

Prescription to Taste

A COOKING GUIDE FOR CANCER PATIENTS



LUIS F. PINEDA, M.D., M.S.H.A.
WITH EDIE HAND

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COOKING WITH CANCER, INC.

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Dedication

*To my patients and
to all those on the journey
of battling, living, and working
with cancer.*

*To my loving family, my wife Diane
and my four beautiful children
Lily, Alaina, Nicolas, and Gia.*

*They are the
sous chef and prep cooks
with me in life.*

*To the great staff
in my medical practice,
for assisting me throughout
years of making life
better for others.*



COOKING WITH CANCER, INC.

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COOKING WITH CANCER, INC.

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And finally, special thanks to all the nursing staff at the different medical facilities who selflessly dedicate each and every day to the quality-of-life for my patients and all those living with cancer.



COOKING WITH CANCER, INC.

Our Mission

Helping those afflicted with cancer to enjoy a better quality of life through good food.

Cooking with Cancer, INC. is a non-profit charitable organization that dedicates its resources and energy to research and develop new recipes for cancer patients and to provide education not only for patients afflicted with cancer, but also their family and friends. Our goal is to create awareness of patients' poor quality-of-life due to neglected nutrition from lack of enjoyment in eating. This problem has continued to be neglected, accepted, and even expected. Cooking with Cancer, INC. provides a proactive attempt to supply a solution without pretending to have all the answers.

Cooking with Cancer, INC. supports the right of everyone regardless of their state of health to enjoy an enhanced quality-of-life and nutrition through good food, good eating, and good cooking. We believe that patients undergoing treatment deserve the same benefit to enjoy the pleasure of food and nutrition.

There are tremendous influences on nutrition and the way we eat today. Like never before, education and awareness show the benefits of nutrition for prevention and treatment of medical illnesses. We encourage the world to become more proactive with dietary changes and prevention.

We welcome everyone to participate in this effort by contributing time, ideas, and intellectual and material resources. For more information on how you can make a difference, please visit us at our website:
www.cookingwithcancer.org.

DISCLAIMER:

Cooking with Cancer, INC. has not been tested by the traditional standards of medical research. It is not a scientific dissertation on this topic. All the recipes are based on common knowledge, knowledge of cooking, and researched literature available from culinary and medical topics.

Before proceeding with any of the recommendations made in this book, we advise you to please discuss the matter with your personal physician, medical surgeon, or radiation and medical oncologist.

Quotations from Dr. Pineda, Edie and Pickles:

“Medicine has given me a lot. This is my way of giving something back that we can feel good about.”

Luis F. Pineda, M.D., M.S.H.A

“You have no control over life’s events, but you do have control over how you respond to them.”

Edie Hand

“Life’s what you taste of it!”

Pickles

Where's the Taste?

An oncology physician's routine of making hospital rounds reveals the same problem day in and day out, finding the same full cans of supplements and untouched trays because patients are unable or unwilling to eat.

The field of oncology is constantly evolving with new treatments, new technology, and new testing, but the most common side effect remains the same - loss of weight due to loss of appetite. In previous regiments to combat this issue, high calorie carbohydrate-based liquid products were used through total parenteral nutrition or gastronomy tubes forcing nourishment, but with very little success. Unlike healthy individuals, cancer patients lose their ability to smell and taste sugar and lipids, both necessary for normal diets. Thoughtful and targeted changes are needed to achieve improvement in nutrition.

Cooking with Cancer, INC. has dedicated time and resources to address this problem by creating recipes specifically designed for patients undergoing chemotherapy and radiation. Each recipe is intended to enhance taste for patients, calculated to heal the mouth, and to provide maximum nutrition. They are meant to treat certain side effects, such as nausea, vomiting, diarrhea, abdominal pain, fluid retention, etc.

Our goal is to have a better understanding of the breakdown in taste, smell, and digestion so we can recommend the most effective treatments for patients. Our belief is that everyone, in good or bad health, deserves the right to eat well. Because little focus has been placed facing weight loss due to loss of appetite from cancer treatments, we have created these recipes with you in mind.

Our Cooking with Cancer system contains the four essential E's:

1. Economical cost
2. Easy to find ingredients
3. Effortless preparation time
4. Efficient portions to store

If you or someone you love is living with cancer, we hope you will find these recipes and educational information beneficial for improving your quality of eating and of life.

Recipes



“Life’s what you taste of it!”



JALAPEÑO ICE CREAM WITH PICKLED ICE

INGREDIENTS

Heavy cream	16 ounces
Olive oil	1.5 ounces
Egg yolk	2 ounces
Sugar confectionary	1 ounces
Salt	1 teaspoon
Pectin	1 teaspoon
Jalapeño pepper	2
Water	3 ounces
Pickles, small	1 jar

STEPS

- Carefully open and clean the seeds from the peppers. In a sauce pan boil them in the water for 5 minutes and simmer until tender and soft.
- In a larger sauce pan boil the heavy cream, olive oil and add 3 oz of the pepper water.
- Separately add the egg yolk, sugar, salt, pectin and whisk together until creamy.
- Temper the eggs and heavy cream until well mixed, then continue cooking while whisking until it begins to rise. Quickly move from heat.
- Screen the mixture through a fine metal strainer and place in the refrigerator to rest for several hours.
- Place in an ice cream maker and follow the manufacturer recommendations until firm. Incorporate by folding the body of the cooked peppers and freeze.

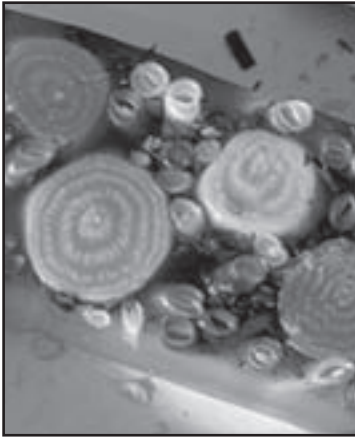
FOR THE PICKLED ICE

- Place all the pickles, with their juice in a blender and liquefy.
- Strain to remove most of the pickle flesh. Use liquid only.
- On a 9 x 12 pan, 2" deep, layer the liquid very thin and freeze. When frozen crack the sheet to get different large shapes and keep for the garnishing.

TO PUT TOGETHER

- Place a large scoop of the ice cream in a bowl.
- Insert a piece of frozen pickle sorbet to garnish.
- Sprinkle with small, dry fruit chunks if desired.

This recipe adds the necessary melting texture and cold temperature to soothe the mouth making it good for mucositis. The pungency of jalapeño pepper will help wake up the taste buds; yet the strong clearing and stimulation to the dull taste buds is the main therapeutic value. The pickle adds a refreshing taste.



This dish is ideal for any patient during their chemotherapy and radiation treatments. The temperature soothes the mouth. The gelatin base is easy to swallow and the fiber bulk helps bowel functions.

TRI COLOR VEGETABLE TERRINE

PREPARATION NOTE

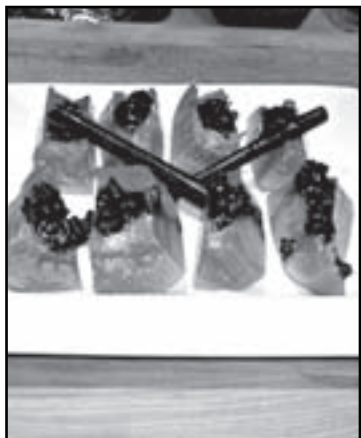
Have ready a 1 quarter (qt) terrine mold like those used for meat loaf preparation. Line with disposable plastic wrap.

INGREDIENTS

Spinach	1 pound
Cauliflower	5 ounces
Carrots	7 ounces
Unflavored gelatin	1/2 ounce
Chicken stock	10 ounces
Salt	to taste
Cayenne pepper	to taste

STEPS

- Mix the gelatin and chicken stock and warm until dissolved.
- Steam spinach individually. Allow to cool. Transfer to a blender to purée. Season to taste.
- Steam cauliflower individually. Allow to cool. Transfer to a blender to purée. Season to taste.
- Steam carrots individually. Allow to cool. Transfer to a blender to purée. Season to taste.
- Spinach first, mix well with 1/3 of the stock/gelatin; place in the mold at the bottom.
- Let it set well.
- Cauliflower second, mix well with 1/3 of the stock/gelatin; place in the mold on top of spinach layer and let it set well.
- Carrots last, mix well with the remaining 1/3 of stock/gelatin; place in the mold on top of cauliflower layer.
- Cover with plastic wrap, and place the mold in the refrigerator for at least 6 hours.
- Unmold and serve cold. Garnish as desired.



The current recipe adds large amounts of calories from carbohydrates without overbearing sweetness. Papaya is readily available in most any supermarket. It is mild in flavor, meaty and provides large amounts of water and vitamins. Serve cold because it is easy to bite and the texture makes it easy to swallow.

PAPAYA WITH PLANTAIN PEPPER SAUCE

INGREDIENTS

Papaya, ripe, skinned and seeded, cut in wedges	1
Water	2 cups
Cinnamon stick, whole	3 each
Clove, whole	6 each
Corn syrup, clear	2 ounces

STEPS

- Place all the ingredients in a covered pot and simmer for 20 minutes.
- Cool down in the refrigerator.

FOR THE SAUCE

Plantain, ripe, skinned and minced	1 ounce
Juice from the papaya	all
Pepper of choice, whole	1
(Note: Recommend whole Habanero)	

- Simmer all ingredients in a sauce pan and reduce until syrupy.
- Cool in refrigerator.

SERVING SUGGESTION

- Place papaya on plate.
- Gently add sauce on top.
- Garnish with cinnamon sticks.



GUAVA CUPCAKES

INGREDIENTS

Guava fruit, clean	4
Cinnamon sticks	2
Water	2 cups
Habanero pepper dust	to taste
Instant coffee	3 teaspoons
Brown sugar	2 ounces
Queso fresco, squares cut (1x1x1 inches)	12
Cupcake liners	12

Guava is a tropical tree. Over centuries the fruit, bark, and leaves have been used as a home remedy for gastrointestinal ailments, in particular, diarrhea.

STEPS

- Combine the guava, cinnamon sticks and water together in a sauce pan. Bring to boil and simmer for 5 minutes.
- Separate the fruit and cool in the refrigerator. Cut into 1/2 inch slices and remove seeds.
- Combine liquid from sauce pan, instant coffee and brown sugar. Boil together until caramelized. Cool in the refrigerator.
- Heat oven to 350°F
- Place cupcake liners on flat pan, and place one queso fresco square inside.
- Warm in oven until gently melted (5 minutes approx).
- Place slice of guava into the melted cheese. Cool.
- At serving time add a teaspoon full of coffee caramel and gently sprinkle with habanero pepper dust.



Main complications of most chemotherapies is inflammation of the mouth. This recipe is cold and meaty, helping the chewing process and stimulating the gums.

MANGO FOLDS WITH COFFEE SAUCE

INGREDIENTS

Mango, medium, ripened	1
Queso fresco	1 package
Coffee	2 cups
Sugar	1 tablespoon
Cayenne pepper	1 pinch

STEPS

- Peel the mango skin; shave side lengthwise (if possible with mandolin) less than 2 millimeters in thickness.
- Cut the cheese in half centimeters in thickness to match the mango fold.
- Wrap the mango around the cheese and refrigerate.
- To a sauce pan add the sugar, coffee and a pinch of pepper and reduce to caramel point.
- Drizzle coffee sauce over the mango fold. Garnish and enjoy.



Gelatin based products are great stool softeners for patients with cancer. Patients with cancer are more prone to the development of constipation due to use of pain medication and relative immobility. This gelatin recipe incorporates agar agar (base of most stool softeners). The coolness and flavor stimulate the mouth and that in turn helps the digestive system.

PINEAPPLE SOUP WITH HERB GELATINS

INGREDIENTS

Pineapple, skinned and cut in small pieces (Save some pieces for garnish)	1
Chicken stock/broth	1 can
Water	2 cups
Onion, fine chopped, small	1
Butter	1 tablespoon

STEPS

- Melt the butter and blanch onion in a quarter sauce pan.
- Mix pineapple, water, stock and bring to boil.
- Using a hand held food processor, purée mixture.
- Allow to cool and strain with cheesecloth. Save the liquid and cool.

INGREDIENTS FOR THE FOUR GELATINS

Unflavored gelatin	4 - 1/4 ounce packets
Parsley	1 bunch
Basil	1 bunch
Red bell pepper, seeded and cut in small cubes	1
Red tomato, skinned	2

PREPARE EACH HERB GELATIN SEPARATELY

- Place the water and herbs in a sauce pan to boil for 5 minutes.
- Purée.
- Strain through cheesecloth and save the flavored water.
- Season with salt, pepper and hot pepper.
- Add one 1/4 ounce packet of gelatin, mix well, place in a mold and refrigerate.

FOR SERVING

- Place the cold pineapple soup in a bowl.
- Cut different color gelatins in cubes.
- Place into the soup together with chunk pineapple.
- Garnish with parsley and/or basil, red pepper, or tomato.

NOTE: Excess gelatin may be frozen for later use.



OLIVE CHOWDER

INGREDIENTS

Chicken stock/broth	2 cans
Vidalia onion, chopped	1
Green olives, pitted	1 cup
Idaho potato, cubed	1 cup
Salt and pepper	to taste
Habanero pepper	to taste

STEPS

- Cube idaho potato and cook until tender. Drain. Set aside.
- Place the stock and onion in a quarter sauce pan. Bring to boil.
- Add potatoes and olives. Boil for 3 minutes.
- Using food processor, chop finely but allow chunks.
- Season to taste.
- Add hot pepper to taste.

NOTE: *Can be served hot or cold, garnish with whole olives, red roasted pepper and parsley leaves.*

Remember, olives are the source of the oil that provides a sour and bitter pungency. It has a significant effect on the gastrointestinal tract being cathartic. This is a recipe that adds the caloric intake of carbohydrates contained in the potatoes. It adds bitter taste which appeals to the inflamed mouth from mucositis.



Pineapple is a refreshing fruit which for centuries has aided the digestive systems. It has a tenderizing effect on food and a helpful effect on excessive gas and abdominal distention.

PINEAPPLE AND CHEESE HONEY CAKE

INGREDIENTS

Queso fresco, (crumbling cheese)	4 ounces, 1/2 inch slices
Fresh pineapple	4 ounces, 1/2 inch slices
Honey	2 tablespoons
Tien tsin pepper	a pinch

STEPS

- In a small sauce pan, place the honey and pepper.
- Cook on medium heat until caramelized (watch for bubbles).

NOTE: *Handle with care as will be hot.*

- Stack the cheese and pineapple one on top of the other three to four layers at a time.
- Cover top with the peppered honey. Allow to cool.
- Garnish with fresh mint leaves.



Plantain is a relative to the banana and has a significant effect on intestinal function, providing the body with help on days of hyper or diminished bowel function.

PLANTAIN CROQUETTES

INGREDIENTS

Plantain, medium, ripened	2
Black bean paste (refried black beans)	4 ounces
Hot pepper of choice (recommend coban pepper)	to taste
Sugar	to taste

STEPS

- Peel the plantain and purée to form a soft but firm dough (add mashed potatoes if needed).
- Flavor with sugar and pepper.
- Use a medium sized skillet with a dash of olive oil to heat refried black bean paste. Allow to cool.
- Place a tablespoon full of black bean paste in the middle of a plantain patty and mold into a croquette or a ball.
- Fry the croquettes in a sauté pan to golden color.
- Sprinkle with sugar.



CHAYOTE AND MOZZARELLA CAKE

INGREDIENTS

Chayote	2
Mozzarella cheese, fresh	1 ball
Egg, whole	1
Flour	1 cup
Bread crumbs	2 cups
Salt and pepper	to taste

STEPS

- Boil the chayote (whole) in water until soft and tender, allow to cool.
- Cut the chayote and mozzarella cheese in matching slices of 1/2 inch each.
- Build the cake to desired height.

PREPARE A BREADING STATION

- Place the flour seasoned with salt and pepper in medium size bowl.
- Beat the egg in another medium size bowl.
- Place the bread crumbs in another medium size bowl.
- Flour the chayote and mozzarella cake stack well all around.
- Brush on egg mixture.
- Generously cover with bread crumbs.
- Deep fry at 325°F until golden brown.

SUGGESTION: *Serve topped with tomato salsa.*

Chayote is a green vegetable from Latin America called “guisquil”. It has high content of water, therefore great for rehydration. The fruit is digestible and provides a good source of calories. This meaty and protein filled dish is also good for dehydration.



The fat and proteins in cheese are an excellent source of calories. These are the building blocks of the intestinal flora which is destroyed by chemotherapy. It improves a sluggish digestive system.

FETA CHEESE ICE CREAM WITH SWEET PEPPER

INGREDIENTS

Feta cheese	6 ounces
Heavy cream	1 pint
Salt and pepper	to taste
(Recommend Habanero pepper)	
Sweet pepper, bell,	1 each
red or yellow for color,	
small juliennes	
White grape juice	1 pint
Unflavored gelatin	3 - 1/4 ounce
	packets

STEPS

- Mix the feta cheese, heavy cream, and add salt and pepper and place in an ice cream maker according to manufacturer recommendations. Place in the freezer until serving time.
- Boil the juliennes and grape juice together. Until nice color obtained. Add the gelatin. Place in a shallow pan and allow to form.

TO PUT TOGETHER

- Cut gelatin to desired shape and place on the plate.
- Add one or two scoops of the ice cream.
- Garnish with mint leaves.



BLUE CHEESE AND FRUIT TERRINE

INGREDIENTS

Blue cheese	8 ounces
Heavy cream	16 ounces
Coban pepper	1 tablespoon
Unflavored gelatin	1/4 ounce (1 packet)
Papaya, cut in slices	1
Kiwi, cut in slices	2
Star fruit, cut in slices	1
Banana, cut in slices	1

Blue cheese is known for the beneficial use to replenish the microbial flora of the intestine. This is useful for the associated bowel problems during chemotherapy or antibiotic treatments.

STEPS

- Heat the heavy cream and add the gelatin. Stir until fully dissolved.
- Add the cream, pepper and blue cheese to the food processor until fully mixed.
- Place in the refrigerator to cool.
- In a terrine pan (aluminum disposable) place a couple of mint leaves on the base and add blue cheese mixture. Mid-way place the fruit slices arranged one on top of the other. Complete filling the pan with the mixture.
- Place the pan in the refrigerator to form. Cut in slices to serve.



GRILLED WATERMELON, MELON AND CHEESE IN TAMARINDO SAUCE

INGREDIENTS

Watermelon,	
seeded and cut in large rectangles	1
Seasonal melon,	
seeded and cut in large rectangles	1
Queso fresco,	
cut in matching rectangles	1

STEPS

- Prepare the grill. When ready grill all the above until marks are well developed.
- Place each one against the other to match color and size. Garnish with mint or basil leaves.

FOR THE TAMARINDO SAUCE

Tamarindo fruit	1/2 lb (2 cups)
Sugar	to taste
Hot pepper	to taste

STEPS

- Place the tamarindo fruit, skinless in water and gently simmer for one hour.
- Allow to cool and separate the seeds. Blend the mixture and reduce on low heat.
- When at sauce point (coats the back of the spoon), add sugar to taste.
- Sprinkle over the watermelon, melon and cheese.

This recipe is rich in water and sugars. It assists in rehydration and calorie intake during dehydration. The meaty flesh of the fruit stimulates the gums.



This very simple tasty recipe is meant for the stimulation of taste and the incorporation of protein to the diet. Good for fatigue.

KIWI, TOFU AND HONEY SOY SAUCE

INGREDIENTS

Kiwi fruit, 2
skinless and cut in rectangles
Tofu, cut in matching rectangles 1 package

- Place matching layers on a plate.

INGREDIENTS FOR HONEY SOY SAUCE

Honey 3 tablespoons
Soy sauce 1 tablespoon
Cayenne pepper to taste

STEPS

- In a sauce pan on low heat, place the honey and allow to gently boil 1 (one) time.
- Add the soy sauce and gently stir.
- Add the cayenne pepper.
- Place the sauce over the kiwi and tofu cakes.



Guava, a tropical fruit, has a significant antidiarrheic effect. It will help during days when chemotherapy induces gastrointestinal problems. The recipe adds large calorie intake through the use of eggs as part of the ice cream. The arbol pepper stimulates the taste.

CINNAMON ICE CREAM WITH GUAVA GRANITA

INGREDIENTS

FOR THE ICE CREAM

Whole milk	1 quart (4 cups)
Cinnamon sticks	4 each
Egg yolks	8 each
Sugar	3 ounces

STEPS

- Place milk, sugar and cinnamon on medium heat until it boils. Let it cool and set.
- In another container beat the egg yolks and temper the cool milk mixture. To temper take 1/2 of the milk mixture and add to eggs, constantly beating. Next, take remaining eggs and add to milk mixture, constantly beating.
- Place back on low heat and beat gently for about 10 minutes. Let set and cool.
- Add to the ice cream maker (follow the manufacturer recommendations) and keep in the freezer until ready to use.

INGREDIENTS

FOR THE GUAVA GRANITA

Guava fruit	4
Water	16 ounces (2 cups)
Sugar	3 ounces
Arbol, red chile pepper	3

STEPS

- Boil water, pepper, and sugar over medium heat, and cool.
- Peel the guava fruit (save the peel for garnishing). Add to the water/sugar mix. Allow to gently boil for 10 minutes.
- With a blender, purée and place on a flat pan in the freezer.
- Crack into crystals.

FOR SERVING

- One ball of ice cream.
- Sprinkle guava crystal as desired.
- Garnish with guava peels.



Much has been and will continue to be said about green tea. It is assumed since the product is not processed (not fermented or oxygenized) that the active chemicals within it are fully functional. Flavonoids, proteins and vitamins have medicinal benefits in cancer prevention, cure and detoxification.

GREEN TEA FLAN WITH QUESO FRESCO AND ROASTED PEPPERS

INGREDIENTS

Unflavored gelatin	1 ounce (4 packets)
Milk	1 cup
Plain water	2 cups
Green tea powder (Matcha)	2 tablespoons
Salt	to taste
Hot pepper	to taste
Colored peppers	3 different colors of choice
Queso fresco	1 packet

STEPS

- Place the gelatin in cold water for 20 minutes to bloom.
- Place on medium heat until dissolved.
- Mix green tea, salt, pepper and milk until well dissolved.
- Add all ingredients together and place in refrigerator until well formed.
- Roast different color peppers on the grill or the oven, peel the skin and seed.
- Cut the peppers in the desired shape.

TO PUT TOGETHER

- Cut the Queso fresco and tea flan in matching shapes and place one on top of the other.
- Garnish with roasted pepper and mint or basil leaves.



GREEN TEA ICE CREAM WITH MANGO CHIPS

INGREDIENTS

FOR THE MANGO CHIPS

Mango, semi-ripened,	1
cut in sheets	
Hot pepper of choice	to taste

STEPS

- Prepare the deep fryer to temperature of 350°F and cook the chips until golden brown.

Green tea has been recognized as having quite a few medicinal values. This recipe, however, is used as a source of protein (egg), calories (sugar), and more importantly for its cathartic effect. Promotes good bowel function.

INGREDIENTS

FOR THE GREEN TEA ICE CREAM

Whole milk	2 cups
Egg yolks	4 each
Sugar	1 cup
Cornstarch	1 tablespoon
Salt	1/3 teaspoon
Green tea (Matcha)	4 tablespoons
Heavy cream	1 cup

STEPS

- Warm the milk to 140°F and mix in the green tea until it is well homogenized.
- Beat the egg yolks with the sugar, salt, cornstarch and heavy cream.
- Gently temper the two mixtures together.
- Place in an ice cream maker and follow manufacturer recommendations.

FOR SERVING

- Place a base of mango chips.
- Next, place a scoop of ice cream.
- Garnish with mango chips and mint leaves.



BLACK BEAN PURÉE WITH BLANCO CHEESE AND TOMATO SAUCE

INGREDIENTS

Refried black beans, easily obtained from the grocery store	1 can
Onion, finely chopped	1/2
Olive oil	1 teaspoon
Blanco cheese	1
Ripe tomato, seeded, peeled and diced	1
Jalapeño pepper powder	pinch
Salt and pepper	to taste

STEPS

FOR THE BEANS

- In a frying pan with oil, blanch 1/2 of the chopped onion.
- Add black beans and mix well on medium heat.
- Frequently stir until the dough has a paste consistency.
- Pass to a plate and refrigerate.

FOR THE TOMATO SAUCE

- In a frying pan with oil, blanch the remaining onion.
- Add tomato, mix well and cook.
- Add a pinch of jalapeño pepper powder to taste.

PUTTING TOGETHER

- Cut the cheese and black bean paste in matching triangles 2 inches in length, 1/2 inch wide.
- Place standing and opposing. Gently fill the bottom of the plate with tomato sauce and garnish with fresh parsley leaves.

Black beans are the back bone of the diet for many Latin countries including Guatemala, Cuba and Brazil. The combination of cheese and gently spiced tomato sauce enhances the taste, while providing gentle stimulation to the large bowel function.



TOMATO CONFIT AND PARMESAN CHEESE COOKIE

INGREDIENTS

Tomatoes, ripe	3
Fresh thyme	1 bunch
Olive oil	1 teaspoon
Coarse salt	1 teaspoon
Grated parmesan cheese	2 ounces
Balsamic vinegar	2 teaspoons

STEPS

FOR THE CONFIT

- In a sauce pan boil water. Make a cross on top and bottom of the tomatoes (with your knife) for easy peeling. Add the full tomatoes and let boil for less than one minute or until the skin begins to peel.
- Let cool and peel the tomatoes. Cut them in half horizontal, not vertical, and seed. Place the flat side down on a flat pan lined with aluminum foil. Salt, drizzle with olive oil and place the thyme directly on the tomato flesh.
- Preheat oven to 250°F and place the tomatoes in for one and one half hours or until the tomatoes have lost 60 to 70% of the water. Cool. Discard the thyme leaves.

STEPS

FOR THE PARMESAN COOKIE

- On a flat cookie sheet, covered with parchment, fill two 2 inch rings half full with grated parmesan cheese.
- Place in the oven until brown and crispy.

TO PUT IT TOGETHER

- Place the parmesan cookie on plate and add the tomato confit.
- Drizzle the balsamic vinegar and garnish with a single baby dill (cornichon).

This is very tasty. It has a soft and crunchy texture that soothes the sore mouth after chemotherapy. The caramelized sugars open the taste buds of the middle and back of the mouth including the tongue.



BRAISED BEET WITH FETA CHEESE AND LIME JUICE

INGREDIENTS

Fresh beets, washed, stem removed	2
Olive oil	1 teaspoon
Sea salt	to taste
Water, cold	1 ounce
Feta cheese, small, cold	1 block
Cascabel pepper and seeds	1
Lime juice	1

Beets are very nutritious as they contain heavy amounts of carbohydrates without tasting sweet. Lime juice becomes very stimulating to the taste while adding feta cheese helps the level of fat your body needs. These beets are a great source for iron. Iron deficiency anemia is often seen during cancer therapy and is related to blood losses from blood testing and bleeding.

STEPS

- Place the beets in aluminum foil. Add oil, water and salt. Seal.
- Preheat the oven to 300°F and place the sealed beets in oven for one and one half hours or until tender (a knife will go through easily). Allow to cool.
- With a paper towel, gently skin the roasted beets.
- Place feta cheese in the refrigerator to cool.

PUT IT TOGETHER

- Cut the beets and cheese in equal squares and make a desired pattern.
- Garnish with rosemary and a whole cascabel pepper.
- Sprinkle with pepper seed to taste.
- Add lime juice to the bottom.

NOTE: Make cheese the first layer to avoid diffusion of the red color onto the lime juice. When working with beets, please remember that they will stain hands, containers and countertops.



Clove is a tropical spice. It is the unopened bud of the tree and known in the USA for braising hams. It contains large amounts of Eugenol, an oil which has significant antiseptic and analgesic effects. This helps relieve the mouth of pain incurred through chemotherapy.

CLOVE GRANITA

INGREDIENTS

Sorbet basic solution	1 quart
Clove	2 tablespoons

STEPS

- In a sauce pan prepare the sorbet solution by boiling equal amounts of water and sugar (1:1). Could use less sugar to make less sweet.
- Once mixed, add the clove and boil for approximately 10 to 15 minutes to extract the essence of the clove.
- Allow it to cool. Filter and discard the cloves.
- Pour solution into a baking pan, and place in the freezer.
- Every 10 minutes or so stir the freezing mixture by cracking the ice until obtaining a texture of coarse crystals.
- When ready, serve on a sugar or savory cone. Garnish with a few cilantro leaves.



Artichoke is one of the oldest plants known to have some therapeutic value through controlled studies. This has been a favorable helper to digestion.

ARTICHOKE, GREEN OLIVE AND BALSAMIC VINEGAR

INGREDIENTS

Artichoke, clean	4
Green olives	4
stuffed with jalapeño pepper	
Balsamic vinegar	2 tablespoons
Olive oil	1 tablespoon
Salt and pepper	to taste

STEPS

- Clean the artichokes by trimming with scissors as close as possible to the base of the leaves. Please leave the stems in place.
- In a deep pan add cold water enough to cover the artichokes. Add the olive oil, salt and pepper and allow to boil for at least 20 to 30 minutes or until tender.
- Allow to cool down and place in the refrigerator until the next day.
- On the next day, gently pick them up and clean the remaining leaves, the center baby leaves, and the very tip of the stem leaving only the tender heart and stem.
- To serve cut long side, garnish with green jalapeño stuffed olives, and drizzle with balsamic vinegar. Serve cold.



Figs are rich in fiber and help to fight slow intestinal function.

SWEET FIG AND ROASTED PEPPER ON BALSAMIC VINEGAR

NOTE: *Patients with latex allergies should take extra precautions in cleaning their figs before preparing.*

INGREDIENTS

Figs, semi-ripened, skinned	2
Roasted pepper, julienne, red and yellow	1 each
Balsamic vinegar	1 ounce
Kosher salt	1 tablespoon
Olive oil	1 ounce
Sweet basil leaves	

STEPS

- Carefully fine slice figs length-wise and place on a plate with 1/2 of the balsamic vinegar and oil. Add the salt.
- Marinate for about 1 hour.
- Marinate roasted julienne peppers on a plate with the rest of the balsamic vinegar for about 1 hour.
- Arrange a star of figs, place pepper on top and garnish.



STRAWBERRY, PARMESAN CHEESE AND BALSAMIC VINEGAR

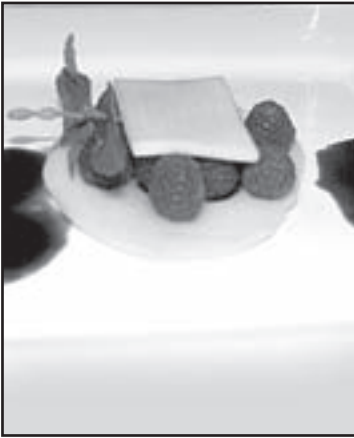
INGREDIENTS

Strawberries, whole, cleaned and dried	6
Parmesan cheese, freshly shaved	1 ounce
Balsamic vinegar	1 ounce
Chipotle pepper, powder	1 pinch
Sea salt	1 pinch

*This recipe is high in
calorie intake and is a
great taste stimulant with
easy preparation.
Strawberries have a
known history of
anti-cancer effect.*

STEPS

- Wash and clean the strawberries, let dry on a paper towel.
- Mix vinegar, salt and pepper to taste.
- Add the strawberries to the vinegar mix and marinate for 1 to 2 hours.
- Serve on cold plate. Randomly arrange the strawberries, parmesan cheese and glaze with balsamic vinegar.



MANGO SLICES, RASPBERRIES AND HOT HIBISCUS FLOWER SAUCE

INGREDIENTS

Mango, peeled	1
Raspberries, whole	12
Dry hibiscus flower	1 ounce
Jalapeño pepper, powder	a pinch
Sea salt	to taste
Water, cold	1 cup

STEPS

- With a mandolin, slice the mango in 3/4” to 1” slices.
- Place water and hibiscus flowers in a pot to boil for about 3 minutes. Strain flowers and discard.
- Slow cook the remaining water until concentrated, then flavor with salt and pepper.
- Arrange the mango slices on a plate. Add the raspberries on top, and glaze with the hibiscus sauce.

*Cold dish with the main
function to stimulate a
sense of taste.*



Fennel is the main plant of anise known for its antispasmodic effect. This recipe helps “colicky children” or females with menstrual cramps.

COLD FENNEL SOUP, BLUE CHEESE AND SWEET PEPPERS

INGREDIENTS

Fennel, cleaned	1
Blue cheese	1 ounce
Chicken broth	1 can
Sea salt	to taste
Olive oil	1 tablespoon
Mayan lover’s pepper (coban)	pinch
Sweet mini peppers	2

STEPS

- Cut the fennel in small pieces, add the chicken broth and process to liquid purée.
- Season with salt, pepper and olive oil.
- Serve in a deep plate. Place the 1 ounce of blue cheese in the center and garnish with sweet mini peppers.



SPICY MERINGUE WITH THYME AND PAPAYA

INGREDIENTS

Egg whites	8
Orange flower water	1 tablespoon
Granulated sugar	2 1/2 tablespoons
Thyme	4 stems
fresh, leaves gently cut off	
Cayenne pepper	1 pinch
Papaya	1

STEPS

THE DAY BEFORE

- Beat the egg whites to become frosty stiff (medium to hard pick).
- Add the orange flower water, sugar and beat.
- Fold in the thyme leaves and cayenne pepper.
- Place in a metal ring mold and place in the freezer.

FOR THE DAY

- Peel the papaya, clean the seeds.
- Use ring mold to cut papaya into rounded rings making the top level with the mold.
- Place the papaya on the center plate. Place the frozen meringue on top.
- Garnish with thyme and a chip of dry fruit.

This recipe is attractive because of easy preparation, cost effectiveness, appropriate texture, and the right temperature for the mouth. This supplies supplemental protein and fiber while stimulating taste buds.



This is easy for anyone to prepare. Flavors reactivate the taste buds. It adds fiber for bowel function, and is appealing because it is cold.

PAPAYA SORBET WITH PESTO

INGREDIENTS

Fresh papaya,	1
peeled and seeded	
Water	2 cups
Granulated sugar	1 cup
Fresh sweet basil	2 bunches
Olive oil	2 ounces
Cashews, dried and crushed	1 tablespoon
Jalapeño pepper, powder	1 pinch
Salt	to taste

STEPS

- Place the water and sugar to heat until dissolved and clear. Let it rest and cool. (Base solution)
- Cube the fresh papaya and place in the blender until it forms a chunky liquid. Add the base solution.
- Place the mix in an ice cream maker and follow manufacturer recommendations.
- Place the sorbet in the freezer.
- Chop the basil fine. Add the oil, cashews, jalapeño powder and salt to taste. Will make a paste.
- On a plate based with pesto, add scoop of papaya sorbet.
- Garnish with mint leaves and dry pepper skeleton (see photo). The pepper skeleton is optional. To make, slice and dry a jalapeño pepper.



This preparation is more complicated, but still easy to prepare. The end product is cold and extremely easy to chew and swallow. The amount of pepper added is at the discretion of the person in need. The recipe contains large amounts of protein, as well as contrasting and stimulating flavors. It is heavy in fiber to help improve large bowel function.

VEGETABLE TERRINE

INGREDIENTS

Boneless chicken breast, raw, cubed	1/2 pound (8 ounces)
Egg white	2
Heavy cream	1 cup
Unflavored gelatin, powder	1/4 ounce (1 packet)
Salt	to taste
Coban pepper	to taste
White pepper	to taste
Zucchini, roasted, fine cubed	8 ounces
Carrot, roasted, fine cubed	8 ounces
Yellow squash, roasted, fine cubed	8 ounces
Porcini mushrooms, sautéed	8 ounces
Jalapeño stuffed olives	8 ounces
Parsley, fine minced	8 tablespoons

STEPS

- Roast the zucchini, carrots, squash until they are tender, and then cut them in fine cubes. Mix all together including stuffed olives and season with salt and pepper.
- Make a mousseline by processing the chicken, egg whites, heavy cream, gelatin, salt and pepper in a food processor and mix well.
- Fold all the above together and keep cold.
- Preheat oven at 300°F. Put water bath in oven.
- Cover the inside of a terrine mold with oil and plastic wrap. Begin with a first layer of minced parsley. Then add the mixture, packing to avoid forming of air pockets. Fold the plastic wrap on top.
- Place mold in the water bath for 75 minutes or an internal temperature of 170°F.
- Place the terrine in the refrigerator for at least 12 hours.
- Serve by slices of 1 inch and garnish with mint leaves.

NOTE: It will keep refrigerated for 4 to 5 days.



The main complaint from patients is in the immediate recovery phase of chemotherapy with the inability to taste. Food will simply have no taste. This recipe improves function of the lower bowel.

SPRING ONION ICE CREAM WITH DATES AND HORSERADISH CONE

INGREDIENTS

Spring onions, clean of tail and beard, chopped	2 bunches
Heavy cream	1 quart
Egg yolks	8
Salt	to taste
Cayenne pepper	to taste
Brown sugar (optional)	1 tablespoon
Large horseradish	1
Dates, cubed, small	10

STEPS

FOR THE ICE CREAM

- Place the chopped onion and heavy cream into the blender to liquefy.
- Put liquid in sauce pan, over medium heat, gently boil.
- Beat the egg yolks to clear cream color.
- Temper the onion cream and the eggs. Place back on the heat and bring to a gentle boil. Salt and pepper to taste.
- Using small gauze strainer, clean the mix of any large residue.
- Place the mixture in the refrigerator for two hours, and then put in an ice cream maker and follow the manufacturer recommendations.
- Fold in the cubes of dates and place in the freezer.

FOR THE CONES

- With a mandolin, thinly slice horseradish.
- Place in a deep fryer until golden or the outer rim gently browned.
- Take them out of the oil, and with your hands protected, fold into a cone.
- Allow to cool.

FOR SERVING

- Place a scoop full of the ice cream into the cones.
- Garnish with some of the green onion.



Dragon fruit is easily available in your local supermarket. This serves as a lubricant and adds needed fiber. This recipe will be helpful for days of slow lower bowel function.

DRAGON FRUIT, PLUM AND ROSEMARY SORBET ON HOT CHEESE BASKET

INGREDIENTS FOR THE SORBET

Dragon fruit, peeled and cubed	3
Brown sugar	to taste
White wine	16 ounces (1 pint)
Water	16 ounces (1 pint)
Rosemary, fresh leaves	2 teaspoons
Fresh plums, cubed	2

STEPS

- Mix the water, wine and sugar in a sauce pan over medium heat until dissolved.
- Add dragon fruit until cooked, about 5 minutes.
- Place in a blender until uniform. Set in the refrigerator to cool, at least 3 hours.
- Place in an ice cream maker and follow manufacturer recommendations until done.
- Fold in the cubed plum and rosemary.
- Place in the freezer until ready to serve.

INGREDIENTS FOR THE BASKET

Parmesan cheese, shredded	3 ounces
Cheddar cheese, shredded	3 ounces
Coban pepper	1 teaspoon

STEPS

- Preheat oven to 350°F.
- Place a silicon baking mat on a cookie sheet and make 3 inch flat circles out of the cheese and pepper mixture.
- Place on top of a glass mold for shape.
- Bake on the glass until golden and crispy.

WHEN READY TO SERVE

- Place a scoop of sorbet in the basket. Garnish with plum and fresh rosemary.



Anise and its seeds have been around for a long time. This recipe will help colic (spasmic pains) not only during premenstrual syndrome (PMS) but also infantile colic syndrome. In addition, this recipe includes alcohol/vodka acting as a significant tranquilizer to help stimulate appetite.

ANISE ICE CREAM WITH HONEY VODKA CARMEL

INGREDIENTS

FOR THE ICE CREAM

Anise extract	1 ounce by volume
Lactose free milk	16 ounces (1 pint)
Sugar	to taste

STEPS FOR THE ICE CREAM

- In a sauce pan, bring the anise extract and milk to boil and place in the refrigerator for 1 hour.
- Place the mixture in an ice cream maker and following the recommendation by the manufacturer, spin until double in size. Place in the freezer until ready to use.

INGREDIENTS

FOR THE BASKET

Vodka	2 ounces
Honey	4 ounces

STEPS FOR THE HONEY VODKA CARMEL BASKET

- In a sauce pan, place the ingredients together and bring gently to boil. Please be careful as it will get hot.
- As it becomes thick or reaches an internal temperature of 220°F, gently pour on a glass or metal mold to form a basket. Allow to cool.

FOR SERVING

- Garnish with anise flowers or mint as available.



Beets provide nutrition and high fiber that helps intestinal rehabilitation which is also aided by lactobacilli from the blue cheese.

ROASTED BEETS WITH BLUE CHEESE

INGREDIENTS

Baby beets, clean	8
Olive oil	2 tablespoons
Rosemary, fresh	2 stems
Blue cheese	1 ounce
Sea salt	pinch
Lime juice	1 ounce

STEPS

- Preheat the oven to 350°F. Place beets, rosemary stems, and olive oil in a tightly sealed aluminum foil and bake for 30 minutes. Allow to cool in the refrigerator. Keep liquid to use later.
- With a paper towel, gently skin the roasted beets. Place on center of the plate.
- Cut a square block of blue cheese and place on the plate.
- Mix the lime juice and the liquid from the roasting foil and gently add the sea salt.
- Pour onto plate.
- Garnish with dry lime slice and serve cold.



COLD BEET SOUP WITH JALAPEÑO PEPPER ICE CREAM

INGREDIENTS FOR THE BEET SOUP

Large beets, cleaned	2
Olive oil	1 tablespoon
Salt	to taste
Pepper	to taste
Beef broth	2 cups

STEPS FOR THE BEET SOUP

- Preheat the oven to 350°F. Place the beets, olive oil and salt/pepper in a well-sealed aluminum foil pocket and bake for 1 hour. Allow to cool in the refrigerator.
- Peel the skin with the help of a paper towel. Cut the beets into small cubes and chop in the food processor. Add the beef stock and blend to a heavy sauce consistency. Add salt and pepper to taste.
- Place in the refrigerator until ready to serve.

INGREDIENTS FOR THE JALAPEÑO PEPPER ICE CREAM

Jalapeño pepper, fresh and clean	4
(Cut length wise, seeds added)	
Clarified butter	1 tablespoon
Heavy cream	1 quart

STEPS FOR THE BEET SOUP

- In a deep 2 qt. pan over medium heat, blanch the pepper in the butter until aroma is present.
- Add the heavy cream and using low heat and occasional stirring, allow the mixture to come to a boil. Place in the refrigerator and allow to cool overnight.
- Place the mixture in an ice cream maker until well-aired and fluffy.
- Place in the freezer until ready to serve.

FOR SERVING

- In a soup bowl, place a shallow amount of the beet soup.
- In the center, add a scoop of the jalapeño ice cream.
- Garnish with marinated jalapeño slices.

This recipe addresses the gastrointestinal difficulties related to chemotherapy and use of antibiotics during infection. Loss of taste and some hypersensitivity make eating difficult. The peppers in the recipe have the ability to depolarize those receptors to improve taste-while the beets provide easy and readily usable carbohydrates without overt sugar taste while also giving necessary fiber for large bowel function.

Note: Beets will discolor bowel movements and urine to a reddish color not to be confused with blood.



The dates in this recipe have a sweet taste and contain a great deal of fiber to help with bowel function.

JALAPEÑO PEPPER ICE CREAM WITH DRY DATE GRANITA

INGREDIENTS FOR THE JALAPEÑO PEPPER ICE CREAM

Jalapeño pepper, fresh and clean	4
(Cut lengthwise, seeds added)	
Clarified butter	1 tablespoon
Heavy cream	1 quart

STEPS FOR THE JALAPEÑO PEPPER ICE CREAM

- In a deep 2 qt. pan, medium heat, blanch the pepper in the butter until aroma is present.
- Add the heavy cream and using low heat and occasional stirring, allow the mixture to come to a boil. Place in the refrigerator and allow cooling overnight.
- Place the mixture in an ice cream maker until well-aired and fluffy.
- Place in the freezer until ready to serve.

INGREDIENTS FOR THE DATE GRANITA

Dry date, whole	2 cups
Unflavored gelatin	1 packet
Soda water	1 pint (16 ounces)

STEPS FOR THE DATE GRANITA

- Place the dates and soda water to boil and allow simmering until dates are tender. Clean the seeds out.
- Add the gelatin and dissolve. Place in a food processor and coarsely grind allowing chunks to remain.
- Pour onto an edged cookie sheet to a couple millimeters of thickness and place in the freezer.
- Occasionally stir with a regular fork to form small crystals.

FOR SERVING

- Cut date granita into squares or circles a couple of inches long.
- Cut a similar shape of ice cream slightly smaller.
- Place the ice cream in between the slices of date granita.
- Garnish with fresh mint or a flower.



This recipe is helpful when you are having a hard time swallowing. Blini literally dissolves in the mouth making it easy to taste and swallow.

BLINI

INGREDIENTS

Yukon potatoes,	5
medium size, washed	
Whole eggs, beaten	3
Shredded parmesan cheese	1 cup
Heavy cream	1 cup
Salt and pepper	to taste

STEPS

- In a tall sauce pan, place the potatoes covered with water and boil for 15 minutes or until tender. Allow to cool down and peel off the skin.
- Mash the potatoes and add the beaten eggs, cheese, and salt and pepper to taste. Continue to mash until well mixed.
- Add heavy cream until you obtain a semisolid consistency (with the paddle allow some of the mixture to come off into the bowl, it should drop lumpy but easily).
- Pass the mixture through a strainer and dispose of the lumps, only using the well-uniformed mixture.
- Pre-heat the oven to 350°F. On a 9" x 12" sheet pan 2" deep covered with parchment paper, pour mixture in an even layer, about 1/2 inch thick. Place in the oven for 15 minutes. Bake until mixture is firm but soft to the touch.
- With a round cookie cutter, cut into servings.
- Serve hot and garnish with alfalfa sprouts.



The reason for sautéing melon is to soften so the texture is easier to chew and swallow. The melon will provide fluid for hydration and fiber for better bowel function. Your carbohydrate intake will give you more energy. The ginger and piquin pepper sauce enhances the taste buds for better tasting and the cactus fruit adds color, fluid and calories.

SAUTÉED MELON WITH CACTUS FRUIT AND GINGER PIQUIN PEPPER SAUCE

INGREDIENTS

Melon, skin and seeds removed and cut in fine slices	1
Cactus fruit, skin and slice round	1
Butter	2 tablespoons
Salt	to taste
Ginger, powder	2 tablespoons
Piquin pepper sauce	1 tablespoon

STEPS

- In a sauté pan, melt the butter and gently, one at the time, add the melon slices. Allow about 2 minutes per side (obtain a nice, not burnt browning). Place aside.
- With a tablespoon, mix the ginger and pepper to homogeneous mix and use for dipping.

FOR SERVING

- Garnish the bottom of the plate as desired. Pictured above using laurel leaves.
- Place the slice of melon and round of cactus fruit on plate.
- Place the pepper/ginger sauce on the side so it can be used for dipping as desired.



SPICY PLUM WHIPPED CREAM WITH TANGERINE CONFIT

INGREDIENTS FOR THE WHIPPED CREAM

Fresh plums,	4 each
preferably ripe, seeded	
Aromatic bitters, angostura	1 tablespoon
Raw sugar	1 tablespoon
Heavy cream	1 ounce
Piquin pepper powder	to taste
Whipped cream, ready made	6 tablespoons

This recipe helps to improve bowel movements. It also stimulates the taste receptors with pepper and the tangy zest of the tangerine skin. The whipped plum cream makes it easy to swallow.

OPTIONAL: *Homemade whipping cream can be made through canister or handmixer.*

STEPS FOR THE WHIPPED CREAM

- Place the plums in a food processor and liquefy. Add the aromatic bitters, sugar, piquin pepper and taste. It should have a tangy and lightly bitter taste to it.
- Using a hand mixer on high, whip the mixture. Fold whipped cream into the spicy plum mixture until a paste consistency.
- Place in refrigerator until ready to use.

INGREDIENTS FOR THE TANGERINE CONFIT

Fresh tangerine, cut in rounds	1 each
of 2 mm thickness	
Honey	1 tablespoon

STEPS FOR THE TANGERINE CONFIT

- Preheat the oven to 250°F. On a cookie sheet, place the tangerine slices and drizzle with the honey.
- Bake for about 30 minutes until dry.

FOR SERVING.

- On plate, place a dry round of tangerine.
- Place a scoop of the spicy plum whipped cream and finish with dry tangerine top.



A whipping cream charger and canister may be used instead of a hand mixer for the whipped cream.



The relatively new technique of foaming allows for the production of multiple flavors. The texture is easy for people to dissolve, distribute and swallow. It's typically served cold and mixed with complementary or contrasting flavors, while avoiding excessive stimulation of smell. Garlic is known not only for its strong flavor, but also as a taste receptor stimulant when used in large amounts. Garlic provides an array of multiple medicinal attributes from restoration of circulatory and heart health to antioxidants and antiradical properties that presumably have an anticancer effect.

GARLIC FOAM WITH AVOCADO

INGREDIENTS

Fresh garlic, clean and finely chopped	1 head
Heavy whipping cream	2 cups
Sugar	to taste
Fresh avocado, skinned and sliced lengthwise	1 each

STEPS

- In a medium sauce pan, place the garlic, sugar and cream over low/medium heat until gently scolded. Allow to cool and pass through a strainer. Discard the garlic meat.
- Place in the refrigerator for at least 2 hours.
- Using a hand mixer on high, beat the mixture until foamy.
- Use a large crystal glass and fill 1/3 full with the whipped cream.
- Place a slice of avocado diagonally and finish loading the glass with whipped cream.
- Garnish with fresh, green herbs.



A whipping cream charger and canister may be used instead of a hand mixer for the whipped cream.



Anaheim pepper is a dry pepper which has a mild sweet and bitter taste. It would excite the overall mouth, preferentially the middle and back, bypassing the front and the lips. This is particularly important for “fever blisters” or Herpes Simplex infection of the lips which causes painful and sometimes disabling sores.

ANAHEIM PEPPER JELL-O WITH TAMARINDO GRANITA

INGREDIENTS FOR THE JELL-O

Anaheim pepper, dry	3
Sweet lime juice (Rose’s)	8 ounces
Sugar	to taste
Unflavored gelatin	1/2 ounce (2 packets)

STEPS FOR THE JELL-O

- Place the peppers, lime juice, sugar in a sauce pan and let it boil. The water will become dark brown.
- Strain out the peppers and seeds and discard.
- Place the pan on low heat, add the gelatin and dissolve completely.
- Place in shaped mold as desired and place in the refrigerator overnight.

INGREDIENTS FOR THE TAMARINDO GRANITA

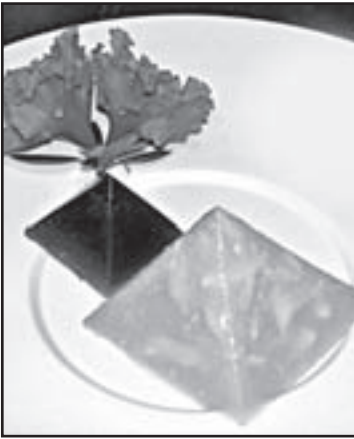
Tamarindo fruit, skinned and veins removed	5
Water	8 ounces
Sugar	to taste

STEPS FOR THE TAMARINDO GRANITA

- Place all ingredients in a sauce pan and soak overnight. The next day, hand remove all the seeds.
- On low heat allow cooking until tamarindo flesh is dissolved in the water.
- Using a 2 inch oven pan, fill with the tamarindo juice to a very thin layer (no more than 3 millimeters) and place in the freezer.
- With a regular fork, brake and scrape the pan to produce tamarindo crystal. Allow to rest overnight.

FOR SERVING

- On a plate, garnish with pansy flowers and mint leaves.
- Place Jell-O in the center and add a scoop of tamarindo granita.



Guanaba is a fruit from Central and South America, sometimes known as Cherimoya. It has been credited as having significant and therapeutic amounts of Vitamin C and Omega 3 oil. The cilantro is the plant which seeds are Cumerin. Very commonly used in Central America as a strong flavor, it has a cleansing effect on the taste receptors allowing for the enhanced ability to taste better. Curry adds even more stimulation to the taste buds.

CILANTRO CURRY AND GUANABA JELL-O

INGREDIENTS FOR THE GUANABA JELL-O

Guanaba, ripe, seeded and skinned	1
Unflavored gelatin	2 packets
Water	2 cups
Sugar	to taste

STEPS FOR THE GUANABA JELL-O

- In a medium sauce pan, place the water, gelatin and sugar, warm on medium heat until the gelatin is well dissolved. Add the cleaned guanaba and mix well.
- Allow the mixture to cool and place in an appropriate mold. Place in the refrigerator for at least 4 hours.

INGREDIENTS FOR THE CILANTRO JELL-O

Cilantro, fresh and cleaned	1 bunch
Water	1 cup
Indian curry	1 teaspoon
Unflavored gelatin	1 packet

STEPS FOR THE CILANTRO JELL-O

- In a small sauce pan, place the water, curry and cilantro on high heat until the water is flavored by the herbs. Pour through a strainer and remove the leaves, retaining the liquid.
- Add the gelatin and cook on low heat until well dissolved. Allow cooling and place in appropriate mold.
- Place in the refrigerator for at least 4 hours before serving.
- Serve cold and garnish with bright colors.



LEMON CONFIT

INGREDIENTS

Lemon, cut in fourths	6
Salt, preferably kosher	2 pounds or (32 ounces)

STEPS

- Use a sealing glass container, about 2 liters in size. Place upside down in boiling water for about 15 minutes. This is done to kill bacteria and fungal spores. Allow to cool.
- Place the lemons and salt in the container and mix well. Put it in a cool, dark place for a minimum of 1 month, but better for 3 months.
- Dip into the container to obtain the fruit product when needed.
- Save the salt to use in other recipes.

This is one of the simplest recipes which yields a powerful taste enhancer and can be used at any time in any other recipe as an activator or rejuvenator for the taste buds. It is a strong stimulator for saliva formation.

NOTE: *The inconvenience of the recipe is the waiting time required for it to be ready. Once ready, it can be used as needed.*



SPICY CHARCOAL PLANTAIN ICE CREAM

INGREDIENTS

Plantain, fresh, cubed	1
Whole eggs, large	6
Heavy cream	1 quart
Cayenne pepper	1 teaspoon
Activated charcoal	2 tablespoons
Granulated sugar	to taste

STEPS

- In a food processor, place the plantain and heavy cream and work until smooth. It should have body but still be liquid. Place on the stove over medium heat and stir frequently.
- In another bowl, place the eggs, charcoal, pepper and sugar and whip together until well mixed.
- Temper the hot plantain into the eggs. Continue cooking and whipping until smooth.
- Screen the mixture to filter out any lumps and place in the refrigerator for about 2 hours.
- Place the cooled mixture into an ice cream maker following the manufacturers recommendations, process until well aired.
- Garnish and serve.

NOTE: The charcoal is found in your drug store as activated charcoal.

Vegetable charcoal, typically obtained from organic material burned to ashes, has been known as an odor and gas absorbent. Napoleon provided his troops with a portion of burnt bread right before going to the battlefield. The idea was to block the “butterfly of the abdomen” (gas caused by fear). Prior to the design of odor absorbent refrigeration, families would place a chunk of charcoal in the refrigerator to keep the food from absorbing the odor of one another. This recipe is meant to be used as a way of absorbing the gastrointestinal gases, typically as they happen during chemotherapy as result of mucosal cellular shedding, thyphlitis, use of antibiotics and some others.



FRIED TOMATO JELL-O WITH FRESH ROSEMARY AND PEPPER

INGREDIENTS

Tomato, large	1
Olive oil	1 teaspoon
Garlic, chopped fine	1 tooth
Sanaam pepper, dry (red chile)	2
Chicken broth	1 can
Gelatin, unflavored	2 packets
Fresh rosemary	2 bunches
Salt	to taste

This is easy to prepare and has multiple appealing features common to patients suffering from mucositis. The texture is tolerable to the mouth and easy to swallow with no need for chewing. The adding of pepper is stimulating to the taste buds and enhances healing by influx of blood to the local area. The rosemary and gelatin enhance good bowel function.

STEPS

- Combine the chicken broth and gelatin in a sauce pan and dissolve over gentle heat for five minutes. Add the peppers.
- Make a tomato concassé. Score an X in the skin and place into boiling water for 10 seconds, remove from the water and place under cold running water.
- The peel should now just slip off; if it does not pop back in the boiling water for a few more seconds.
- Cut in half and remove the pips and rinse out and roughly chop.
- In a pan, place the oil and tomato over medium heat and fry. Add the garlic and salt to taste.
- Blend together the fried tomato and chicken broth mixtures and cook for 3 more minutes. Take off the heat and incorporate the rosemary.
- Place the content in a mold of choice and allow to settle in the refrigerator for at least 4 hours.
- Garnish with rosemary and tomato.

Tomato concassé - (con-cass-eh) A dice of tomatoes which have been peeled and the seeds removed.



ROASTED PEPPER, MOZZARELLA CHEESE AND BACON

INGREDIENTS

Bell pepper, red	1
Fresh milk mozzarella cheeseball	1 large
Bacon	2 slices
Salt and pepper	to taste
Extra virgin olive oil	1 tablespoon
Balsamic vinegar	1 tablespoon

This is a very simple and versatile recipe. The fat and protein from the cheese add nutritional value. Being cold makes it easy to swallow. The pepper and balsamic vinegar provide flavor while the olive oil makes it smooth to swallow.

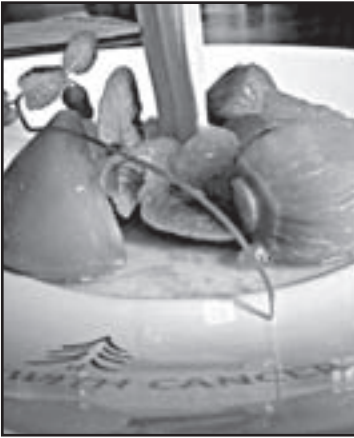
STEPS

- Heat the oven to 350°F. Roast the pepper to blister the skin and let it cool down.
- Peel the skin off and discard. Gently clean the seeds and cut pepper into small holding boats.
- Bake the bacon until crispy without burning and allow cooling and resting.
- Cut the cheese in sections to fit the pepper holding boats.

TO PUT TOGETHER

- On a plate, place the pepper holding boats and fill them with the cheese and crumbled bacon.
- Season with salt and pepper. Add olive oil and balsamic as drizzle. Garnish with basil.

NOTE: *Serve cold.*



This is a very ingenious and fascinating recipe using garlic known for its bitterness and sweetness. By cooking the garlic, its taste and smell can be moderated to be therapeutically beneficial.

ROASTED GARLIC AND TANGERINE SAUCE

INGREDIENTS

Elephant garlic, skin clean	1
Fresh tangerine	2
Chipotle pepper, powder	to taste
Heavy cream	1 ounce
Salt	to taste

STEPS

- Pre-heat the oven to 350°F. In aluminum foil, place the garlic and salt. Fold the foil carefully and place in the oven for 20 minutes. Take it out of the oven and cool in the refrigerator.
- Extract the juice of the tangerine, leaving 3 to 4 pieces intact to use as garnish later.
- Cook the juice of the tangerine and add the heavy cream. Season with the salt and pepper to the correct taste and texture. Allow to cool in the refrigerator.
- Place the garlic in the center of a plate and gently add the tangerine sauce.

NOTE: *Serve cold.*



BASIL WITH TOMATO GOAT CHEESE TERRINE

INGREDIENTS

Garlic, minced	2 cloves
Yellow tomato, medium	3
Red tomato, medium	3
Milk, whole	1/2 cups
Unflavored gelatin	1/4 ounce (1 packet)
Goat cheese	14 ounces
Basil leaves, fresh cut	1 cup
Jalapeño pepper, seedless, minced	1 ounce

Chemotherapy will produce changes in the taste and smell, which will disturb food intake and nutrition. The general medical recommendation is to avoid hot, red and smelly foods and instead eat white, cold and non-smelly foods. This recipe follows this general rule but is also rich in vitamins and flavor from the tomatoes and jalapeño pepper.

STEPS

- Layer a medium disposable meal loaf pan with plastic wrap, leaving 4 inches of excess wrap on all sides.
- Score an X on tomatoes and place in boiling water until skin comes off by gently peeling. Allow them to cool.
- Cut them in quarters and clean the inside of seeds and inner flesh.
- Clean and wash basil leaves.
- Place the milk in a medium sauce pan and gently heat, adding the gelatin to dissolve for about 5 minutes.
- Whisk in the cheese until evenly mixed. Add the jalapeño peppers.
- Pour the mixture into the meatloaf pan while placing the tomatoes and basil leaves randomly into it.
- Fold the excess plastic wrap over top and place in the refrigerator for at least 12 hours.
- Unwrap and slice. Add few drops of lemon juice or preferred salad dressing.



The chili pepper in this recipe is meant to stimulate the taste receptor by allowing the sustained exposure of the pepper to the receptor by sucking instead of chewing on it. The candy stays in the mouth longer, allowing prolonged exposure and longer saliva production. The addition of the blue cheese adds contrast as well as coolness to the process. The fig provides calories that help to build strength. Good for mucositis.

CARAMELIZED MISSION FIG WITH CAYENNE PEPPER CANDY AND BLUE CHEESE

INGREDIENTS

Mission fig, clean and whole	12
Water	1 quart
Granulated sugar	2 ounces
Clear corn syrup	2 ounces
Cayenne pepper	1 teaspoon
Blue Cheese	2 tablespoons

STEPS

- In a medium size sauce pan, boil the water, sugar and corn syrup until dissolved.
- Add the figs and set the temperature to low and cook with no lid until a thick caramel is formed in the bottom of the pan. Occasionally brush the sides of the pan with cold water.
- Take the figs out and put them aside. Meanwhile add the cayenne pepper to the caramel left in the sauce pan, mix well. On a 2" oven pan covered with freezer paper shiny side up, drip the caramel, allowing crystallizing or hardening.
- On a plate, place a layer of crumbled blue cheese. Add one or two figs and place a piece of the cracked caramel on top. Garnish with fresh mint.

“For the Health of It”

Behind the Scenes



Dr. Luis F. Pineda and Edie Hand

Have you ever wondered why there aren't recipes on your menu for people with special needs? For over 25 years, Dr. Luis F. Pineda has listened to his patient's symptoms and nutritional needs during their battles with cancer. He found himself asking, "Doesn't everyone deserve the right to eat well?" With this in mind, Dr. Pineda decided to return to school. He enrolled in Virginia College's Culinary School and studied the Art of Cooking. He has now combined the Art of Cooking with his knowledge of medicine to create a new way to care for cancer patients.

Each week, Cooking with Cancer, INC. broadcasts a TV show for these special needs called *For the Health of It*. You will see Dr. Pineda along with host and bestselling cookbook author Edie Hand help raise awareness with the Cooking with Cancer concept. Dr. Pineda, a hematologist, oncologist, and chef, along with Edie Hand, three-time cancer survivor, address some of cancer's nutritional needs. They prepare recipes based on various cancer symptoms and share stories from the heart to give the viewer insight into the needs of cancer patients and their caregivers during this difficult time. The motto of Pickles, the Cooking with Cancer mascot, is "Life is what you taste of it!" Viewers are encouraged to submit questions to Pickles@cookingwithcancer.org. Your question may even be answered on the show.

For the Health of It will educate, entertain, demonstrate, and motivate you to find answers with an attitude to fit your taste!

For past episodes of *For the Health of It* go to our website: www.cookingwithcancer.org.

“For the Health of It”

Behind the Scenes



*Edie Hand, Reed Longgear and
Patrick Means*



*Dr. Luis F. Pineda, Edie Hand, Gia
Pineda and Gina Seibert*



*Guest, Dr. Fred Dumas, Edie Hand
and Dr. Luis F. Pineda*



Gia Pineda, Pickles and Gina Seibert



Dr. Luis F. Pineda



*Dr. Luis F. Pineda, Bayleigh Phillips and
Edie Hand*

Cooking Up Magic



Photo from left to right: Reed Longgrear, Tom Shufflebarger, Gina Seibert, Gabriela Roca, Avery Hildreth, Madison Taylor, and Dr. Luis Pineda.

In 2006, Cooking with Cancer, INC. wanted to further its research of the breakdown of taste and smell. On a daily basis, we see the effects on adult patients and families who are living with cancer. Children suffer side effects while they undergo chemotherapy and radiation treatment. With this in mind, we developed our *Cooking Up Magic* contest.

We believe there are two certain pleasures in life: the joyous smile on a child's face from sheer excitement and Disney!

Cooking Up Magic is held annually at Children's Health System in Birmingham, Alabama. It gives a child the opportunity to win the grand prize of a trip to Walt Disney World.

This contest is for children eighteen years old and under, diagnosed with cancer and currently undergoing or having undergone chemotherapy or radiation within the last twelve months. Children who wish to participate are asked to submit a recipe, something they enjoy eating since they have been diagnosed.

These recipes have ranged from Peanut Butter Cookies to Jammin' Jamaica Jerk Chicken to something as simple as Papa John's Pizza. We welcome each recipe submission. The data collected from these recipes is synthesized and used to research the effects of chemotherapy and radiation on the child's palate to determine if the effects on taste and smell are the same as seen in adults.

Contest winners and their recipes are posted on our website and are featured in our cookbooks. It gives us joy to share their stories with you and present a children's recipe resource. Our goal is to watch this program grow and become offered nationally. We plan to continue research and development to make a difference in the lives of patients of all ages living with cancer.

Cooking Up Magic's 2007 First Place Winner: Avery Hildreth



Avery's Story:

On April 26, 2008, our sweet Avery lost her four year battle with cancer. She was diagnosed on January 26, 2004, at the age of ten months, with a malignant anaplastic ependymoma (brain tumor). Through it all, two brain surgeries, six other surgeries, fifty-three rounds of chemo, and fifty-six rounds of radiation, she fought with the courage and strength only an angel could possess. She has taught so many the meaning of life and brought countless others to God. She was not only our little hero, but a hero to so many.

Eating was a challenge during Avery's second round of radiation. One of her favorite foods and one that we hardly left home without were peanut butter cookies. There were days when she would only eat peanut butter cookies. Avery's recipe is one that we found that was easy enough so she could help make them. She loved helping in the kitchen and would always say "Now what is my job, Mommy?" We loved our time together in the kitchen.

Last year when we heard about the *Cooking Up Magic* contest, we couldn't wait to sign up. I would ask her the questions on the contest form, and she would rattle off her answers. Last December, she couldn't wait to get to the award ceremony to see if she had won the contest. We were in

major shock when she was announced the winner. Of course she decided at that point she was not doing any of the talking, so Mommy did all of the talking. She did call her Daddy to share her excitement. She told him, "Guess what Daddy? I won! I'm going to Disney World! I REALLY WON!"

Avery relapsed in late January following the contest and never made it to Disney World for her grand prize winning trip; however, she never missed an opportunity to tell anyone who would listen about her prize-winning peanut butter cookies. We hope you enjoy her recipe as much as we have over the last few years.

Dan and Gene Ann Hildreth

AVERY'S CONTEST WINNING PEANUT BUTTER COOKIES

INGREDIENTS

1 cup of peanut butter (smooth or chunky but I like the smooth)
1 cup of sugar (can substitute half a cup of Splenda for baking)
1 egg

STEPS

Now, mix all of this together. Take a spoonful of this and roll into a small ball about the size of the gum balls in the machines that I like so well. Place the balls on a big cookie sheet at least one inch apart. Then with a fork smash the balls flat. Then make a design my mommy calls criss crosses on top. Then comes my favorite part: sprinkle them with a little bit of sugar. Now you are ready to bake them for 9-15 minutes in a heated (350 degree) oven. My mommy's oven cooks them in 9 minutes perfectly. She says to be very careful not to overcook them. To make it fun, sometimes mommy will let me put M&M's, Reese's Pieces, Hershey Kisses or little Reese's Cups on top. This recipe makes two dozen cookies. Me and my mommy made these last Christmas for all of our friends. I love cooking!

Cooking Up Magic's 2007 Second Place Winner:

Reed Longgear



Reed's Story:

I couldn't think of how to say it. After all, he was seated right next to me. Just one more day of peace for him, please. He doesn't have to know yet.

"So what did the doctor say?" my husband asked.

"I can't really say right now."

"What, do you mean you can't say? Is it bad?" Fear and panic flooded my husband's voice.

"He's sitting right here beside me" I said, hoping he'll pick up the hint.

"Honey, please tell me, do they think it might be cancer or something?" My husband was scared, but then, so was I.

"Yes," was all I could say. It was so hard to hold back the torrent of emotions running through me, but I had to. He was sitting right next to me, and I didn't want him to know, not yet. Nothing was certain. Please, just one more day of peace for him, please.

That was how it all started for my family. But I shouldn't leave you with the impression it was all fearful and sad.

There were days and weeks that seemed to fold in on one another, like you are moving about in a different place from the rest of the world. Though it seemed like I would be sick forever, because of my family, my friends, and everyone who played a role in my recovery, it was hard to be sad. It was easier to have hope.

Although I had to endure the regular prodding, poking and sticking of needles, there were many miraculous things that happened to my family and me while I was sick. It was especially hard at first because my dad was laid off from his job just thirty days before my diagnosis. As you can imagine, this made a bad thing *seem* even worse.

But, some amazing things happened during this time. I recall a story about one of my aunts on my father's side who said she was awakened suddenly in the middle of the night by the Lord's spirit. She said she was filled with a single urgent bidding. She HAD to help my family. They were hurting, and they needed help. The result of this was an amazing outpouring of kindness and generosity such as I've never seen in my life. I will always remember how my family pulled together during this time; it was the beginning of real hope for us.

So great was our need, I suppose my Heavenly Father reached out to more than just my family. People from my dad's former job even pooled money together in a Christmas fund for my family. They wanted to make sure we had what we needed, food and support, so we could focus on the joy of Christmas that year.

I obviously cannot write a story about my struggles and my year fighting cancer without mentioning Dr. Watts, my Oncologist, Dr. Pineda and the Cooking with Cancer organization, and all the staff at Children's. They pulled me through by being honest with me without causing panic and by explaining everything I needed to know about what I had to face. The Cooking with Cancer organization, through the *Cooking Up Magic* contest, gave me the chance to focus on something I love, food and cooking. You see, when I grow up I want to be a chef. Maybe I'll even be more famous than Emeril one of these days. It is my wish that my Tilapia with Mango Salsa and Coleslaw I submitted to the contest will help others.

Too often, it seems we tend to dwell on the negative situations in our life so much, that if we aren't careful, we miss all the subtle kindness bestowed upon us. Hope and faith are very powerful healers if we only open ourselves to them. Thank you for letting me tell my story and thank you for allowing me to pass along hope to others who might think all is lost. It does get better and hope can get you through anything if you let it.

*Reed Longgear together with parents:
Christy and Huntley Longgear*

REED'S SPICY PAN-FRIED TILAPIA WITH MANGO SALSA & COLESLAW

INGREDIENTS

4 tilapia filets (you can easily substitute any of your favorite fish)
1 cup beer (non-alcoholic is fine)
1 cup of flour
4 tbsp vegetable oil (or for an extra kick use olive oil)
2 tbsp chili powder
1/4 - 1/2 tsp cayenne pepper (use sparingly if you don't like spicy food)
1 – 4 to 8 ounce container of prepared mango/pineapple salsa
1 bunch of cilantro
Lemon and lime wedges
Salt and pepper

PREPARATION:

- Season the fish with the salt, pepper, chili powder, and cayenne pepper.
- To make the batter, mix the remaining cayenne pepper, chili powder, salt, pepper, flour, and beer. Mix until the batter is no longer lumpy.
- Heat oil in skillet at medium to medium-high heat.
- Dip the fish filets in the batter, allowing the excess to drip.
- Pan fry, turning once, until filets are golden brown.
- Serve with pre-cut coleslaw cabbage mixed with French dressing.
- Before serving, top each filet with 1-2 tbsp of the mango/pineapple salsa and serve with lemon and lime wedges.
- A yellow or saffron rice makes another great side to serve with this dish.

Cooking Up Magic's 2007 Third Place Winner:

Madison Taylor



Madison's Story:

In October of 2005, Madison, ten years old and in the fifth grade, was diagnosed with T-Cell Lymphoma. The only symptoms that she had were a sore throat and a funny cough, however, by late that Wednesday night we learned that there was an inoperable tumor the size of a grown-ups hand in her chest. The doctors said it would be at least eight weeks of chemotherapy and radiation before the tumor would be small enough to place an access for chemotherapy. Friday, the doctors did a biopsy and put a picc line in her arm to the heart, and she had one dose of chemotherapy. Saturday, a chest x-ray showed that the tumor had shrunk to just behind her sternum. We know that the Lord took the tumor away, but she still had to endure two years of chemotherapy. The first year we averaged a little more than two weeks out of the month at Children's Hospital. She lost her hair, but she did not mind. The chemotherapy made her very sick; she hurt and had acid reflux and nausea. Then the second year of maintenance chemotherapy was supposed to be better. After the first dose, she could not walk. She had peripheral neuropathy, and she had trouble moving her legs unless she looked at them. She had severe bone pain, ulcers, and more. She was eleven years old and weighed only 41 pounds. She was frail, would not eat, and had IV nutrition every day. She was getting weaker, and we tried to get her to eat anything and everything. She has always been a finicky eater, but now she would only eat little bites of very few things. Food tasted different

to her. It hurt the ulcers in her mouth, and the smell made her sick. She just did not feel like eating.

Then Summer's bars came into the picture. A chemotherapy buddy named Summer was often in the hospital at the same time Madison was. In chemotherapy, kids and parents learn to depend on and share with each other. Summer's mother would share every type of food that was brought to Summer. She wanted Madison to gain weight too. One of the foods Madison named Summer Bars. They were nutritious and tasted great. Madison loved them. We give Summer Bars credit for stopping Madison's weight loss and even helping her gain a little weight. So, when Madison heard of the *Cooking Up Magic* contest, she submitted this recipe to share with others who might be in similar circumstances.

Madison finished chemotherapy and is doing well. She is in the 8th grade and loves the Lord, dancing, and reading. She is trying very hard to re-learn how to turn flips because she wants to be a cheerleader next year. She is still a picky eater, and we are constantly looking for foods that she will eat.

Thomas and Cindy Taylor

SUMMER BARS

INGREDIENTS

- 2 cups of chopped peanuts
- 2 cups of mini chocolate chips (any flavor you like)
- 1 - 16 oz box Honey Bunches of Oats (you can use plain, or with almonds, or the type with dried fruit)
- 1 1/2 cup of peanut butter
- 2/3 cup honey (do not use for kids two and under, you can substitute Karo Syrup)
- 2 cups of mini marshmallows (they melt more easily)

PREPARATION:

- In a large bowl, mix first three ingredients.
- Put peanut butter, honey and marshmallows in a microwaveable bowl.
- Heat on high for 1 minute, stir, and then stir for 30 second intervals until melted.
- Pour on top of cereal mixture, stir until blended.
- Put on a large cookie sheet.
- Make cereal mixture about 1/2 to 1 inch thick, cut in squares.
- Does not have to be refrigerated.

You can also put some Fibersure in it before you mix together; you can't taste it. I add 1/4 cup if needed.



COOKING WITH CANCER, INC.

Product Information

Cooking with Cancer, INC. offers many products where 100% of your donation goes directly into our non-profit organization. Many people contact us asking how they can contribute. Below are several products we have that give you this opportunity, or you can donate directly.

Prescription to Taste. A Cooking Guide for Cancer Patients

Cookbook featuring recipes specifically designed for cancer patients.

By: Luis F. Pineda, M.D., M.S.H.A., with Edie Hand

Cooking with Cancer, INC.

Handcrafted China

China designed with cancer patients in mind.

Sold separately or as a place setting.

- Plate
- Soup Bowl
- Cup and Saucer

Cooking with Cancer, INC.

Pill Box Chef Hats

White chef hat featuring our logo, as see on the TV Show *For the Health of It*.

Cooking with Cancer, INC.

Tie Back Chef Cap

Black chef cap featuring our organization and logo, as seen on the TV Show *For the Health of It*.

Cooking with Cancer, INC.

Chef Pickles

Our little chef from the TV Show *For the Health of It*.

Cooking with Cancer, INC.

Awareness Bracelets

Designed in tree of life green, featuring the Cooking with Cancer logo, and embossed with our Chef Pickles.

For more information or to order please visit our website:

www.cookingwithcancer.org

Frequently Asked Questions

Many questions arise when you or a loved one is diagnosed with cancer. This section has been included in our cookbook to answer many of the most frequently asked questions we have received over the years from our patients, their families, and caregivers. If you have more specific questions, please ask your personal physician or healthcare provider.

Q. Should I work?

A. *Yes, it is important to continue with work to maintain a level of normalcy and to keep your sense of purpose. It also helps to occupy your mind.*

Q. Will I lose my hair?

A. *Not all chemotherapies cause hair loss. One of the most common treatments that causes hair loss is Adriamycin.*

Q. Can I get a perm or color my hair?

A. *Chemotherapy can make the scalp and skin more sensitive. Please check with your oncologist to find out if your specific chemotherapy will cause a reaction.*

Q. A family member received chemotherapy years ago and was very sick. Will I get sick like this, too?

A. *Different cancers are treated with different chemotherapy regimens. Over the past twenty years, there have been many advances in pre-medications. Often new anti-emetics that work with the chemotherapy receptors in the brain can help to decrease nausea and sometimes completely eliminate it.*

Q. Why does chemotherapy cause the bad side effects?

A. *Chemotherapy not only kills the cancer cells but also normal, good cells. You usually see this happen in fast dividing cells such as hair follicles, oral mucosa and bone marrow. Precautions are taken, and medications are given to reduce these consequences.*

Q. What is the most common side effect from chemotherapy?

A. *Fatigue. Many Cooking with Cancer recipes address this side effect.*

Q. Should I get a flu vaccination while I receive chemotherapy?

A. *Yes, as long as you do not have a fever or infection. It is wise to receive your flu shot yearly.*

Q. Should I get a pneumonia vaccination?

A. *Yes, but you must be fever free and without infection. Remember the pneumonia vaccine is for cancer patients undergoing treatment as well as survivors and should only be administered every five years.*

Q. Should my family undergo genetic testing for cancer?

A. *Genetic testing is a personal decision. The results will affect the future. It is important to consider if you or a family member has been diagnosed. You are encouraged to talk with family members about the availability of testing and let each member decide. Some like to be informed, and others prefer not to be. Not all insurance carriers cover genetic testing. It is wise to investigate coverage prior to testing so this does not become an out-of-pocket expense.*

Q. Can I still travel?

A. *Yes, continental U.S. travel is encouraged to maintain some normal activity. Pre-arrange to travel for a weekend getaway or a one-week-vacation. However, we do not suggest lengthy vacations such as a month because of the delay in your treatment. When traveling, carry a list of all your current medications. Make sure you have enough of a medication supply to last while you are away. We also recommend you carry a list of your chemotherapy regimen. Remember to take your oncologist's business card with all contact information in case you require emergency room services while out of state. We advise you to discuss at length with your physician prior to traveling outside the U.S.*

Q. My grandchildren are very young. Can I still be around them?

- A. *Yes, as long as they are well and fever free with no cough. We strongly encourage hand washing and avoiding direct hand contact on your face. Connecting with family is important during this stressful time. Try not to isolate yourself from those you love and who love you.*

Q. Should I exercise?

- A. *Daily moderate exercise is important. It increases circulation, helps fight depression, increases rest at night, and stimulates the appetite. Be aware of seasonal changes. When the weather is cooler, try a leisurely walk inside a mall or indoor facility. When the weather is warmer, then stroll outside. If you are unstable on your feet, then have a companion and wheelchair available. Even pushing a wheelchair or a store shopping cart allows you to exercise with support. Remember to carry a cell phone in case of emergency.*

Q. Can I drink wine?

- A. *Yes, alcohol increases the appetite and enhances the taste of food. One glass nightly with dinner is recommended, in moderation. There are studies that show many other medical benefits from wine. When consuming alcohol, please first consult with your medical physician.*

Q. What cautions should I use with seasonal changes?

- A. *During fall or winter, try to avoid leaf piles that emit dust particles. If you cannot avoid them, then try a surgical mask for protection. When leaving warm buildings into the cold, cover your mouth with a scarf to avoid the cold air. Cold air may cause bronchial constriction. In the spring, dress in layers to avoid temperature changes. In the summer, wear sunscreen. Use the highest SPF available. Chemotherapy sensitizes the skin even post treatment.*

Q. I take daily medications at various times of the day. Should I bring them with me on the day of treatment?

- A. *Yes, if you have a scheduled medication to take while you are receiving a treatment, please bring them with you so you do not miss your dose.*

Q. What should I wear on chemotherapy days?

A. *Dress comfortably with sturdy, non-skid shoes. It may be wise to bring a jacket. Bring something familiar like a blanket or a pillow from home.*

Q. What will I do on chemotherapy days at a facility?

A. *Rest in a recliner. Some patients sleep, read, and watch TV or a movie. You can bring your computer to work on or even catch up on a book. We have seen patients clip coupons and even knit. Bringing a friend or family member for communication and support helps to pass the time. If someone can't come with you, you could also use this time to catch up with loved ones via cell phone.*

Q. Can I eat the day of chemotherapy?

A. *Yes, eat a normal breakfast and take all your regular medications. If a patient feels anxious and has skipped breakfast, they may feel worse as blood sugar levels drop. Bring your favorite snack or drink. Check with your facility prior to your scheduled treatment for snack, drink or lunch plans offered.*

Q. What type of diet should I follow?

A. *A well balanced diet with fruits, vegetables, meats, dairy, and nuts with occasional sweet treats. We recommend small meals daily dividing the three large meals into six or eight smaller ones like the recipes here in "Prescription to Taste".*



COOKING WITH CANCER, INC.

UNDERSTANDING
THE COOKING WITH CANCER
CONCEPT:
TASTE AND SMELL IN CANCER

WARNING

The following content is intended
as a scientific explanation of the
breakdown in taste and smell.
Material contains facial photography
of sensitive, even described by
some as graphic, illustration
seen in chemotherapy and radiation
therapy patients.
Viewer discretion is advised.

LUIS F. PINEDA, M.D., M.S.H.A.

TASTE AND SMELL IN CANCER:

INTRODUCTION

With the aging process and prolongation of life, cancer is, and will continue to be, a major health issue. One of many, not the least important, yet critical problems, is the ability of patients with cancer to support normal nutrition. Basic assumptions are that cancer, a state of abnormal cellular behavior, imposes a catabolic state on the individual. Documented further by recent technological development of the PET scan, we are able to obtain images of cancer cell locations on the basis of the incorporation of radioactively labeled glucose as the result of their hyperactive metabolism. If the individual is unable to keep up to the demand on the basis of incorporation or intake of nutrients, then malnutrition and weight loss ensues. There is a possible participation of endogenously released cytokines such as Interleukins or a tumor necrosis factor.

Additionally, the cancer treatment modalities of today are causes of substantial changes to taste, smell, and appetite by either psychological trauma, neurochemical changes or inflammatory cytolytic damage to the mouth, nose, or gastrointestinal tract. Things are further worsened by cancer therapy complications, including infection, nausea, and vomiting.

Palliative modalities of pain control, use of narcotic pain medications such as codeine, morphine and analogs, which directly affect the central nervous system (limbic system), affect the function of the gastrointestinal tract causing severe constipation, nausea and vomiting. Most culinary literature available addresses these issues by attempting to minimize the smell of preparation, the temperature, and color. By this, I mean, historically it was recommended to consume white, cold, and non smelly foods versus hot, red, and smelly foods. By garnishing and coloring the food we can now impact the taste and intake and create appeal.

Most nutritional literature available addresses these issues by the

drastic use of involuntary nutrition such as total parenteral nutrition or TPN, tube feeding via gastrointestinal infusion through nasogastric or percutaneous endoscopically placed gastric tube (PEG). All of these are unappealing and excessively expensive interventions. The use of high calorie oral supplements such as puddings, bars, and boosters have failed despite their easy availability. This failure is due to patient intolerance, mostly because of the high carbohydrate content, which makes the products excessively sweet.

Appetite stimulants such as Marinol® (tetrahydrocannabinol) or Megace® (megastrol) have the disadvantage of causing mental status changes and sedation. They are exceedingly expensive, or in the case of Megace, there is an inability to use it in cases of hormone dependent cancers (ex. prostate cancer - a very common cancer in adult males). There is also the potential for abnormal blood clotting which is already heightened in cancer.

The management of cancer induced taste alteration should be aimed at maintaining optimal nutrition (Brodie 1998), but above all, quality of life.

TASTE

Flavor is a complex mixture of sensory inputs (Smith 2001). Its components are gustation (taste), olfaction (smell, perhaps more important than credited), and tactile (mechanics of chewing).

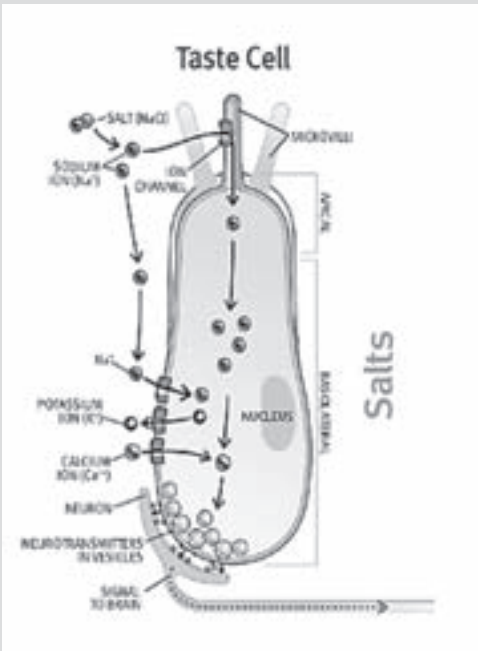
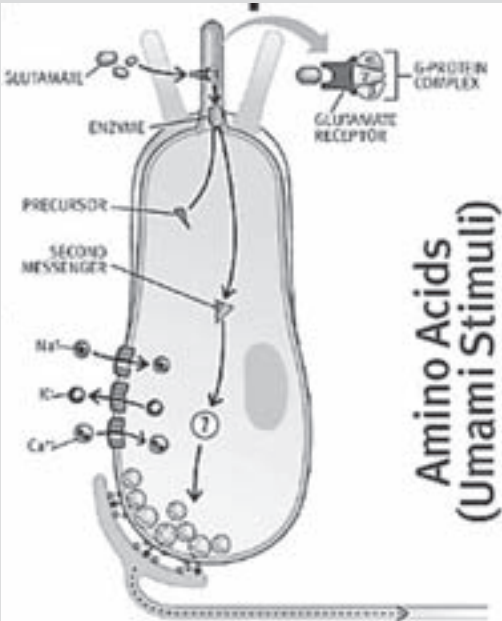
Traditionally described qualities of taste are sourness, sweetness, bitterness, and saltiness. Some others may exist, notably Umami, (Japanese translation “delicious”). This is most elicited by glutamate, an enhancer of taste commercially available as monosodium glutamate or MSG. In 1908, Ikeda from Japan, recognized it as the tasting chemical component of the brown algae soup Kombu.

This Umami concept was developed by Chaudhari and Roper from the University of Miami in 1998. Loosely implying a “meaty” taste, this concept is still not widely accepted.

Most recent research has documented Umami receptors mediated via mGluR4 glutamate receptor, as well as mT2R8 denatonium receptors located in the mouth, glutamate related and cyclic AMP conducted via calcium channels.

Sodium glutamate is a food enhancer that is very similar in taste to common cooking salt and definitely enhances the pleasantness of food by at least 50% or better at appropriate culinary levels (Yamaguchi, 1984). The main concern has been the flatulence and abdominal discomfort sometimes associated with it. It is blamed for obesity in oriental people and occasionally allergic reactions. Nonetheless, the significantly lesser amount of Sodium content when compared with regular cooking salt (65% less) has a potentially significant impact in hypertension management and can be a great benefit.

For years it was believed the tongue was the source of taste receptors, all selectively located by geography and specificity (i.e. sweetness located at the tip or sourness to the side). The fact is that all the mouth, not only the tongue, possesses receptors that are capable of responding to different stimuli regardless



of the quality and nature. An example is the following salt receptor diagram. It highlights the importance of the electrolyte channels and the electrical nature of the transmission.

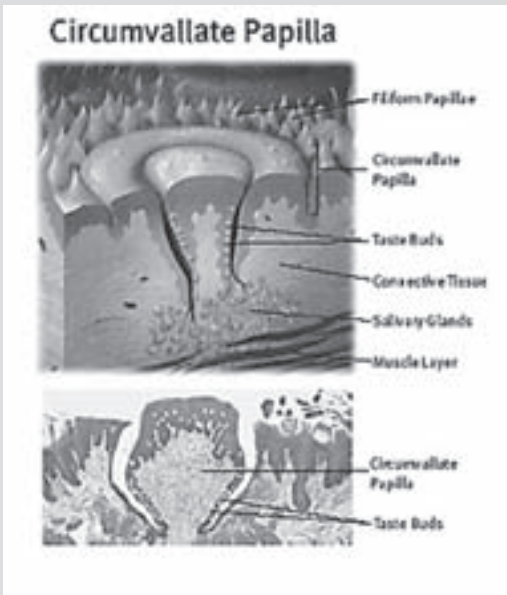
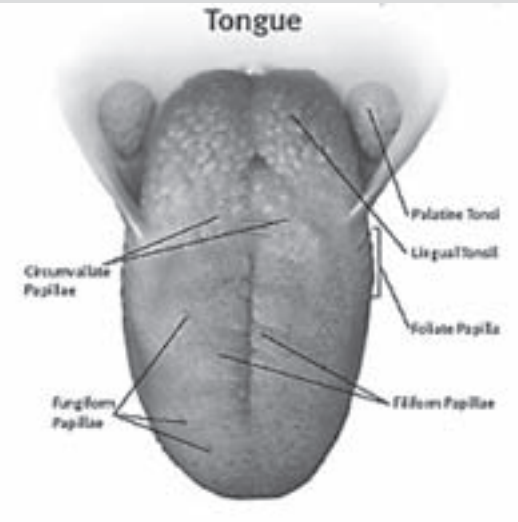
Recent studies have described more specific receptors for tasting sensations and further research continues.

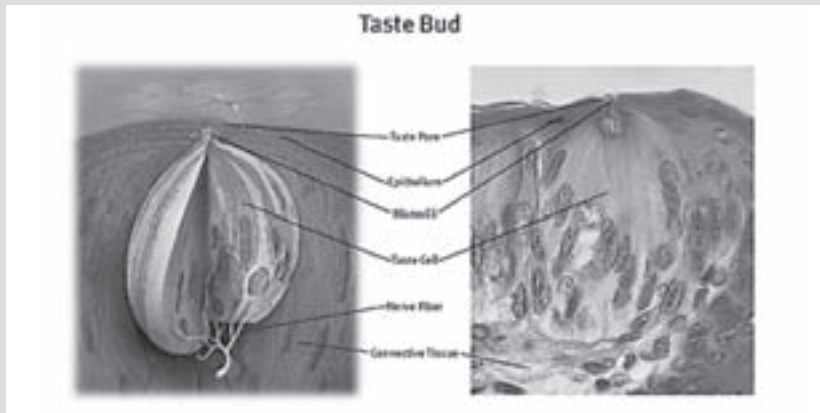
Taste buds, receptors and conductors will respond to a sensation in particular, but to all sensations to a certain degree. So, the receptor for sweet will respond to mostly sweet taste, but to bitter, sour, and salty to a lesser degree (Wickham 1999).

The locations of the receptors are the tongue, soft palate, glossopalatine arch, and the posterior portion of the pharynx. Most taste receptors are located on the tongue. They are located within the papillae projection giving the tongue its velvety appearance.

Several geographical areas on the tongue are identified. As shown, the tip is rich in mushroom like taste buds. The taste buds on the back of the tongue are flat circumvallates distributed in an inverted V. The taste buds on the lateral portion of the tongue are foliates. The filiform lack tasting receptors, yet provide tactile sensations.

The concept of the geographic tongue (sweet, hot, salty) is no longer sustainable as each receptor is capable of reacting to more than one kind of stimuli





at a time. They are not unique to a given taste, nor are they geographically distributed as previously thought.

The taste buds contain about 50 to 100 taste cells. They are arranged in an onion shaped fashion with small microvilli poking through the opening at the top (taste pore).

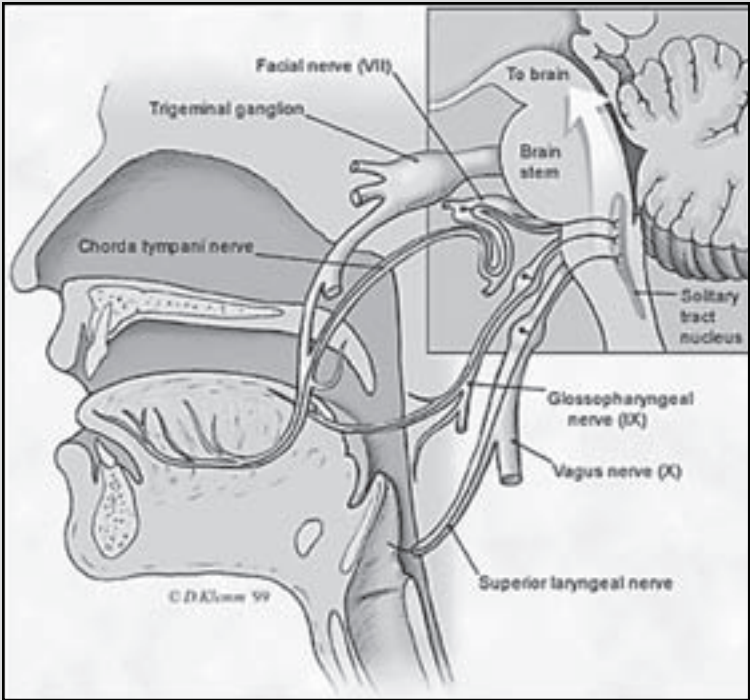
The vehicle for taste is the saliva (Schiffman 1994). Tastants, or food chemicals dissolved in saliva, contact the receptors via the pore, activating the chemical G-protein (gustducin and transducin) receptors (ion channels) that transform into electrical impulses that are then sent to the brain.

The process of depolarization activates the receptors. The inside and outside of the cells are in constant electrical balance. In the case of taste receptors, they are negatively charged inside. The contact with the stimulating agent tends to neutralize or turn the inside positive. This creates a cascade of electrical current, which gets passed through the nerve line, the end of which releases a chemical neurotransmitter to communicate in relay to the next nerve cell until it arrives at its destination in the brain.

As the receptor, nerve line, relay points, and end stations are electrically activated they become unable to respond to another stimuli (taste) until delivery, and then become depolarized again. This is called the refractile or recovery phase. The impulses from the taste are then transmitted to the cerebrum via cranial nerves V, VII, IX, and X (Bender 1999).

Chorda tympani (CT) are the primary innervation pathway for the anterior tongue receptors in addition to providing the taste receptors structural and functional fitness (McCluskey 2002). Surgical alteration of the tongue leads to loss of sweet and salty receptors. Surgery of the palate can alter sour and bitter receptors (Grant 2000). The final receptor, thought to be the parietal operculum near the Rolando's fissure, is now believed to be mostly located in the insula (This 2005).

The likelihood is that there is not a single taste center in the brain, but it is likely the electrical interaction of many areas allowing the brain to construct a global sensation.



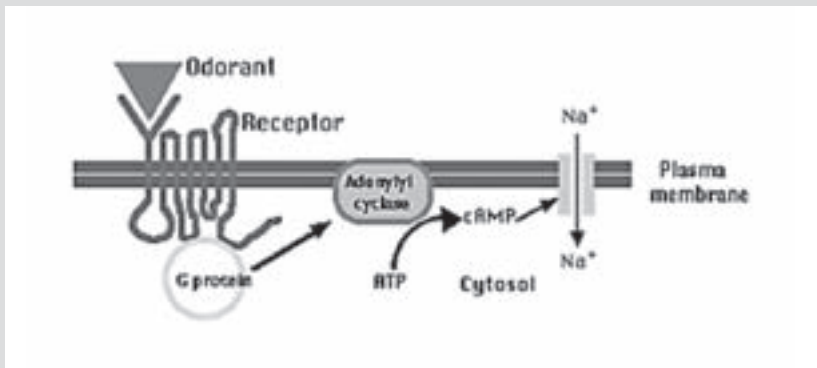
SMELL

Smell has played a very special role in the natural evolution of animals, especially the mammals. Many of them are nocturnal and they had to depend on olfactory guidance to detect food, avoid predators, recognize territories, social groups, and even sexual contact (McGee 1984).

The human olfactory area is approximately 16 square centimeters as compared with almost 150 square centimeters in dogs.

Smell and taste cannot be separated. "Smell and taste form a single sense, of which the mouth is the laboratory and the nose is the chimney. To be more specific, of which, one serves for the tasting of actual bodies and the other for the savoring of their gases" (Brillat-Savarin 1994).

Little has been known about smell until recent years. Researchers have earned two major Noble prizes in physiology and medicine (Linda Buck and Richard Axel 2004) by defining the olfactory receptor protein as shown.

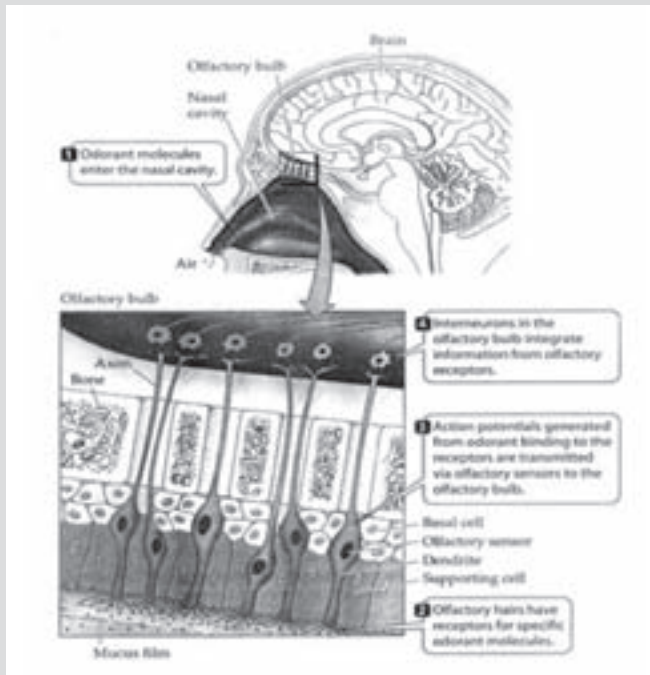


This system still depends on receptor activation, transmission of electrical impulses via cyclic AMP (amino mono phosphate), and electric exchange interaction with sodium exchange.

Often misunderstood, the act of smelling does not happen exclusively by inhaling aromas via the nose, but rather by a pheromonal action. This mixture of combined saliva, product, and

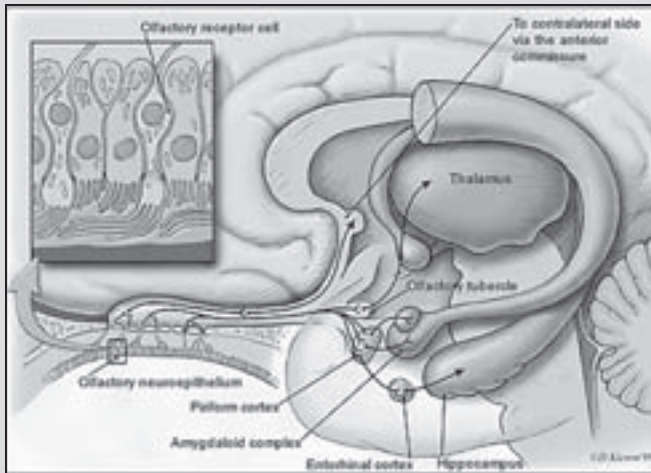
evaporation penetrates the back of the nose via the back soft palate and activates the smell receptors.

The human sense of smell depends on the functioning of cranial nerve I or the olfactory nerve, for qualitative odor sensations such as the smell of roses, lemon or grass and the ophthalmic and maxillary portions of cranial nerve V the trigeminal nerve for somatic sensory overtones of odorants such as warmth, coolness, sharpness, and irritation.



The olfactory neuroepithelium is located over the cribriform plate, the superior septum and a segment of the superior turbinate and is rich in smell receptors.

As in the case of taste, odors attach to and dissolve within the covering mucus layer to obtain contact with the receptors (Doty R.L. Bromley, S.M. 1997). Taste, smell, and other impulses will make their way via nerve conduction to the brain where the ultimate arrangement of impulses gets coded for the final perception.



THERMAL AND MECHANICAL RECEPTORS

Other minor receptors include:

- Mechanical: tactile sensing of texture (crunchy, soft, hard, dry, wet)
- Thermal: temperature sensation

All of this is aided by mastication, the mechanical dismembering of the food bolus into smaller particles capable of being mixed with saliva, and the carrying of particles to contact the taste receptors via fluid or smell receptors via gases (pheromonal). The process of mastication reduces the size of the particles to be swallowed and mixes the saliva to bind all together in a safe bolus. This mixes the food for better exposure to digestive enzymes.

Most people will chew about twenty times before swallowing; however, under normal circumstances the more likable the food the longer the mastication as a source of pleasure. The slower and longer the mastication, the more opportunity for odorants, which are volatile molecules, to travel up to the smell receptors via the back of the mouth. This is relevant for the chewing gum industry.

ENHANCERS

Peppers are used in many cultures as a flavor enhancer. Capsaicin, the active substance in peppers, increases the blood flow to the mouth and activates VRI receptors, a membrane channel protein, which exchanges calcium in and out of the cells. Capsaicin has four different subunits, which located in different sites of the mouth, count for the different effect in flavor by different kinds of peppers. Being fat soluble and heat sensitive improves the taste for fatty foods.

Peppers are, if nothing else, taste enhancers. Their physiological function is based on three principles.

- An overwhelming inducer of blood supply to the mouth (please note to yourself what happens when exposed to a minimal amount of peppers on your lips) that causes an increased production of saliva, a vehicle to the distribution of elements of flavor in the mouth, and rapid heart rate with an increase in bronchial secretions and indices perspiration (cooling effect).
- They are depolarizers of the electrical charges to the taste and smell receptors.
- They are a direct stimulant of the brain via pain sensory pathways. This is done by reducing the availability of substance P and increasing levels of prostaglandins, both crucial elements of the inflammatory human response.

All these enhance the brain capacity for taste and smell. This makes the act of eating more pleasurable.

Well known to other cultures, such as Latin America (jalapeño, ancho), India (sanaam, dundicut), and China (tien tsin pepper), the use of chilli peppers is intrinsically part of the culture.

Chilli peppers, originally from Latin America, were used by Maya, Inca and Aztecs. Chilli peppers were taken to the old world by Christopher Columbus as a substitute to the better-known peppers. The medicinal effects were recognized early on by pre-Columbian Mayan. They prepared chillatolli, maize flour mixed with chilli, for all kinds of respiratory ailments. The Aztec would use the direct fruit

for toothache pain control. Tukano Indians in Colombia used it for the treatment of hangovers and Mayans and Aztecs as infection control for open wounds.

The assumption that peppers are an anti-cancer chemical is less important. They are otherwise well recognized as a pain controller and widely used in the United States of America as a localized anti-arthritis medicine. Peppers are not just “hot” they are used as flavor enhancers, for example Paprika.

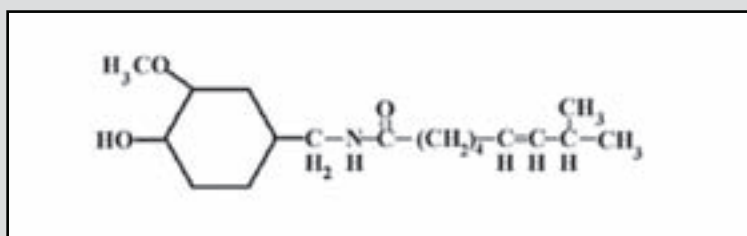
They are all graded in the intensity of the heat according to the Scoville Heat Unit System (Wilbur L. Scoville 1912). This scale is human rated so consequently, this is subjective and liable to human error. The scale establishes pungency by dilution and testing. In essence, they attempt to document the number of dilution times in a neutral liquid where a normal human being can no longer detect the bite. The most scientific measurement is a high performance liquid chromatography which extracts and measures capsaicinoid chemicals.

SCOVILLE HEAT UNITS SCALE

The following is a list of chiles, put into a scale to show the relative pungency levels and their Scoville Heat Units.*

Name	Pod Type	Species	Scoville Units
Orange Habanero	Habanero	C. chinense	210,000
Red Habanero	Habanero	C. chinense	150,000
Tabasco	Tabasco	C. frutescens	120,000
Tepin	Tepin	C. annuum	75,000
Chiltepin	Tepin	C. annuum	70,000
Thai Hot	Asain	C. annuum	60,000
Jalapeño M	Jalapeño	C. annuum	25,000
Long Slim Cayenne	Cayenne	C. annuum	23,000
Mitla	Jalapeño	C. annuum	22,000
Santa Fe Grande	Hungarian	C. annuum	21,000
Aji Escabeche	Aji	C. baccatum	17,000
Long Thick Cayenne	Cayenne	C. annuum	8,500
Cayenne	Cayenne	C. annuum	8,000
Pasilla	Pasilla	C. annuum	5,500
Primavera	Jalapeño	C. annuum	5,000
Sandia	New Mexican	C. annuum	5,000
NuMex Joe E. Parker	New Mexican	C. annuum	4,500
Serrano	Serrano	C. annuum	4,000
Mulato	Ancho	C. annuum	1,000
Bell	Bell	C. annuum	0

CAPSAICIN



Chemical Structure of Capsaicin

Capsaicin is the most widely recognized chemically active ingredient in chilli peppers. Contrary to popular belief, the heat is

not located in the seeds, but in the placenta, which are little sacs located in the inner wall of the fruit. When opening the fruit they tend to splash into the seeds since they are very fragile and easy to rupture. Capsaicin binds directly to the receptors in tasting but can be unbound by casein, a protein obtained from milk, beans, nuts, and chocolate that is used as a moderator of pungency.

To date, there are fourteen different capsaicins named capsaicinoids. Each one has a quite unique and characteristic property on the nature of the bite, the location in the mouth that gets activated, and the duration of its action.

- Nordyhydrocapsaicin gives a mellow warming effect, rapidly on and off, mostly at the front of the mouth and the palate.
- By comparison, dihydrocapsaicin is more potent and affects the middle of the mouth and palate.
- Homohydrocapsaicin is a harsh, sharp irritant, with a slow onset but a longer duration at the throat and back of the tongue.

Likewise, heating of the tip of the tongue produces a sweet taste, while cooling elicits a sour sensation.

TASTE AND SMELL BEHAVIOR

Most flavor preferences and aversions are learned. There is an innate liking to sweetness perhaps associated with common eating of fruits, and a disliking to bitterness that is mostly associated with poisonous and bitter alkaloids. Social customs, opportunities, and private associations with pleasant and painful moments are imprinted from early childhood. This has been experimentally exemplified in well-known studies such as the case of Pavlov and his experiences with dogs. There are repeated reports of food “cravings” rich in needed fundamental electrolytes or nutritional items. For example, water and salt in dehydration, water and carbohydrates in cases of Diabetes Mellitus, and pregnancy cravings.

Preabsorptive Satiety refers to the point in time when a sense of fulfillment of eating arises. Several mechanisms are believed

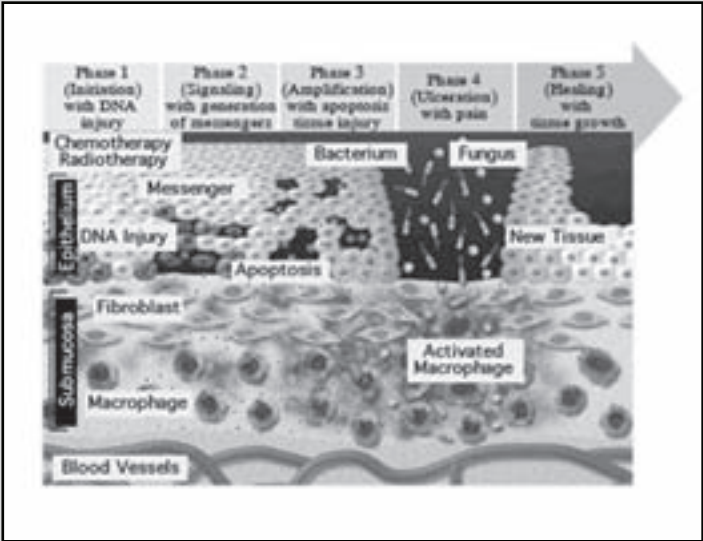
associated with this since the actual biochemical satisfactions of need cannot be corroborated, so pressure receptors in the wall of the stomach, chemical receptors in the wall of the intestine, or downgraded affinity of the tasting receptors via blood glucose has been sited (this could be nonetheless overridden by cultural pressures, for example obesity in the USA). It is unclear why someone becomes full after a meal or why a given desired food intake becomes sickening when taken in excess.

PATHOPHYSIOLOGY

The life span of a taste cell is approximately ten days. Because of this rapid proliferation, they become highly susceptible to cellular destruction during chemotherapy (Strohl 1984). In cancer patients in general, there is a higher taste threshold as a result of a decrease in the number of taste buds (Stubbs 1989).

Cytokines are proteins manufactured by the body. They influence the cellular behavior by inducing specific cellular functions. Cancer drives up the production of them (Interleukins, Tumor Necrosis Factor). They are known for lowering the threshold for bitter sensations (Davidson 1998).

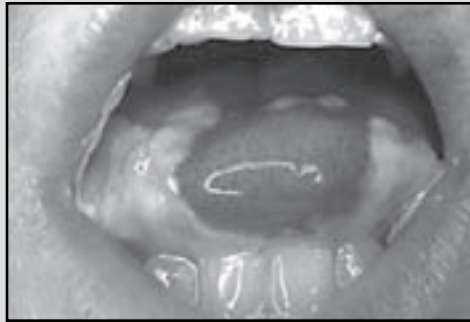
Radiation therapy to the head and neck area is known to cause alteration of taste: initially at 20Gy (the unit of measurement in radiation) you experience alteration of taste. This increases 50% at 30Gy and becomes permanent at 60Gy (Madeya 1996). Radiation directly reduces the number of taste buds and damages the



microvilli of the cells. Initially this impairs the bitter and salty sensations and later to a lesser degree the sweet taste (Mossman K. 1978).

Chemotherapy, on the other hand, lowers the threshold for bitter tastes and increases it for the sweet tastes (Madeya 1996). Many patients complain about a metallic taste. The main offending agents are Nitrogen Mustard, Cisplatin, Cyclophosphamide, and Doxorubicin. Repeated adverse reaction to chemotherapy has been known to develop into a behaviorally adverse reaction by the patient according to Pavlov's mechanism (Bender 1999).

Damage by chemotherapy:



Mucositis

Damage by Infections:



Herpes Zoster Infection

Damage by Radiation Therapy:



Osteonecrosis

DOES IT MAKE ANY DIFFERENCE?

Beyond the issue of pure quality of life and the enjoyment of eating, would nutrition make any difference? For most anyone, including medical or neophytes, the answer is yes. Usually, this question is not primarily addressed and sometimes priority is the second or third tier in nutritional importance.

Food for thought:

- The fundamentals are misunderstood in importance.
- The Positron Emitting Tomography (PET scan), the up-to-date technological tool in oncology, precisely depends on the cellular utilization of glucose by cancer cells.
- In 1998 a double blind, random study with a small sample, showed that administration of zinc sulfate three to four times per day restored not only the acuity of taste but also slowed the worsening of taste alterations and taste bud anatomy (Ripamonti 1998).
- Monosodium Glutamate, commonly used in oriental food, is becoming a good candidate as a “flavor enhancer”, not only because of its salty taste but it stimulates Umami, the latest recognized taste, triggering release of glucagons and insulin (This 2005).

ALCOHOL AND HEALTH

The relationship between alcohol and health has been long-lived and controversial. For years medical schools have taught students the serious adverse effects including alcoholism and its social consequences, as well as the more physical impacts including liver cirrhosis and fetal alcohol syndrome.

For moderate drinkers, indications show a mortality rate 16% lower than the 28% seen in non-drinkers (Boffetta, Fuchs). The National Institute on Alcohol Abuse and Alcoholism has established the greatest longevity with the consumption of one to two drinks per day (Ellison 1993). A drink is defined as a five-ounce glass of wine, one ounce of hard alcohol or one can of beer.

The most protective effect is on the cardiovascular and circulatory systems by increasing levels of HDL (high density lipoprotein) or the good cholesterol, decreasing thrombosis, reducing fibrinogen, increasing fibrinolysis and reducing arterial spasm during stress (Paassilta 1998).

Moderate alcohol consumers suffer a lesser number of heart attacks and arteriosclerosis. They have a lower risk for dementias including Alzheimer's disease (Mukamal 2003), and there is a lower incidence for metabolic syndrome (Matthew 2004). They all seem associated with the presence of resveratrol, a phytoalexin chemical found in the skin of the red grapes used in the production of red wines.

For our purposes, alcohol seems to have an enhancing property to appetite and taste, interestingly enough, by enhancing the sense of smell.

FOOD CHEMISTRY

What healthy people like:

- Taste of fat (concept of marveling)
- Taste of sugar (concept of caramelizing)

Recommendations:

- Because of the described metallic taste, use plastic utensils (Stubbs 1989).
- Patients should eat small and frequent meals throughout the day (Sherry 2002).
- Chilled or frozen foods are more acceptable than warm food (Brodie 1998).
- Mouth care is of crucial importance (Sherry 2002).
- Provide rapid shifting tastes:
 1. By enhancing receptors activities (chilli pepper).
 2. By cleansing of receptors
 - a. (ginger/pickles)
 3. By use of sauces of the nature of coulis (fruit based sauce with no fat)
- Portions should be small.
- Presentation should be simple and colorful.
- Drink a glass of red wine before a meal. (Alcoholic beverages are used as an appetite stimulant.)

DISCLAIMER

This paper is not intended to be a scientific presentation in as much as a compilation of information and ideas in the attempt to improve quality and perhaps quantity of the lives of patients afflicted by cancer.

The hope is to provide a simple, superlative, and better quality of life to patients afflicted with cancer.

PERSONAL STATEMENT

My quest in taste and smell in patients afflicted with cancer has been accomplished with the help of God and those patients for whom this manuscript is dedicated and intended.

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DR. LUIS F. PINEDA

Dr. Luis F. Pineda has served in the medical community in Birmingham, Alabama for over 28 years as a hematologist and oncologist.

Born in Guatemala he came to the United States to complete his medical training where he attended the University of Nebraska and the University of Alabama in Birmingham (UAB). He is multi-disciplined in Internal Medicine, Hematology, Oncology, and Psychiatry. He also holds a Master of Science in Health Administration and is an Executive Chef from the Culinary Institute of Virginia College.

In 2000, after years of seeing his patients' nutritional needs deteriorate due to chemotherapy and radiation, he decided to enroll in culinary school to combine his knowledge of medicine with the art of cooking. His motivation was his patients and his desire to provide an alternative option of nutrition through re-stimulating their affected taste buds.

Cooking with Cancer, INC. is a non-profit organization founded in 2005. Our mission is, "helping those afflicted with cancer to enjoy a better quality-of-life through good food." Through resources and donations, research and recipes have been developed for cancer patients and their families. Creating special china for cancer patients, generating cookbooks, developing a TV cooking show, and programs with cooking institutions are just some of the ways Cooking with Cancer, INC. is making a difference.

To research the breakdown of taste and smell in patients of all ages, the annual *Cooking Up Magic* contest was specifically designed in 2006. To help a broader range of patients, children undergoing chemotherapy or radiation can submit favorite dishes they enjoy

eating after their taste buds have been affected by their treatment.

Dr. Pineda lives in Alabama with his wife and family. They have four children and one grandchild. He currently practices medicine full time in Vestavia, Alabama continuing his fight for patients with cancer.

**For more information on Dr. Luis F. Pineda and Cooking With Cancer, INC.
go to:**

www.drpineda.com
www.cookingwithcancer.org



EDIE HAND

Edie Hand is one of those remarkable people who brightens up a room as soon as she walks in. Her philosophy for living life with gusto can be seen in everything she does from her work as an acclaimed celebrity chef, author, philanthropist, speaker and business woman.

Edie learned about the simple joys of family, life and helping others from her modest childhood growing up in the rural south. She is a cousin to the late Elvis Presley and also the cousin of 2007 Nashville Star winner, Angela Hacker. She has authored, co-authored and helped develop over twenty books. Her books range from inspirational cookbooks to novellas.

Edie has starred in national commercials and daytime television soaps. She has hosted numerous national radio and television shows and been the CEO of Hand 'N Hand Advertising, Inc. since 1976.

Edie is actively involved with American Women of Radio and Television, National Speakers Association, National Association of Women Business Owners and has worked to benefit the Children's Hospital of Alabama, Children's Miracle Network, St. Jude Children's Research Hospital, Camp Smile-A-Mile and Country Music Hall of Fame and Museum. She is a graduate of the University of North Alabama.

Edie lives near Birmingham, Alabama with her husband Mark Aldridge, an educator. Her only son, Linc Hand, a working actor, lives in Los Angeles, California.

For more information go to these websites:

www.ediehand.com

www.ediehandfoundation.org

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COOKING WITH CANCER, INC.

Dr. Pineda's heart to help others through cooking is inspiring. His research has given hope to friends battling the disease. His recipes are carefully thought out and researched to help reduce the suffering the disease and treatment can cause. He is a warrior in the fight against cancer, both in the field of medicine as well as in the kitchen.

Brenda Ladun

Dr. Pineda is passionate about life and the practice of medicine. "Prescription to Taste" combines these interests to help readers improve their health and their spirit."

Tom Shufflebarger, COO of Children's Health System

Food is not only vital to life; it is an essential form of nurture. I have known Dr. Pineda for over 10 years as a colleague and friend. It is a wonderful gift to enjoy nourishment with a friend, and this book is aimed at restoring this gift to patients who may have lost this joy through the course of their cancer treatment. May this book be received by all who need it, in the spirit of nurture in which it was written and conceived by a man who has dedicated his life to the nurturing of the body and spirit of his patients, his family, and his friends.

Elizabeth A. Lowenthal, D.O.

"Dr. Pineda's approach to helping patients meet their nutritional needs while undergoing treatment is inspiring. He has effectively combined science and art with his unique creations."

Donna Sibley, R.D., L.D.

As an oncologist and chef, Dr. Pineda provides a unique approach to patients suffering from nutritional side effects of cancer treatment. As an oncologist, I welcome the opportunity to provide our patients nutritional foods with a great taste and healing value.

J. Patrick Daugherty, M.D., D.Min., PhD, Director, Northwest Alabama Cancer Center

The diagnosis of cancer... your life becomes shattered pieces of glass on the floor in front of you. And then... one of those rare moments in life happen. May we introduce to you our oncologist... Dr. Luis F. Pineda. He is patient, attentive, compassionate, respectful and wise. A man who provides immense comfort because he has within him an immense goodness.

Gerald and Mary Miklouchich, Cancer Survivor

www.cookingwithcancer.org