elderly – duct tape hands, mesh over eyes, ear covers make biscuits or pancakes, introduce non-salted saltines & no sugar Kool-Aid – loss of taste buds

Do soups with Elderly Food Lab
Make a life of grandparents and see what's wrong in their family and how they address these.
Kid friendly meal – homemade mac "n" cheese, ants on a log
Kid friendly recipes, each unit does a different food
Sports Nutrition – Do a different kind of grain bread, 7 grain cereal
Assign students to plan snacks for soccer team when they participate in a tournament
Health Concerns – students present diseases (PowerPoint, brochure, poster)
Health Stations – rotations
Assign disease and research how life changes
Family Tree
Sports Nutrition – college presentation, Sports guide, students plan a lab, use student athletes to teach
Apples – Kids make applesauce, teens apples and dip, adults apple salad, elderly apple crisp

<u>Fun ideas for teaching the food standards (2, 4, 6, 8, 10) - Not Labs</u>
Give students wheat and let them chew it to develop gluten.
Make a gluten ball ahead, bake it to show structure.
Fermentation – yeast in Ziploc bag
Power Points with notes = study guide
Alton Brown videos
Make and taste different dressings
Find salads by nutrient – identify nutrients in salads
Build a menu around a type of salad (appetizer, main dish, etc…)
Make béchamel with different cheeses. Let kids taste using French bread.
YouTube Videos – pie dough with food processor, lattice, etc…
Experiments
Kahoot.it for informal assessment
Teach temp for meat – 5 will keep you alive. Sea level-seafood 145, ground level-ground meat 155, birds that fly 165
Use Ted Talks
Everyone is assigned to be a part of a salad – have them make a complete salad by moving around the room.
Meat Demo – cook roast overnight in slow cooker. Sample. Marinated steak, sample.

<u>How do you teach budgeting & Consumerism?</u>
Give students a scenario of a family and a budget $4.00 per person per day. Take them to the grocery store to find items for the family fitting to my plate and budget.
Video- Winning the shipping cart race
Draw favorite store layout – discuss placement, make shopping list for store
Lab – store brand vs name brand, Mac & Cheese, Oreos, graham crackers, canned peaches, chocolate chips, granola bars – organic vs conventional
Nutrition Label – lab then make a label for what they made
Price is right games with food items
Videos – supermarket persuasion – learning seed, Andrew Zimmerman – how to shop
Have labs come up with a product and label
Shark tank – present product, why people would want to buy it, vote on it
Online grocery store to compare prices
Make a menu for 24 hours for one family – one day eating out, one day from grocery store, compare cost and nutrients
Store Ads – plan meals - $1 per person, $2 per person
FIFI project – how much to spend on food
Compare scratch, box and pre-made cookie dough

Extension.usu.edu – food sense website
Oldwayspt.org – take a traditional recipe and compare with a convenience food
Set up a fake grocery store in class for pricing activities

Talk about Final reviews, final meals & careers
Print addendum in booklet form for students to use during review or fill in blanks with addendum
Kahoot game
Great race – with rewards, each level earns one more item
UTIPS – practice tests
Final Meals – combine 2 groups come up with work plan
Iron chef final
New Mexico State extension has review games
Socrates game online
Final meal at home send pictures
Final review – tables with topics and write down questions and answers to review standards. Break up review questions for each table to answer
Shoot board with nerf gun for point values, group review
Practical final meal

Period:_____ Kitchen:_____

FOODS 2
PRACTICAL FINAL

Final Meal Menu
Baked Chicken Breast
Sauce Supreme
Mashed Potatoes
Tossed Salad with Dressing
Rolls
Fruit Tarts
Ice Water

Name	Day 1 - 100 points	Day 2 - 200 points	Total Points Earned

Prep Day

1. Fresh Fruit Tarts Check off: _____

1 ½ cups Flour
¼ cup Sugar
¼ tsp Salt
½ cup Cold Butter
1 egg

In a large bowl, combine the flour, sugar and salt. Using a pastry blender, cut in the butter until the mixture resembles coarse crumbs. Add the egg, mix with a fork until blended. Divide the dough into 6 portions. Press each portion into a greased 4 ½" tart pan. Bake at 350 15-20 minutes or until the edges are lightly browned. Remove from the tart pan. Put on labeled tray for final meal.

2. Each person will dice a potato into a medium dice. Check off: _____
Put in a plastic container completely covered with water.

3. Make one batch of roll dough with cold water, put in Ziploc bag. Check off: _____

Rich Bread Dough

1 tablespoon yeast
1 cup warm water (cold for class)
3 tbsp butter, softened
1 tsp salt
3 tbsp sugar
1/3 cup nonfat dry milk
2 ½-3 cups flour
1 egg

Combine yeast, water and sugar. Let stand 5 minutes. Add fat, salt, dry milk, 1 cup flour, and egg. Beat until smooth. Add one more cup of flour, beat until smooth. Add remaining flour ½ cup at a time as needed. Knead until smooth and satiny by hand or in a machine. For class: grease a Ziploc bag and place dough inside. Remove most of the air and refrigerate.

4. Plan the preparation and service of the final meal.

Final Meal Planning Sheet

For each menu item choose the correct order of preparation and determine who will be responsible for preparing that item. 2 people can work together on the same item. Please assign someone to set the table using place mats, correct dinnerware and flatware – don't forget the napkin!!

Time	Food Item/Activity	Person(s) Responsible	Equipment Needed

Meal must be on the table 30 minutes prior to the end of class.
Clean as you go so your kitchen should be very clean as you sit down to eat.
Kitchen must be cleaned to the highest of standards and the completion of the lab.

Final Meal Day

1. Baked Chicken
   Place chicken on parchment paper lined baking tray. Season chicken with salt and pepper. Bake in 350 degree oven until 165 internal degrees about 30-40 minutes.

2. Sauce Supreme
   1 ½ tbsp butter
   1 ½ tbsp flour
   1 cup chicken stock
   Salt & Pepper
   ¼ cup heavy cream
   2 tbsp butter
   ½ tsp lemon juice

   Melt the 1 ½ tbsp butter in a sauce pan over medium heat. Stir in the flour and cook, stirring constantly until the mixture is smooth and bubbly. 1-2 minutes. Stir in stock. Heat to boiling stirring constantly. Reduce the heat to low and cook until it has reduced in volume by ¼. Season with salt and pepper. Place cream in a bowl and temper by slowly incorporating about ¼ cup of the veloute into the cream. Slowly stir the cream mixture into the sauce and simmer on low. While stirring constantly, add 2 tbsp of butter 1 tbsp at a time. Add lemon juice. Serve immediately.

3. Mashed Potatoes
   Drain water from potatoes. Fill large pot 2/3 full of water and about 1 tsp salt. Add potatoes, bring to a boil and boil WITHOUT LID until potatoes are fork tender, 5-10 minutes. Drain potatoes. Put back in pot and mash with milk and butter until desired consistency.

4. Prepare tossed salad. Use at least 2 knife cuts on the given vegetables.
   Use Ranch Dressing for the salad.

5. Prepare rolls. Remove dough from Ziploc bag. Roll into a 12-14" circle. Using a pizza cutter cut into 8 wedges (or slices of pizza). Brush with melted butter and roll from wide end into a crescent roll. Place on parchment lined baking sheet and let rise 20 minutes. Bake at 375 for 15-20 minutes.

6. Complete fruit tarts.
   4 oz Cream Cheese, softened
   ¼ cup Sweetened condensed milk
   2 tbsp Lemon Juice
   As needed Assorted Fresh Fruit

   In a small mixing bowl beat cream cheese until smooth with a spoon. Beat in sweetened condensed milk and lemon juice. Spoon filling into each tart shell. Top with sliced fruit.

Meal Evaluation

1. What went wrong or what would you do differently next time?

2. What went well?

3. What did you learn in class this semester that helped?

4. What was something **new** you learned as you prepared this meal?

5. Give your group a grade: _____ Why do you deserve this grade?

Grading Sheet

	Points Possible	Points Earned
Diced Potatoes	20	
Roll Dough	20	
Tart Shells	20	
Clean up Day 1	20	
Planning Sheet	20	
SUB TOTAL	100	
Everyone arrived on time	20	
Meal was prepared and served in allotted time	50	
Table Set appropriately	20	
Cleaned during preparation	30	
Kitchen left entirely clean including table and floor	50	
Evaluation	30	
SUBTOTAL	200	
TOTAL	300	

Food Needed Per Unit	24 Units
4 Potatoes	96
1 tbsp yeast	1 ½ cups
3 tbsp butter	see below
½ cup butter	see below
1/3 cup dry milk	8 cups
2 eggs	4 dozen
4 pieces of chicken	96/32 breasts
5 ½ tbsp. butter	see below
1 cup chicken stock	24 tsp
¼ cup heavy cream	6 cups
½ tsp lemon	24 lemons
½ cup milk	12 cups
¼ head lettuce	6 heads
1 carrot	24
½ cucumber	12
¼ red pepper	6
¼ cup ranch dressing	6 cups
¼ cup butter	see below
4 oz cream cheese	12 / 8 oz
¼ cup sweet cond milk	6 cups
2 tbsp lemon juice	(with lemon above)
3 strawberries	72
¼ can mandarin oranges	6 large cans
1 kiwi	24
	16 lbs butter

Additional Equipment

Tart Pans
1 Ziploc bag
1 plastic container
Dough Hook
Pastry Blender

2 sheets parchment paper
1 half sheet pan
Potato masher
Pizza wheel
Pastry brush
Meat thermometer
Reamer

Period:_____ Name:_____

FOODS 2
PRACTICAL FINAL MAKE UP – DAY ONE

Prep Day - Tart Dough Make Up – 20 points
Read the following article and answer the questions at the end.

If there's one thing that instills fear into the hearts and minds of American cooks, it's pie crust. I know. At one time, I was one of those people. Pie crusts were the Mumm-ra to my Lion-O, and it was all because they were a mystery to me. What makes them flaky? What makes them tender? And most importantly, how come mine used to come out like pliant pieces of leather instead of buttery and delicious?

What I'm after: The kind of crust that's substantial enough that it doesn't sog-out from a juicy filling but tender enough that it flakes in your mouth into buttery shards. A crust with substance, but not chew. A crust that divides along deep faults into many distinct layers separated by tiny air spaces and that cracks when bent. A crust that is never leathery or pliant, but not so tender or crisp that it crumbles instead of flakes. And of course, it should have a deep butteriness coupled with a balanced sweet and salty flavor.

Easier said that done, right? For many people, making pie crust is a crap shoot. Sometimes it comes out perfectly flaky, other times tough. Sometimes you need just a couple tablespoons of water, sometimes a full 1/2 cup. **What gives?**

Turns out that the science of pie crust is really not all that complex, and once you get a grasp of what's really going on in between those flaky layers, then making a perfect crust becomes a matter of smarts, not luck.

On paper, a classic American pie crust is a mind-bogglingly simple recipe. Combine flour with a bit of salt and sugar, cut in some butter and/or shortening, then add just enough cold water to get it to come together into a disk. Roll it out, and bake. **That's it.**

The underlying difficulty in the technique comes during the first stage of cutting the butter into the flour. It's simply impossible to accurately cut butter into flour to the same degree on a consistent basis. Don't cut it in quite enough, and you need to add extra water to absorb the excess dry flour, resulting in the over-formation of gluten, and a tough, leathery crust. On the other hand, cut it just bit too far, and you end up with way too little dry flour. Rather than having well-structured flaky layers, you end up with a crust that crumbles into sandy pieces.

This is the reason why you sometimes need to add a couple tablespoons of water and other times up to twice as much to get the dough to come together—it's got nothing to do with the relative humidity of the air as many books will have you believe. Indeed, in the short time that it takes to make a pie crust, flour will absorb approximately 0.1 percent of its weight in water, even in the most humid of environments. That's a small enough amount to effectively be zero.

So how does the simple action of cutting butter into flour result in layers and layers of flaky pastry? **It's all got to do with the balanced interaction of gluten and fat.**

Old school pastry books will tell you that when you cut butter or some other solid fat (like shortening or lard) into flour, what's happening is that you are encasing pockets of flour inside a shell of fat. Add water, and the flour is moistened, whereupon gluten—the network of proteins that lend structure to baked goods—is formed. When you subsequently roll this dough out, these pockets of fat stretch and stretch, eventually forming sheet of fat that separate sheets of gluten-enforced flour. Then, as the pastry bakes, the fatty layers melt, allowing the floury layers to separate from each other, solidify, and form the layers you see in a great pie crust.

It makes sense. Sort of. Unfortunately, it's not a particularly accurate picture of what's going on. For starters, how could the action of cutting a solid fat into a relatively fluid mass of flour possibly cause it to coat pockets of flour in distinct bubbles? And even more importantly, if the fat is really coating these pockets of dry flour, then how would they get moist when you add water to the mix? Wouldn't the fat prevent any water from reaching the flour?

Let me digress for a moment. A few years ago, I developed a pie dough recipe while working at Cook's Illustrated. The one trick that got majorly hyped up about it was the inclusion of vodka in place of some of the water in the recipe. It was a pretty neat trick, if I do say so myself, and it solved one of the major problems people have with pie crust.

But there's a good chunk of that article that seemed to have gotten glossed over by pretty much everyone, and I believe that it's a far cooler part than the headline-friendly vodka trick, and it has to do with the basic structure of dough.

You see, it turns out that when it comes to pie dough, our existing model has it wrong. In fact, it's not the fat that's coating pockets of dry flour. **It's the reverse**. It's the *flour* that's coating pockets of pure *fat*. With this model, things make much more sense. You can easily and intuitively see how fat gets coated with flour (think about dropping a pat of butter into a pile of flour, but on a much smaller scale), and with this model, when you add water, you are indeed moistening dry flour so that it can form sheets of gluten.

But there's a third element at play here that's been ignored: the**fat/flour paste** that forms at the interface between the pure fat and the dry flour. With this paste, what you're getting is essentially single particles of flour that are completely coated in fat. Since they can't absorb any water, they end up behaving in much the same way as pure fat.

To summarize, here's what we've got as we're forming a pie dough: **Dry flour**, completely uncoated by fat, that absorbs water when you add it, forming gluten that then gets stretched out into wide layers. **Pure pockets of fat** that will flatten out into long, wide, thin sheets as you roll out your dough, separating the layers of gluten-enforced flour from each other so that rather than forming a solid, leathery mass, they separate and gently puff as they bake. **A flour/fat paste** that functions much in the same way as pure fat does. As it bakes, the fat melts and a tiny amount of individually separated flour bits will deposit themselves and become incorporated into the gluten-enforced layers.

And if this flour/fat paste functions similarly to pure fat, doesn't that imply that we can completely replace the pure fat with this paste?**Indeed, we can.**

Any baker would have taken a look at the finished dough and declare it a failure without even bothering to bake it. After all, how could a crust come out flaky if there aren't even visible bits of fat left in it? By classical pie crust definitions, it can't. Yet we've just proven here that it can indeed, and when physical evidence indicates that an existing model is wrong, it's time to modify that model.

So it's all very interesting, but the question here is, **why should you care?** How does this make forming pie crust any easier?

In two ways. First off, it completely removes the variability of a traditional pie crust recipe. By measuring out a given amount of flour and fat and combining them together until they form a near

homogeneous paste and then adding the remaining dry flour to that paste, you are very strictly defining exactly how much flour is used for gluten formation and how much ends up coated with fat. No more trying to visually judge whether your fat is properly cut. No more adding ice water a drop at a time until a dough is formed. The dough comes out the same, every single time.

The other key advantage is that your dough becomes much more pliable. The fat/flour paste formed at the beginning is much softer and more malleable than pure butter is, which means that your final dough rolls out smoothly and easily with little to no risk of cracking like a traditional pie crust, even without the vodka.

How's that for pie flinging?

There's still a number of questions that come up in regards to pie crust. Which fat makes the best crusts is prime stomping grounds for eternal debate between bakers, and it comes down to a battle between texture and flavor.

Butter:

- **Pros:** Excellent flavor, forms distinct, large flaky layers.
- **Cons:** Difficult to work with. Butter melts at a relatively low temperature (below body temperature) and has a very narrow workable range. It's also got a relatively high water content (about 15 to 17 percent), which can cause excess gluten to form and turn your crust leathery if you aren't careful.

Shortening:

- **Pros:** Very easy to work with, produces crusts that are extremely tender.
- **Cons:** It has no flavor at all other than grease. It's also soft over a wide range of temperatures, greatly increasing your chance of overworking your dough and turning it crumbly instead of flaky.

Lard:

- **Pros:** The best for working with—it has a wide workable temperature range and is not nearly as soft as shortening within that range. Creates very tender, flaky crusts.
- **Cons:** Unless you slaughter your own pigs and render your own leaf lard, it's extremely hard to find good lard. The stuff sold in supermarkets has a very piggy aroma, which makes for very piggy-tasting crusts. Most of the time, that's not good.

Because of these various characteristics, most recipes call for some combination of butter and shortening. Because shortening is so much softer than butter at room temperature, it's much more likely to form the fat/flour paste while the butter remains in discrete chunks. But here's the good news: **with the method I've outlined above, you can cut the amount of shortening down to virtually nothing**. Depending on how tender you want your crust to be, anywhere below a 4:1 ratio of butter to shortening will work. To be honest, most of the time I'll make pure butter crusts, simply because shortening is just not something I keep lying around the house.

Finally, let me offer you a few tips to make the most out of your crust, no matter what recipe you decide to use.

Get yourself a scale, then do yourself a favor and throw out your dry measuring cups. Honestly. Do it. You will not regret it. Weighing dry ingredients by volume is simply not accurate. Depending on how tightly packed it is, the weight of a cup of all-purpose flour can vary by as much as 50 percent. **50 percent!!!**. No such problems with a scale. Five ounces of flour (the equivalent of one cup) is five ounces of flour, no matter how tightly it's packed.

If there's one reason to own a food processor, it's to make pie crust. Nothing is as efficient or as consistent at cutting fat into flour. A stand mixer will do the job reasonably well; a pastry cutter will, too, though it requires much more work. You can even get a decent crust using just your fingers. But if you've got the processor, use it.

Just like with grinding meat, the key to great pie crust is to make sure that your fat doesn't melt too much. If your home is too hot, make sure that you re-chill your dough as you work with it. In the summer with my oven on, the apartment pushes 80°F. Under these conditions, I'll put my dough back in the fridge for ten minutes immediately after incorporating the fat, for at least 2 hours after forming the dough into a disk and wrapping it, and for another 10 minutes after draping it in the pie plate before trimming and fluting the edges.

The temperature of your water has less of an effect than people lead you to believe. A couple tablespoons of warm water won't significantly chill a pound or two of butter and flour. Still, it doesn't hurt to use cold water or even ice water.

Your processed flour and butter are sitting there in the bowl of your food processor and you're tempted to save yourself a bit of cleanup by just adding the water directly in there, right? **Don't do it!** Sure, it'll work out ok, but you won't form nearly the same level of flakiness as you do if you incorporate with a spatula. By using the spatula to fold the water into the crust, you give flaky layer formation a head-start even before you pull out the rolling pin.

While the ball-bearing-based heavy-duty cylindrical rolling pin might be better for whacking husbands over the head in cartoons or fitting into Norman Rockwell paintings, the slender, slightly tapered French-style rolling pin offers far more control, is easier to clean and store, and is cheaper to boot.

And that's basically all I know about pie crust. Or at least as much as I'm willing to write before my book comes out. I gotta save *something* to keep my publishers happy, right?

1. According to the author what is a description of a perfect pie crust? List 4-6 key adjectives.

2. What happens if you don’t cut the fat in enough?

3. What happens if you cut in the fat too much?

4. What was the author’s neat trick in his pie crust recipe?

5.

	Pros	Cons
Butter		
Shortening		
Lard		

6. Why should you weigh flour?

7. Why a food processor?

8. Why use a spatula to incorporate water?

9. Why use a tapered rolling pin?

Prep Day – Knife Cut Make Up – 20 points
Read the following article and answer the questions at the end.

Top 10 Knife Skills
Learning how to use a knife correctly is imperative when it comes to keeping you safe in the kitchen. Not only is it important to keep knives clean and sharp, but learning how to properly cut foods can prevent accidents. You may know how to chop and mince fruits and vegetables, but do you know how to properly protect your fingers as you slice and dice? Equipping yourself with the right knowledge will go a long way in the kitchen.
There are several different ways to use a knife to prepare foods, and each technique can help make cooking a much easier -- and safer -- task. Plus, knowing the difference between dicing and julienning can be a real lifesaver at your next dinner party! Whether you're an experienced cook or just bought your first cutlery set, here are 10 knife skills that you'll find instrumental in helping you prepare meals like a world-renowned chef.

10: Cleaning Your Knife
Although this might seem like a no-brainer, keeping your knives clean is an essential part of proper knife use, as it kills harmful bacteria that might contaminate food.
To clean your knives, use hot water and dishwashing soap, making sure the sharp end is pointing away from your body and that you keep your fingers away from the blade. After you're done washing them, dry your knives off with paper towels or with a dish cloth. If you use a dish cloth, avoid running it down the length of the blade, which may cut the fabric (and possibly your hand).
You should also avoid leaving knives to soak in the sink for several reasons. First, prolonged exposure to water can damage the handles of knives -- especially wooden ones -- and can cause even the most expensive blades to rust. But most importantly, knives left in a sink of water can remain hidden from view, creating the risk that you might reach for something and accidentally cut yourself.

9: Sharpening Your Knife
It's important to keep knives sharp to stay safe when cooking. It's not something you'll have to do often -- professional chefs sharpen their knives maybe once or twice a year -- but dull knives are a safety hazard and can be very dangerous.
The more blunt a knife's edge is, the more pressure it takes to cut something. The more pressure your hand and the knife apply to a piece of food, the more likely you are to slip and cut your finger instead. Sharpened knives also reduce the time it takes to prepare your meals, since your cuts will be faster and more accurate.
To sharpen a knife, use a sharpening stone, also known as a whetstone. If you don't feel comfortable performing what could be a dangerous task, most knife manufacturing companies let you send your knifes in for professional sharpening, and many cooking supply stores also offer sharpening services.

7: Chopping
Chopping is probably the most basic of knife skills and the easiest to perform, and you can use it for a wide variety of food preparations. To hold the knife properly, put your middle, ring and pinky fingers around the handle, and grip the blade with your index finger and thumb. There are essentially two basic methods you can use for chopping: the wrist-fulcrum method or the tip-fulcrum method.

The **wrist-fulcrum method** involves keeping the heel of the knife -- the part of the blade closest to the handle -- near the cutting board and pointing the tip of the knife upward. This requires you to use your wrist as a fulcrum, swiveling it up and down to move the blade in a chopping motion. The **tip-fulcrum method**, on the other hand, keeps the tip on the far side of the piece of food you're cutting -- you chop by moving your hand and wrist up and down

8: Dicing

PROTECT YOUR FINGERS

Since you don't want to cut yourself while you're chopping, holding the food properly is important, too. It's best to curl your fingers under toward the palm of your hand to keep a grip on the food and avoid cutting your fingertips. As you chop, move your fingers back slightly with each cut.

Whereas chopping is mainly used for foods that don't need to be cut in uniform shapes and sizes, dicing is the opposite. Dicing is good for cutting fruits and veggies into even-sided cubes. You can dice your provisions into any size you'd like, of course, but there are three main types of dices: large (3/4 inch), medium (1/2 inch) and small (1/4 inch). To begin, first cut your food into several square-sided pieces of equal length. After placing these pieces in a row, cut the whole group into as many cubes as possible.

6: Chiffonade

Chiffonade is a knife technique usually reserved for cutting herbs and greens. Leafy greens and herb leaves are cut into long, thin strips and then used as ingredients in dishes or as garnishes. Before you chiffonade, pull off the stems and place the leaves on top of each other. Then stack them according to size -- from small to large -- to ensure that your cuts are even and approximately the same size. Use the knife in a rocking motion to shave the greens. Avoid chopping up and down, as this will bruise and possibly discolor the leaves, and if you're storing your chiffonaded leaves (in the case of herbs, for example), it may cause the food to lose its flavor over time.

5: Peeling

HOW TO PREVENT OXIDATION

Oxidation occurs when the flesh of a peeled food darkens after being exposed to air. To keep foods from oxidizing, place them in a bowl of acidulated water.

To peel fruits and vegetables like apples, potatoes and squash with ease, use a paring knife or a serrated peeler -- both are sturdy and easy to control. To begin, cradle the food in one hand and insert the tip of the knife directly under the skin with the other. Then, starting at the top, use the knife to peel away the skin in a circular direction. Work the blade away from your hands to keep them safe. As you turn the food in your hand, use your thumb to give the knife some leverage.

4: Batonnet

Batonnet -- a French word that means stick or baton -- is a technique that is the basis for the julienne and dice cuts. Regardless of the food you batonnet, always begin by chopping off each end, which is known as topping and tailing. Next, make a rectangle with the knife by squaring off all four sides. Slice the rectangle into quarter-inch pieces, stack them and cut again, this time in quarter-inch strips. It's optional, but if you want to cut a true batonnet, the final size should measure approximately 2.5 to 3 inches long.

3: Mincing

HOW TO RID YOUR HANDS OF A GARLIC ODOR

Handling garlic is stinky business. To remove a garlic scent from your skin, pour a small amount of baking soda or salt onto your hands, rub them together, and wash well with soap and water. Rubbing your hands on stainless steel also works.

Mincing is very similar to chopping -- the difference being that minced foods are chopped very finely so they can literally dissolve when cooking. To mince, cut the food lengthwise into strips, then again after turning the provisions 90 degrees. Place one hand on the top of the knife to hold it steady, and be sure to keep the tip of the blade anchored against the cutting board as you chop. Continue this motion as you mince by moving the knife back and forth swiftly through the pile. Garlic and onions are two commonly minced foods.

2: Tournée

Tournée is an oblong-shaped cutting technique usually used to cut vegetables like potatoes, carrots and squash. To tournée, first prepare the vegetables by cutting off the edges and trimming the length to approximately 2 inches. You can use any knife that's comfortable to handle, but a bird's beak knife or tourne knife are often preferred by cooks because a curved blade allows foods to be carved and shaped quickly and efficiently. Use such a knife to sculpt food into several small oval-shaped pieces, and add them to a dish to lend a distinct, formal touch to a meal.

1: Julienning

MATCHSTICK MEASUREMENT

The precise dimensions of a julienne are 1/8 inch by 1/8 inch by 2.5 inches, but most cooks simply use the size of a matchstick to describe this particular cut.

Like a dice cut, a julienne is a smaller, much finer cut and takes a little bit of practice -- but once you've mastered it, it can add a decorative flash to recipes. To julienne, cut food into rectangular 1/8-inch planks. Then stack the planks on top of each other and slice lengthwise into 1/8-inch strips. If you don't have a ruler handy (and you probably won't) the best way to judge the size of your julienne is to hold up your slices against the handle of your knife. Using the rivets on the handle -- the small, round metal attachment points that keep the blade and the handle together -- each julienne should measure from one rivet to the next.

1. How do you wash a knife?

2. Why is a dull knife dangerous?

3. What is the proper way to hold your hand so you don’t cut your fingers?

4. What is typically cut with a chiffonade cut?

5. What does a batonnet look like? Draw a picture using correct dimensions.

6. What two food are commonly minced?

7. What are the correct measurements for a julienne?

Prep Day – Yeast Breads – 20 points
Read the following article and answer the questions at the end.

Secrets to Making Yeast Bread

Don't let lengthy yeast bread recipes intimidate you. Making yeast bread is easy—even if you're a beginner—and requires just a few minutes of hands-on work. Below is a brief overview of how yeast breads are made, using our Hearty Country Bread as an example. Once you learn these basics, following a bread recipe will be a cinch.

The most important thing to remember is that good bread takes both time and patience—you must wait for the bread dough to be ready, but when ready, the bread dough will not wait for you. As most professional bakers will tell you, bread baking is a game of "hurry up and wait."

STEP #1 Weigh Your Ingredients

When measuring out ingredients for a dough, bakers often use the phrase "scale out"' rather than "measure out" because they use a scale to weigh the ingredients rather than using measuring cups. Because the ratio of flour to water greatly impacts the end result, we recommend weighing your ingredients before making bread. That said, whether you scale or measure, the nice thing about bread dough is that it is very flexible—you will have plenty of time during kneading to fix a wet or dry dough if necessary. The only thing to keep in mind is temperature, since yeast is a live culture; if your liquid ingredients are too warm (over 120 degrees), they will kill the yeast.

STEP #2 Form a Shaggy Dough

Mixing only takes a minute or two and we like to do the mixing right in the standing mixer bowl that will be used later for kneading. The point of mixing is to evenly distribute water into the dry ingredients (which starts the development of gluten), and form a very shaggy dough. Making a smooth, soft, malleable ball of dough is not the point here—we just care about incorporating the water into the flour. This step is particularly important for rustic doughs, because it lays the foundation for a strong gluten structure later during kneading and turning.

STEP #3 Let It Rest

Many of our recipes let the dough rest after it's mixed—officially, this rest is called an autolyse. The point of this resting time is to let the flour absorb the water before it gets pushed around during kneading. Giving the flour a chance to hydrate has several advantages: it makes the dough less sticky and easier to knead, it cuts down on kneading time (excessive kneading leads to loss of flavor), and it gives the bread a more open crumb. An autolyse is especially important for leaner breads such as rustic loaves and baguettes; it is less critical for breads with more fat and flavoring ingredients, like sandwich bread and cinnamon swirl bread.

STEP #4 Knead the Dough

Kneading is a very important step that takes 8 to 10 minutes in a standing mixer (or up to 30 minutes if kneading by hand), and this time should never be skimped on. Kneading develops and organizes the gluten strands in the dough, which provides the bread's structure. Without good gluten structure, the bread will sag in the oven.

STEP #5 Let the Dough Rise

After the dough has been kneaded, it needs to rest, relax, and rise (usually for 1 to 1½ hours). The gluten, which was worked hard during kneading, will relax and become elastic and supple. Meanwhile, the yeast will begin to go to work—it eats the flours starches and releases carbon dioxide. The releasing of the carbon dioxide into the relaxed, elastic dough is like slowly blowing air into a balloon. The bread is ready for shaping when it has doubled in size. The key is knowing when that point is reached. The easiest way is to let the dough rise in a straight-sided container and mark its initial height with a rubber band.

STEP #6 Shape the Dough

After the first rise, the dough is formed into the final shape of the bread, such as a round loaf, sandwich loaf, small rolls, or a long, skinny baguette. The shaping is done on the counter with "iron hands in kid gloves," to quote an old baker's phrase. Simply put, you need to firmly bend, fold, and roll the dough (which will have a will of its own at this point) into a tidy, sturdy shape without tearing or roughing up the dough's surface.

STEP #7 Let It Rise a Second Time

This second rise, also called proofing, is much like the first rise in that the dough needs to rest, relax, and rise. The only difference this time is that the yeast is already hard at work and the dough has been shaped into a loaf. You also shouldn't let the bread overrise (overproof) or it will develop a slack shape, a dense, blobby texture, and a sour taste. Underrisen loaves will be dense and squat. (But when in doubt, it's better to under- than overproof.) You can tell when the loaf is properly risen and ready to be baked when it has nearly doubled in size, and the dough barely springs back when poked with a knuckle.

STEP #8 Brush or Slash Before Baking

Heating up the oven (and a baking stone if you're making rustic breads or rolls) is important, as is prepping the bread for baking. Some loaves of bread should be brushed with something wet, such as water, oil, or a beaten egg—this moisture helps keep the surface of the bread elastic so that the bread can continue to rise nicely as it bakes in the oven. Alternatively, you can turn your oven into a steamy sauna by pouring boiling water into a preheated loaf pan placed on the oven's bottom rack; the moist environment transfers heat more rapidly than dry heat, prevents the bread's exterior from drying out too quickly, and creates a glossy, crackly crust. Some loaves and rolls with thick, rustic crusts are also slashed with a sharp knife or razor—this not only looks pretty, but the slash acts as a pleat to let the bread rise during baking.

STEP #9 Take the Temp to Tell Doneness

The best way to gauge the doneness of a loaf is internal temperature. Don't be tempted to pierce the top crust in the center, though, as this will leave a conspicuous hole. Insert the thermometer from the side. (If the bread is in a loaf pan insert it just above the edge of the pan directing it at a downward angle.) Bread is generally done baking when its internal temperature registers 200 to 210 degrees. We don't, however, recommend using this method for testing babka or cinnamon swirl bread because you could hit a patch of sugar, which would give you an inaccurate temperature reading.

1. Why do you need to keep temperature in mind?

2. Why should you let dough rest before you knead it? (4 reasons)

3. What happens when the bread rises? How do you know when it is done?

4. What are the four shapes mentioned in the article?

5. What happens if bread overrises?

6. How can you determine when bread is done?

Prep Day – Preparation & Service – 20 points
Read the following article and answer the questions at the end.

Five Tips for Cooking a Full Meal
One of the most frequently requested tips this spring, was advice on cooking a whole meal - each dish balanced to be ready in time and on time. This means that your work is balanced precisely to be finished when your guests arrive, with the entrée hot and ready to serve, each dish at the right temperature.

This is a hard question to answer. This is one of those all-encompassing sets of kitchen wisdom that accumulates over time as we amass more skills, better instincts, and a deeper feel for our favorite recipes.

We are still learning this too! How many times have our dinner preparations run 30, 40 minutes over? How many times have we been half an hour late to the potluck we were catering. But through that we have picked up a few tips. The thing is, these are all rather obvious, and you could probably figure them out yourself. These just take practice and an organized mind. You have to think ahead and know the hidden danger spots in recipes.

Here are five steps that we go through when planning a whole meal to be ready at a precise time.

1. Schedule: Work backwards.
First, make a schedule of your evening. If your guests are due to arrive at 7pm and you are getting home from work at 4:30, then work your schedule backwards from 7pm. Actually, work it backwards from 6:45, so you have some breathing room! Then work closely with your recipes to make sure that each fits into that time. If this is your first dinner party please just use recipes you already know.

2. Diversify cooking methods: Broiler, stove, oven, microwave, raw.
Plan your menu around a variety of cooking methods. A classic mistake is to plan a roast chicken, bread, roasted vegetables AND a cake all at the same time. Look carefully through your recipes, and choose a variety of cooking methods. Maybe this means blanching the asparagus instead of serving them roasted. Maybe this means a stovetop pudding with whipped cream instead of baked custard, or steaming your broccoli instead of on the stove - already full up with boiling pasta and simmering ragu.

3. Do ahead, do ahead, do ahead.
If we had to choose just one tip, this would be the one! So many dishes can be done ahead, especially when cooking cool summer and spring menus. The salad and dessert can easily be done ahead - think pretty berries in individual cups with heaps of whipped cream and ginger biscuits on the side, or plated ice cream bombes set up in freezer. (Set up your coffee pot ahead of time too so all you need to do is boil water or push a button.) So many shaved cabbage and green salad options, too - toss a salad, put it in the fridge and it's ready to go. Cook the meat too if you can - a braise does very well made ahead, warmed up on the stove right before you guests come.

4. Don't forget appetizers (and drinks)
Buy yourself a little extra time (just in case) by having a dish of cheese, nuts, and crackers ready

ahead of time with the wine already open. Then when your guests arrive you can ease into the evening and do any last minute tasks while they are happily appetizing. Less pressure for you and a nice beginning of the evening for them.

5. Work in a cleaning break
Don't forget to clean as you go; it helps you feel less stressed and more ready to welcome guests. As you work backwards from 7pm (or whenever) don't let your cooking tasks flow right into each other; clean up and take a few moments to clean up as you go. This helps you be more on top of your cooking tasks anyway - more prepared and clear. Also, in small kitchens it's nice to clear as much clutter out of the way as possible!

One extra: Set the table first. If you're sitting around a table with guests, set the table before you start cooking. It helps you get in a good frame of mind and lets you work towards a psychological goal. Also, your guests walk into a kitchen or dining room that is obviously prepared for them. It doesn't help get the cooking done, but it does help you - especially if you run over a bit!

1. How does working backwards work?

2. Create a quick dinner menu using different cooking methods:
   Main Dish: Bread:
   Side Dish: Dessert:
   Side Dish:

3. For the following menu explain what you can do in advance for each item:
   Lasagna:_____
   Tossed Salad:_____
   Garlic Bread:_____
   Cheesecake:_____

4. What is the purpose of appetizers and drinks?

5. Why is it important to clean as you go?

6. Why should you set the table first?

Period:_____ Name:_____

FOODS 2
PRACTICAL FINAL MAKE UP - DAY TWO

Plan a meal for your family with the following elements:

Casserole	
Salad	
Bread	
Dessert	

You must make 3 out of the four items from scratch. You may have one helper in the kitchen with you. You will be required to show pictures. You can print them, e-mail them (bcox@alpinedistrict.org) or show them to me on a phone or camera.

Please create a plan for how this will be prepared and in what order:

Please include the following with this paper:

1. Recipes – you must attach 3 recipes for the items you are making from scratch.

2. Knife Cuts – you must include at least 2 knife cuts (dice, julienne, diagonal, chiffonade) These can be in the salad, casserole or dessert. You must include a **picture** of your knife cuts.

   Knife cuts you did:_____ and _____.

3. Table setting – please include a **picture** of your table setting.

4. Meal – a **picture** or pictures of all the food you prepared.

5. A clean kitchen – a **picture** of the kitchen after you have cleaned up.

6. Meal evaluation from the student and parent/guardian – both MUST be complete, they are on the back of this paper.

Parent or Guardian Evaluation

Meal was prepared and served in allotted time	40	
Table Set appropriately	20	
Cleaned during preparation	30	
Kitchen left entirely clean including table and floor	40	
FINAL SCORE	130	

Parent/Guardian Comments:

Parent/Guardian Signature:_____

Parent/Guardian Phone Number:_____

Student Meal Evaluation

1. What went wrong or what would you do differently next time?

2. What went well?

3. What did you learn in class this semester that helped?

4. What was something **new** you learned as you prepared this meal?

5. Give yourself a grade: _____ Why do you deserve this grade?

Small Appliance Recipes
(Food Processor)

Chili's Salsa-JustaQT

1 (14 1/2 ounce) can tomatoes and green chilies
1 (14 1/2 ounce) can whole canned tomatoes (plus the juice)
4 teaspoons jalapenos (canned,diced, not pickled)
1/4 cup yellow onion (diced)
1/2-3/4 teaspoon garlic salt
1/2 teaspoon cumin
1/4 teaspoon sugar

In food processor place jalapenos and onions.
Process for just a few seconds.
Add both cans of tomatoes, salt, sugar, and cumin.
Process all ingredients until well blended but do not puree.
Serve with your favorite thin corn tortilla chips.

Hummas- Ina Garten

4 garlic cloves
2 cups canned chickpeas, drained, liquid reserved
1 1/2 teaspoons kosher salt
1/3 cup tahini (sesame paste)
6 tablespoons freshly squeezed lemon juice (2 lemons)
2 tablespoons water or liquid from the chickpeas
8 dashes hot sauce

Turn on the food processor fitted with the steel blade and drop the garlic down the feed tube; process until it's minced. Add the rest of the ingredients to the food processor and process until the hummus is coarsely pureed. Taste, for seasoning, and serve chilled or at room temperature.

Small Appliance Recipes
(Immersion Blender)

Healthy Spinach Dip-Lindsey Isham

5 oz frozen chopped spinach
5 oz cans of sliced water chestnuts
8 oz container of 1% cottage cheese
½ packet Hidden Valley Ranch dry mix

Defrost spinach and squeeze out all the juice. Chop water chestnuts into small pieces. Blend cottage cheese with an immersion blender until smooth and creamy. Stir spinach, water chestnuts and ranch mix into blended cottage cheese. Stir with a spoon or rubber scraper until mixed well.

Ranch Dressing-livinglovingpaleo.com

2/3 cup olive oil
1 egg
½ tsp mustard powder
1 tsp lemon juice
2 tsp dried dill
1 ½ tsp dried parsley
¾ tsp minced garlic
½ tsp sea salt

Place all ingredients in a tall container (like a 2 cup measuring cup). Place an immersion blender at the bottom and turn on. Once the mixture starts to blend together and become thick, move the immersion blender towards the top until it's well blended. Should take less than 1 minute!

Thermometers and Calibration

Temperatures:

1. What are the internal meat temperatures based off of?

2. Where should you insert the thermometer when taking the internal temperature of meat?

3. Fill in the temperatures for each:
   a. Temperature danger zone: _____
   b. Seafood, pork, beef, veal and lamb: _____
   c. Ground meat: _____
   d. All poultry: _____
4. How long can food sit out in temperature danger zone before it should get thrown out?

Calibration:

Follow the instructions to calibrate a thermometer and then cook 2 chicken breasts. One to an internal temperature of 165 and one to 200. Then compare the two pieces of chicken.

1. Fill a large glass with crushed _____.
2. Add clean water until the glass is full and stir well.
3. Put the _____ stem into the ice water so that the entire sensing area is submerged. Do not let the stem touch the sides or bottom of the _____.
4. Wait at least _____ seconds or until the indicator stops moving.
5. With the stem of the thermometer still in the water, use a wrench to turn the adjusting nut until the thermometer reads _____degrees F.

Chicken Temperatures:	165°	200°
Texture:		
Taste:		
Moisture:		

Sport Nutrition

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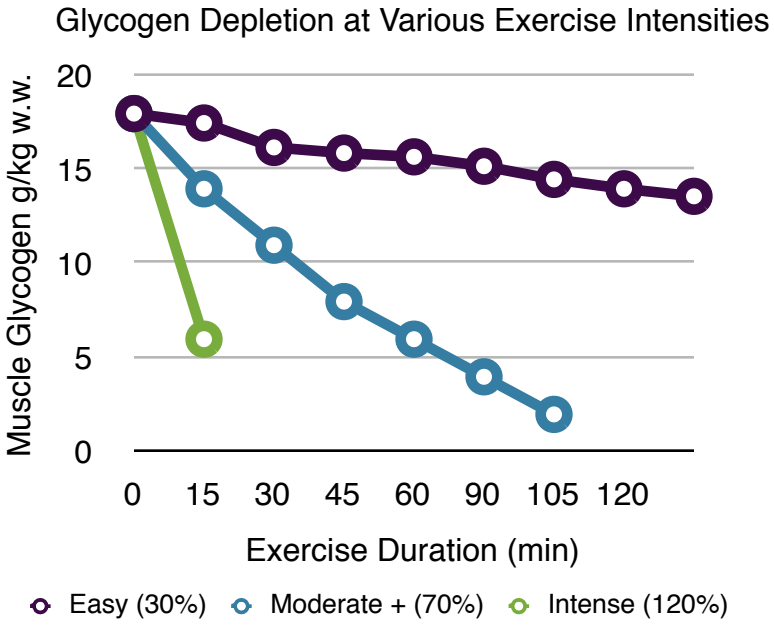
During Exercise

Carbohydrate is the body's primary energy source during exercise. Dietary carbohydrates (grains, fruit, starchy veggies, milk and yogurt) are stored in the liver and in the muscle as glycogen. During exercise, the body draws upon these glycogen stores (primarily muscle glycogen) to fuel working muscles. The speed with which our body exhausts these energy supplies depends on workout intensity, such that harder, more intense workouts use up glycogen reserves more quickly than more moderate exercise bouts. Glycogen stores are limited, so during prolonged exercise > 60-90 minutes, consuming carbohydrate while exercising can help improve performance by:

- ✓Reducing the risk of hypoglycemia (low blood sugar)
- ✓Providing fuel for actively working muscles
- ✓Sparing protein (you don't want your body to start breaking down muscle for energy)
- ✓Preventing "bonking," or "hitting the wall" and being forced to slow down or stop



What Should I Eat?

The table provides examples of solid foods, whole foods, and sport foods and liquids that can deliver carbohydrate while training/competing. What you choose is a matter of personal preference and tolerance. Research shows that 40-60g of carbohydrate per hour will help delay glycogen depletion and keep you feeling strong.

✓Be sure to practice in training before trying something new in competition!

Food	Carb Content
1 med banana	25g
1 slice Bread w/ PB	15-20g
1 Fig Newton Bar (2 Cookies)	14g
1 oz Pretzels	20g
1 Med white roll with 1 T jam	50g
1 Clif Bar / 1 Luna Bar	40-45g / 23-28g
3 Clif Bloks / 6 Luna Moons	25g
1 Sport Gel (i.e., Gu, PowerGel, ClifShot)	25g
Gatorade (8 oz) 500-1000mL/hr (18-34 oz)	14g 30-60g
Coke (12oz)	40g

To limit gastrointestinal distress during training/ competition consider applying the following tips:

- ✓Get fit and acclimatized
- ✓Stay hydrated
- ✓Practice drinking during training
- ✓Avoid "Over-Nutrition" both before and during competition
- ✓Keep your pre-race meal moderate in protein and low in fat
- ✓Eat a high-energy, high carbohydrate diet regularly
- ✓Avoid high-fiber foods before exercise
- ✓If prone to GI problems, limit NSAIDS (anti-inflammatory medication), alcohol, caffeine, antibiotics, & supplements
- ✓Visit the Port-A-Potty BEFORE you start!

For information on sport nutrition at TOSH, contact Kristi Spence kristi.spence@imail.org; 801-314-4038

Sport Nutrition

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Hydration

Athletes must remain hydrated in order to train and compete at top levels. A loss of body weight (as little as 2-3%) from water can result in decreased performance. Fluid needs are influenced by gender, age, body mass, outside temperature, sweat rate, climate, altitude, and sport type and are therefore highly individual. Understanding why hydration is important for performance and how much YOU need to consume can help prevent unnecessary complications.

How can hydration status impact performance?

Water helps the body regulate many important functions:

- ✓ Temperature *(sweating cools the body)*
- ✓ Blood pressure
- ✓ Nutrient concentration *(fluid helps maintain appropriate levels of electrolytes in the body)*
- ✓ Nutrient transportation
- ✓ Recover from intense training

Allowing the body to become dehydrated can cause muscles to cramp, alter blood pressure, cause weight loss during exercise, delay recovery time, and decrease performance. Drinking too much water can alter electrolytes and cause bodily harm (hyponatremia).

How much should I drink?

Fluid needs are highly individual, but all athletes should get into the following habits:

- ✓ Drink a glass of water, milk, or 100% juice with each meal
- ✓ Carry a water bottle around while at school or work
- ✓ Pay attention to thirst and drink when thirsty
- ✓ Determine your personal sweat rate: *Sweat rates can vary considerably among athletes. It pays to know how much YOU sweat in different environments. See box below on how to calculate.*
- ✓ Drink more when adapting to a new environment *(i.e., high altitude, hot, humid)*
- ✓ Remember that you can get dehydrated in the cold too. The body loses water as you breath.
- ✓ Start hydrating at least 4 hrs prior to training or competition
- ✓ Aim to replenish 150% of lost fluid after training
- ✓ Monitor your urine color (pale yellow is ideal) & frequency

When to use Sport Drinks:

Sport drinks were designed for use before, during, and after intense or long training sessions and serve important functions for athletes.

1. **Hydration**
2. **Provide fuel for muscles (carbohydrate)**
3. **Provide electrolytes**
4. **Some sport drinks offer protein. This is not essential during exercise, but is important for recovery.**

Consider a sport drink if...

- ✓ Training intensely > 45 minutes in heat
- ✓ Two-a-day practices
- ✓ Tournament or multi-day event
- ✓ Endurance training >90 minutes
- ✓ Training/Competition when last meal was > 3 hrs prior

Sport drinks should not be your "go-to" drink during the day. Instead opt for plain water or a more nutrient dense milk or 100% juice option unless you are in a before, during, or after training window.

Measuring Sweat Rate...

Step #1: Weigh yourself (minimal clothing, no shoes) before training/competition

Step #2: Keep track of all fluid consumed during training

Step #3: Weigh yourself after training (same clothing)

Step #4: Find the difference and convert to ounces (1 lb. = 16 oz or 2 cups of fluid)

Step #5: Add the ounces you consumed during training

Step #6: Determine hourly sweat rate: divide total ounces lost by hrs of training.

Example

Tim practices for 2 hours and drinks 20oz (2.5cups)

Weight #1:	**175 lb.**
Training Fluid:	**20 oz**
Weight #2:	**172 lb.**
Difference:	**- 3 lb.**
Difference (oz):	**48 oz**

Add training fluids:
48 + 20 = 68 oz (8.5 cups)
Sweat Rate:
68 oz/2 hrs = 34 oz/hr or ~4 cups per hour

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Sport Nutrition

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'Pre-Game'

What to Eat Before Training & Competition

Your pre-event meal is important. It is your last opportunity to "top-off" your body's fuel tanks with carbohydrate-rich foods so you can step onto the field, up to the line, or into the blocks well-fueled, ready to compete, and confident that you are nutritionally ready to go. Your last meal before an intense training session or competition should be 2-4 hours prior. Since carbohydrate is your primary fuel source during exercise, you want this meal to be comprised primarily of carbohydrate. This meal should contain moderate amounts of protein, and be low in fat. A high-fat, high-protein meal just before exercise may delay gastric emptying and prevent carbohydrate from being readily digested, absorbed; it can also cause potential discomfort during exercise. Calorie contents of these pre-event meals will vary based on your sport, intensity level, duration of exercise, gender, size, and energy needs; however, the following meals offer some guidelines and give you some examples of foods to consider. Always remember to practice eating new foods before *training* sessions instead of trying something new before a big meet, race, game, or match. Determine what your body tolerates best - everyone is different and there is no *perfect* combination for everyone.

Pre-Game Breakfasts

MEAL #1: 1-2 cups cereal with 1-1.5 cups skim/1% milk, sliced fruit, and handful of nuts

MEAL #2: 1 cup lowfat/nonfat fruit yogurt, 1/2 - 1 cup crunchy cereal (i.e., grape nuts, granola, Kashi), fruit

MEAL #3: 2 slices of toast OR 1 English muffin OR 1 bagel with 1-2 Tbsp natural peanut butter, honey, and sliced banana; 8-10 oz skim/1% milk or orange juice

MEAL #4: 2 eggs (or 1 egg + 1 egg white), 2 slices of toast with honey or jam; 1 cup fruit; 1 cup milk

Pre-Game Lunches

MEAL #1: Turkey Sandwich (2 slices whole grain bread; 2-3 slices deli turkey or chicken, 1 slice mozzarella cheese, veggies); piece of fruit; 1 cup milk

MEAL #2: Pasta Salad (1.5 cups pasta, 1 cup veggies, 1/2 can tuna, chicken, or salmon, 1 cup veggies (broccoli, carrots, tomatoes, peas); 1.5 Tbsp vinaigrette dressing; piece of fruit

MEAL #3: 1 med baked potato or sweet potato; 2-3 turkey "roll-ups" (rolled slice of deli turkey); string cheese; 15-20 Kashi-type crackers; 1 apple

MEAL #4: Tuna or salmon salad sandwich in whole wheat pita (try making with olive oil and balsamic vinegar instead of mayonnaise), fresh fruit, crackers OR baked chips OR pretzels; 1 cup milk

Tips to Remember:

- ✓Carbohydrates come from grains (rice, cereal, crackers, pasta, bread), fruit, starchy veggies (potatoes, corn, peas, squash), and dairy (milk and yogurt)
- ✓Your meal should contain mostly carbohydrate, moderate amounts of protein and be low in fat
- ✓Consider low-fiber, easily digested foods for pre-game meals (especially if you are not used to eating a high fiber diet)
- ✓Aim for 0.45 - 1.36 g of carbohydrate per lb. of body weight (or 1-3g/kg) in the pre-event meal
- ✓If nerves keep you from tolerating too much food, consider a fruit smoothie or sport nutrition products, but don't go without eating!
- ✓In the hour before, use sport drinks or sport products (gels, bloks) to top off carbohydrate stores
- ✓Never experiment before a major competition! Practice in training what you plan to do for big events.
- ✓Know your body, what you like and what you can tolerate

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Sport Nutrition

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Recovery Nutrition

Sport requires energy, and the body gets this energy from calories in food (carbohydrate, protein, and fat). The body converts calories from carbohydrate-rich foods (grains, fruit, dairy) into a quick source of energy called glycogen, which is stored in the muscle and used for intense activity. This muscular fuel is like the body's gas tank; it needs to be filled before intense and/or long training sessions and refilled after so that the body can continue to perform at its best. Training uses up muscle glycogen, depletes fluid, and breaks down muscle tissue. Well-balanced eating and appropriate hydration after a workout helps the body replenish lost fluid and nutrient stores, repair damaged tissue, and prepare for the next workout.

When you eat matters:

Pay attention to timing for best recovery results

- ✓The body is primed to replenish lost nutrients soon after exercise. After a workout, game, match, or race, start refueling within 15-60 minutes.
- ✓Recovery in 3 stages - see box for examples
  1. **Snack + Fluid (15-60 min)** carbohydrate & 10-15g protein
  2. **Meal + Fluid (within 2 hrs)** Balance (mostly carbs, lean protein, low fat)
  3. **Snack + Fluid (within 4 hrs)** carbohydrate & 10-15g protein

When is recovery crucial?

Fueling well after workouts is always important; however, certain types of training/competition require greater attention to detail:

- ✓2 or more training sessions per day
- ✓Less than 8 hours between training sessions
- ✓Endurance training sessions > 90 min
- ✓Intense training
- ✓Tournament / multi-day competition

Recovery Examples:

Stage 1: Snack

- ✓Peanut butter and jelly sandwich
- ✓Fruit yogurt
- ✓Sport bar

If you don't have an appetite, choose drinks containing both carbohydrate and protein:

- ✓Chocolate milk
- ✓Sport nutrition recovery drink
- ✓Smoothie with fruit and yogurt

Stage 2: Meal

- ✓Pasta with tomato sauce, veggies & chicken
- ✓Turkey sandwich, whole wheat crackers & fruit
- ✓Stir-fry with rice, veggies, & lean meat

Stage 3: Snack

- ✓Whole grain crackers & string cheese
- ✓Graham crackers with peanut butter
- ✓Cereal with low-fat milk

Recovery Fluids:

- ✓Sport drink (carbohydrate + electrolytes)
- ✓Sport nutrition recovery drink
- ✓Milk / Chocolate milk
- ✓Smoothies
- ✓Water

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Sports Nutrition

Condition and nutrition is the key to top athletic performance. Athletes who eat a varied, nutrient dense diet do not need sports bars or dietary supplements.

Caloric Breakdown for Athletic Training

Carbohydrates	%
Fat	%
Protein	%

Pre-game

1. What should the last meal before a competition look like?

2. When should you eat that meal?

3. How much protein, fat or fiber should be in that last meal?

Hydration

1. What does water help regulate?
   a.
   d.
   b.
   e.
   c.
2. What can dehydration do when exercising?

3. Why is drinking too much water harmful?

4. When and how much water should athletes drink when exercising?

   Athletes should drink water about every 15 minutes during an event.

5. Fluid needs are highly individual. What percent of lost fluid should be replenished after training or an event?

6. What color urine indicates proper hydration?

7. When might you consider drinking a sports drink?

During exercise

1. What is the primary energy source?

2. During exercise what does your body draw upon to fuel muscles?

3. Where does the body store glycogen?

4. Glycogen stores are limited, so during prolonged exercise (more than 60-90 minutes) what are the advantages to consuming carbohydrates while exercising?
   a.
   b.
   c.
   d.

Recovery

1. How quickly should you begin refueling after an event or exercise?

Small Appliance Recipes
(Food Processor)

Chili's Salsa-JustaQT

½ (14 1/2 ounce) can tomatoes and green chilies
½ (14 1/2 ounce) can whole canned tomatoes (plus the juice)
2 teaspoons jalapenos (canned,diced, not pickled)
2 tablespoons yellow onion (diced)
¼ teaspoon garlic salt
¼ teaspoon cumin
¼ teaspoon sugar

In food processor place jalapenos and onions.
Process for just a few seconds.
Add both cans of tomatoes, salt, sugar, and cumin.
Process all ingredients until well blended but do not puree.
Serve with your favorite thin corn tortilla chips.

Hummas- Ina Garten

4 garlic cloves
2 cups canned chickpeas, drained, liquid reserved
1 1/2 teaspoons kosher salt
1/3 cup tahini (sesame paste)
6 tablespoons freshly squeezed lemon juice (2 lemons)
2 tablespoons water or liquid from the chickpeas
8 dashes hot sauce

Turn on the food processor fitted with the steel blade and drop the garlic down the feed tube; process until it's minced. Add the rest of the ingredients to the food processor and process until the hummus is coarsely pureed. Taste, for seasoning, and serve chilled or at room temperature.

Small Appliance Recipes
(Immersion Blender)

Healthy Spinach Dip-Lindsey Isham

5 oz frozen chopped spinach
5 oz cans of sliced water chestnuts
8 oz container of 1% cottage cheese
½ packet Hidden Valley Ranch dry mix

Defrost spinach and squeeze out all the juice. Chop water chestnuts into small pieces. Blend cottage cheese with an immersion blender until smooth and creamy. Stir spinach, water chestnuts and ranch mix into blended cottage cheese. Stir with a spoon or rubber scraper until mixed well.

Ranch Dressing-livinglovingpaleo.com

2/3 cup olive oil
1 egg
½ tsp mustard powder
1 tsp lemon juice
2 tsp dried dill
1 ½ tsp dried parsley
¾ tsp minced garlic
½ tsp sea salt

Place all ingredients in a tall container (like a 2 cup measuring cup). Place an immersion blender at the bottom and turn on. Once the mixture starts to blend together and become thick, move the immersion blender towards the top until it's well blended. Should take less than 1 minute!

Bread, Salad, Pies and Tarts

Rich Bread Dough

1 tbsp yeast
1 cup warm water (cold for class)
3 tbsp butter, softened
1 egg
1.8 ounce sugar
1/3 cup nonfat dry milk
12-14 ounces flour
1 teaspoon salt

Combine yeast, water and sugar. Let stand 5 minutes. Add fat, salt, dry milk, half the flour, and egg. Beat until smooth. Add remaining flour, beat until smooth. Add up to ½ cup more flour if needed- but dough should be sticky!! Knead until smooth and satiny by hand or in a machine. For class: grease a ziploc bag and place dough inside. Remove most of the air and refrigerate. Grease a bowl and put dough in bowl, cover with plastic wrap and let rest in a warm area. When tripled in size place on board with flour. Shape as desired. Put in greased pan. Let rise in a warm place. Bake 375 for 15-20 minutes. Makes about 1 ½ dozen rolls or 1 loaf.

German Soft Pretzels

2 tsp yeast
¾ cup warm water
1 tsp salt
2 tsp sugar
2 cups flour

Add yeast and sugar into warm water, stir quickly and wait for 2 minutes. Add salt. Using a dough hook, blend in the flour until smooth. Divide into 4 pieces. Twist and place on a greased cookie sheet or parchment. Bake 12-15 minutes at 425, brush with melted butter.

Lemon Vinaigrette Dressing

¼ cup red wine vinegar
2 tbsp Dijon mustard
1 tsp dried oregano
1 clove garlic, minced
½ tsp salt
¼ tsp pepper
½ cup olive oil
2 tbsp lemon juice

Blend well.

Ranch Dressing Ree Drummond

1 clove garlic
1/8 teaspoon kosher salt
½ cup real mayonnaise
¼ cup sour cream
2 tablespoon Italian flat-leaf parsley leaves, minced
1 tablespoon fresh dill, minced
½ tablespoon minced fresh chives
½ teaspoon Worcestershire sauce
¼ teaspoon ground black pepper
¼ teaspoon white vinegar
2 tablespoons to ¼ cup buttermilk (as needed for desired consistency)
Mince the garlic with a knife and then sprinkle on the salt and mash it into a paste with a fork.

In a bowl, combine the garlic paste, mayonnaise, sour cream, parsley, dill, chives, Worcestershire sauce, black pepper, vinegar, and paprika. Add the buttermilk to desired consistency and mix to combine, tasting frequently and adjusting seasonings as needed. Chill for a couple of hours before serving, thinning with more buttermilk if needed.

Poppy Seed Dressing Lion House Cookbook

6 tablespoons Sugar
½ tbsp. Dry mustard
¼ tsp. Salt
3 tablespoons Apple Cider vinegar
½ cup Oil (try ¼ oil and ¼ fruit juice)
2 teaspoons Poppy seeds

Creamy Tomatillo Dressing

Blend the following together in a blender:
½ packet Hidden Valley Ranch Dressing Mix
½ cup buttermilk
½ cup fresh cilantro leaves
¼ small jalapeño – seeds removed
½ cup mayonnaise
½ tsp lime juice
1 tomatillos – remove paper skin
1 garlic clove

Broccoli Salad Serves 8-10

1 Large bunch of broccoli, chop finely
1 cup Grated cheese
1/4 cup Red onion, chopped
½ lb. Bacon, cooked and crumbled
½ cup Mayonnaise
1/4 cup Sugar
2 tbsp. Red wine vinegar
Mix mayonnaise, sugar and vinegar. Toss together broccoli, cheese, onion and bacon. Pour on dressing, stir and serve.

Lemonade Salad

1 peeled oranges, cut in sections
1 red apples, diced
1/2 cup celery, sliced
1 can pineapple chunks (6 oz), drained
3 oz frozen lemonade concentrate

Toss all together.

Oriental Chicken Salad Serves 10-12

2 packagesRamen Noodles, discard seasoning and break into pieces
½ head Cabbage, shredded
¼ head Purple cabbage, shredded
3 Green Onions, sliced
3 cups Cooked Chicken
1/3 cup Sliced Almonds
2 tbsp Sesame Seeds
Toast almonds and sesame seeds in frying pan, stirring constantly. Toss with all remaining ingredients. Toss with dressing

Oriental Chicken Salad Dressing

1/2 cup Oil
1/2 tsp. Black Pepper
3 tbsp Rice Wine Vinegar
1 tsp Salt
2 tbsp Sugar
2 tsp Soy Sauce

Spinach Salad

½ head Lettuce, torn bite size
1/2 bunch Spinach, torn if needed
1/2 cup Cottage cheese, drained and rinsed in a strainer with water
1/2 cup Swiss cheese, grated
1/4 lb. Bacon, cooked and crumbled
½ small Red onion, chopped
1/4 cup Mushrooms, sliced

Dressing

3 tbsp Vinegar
2 tbsp Oil
1/4 cup Sugar
1/4 tsp. Salt
1/2 tsp. Onion powder
1/4 tsp. Dry mustard
1-2 tsp. Balsamic vinegar

Pie Crust

1 1/3 cup flour
1/3 cup oil
½ teaspoon salt
2 tablespoons cold water

Put flour and salt in bowl, mix with fork. Add oil and mix with a fork until crumbly. Add the water and work in with hands. Roll and form to pan. Bake at 450 10-15 minutes.
Yield: 1 single crust pie

Impossibly Easy Mini Chicken Pot Pie – Betty Crocker

1 tablespoon vegetable oil
1 lb boneless skinless chicken breasts, cut into bite-size pieces
1 medium onion, chopped (1/2 cup)
½ cup chicken broth
1 cup chopped vegetables
½ teaspoon salt
¼ teaspoon pepper
¼ teaspoon ground thyme
1 cup shredded Cheddar cheese (4 oz)
½ cup Bisquick™ mix
½ cup milk
2 eggs

Heat oven to 375°F. Spray 12 regular-size muffin cups with cooking spray.

In 10-inch nonstick skillet, heat oil over medium-high heat. Cook chicken in oil 5 to 7 minutes, stirring occasionally, until chicken is no longer pink in center. Add onion and chicken broth; heat to simmering. Add frozen vegetables and seasonings. Heat until hot, stirring occasionally until almost all liquid is absorbed. Cool 5 minutes; stir in cheese.

In medium bowl, stir baking mixture ingredients with whisk or fork until blended. Spoon 1 scant tablespoon baking mixture into each muffin cup. Top with about 1/4 cup chicken mixture. Spoon 1 tablespoon baking mixture onto chicken mixture in each muffin cup.

Bake 25 to 30 minutes or until toothpick inserted in center comes out clean. Cool 5 minutes. With thin knife, loosen sides of pies from pan; remove from pan and place top sides up on cooling rack. Cool 10 minutes longer, and serve.

Life Span

Sarah's Applesauce – Phatcat

4 apples, peeled, cored, chopped
¾ cup water
¼ cup sugar
½ tsp. vanilla

In a sauce pan combine apples, water, sugar and vanilla. Cover and cook over medium heat for 15-20 minutes or until apples are soft. Cool slightly and mash with a potato masher.

Russ's Caramel Apple Dip

4 apples, sliced
½ cup brown sugar
½ cup caramel ice cream topping
8 oz. package cream cheese

Beat caramel, brown sugar and cream cheese until smooth.

Zesty Apple Salad - Shelly

2 granny smith apples, diced
1 (15 oz.) can mandarin oranges, drained
1 ½ cups mini marshmallows
1 cup of grapes, halved
1 (8 oz.) container lemon yogurt

Stir all ingredients together.

Easy Apple Crisp

4 apples, peeled, cored and diced
¼ cup sugar
1 ½ cup oats
½ tsp. salt
½ cup melted butter
1 tablespoon lemon juice
½ cup flour
¾ cup brown sugar
1 tsp. cinnamon

Preheat oven to 350. Put apples, lemon juice and ¼ cup sugar in a glass square baking dish. Microwave for 6 minutes. While cooking mix the flour, oats, brown sugar, salt and cinnamon in a bowl. Add melted butter and stir together. When apples are done sprinkle with topping and put in oven for 15 minutes. Serve warm.

Burrito Recipe – From Ellie Krieger – Serves 4

2 teaspoons canola oil
½ small red onion, diced (1 cup)
½ red bell pepper, seeded and diced
1 cup drained, rinsed canned black beans, preferably low-sodium
1/4 teaspoon chili flakes
Salt and freshly ground black pepper
8 eggs
1/3 cup (about 1 1/2-ounce) shredded pepper Jack cheese
½ teaspoon oil
4 (10-inch) whole-wheat tortillas (burrito-size)
1/4 cup reduced-fat sour cream
1/4 cup salsa
1 large tomato, (4 ounces) seeded and diced

Heat the canola oil in a large nonstick skillet over a medium-high heat. Cook the onions and peppers until onions are softened and peppers are slightly charred, about 5 minutes. Add black beans and red pepper flakes and cook until warmed through, another 3 minutes. Season with salt and pepper and transfer to a dish.

Whisk together the eggs then stir in the cheese. Put ½ teaspoon of oil in the skillet, and reheat the skillet over a medium heat. Reduce heat to low and add eggs, scrambling until cooked through, about 3 minutes. Spread each tortilla with 1 tablespoon each sour cream and salsa, then layer with 1/4 of the black bean mixture, 1/4 of the scrambled eggs, and some diced tomato. Roll up burrito-style and serve.

Anemia: Black Bean Salsa with Chips

2 cans black beans, drained & rinsed
1 can corn, drained
1 can black olives, sliced, drained
1 red pepper, small dice
1 cup pineapple tidbits, drained
2 tbsp cilantro minced
Juice of 2 limes
4 cups prepared salsa

Mix and serve with chips.

Colon and Rectal Cancer: Extra Fiber Apple Crisp

5 apples, washed, diced small with peels
3 tbsp sugar
½ cup rolled oats
½ cup brown sugar
¼ cup flour
3 tbsp wheat germ
¼ tsp cinnamon
¼ cup butter, softened
¼ cup nuts

Cut and place fruit in a baking dish. Toss with sugar. For topping combine other ingredients. Cut butter in until it makes crumbs. Sprinkle topping on top of fruit and bake at 375 F for 35 minutes.

Heart Disease: Low Cholesterol Oatmeal Cookies

1 cup flour
½ tsp baking powder
¼ tsp baking soda
½ tsp salt
½ tsp cinnamon
¾ cup brown sugar
1 ½ cups oats
½ cup canola oil
1 T molasses
1 egg (or replace with egg beaters)
2 tbsp water
1 tsp vanilla

In a mixing bowl combine flour, baking powder, baking soda, salt and cinnamon. Add sugar and stir in oats. Make a well in the center and add oil, molasses, egg, water and vanilla. Stir until dry ingredients are moistened. Drop by tablespoons 2" apart onto an ungreased cookie sheet. Bake at 350 F 13-15 minutes. Cool on a rack. Makes about 15 cookies.

Diabetes: Lite Banana Parfait

2 packages sugar free instant pudding (follow directions on package, use ½ cup less milk)
½ pint whipping cream with sweetener
3 bananas
1 package graham crackers

In portion cups, put graham cracker on the bottom. Whip cream add sweetener. Layer with pudding, cream and bananas.

Osteoporosis: Tofu Smoothies

Use 2 blenders – this amount in each blender
1 ½ cups skim milk
1 cup silken tofu
2 cups whole strawberries
2 cups frozen berries
¼ cup honey
1 tsp vanilla

Weight Management: Sensibly Delicious Brownies

1 1/2 c. flour
1 c. sugar
3/4 c. unsweetened cocoa
1 tsp. baking powder
1 tsp. salt
1/4 c. skim milk
½ cup corn syrup
1 whole egg
2 egg whites
½ cup canola oil
1 tsp vanilla

Spray mini muffin tins with non-stick cooking spray. Preheat oven to 350 degrees. In a mixing bowl combine flour, sugar, cocoa, baking powder and salt. Mix thoroughly. Combine oil, milk, corn syrup, egg, egg whites and vanilla. Stir liquid ingredients into dry ingredients. Bake 15 minutes until set, but soft. Makes 3 dozen.

Meats, Sauces, Soups

Meat Lab - Beef Fajitas

8 oz Beef steak
1/4 cup Italian salad dressing
1/4 cup Salsa
1-2 tbsp lime juice
Dash Worcestershire sauce
4 - 7" flour tortillas
2 tsp oil
½ onion thinly sliced
½ green pepper, thinly sliced

Slice the steak across the grain into bite-size strips. Put in a bowl. In another small bowl combine salad dressing, salsa, lime juice and Worcestershire sauce. Pour over meat and let sit 5-10 minutes. Pour oil in a skillet, when hot add onion. Cook and stir about 1 ½ minutes. Add pepper. Cook and stir about 1 ½ minutes more. Remove from skillet. Add beef strips (with marinade) to the hot skillet and cook and stir 2-3 minutes to desired doneness. Add onions and peppers back to skillet and cook and stir 1-2 minutes until heated through. Serve in warmed tortillas (damp paper towel, 10-20 seconds in microwave). Garnish as desired with cheese, salsa, guacamole or sour cream.

Pineapple Chicken Kabobs

¼ lb chicken tenders
¼ cup + 2 tbsp. teriyaki sauce
¼ fresh pineapple or 1 cup canned pineapple chunks

Preheat the oven to 400 degrees. Put chicken and ¼ cup of teriyaki sauce in a bowl and let sit 15 minutes. Soak bamboo skewers in water for 15 minutes. Skewer the chicken and pineapple on the sticks. Place in a baking sheet lined with parchment. Brush with remaining teriyaki sauce. Bake uncovered about 10 minutes.

Chicken Tortellini Soup

1 cup onion, diced
1 cup celery, diced
½ cup carrots, sliced
1 clove garlic, minced
1 tsp Italian seasoning
1 tbsp olive oil
4 cups chicken broth
1 cup chicken, cooked and chopped
1 ½ cups cheese filled tortellini

Heat olive oil in a large sauce pan. Sweat onions, celery, carrot, garlic and seasoning in large sauce pan over medium heat for 10 minutes; lid on. Stir occasionally. Stir in broth; bring to a boil. Add tortellini and chicken, simmer 10 minutes. Season with salt and pepper.

Creamy Chicken Noodle

1 tsp stock base
1 ½ cups chicken stock
1 cup chopped carrots
1 cup chopped celery
½ cup chopped onion
1 can cream of chicken soup
¼ cup whole milk
1 cup cooked chicken
5 cups raw noodles (approx. 8 oz)
Salt and pepper to taste

Cook noodles according to directions. Heat base and stock. Add carrots, celery and onions. Simmer until tender. Add soup and milk. Add chicken and noodles. Heat and season. Thin with milk as needed.

Consumerism & Meal Management

Calzone

2 Rhodes dinner rolls, thawed
1/4 cup pizza sauce
2 T. toppings
1 oz cheese

Thaw rolls as directed on package. Knead 2 rolls together on lightly floured board. Roll into 7" circle. Fill with toppings and cheese. Fold over like a turnover, and seal edges. Bake on a greased cookie sheet 20 minutes at 350. Remove from oven, place on plate, top with heated pizza sauce.

Hamburger Stroganoff

1/4 minced onion
1 T butter
1/2 lb ground beef
mushrooms as desired
1 T flour
½ t salt
1/4 t pepper
1/4 t garlic granules
½ can cream of chicken soup
½ cup sour cream

Cook onion and ground beef in butter. (Mushrooms too if using) Add seasonings and flour. Stir well. Add soup. Simmer uncovered for 10 minutes. Add sour cream just before serving. Serve over rice or noodles.