Appendix A

Installation Instructions

We wrote and ran our code on a machine running Microsoft Windows XP. However both Python and PyClips are available for linux. These are the instructions for running Thought4Food on Windows:

- 1. Download and install Python 2.4 from www.python.org
- 2. Download and install PyClips 1.0 from: <u>http://prdownloads.sourceforge.net/pyclips/pyclips-1.0_R1-</u> <u>clips_6.23.win32-py2.4.exe?download</u>
- 3. Download Thought4Food from http://web.mit.edu/saads/www/6.871/Thought4Food.zip
- 4. Extract Thought4Food.zip into any directory. This should place the following files in that directory:
 - thought4food.py
 - ruleset.txt
 - recipesDatabase.txt
- 5. Using the command prompt, 'cd' to the directory where you extracted the files.
- 6. Type the following at the command prompt: python thought4food.py

Note: To get the "craving" functionality described in **Section 4.4**, you have to open up the python interpreter by typing python at the command prompt and then issue the following commands:

```
>>> import thought4food
>>> from thought4food import runThought4Food
>>> runThought4Food(True)
```

The program should run on linux without problems, however the linux implementation of PyClips is only provided for Python 2.3. This should not be a problem since most versions of linux (including Athena) have Python 2.3 and not 2.4. However we have not tested it on Athena.

Appendix B

Recipes

Recipe1:

Name: All American Roast Beef

Ingredients: 3 pounds beef eye of round roast 1/2 teaspoon kosher salt 1/2 teaspoon garlic powder 1/4 teaspoon freshly ground black pepper

Method:

Preheat oven to 375 degrees F (190 degrees C). If roast is untied, tie at 3 inch intervals with cotton twine. Place roast in pan, and season with salt, garlic powder, and pepper. Add more or less seasonings to taste.

Roast in oven for 60 minutes (20 minutes per pound). Remove from oven, cover loosely with foil, and let rest for 15 to 20 minutes.

NutInfoPerServing: Calories: 484 Total Fat: 32.4g Cholesterol: 138mg Sodium: 268mg Total Carbs: 0.2g Dietary Fiber: 0g Protein: 44.8g

ServSize: 6

TotalCookTime: 65 mins

Recipe2:

Name: American Shepherd's Pie

Ingredients: 1 pound lean ground beef 1/2 cup chopped onion 1/2 cup chopped celery 1 (10.5 ounce) can condensed vegetable soup

1/2 teaspoon dried thyme

3 cups mashed cooked potatoes

1 cup shredded Colby longhorn cheese

Method:

Preheat oven to 350 degrees F (175 degrees C) and lightly grease a 2 quart baking dish.

In a large skillet over medium-high heat, stir and cook ground beef, onion and celery until juices run clear. Drain. Pour mixture into baking dish with vegetable soup and thyme; stir well. Spread mashed potatoes on top.

Bake 20 minutes. Sprinkle shredded cheese on top and bake 5 minutes more, or until cheese has melted.

NutInfoPerServing: Calories: 336 Total Fat: 16.7g Cholesterol: 70mg Sodium: 818mg Total Carbs: 25.3g Dietary Fiber: 2.8g Protein: 22g

ServSize: 6

TotalCookTime: 40 mins

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Recipe3:

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Name: American Chop Suey

Ingredients: 1 pound lean ground beef 1/2 cup chopped celery 1/2 cup chopped onion 1 (14.5 ounce) can stewed tomatoes 2 (15 ounce) cans spaghetti with sauce

Method:

In a large skillet, brown the beef with the celery and onion until the onion is tender. Add the tomatoes and spaghetti and heat, stirring all together. Serve with garlic bread and a dinner salad if desired. SO easy!

NutInfoPerServing: Calories: 250 Total Fat: 12.5g Cholesterol: 46mg Sodium: 565mg Total Carbs: 21g Dietary Fiber: 4.1g Protein: 13g

ServSize: 8

TotalCookTime: 20 mins

Recipe4:

"Name: American Lasagne

Ingredients:

1 1/2 pounds lean ground beef 1 onion, chopped 2 cloves garlic, minced 1 tablespoon chopped fresh basil 1 teaspoon dried oregano 2 tablespoons brown sugar 1 1/2 teaspoons salt 1 (29 ounce) can diced tomatoes 2 (6 ounce) cans tomato paste 12 dry lasagna noodles 2 eggs, beaten 1 pint part-skim ricotta cheese 1/2 cup grated Parmesan cheese 2 tablespoons dried parsley 1 teaspoon salt 1 pound mozzarella cheese, shredded 2 tablespoons grated Parmesan cheese

Method:

In a skillet over medium heat, brown ground beef, onion and garlic; drain fat. Mix in basil, oregano, brown sugar, 1 1/2 teaspoons salt, diced tomatoes and tomato paste. Simmer for 30 to 45 minutes, stirring occasionally.

Preheat oven to 375 degrees F (190 degrees C). Bring a large pot of lightly salted water to a boil. Add lasagna noodles, and cook for 5 to 8 minutes, or until al dente; drain. Lay noodles flat on towels, and blot dry.

In a medium bowl, mix together eggs, ricotta, Parmesan cheese, parsley and 1 teaspoon salt.

Layer 1/3 of the lasagna noodles in the bottom of a 9x13 inch baking dish. Cover noodles with 1/2 ricotta mixture, 1/2 of the mozzarella cheese and 1/3 of the sauce. Repeat. Top with remaining noodles and sauce. Sprinkle additional Parmesan cheese over the top. Bake in the preheated oven 30 minutes. Let stand 10 minutes before serving.

NutInfoPerServing: Calories: 1061 Total Fat: 39.8g Cholesterol: 185mg Sodium: 1958mg Total Carbs: 112.4g Dietary Fiber: 6.2g Protein: 62.5g

ServSize: 8

TotalCookTime: 120 mins

Recipe5 :

Name: American-Style Red Beans and Rice

Ingredients: 1 tablespoon olive oil 1 (15 ounce) can kidney beans 1 1/2 cups tomato sauce 4 1/2 cups water, divided 1/2 teaspoon dried oregano 1/2 teaspoon dried basil 1 pinch dried thyme salt and pepper to taste 5 teaspoons adobo seasoning, divided 2 cups uncooked white rice

In a large saucepan combine olive oil, kidney beans, tomato sauce, 1/2 cup water, oregano, basil, thyme, salt, pepper and 2 teaspoons adobo. Simmer on low heat. Meanwhile, bring 4 cups water to a boil. Add rice and stir. Reduce heat, cover and simmer for 20 minutes, or until rice is cooked and all liquid is absorbed. Stir in remaining 3 teaspoons adobo. Serve beans over the rice.

NutInfoPerServing: Calories: 517 Total Fat: 5g Cholesterol: 0mg Sodium: 926mg Total Carbs: 103g Dietary Fiber: 10.2g Protein: 14.6g

ServSize: 4

TotalCookTime: 35 mins

Recipe6 :

Name: Asian Lettuce Wraps

Ingredients: 4 cups water 2 cups uncooked white rice 1 tablespoon vegetable oil 1 pound ground pork 1 bunch green onions, thinly sliced 1/2 teaspoon minced garlic 1 (14 ounce) package firm tofu, drained and cubed 2 carrots, shredded 3 tablespoons hoisin sauce 2 tablespoons soy sauce 1 teaspoon sesame oil 1/4 teaspoon hot chile paste 1 head iceberg lettuce leaves, separated

In a saucepan combine the water and rice. Bring to a boil, cover, and reduce heat to a simmer. Simmer for 20 minutes, until water is absorbed. Set aside and keep warm.

Heat oil in a wok over medium-high heat. Cook the pork, green onions, and garlic for 5 to 7 minutes, or until lightly brown. Add the tofu, carrot, Hoisin, and soy sauce, stirring frequently until heated through. Remove from heat, and stir in the sesame oil and chile paste.

To serve: spoon a small amount of rice into each lettuce leaf, top with the stir-fry mixture, and drizzle with additional soy sauce or hoisin, if desired. Wrap the lettuce leaf to enclose the filling.

NutInfoPerServing: Calories: 837 Total Fat: 31g Cholesterol: 74mg Sodium: 781mg Total Carbs: 95.2g Dietary Fiber: 8.4g Protein: 46g

ServSize: 4

TotalCookTime: 47 mins

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Recipe7:

Name: Asian Style Meatloaf

Ingredients: 1 1/2 pounds ground beef 1/2 pound ground pork 3 slices bread, broken up into small pieces 2 eggs, lightly beaten 1 small onion, finely chopped 2 stalks celery, finely chopped 3 tablespoons soy sauce 1 tablespoon minced fresh ginger 2 tablespoons hoisin sauce 1/2 cup hoisin sauce 2 tablespoons ketchup

Preheat oven to 350 degrees F (175 degrees C).

In a large bowl, mix together the beef, pork, bread crumbs, eggs, onion, and celery. Season with 3 tablespoons soy sauce, ginger, and 2 tablespoons hoisin sauce. Pat mixture into a shallow 2 quart baking pan.

Bake in preheated oven for 40 minutes.

Drain grease from pan. In a small bowl, mix 1/2 cup hoisin with 2 tablespoons ketchup. Spread over top of meatloaf. Continue baking for 20 minutes or so. Remove from oven, and let rest for 5 minutes.

NutInfoPerServing: Calories: 438 Total Fat: 30.9g Cholesterol: 147mg Sodium: 857mg Total Carbs: 16.3g Dietary Fiber: 1.2g Protein: 22.5g

ServSize: 8

TotalCookTime: 82 mins

Recipe8:

Name: Asian Style Zucchini

Ingredients: 1 teaspoon butter 1 large zucchini, halved lengthwise and cut into 1 inch slices 2 tablespoons soy sauce, divided 1/2 cup sesame seeds garlic powder to taste ground black pepper to taste

Method:

Melt the butter in a skillet over medium heat. Stir in the zucchini, and cook until lightly browned. Sprinkle with soy sauce and sesame seeds. Season with garlic powder and pepper, and continue cooking until zucchini is well coated and tender.

NutInfoPerServing: Calories: 129 Total Fat: 10.1g Cholesterol: 3mg Sodium: 472mg Total Carbs: 7.6g Dietary Fiber: 3.2g Protein: 4.6g

ServSize: 4

TotalCookTime: 20 mins

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Recipe9:

Name: Asian Turkey BBQ

Ingredients: 1/3 cup hoisin sauce 1/4 cup barbeque sauce 1 tablespoon minced fresh ginger root 2 tablespoons sesame oil, divided 3 cups cooked, chopped turkey meat salt and pepper to taste 1/2 cup diced green onions, divided 4 English muffins, split

Method:

Preheat the broiler.

In a large saucepan over medium heat, whisk together hoisin sauce, barbeque sauce, ginger and 1 tablespoon sesame oil. Mix in turkey, salt, pepper and green onions, gently tossing until all ingredients are well blended. Cook approximately 10 minutes.

In a small bowl, mix the remaining sesame oil and remaining green onions. Brush the cut sides of the English muffins lightly with the mixture. Place the muffin halves face up on a medium baking sheet.

Broil English muffins 2 minutes, or until lightly toasted. Remove from heat and top with turkey mixture. Serve warm.

NutInfoPerServing:

Calories: 431 Total Fat: 13.9g Cholesterol: 80mg Sodium: 751mg Total Carbs: 38g Dietary Fiber: 1.1g Protein: 36.9g

ServSize: 4

TotalCookTime: 25 mins

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Recipe10:

Name: Baked Asian Style Honey Chicken

Ingredients:

- 1 (3 pound) whole chicken, cut into pieces
- 3 tablespoons chopped onion
- 2 tablespoons soy sauce
- 1 tablespoon minced fresh ginger root
- 1 teaspoon minced garlic
- 2 tablespoons honey
- 1/4 cup chopped green onions

Method:

To Marinate: Arrange chicken pieces in a 9x3 inch baking dish. In a small bowl combine the onion, soy sauce, ginger, garlic and honey; mix together and spoon mixture over chicken. Cover dish and refrigerate to marinate for 1 hour, turning pieces once. Preheat oven to 425 degrees F (220 degrees C).

Bake chicken at 425 degrees F (220 degrees C) for 30 minutes. Turn pieces over and top with green onion, then continue baking for about 10 to 15 minutes, or until chicken is tender and cooked through and juices run clear. Serve immediately.

NutInfoPerServing: Calories: 620 Total Fat: 41.1g Cholesterol: 204mg Sodium: 558mg Total Carbs: 8.7g Dietary Fiber: 0.3g Protein: 51.2g

ServSize: 5

TotalCookTime: 105 mins

Recipe11:

Name: Asian Chicken Noodle Bowl

Ingredients:

3/4 teaspoon Asian five-spice powder

1/4 teaspoon pepper

1/8 teaspoon salt

1 pound Tyson" Fresh Boneless, Skinless Chicken Thighs

2 teaspoons vegetable oil

2 large cloves garlic, finely chopped

3 (14.5 ounce) cans low-sodium chicken broth

1 tablespoon soy sauce

1 (9 ounce) package fresh angel hair pasta

1 (6 ounce) bag baby spinach

Method:

Combine five-spice powder, pepper and salt in cup. Wash hands. Cut chicken into 1inch pieces. Rub spices onto chicken. Wash hands.

Heat oil in 2-quart stockpot over medium-high. Add chicken and cook about 5 minutes or until browned on all sides. Add garlic and cook about 1 minute or until fragrant. Add chicken broth and soy sauce; cover and bring to a boil. Uncover, reduce heat to simmer and cook 3 minutes. Add pasta; simmer 1 minute or until tender. Add spinach; stir just until wilted.

SERVING SUGGESTION: Ladle individual servings into deep bowls and top with thinly sliced green onions. Refrigerate leftovers.

TIP:

To substitute Tyson Individually Fresh Frozen[®] Boneless, Skinless Chicken Thighs, rinse off ice glaze before cutting and increase cooking time by about one-third.

NutInfoPerServing:

Calories: 406 Total Fat: 10.9g Cholesterol: 147mg Sodium: 624mg Total Carbs: 40.6g Dietary Fiber: 3.8g Protein: 36.1g

ServSize: 4

TotalCookTime: 30 mins

Recipe12:

Name: Beef Samosas

Ingredients:

2 large potatoes, peeled 1 cup frozen peas, thawed 2 tablespoons vegetable oil 1/2 teaspoon cumin seeds 1 bay leaf, crushed 2 large onions, finely chopped 1 pound ground beef 4 cloves garlic, crushed 1 tablespoon minced fresh ginger root 1/2 teaspoon ground black pepper 1 1/2 teaspoons salt 1 teaspoon ground cumin 1 teaspoon ground coriander 1 teaspoon ground turmeric 1 teaspoon chili powder 1/2 teaspoon ground cinnamon 1/2 teaspoon ground cardamom 2 tablespoons chopped fresh cilantro 2 tablespoons chopped green chile peppers 1 quart oil for deep frying

1 (16 ounce) package phyllo dough

Bring a medium saucepan of lightly salted water to a boil. Stir in potatoes and peas. Cook until potatoes are tender but still firm, about 15 minutes. Drain, mash together and set aside.

In a large saucepan over medium high heat, heat the oil. Brown cumin seeds and bay leaf. Mix in onions and ground beef. Cook until beef is evenly brown and onions are soft, about 5 minutes. Mix in garlic, fresh ginger root. Season with black pepper, salt, cumin, coriander, turmeric, chili powder, cinnamon and cardamom. Stir in the mashed potato mixture. Remove from heat and chill in the refrigerator for 1 hour, or until cool. Heat oil in a large, heavy saucepan over high heat.

Mix cilantro and green chile peppers into the potato and beef mixture. Place approximately 1 tablespoon of the mixture onto each phyllo sheet. Fold sheets into triangles, pressing edges together with moistened fingers.

In small batches, fry until golden brown, about 3 minutes. Drain on paper towels and serve warm.

NutInfoPerServing: Calories: 242 Total Fat: 14.8g Cholesterol: 21mg Sodium: 345mg Total Carbs: 20.2g Dietary Fiber: 1.9g Protein: 7.2g

ServSize: 18

TotalCookTime: 40 mins

Recipe13:

Name: Chicken Biryani

Ingredients: 4 tablespoons vegetable oil 4 small potatoes, peeled and halved 2 large onions, finely chopped 2 cloves garlic, minced 1 tablespoon minced fresh ginger root 1/2 teaspoon chili powder

1/2 teaspoon ground black pepper 1/2 teaspoon ground turmeric 1 teaspoon ground cumin 1 teaspoon salt 2 medium tomatoes, peeled and chopped 2 tablespoons plain yogurt 2 tablespoons chopped fresh mint leaves 1/2 teaspoon ground cardamom 1 (2 inch) piece cinnamon stick 3 pounds boneless, skinless chicken pieces cut into chunks 2 1/2 tablespoons vegetable oil 1 large onion, diced 1 pinch powdered saffron 5 pods cardamom 3 whole cloves 1 (1 inch) piece cinnamon stick 1/2 teaspoon ground ginger 1 pound basmati rice 4 cups chicken stock 1 1/2 teaspoons salt

Method:

In a large skillet, in 2 tablespoons vegetable oil (or ghee) fry potatoes until brown, drain and reserve the potatoes. Add remaining 2 tablespoons oil to the skillet and fry onion, garlic and ginger until onion is soft and golden. Add chili, pepper, turmeric, cumin, salt and the tomatoes. Fry, stirring constantly for 5 minutes. Add yogurt, mint, cardamom and cinnamon stick. Cover and cook over low heat, stirring occasionally until the tomatoes are cooked to a pulp. It may be necessary to add a little hot water if the mixture becomes too dry and starts to stick to the pan.

When the mixture is thick and smooth, add the chicken pieces and stir well to coat them with the spice mixture. Cover and cook over very low heat until the chicken is tender, approximately 35 to 45 minutes. There should only be a little very thick gravy left when chicken is finished cooking. If necessary cook uncovered for a few minutes to reduce the gravy.

Wash rice well and drain in colander for at least 30 minutes.

In a large skillet, heat vegetable oil (or ghee) and fry the onions until they are golden. Add saffron, cardamom, cloves, cinnamon stick, ginger and rice. Stir continuously until the rice is coated with the spices.

In a medium-size pot, heat the chicken stock and salt. When the mixture is hot pour it over the rice and stir well. Add the chicken mixture and the potatoes; gently mix them into the rice. Bring to boil. Cover the saucepan tightly, turn heat to very low and steam

for 20 minutes. Do not lift lid or stir while cooking. Spoon biryani onto a warm serving dish.

NutInfoPerServing: Calories: 821 Total Fat: 36g Cholesterol: 131mg Sodium: 1544mg Total Carbs: 70.8g Dietary Fiber: 4.9g Protein: 47.3g

ServSize: 7

TotalCookTime: 120 mins

Recipe14:

Name: Chicken Fry

Ingredients:

2 tablespoons vegetable oil

1 pound skinless, boneless chicken breast halves

1 onion, sliced

1 teaspoon ginger garlic paste

2 green chile peppers, chopped

3 teaspoons ground coriander seed

1 teaspoon garam masala

1/2 teaspoon ground turmeric

1 teaspoon chili powder

1 pinch ground nutmeg

1 tablespoon fresh chopped cilantro, for garnish

salt to taste

Method:

Heat oil in a pan. Add onions, green chilies, garam masala powder, ginger-garlic paste and fry until onions turn golden brown. Add chicken pieces, turmeric, nutmeg, pepper and chili powders and let cook for 5 to 6 minutes. Add salt and additional coriander powder to taste and cook until done. Garnish with cilantro if desired, and serve. NutInfoPerServing: Calories: 176 Total Fat: 7.1g Cholesterol: 53mg Sodium: 102mg Total Carbs: 5.1g Dietary Fiber: 1.7g Protein: 21.9g

ServSize: 5

TotalCookTime: 15 mins

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Recipe15:

Name: Chicken Makhni

Ingredients:

1 tablespoon peanut oil

1 shallot, finely chopped

1/4 white onion, chopped

2 tablespoons butter

2 teaspoons lemon juice

1 tablespoon ginger garlic paste

1 teaspoon garam masala

1 teaspoon chili powder

1 teaspoon ground cumin

1 bay leaf

1/4 cup plain yogurt

1 cup half-and-half

1 cup tomato puree

1/4 teaspoon cayenne pepper, or to taste

1 pinch salt

1 pinch black pepper

1 tablespoon peanut oil

1 pound boneless, skinless chicken thighs, cut into bite-size pieces

1 teaspoon garam masala

1 pinch cayenne pepper 1 tablespoon cornstarch 1/4 cup water

Method:

Heat 1 tablespoon oil in a large saucepan over medium high heat. Saute shallot and onion until soft and translucent. Stir in butter, lemon juice, ginger-garlic paste, 1 teaspoon garam masala, chili powder, cumin and bay leaf. Cook, stirring, for 1 minute. Add tomato sauce, and cook for 2 minutes, stirring frequently. Stir in half-and-half and yogurt. Reduce heat to low, and simmer for 10 minutes, stirring frequently. Season with salt pepper. Remove from heat and set aside.

Heat 1 tablespoon oil in a large heavy skillet over medium heat. Cook chicken until lightly browned, about 10 minutes. Reduce heat, and season with 1 teaspoon garam masala and cayenne. Stir in a few spoonfuls of sauce, and simmer until liquid has reduced, and chicken is no longer pink. Stir cooked chicken into sauce.

Mix together cornstarch and water, then stir into the sauce. Cook for 5 to 10 minutes, or until thickened.

Note:

Garam masala may be purchased in Indian markets and in the gourmet section of some supermarkets.

NutInfoPerServing: Calories: 409 Total Fat: 27.8g Cholesterol: 107mg Sodium: 638mg Total Carbs: 15.9g Dietary Fiber: 2.3g Protein: 23.4g

ServSize: 4

TotalCookTime: 25 mins

Recipe16:

Name: Curried Chicken and Potatoes

Ingredients: 2 tablespoons olive oil 1 teaspoon cumin seed 1/2 teaspoon garam masala 1/4 teaspoon ground cardamom 1/4 teaspoon cayenne pepper 1/2 teaspoon black mustard seed 1/2 teaspoon black mustard seed 1/2 teaspoon salt 2 cloves garlic, minced 2 (4 ounce) chicken thighs, cut into bite size pieces 2 medium potatoes, diced 2 roma (plum) tomatoes, diced 1/2 bunch Swiss chard, chopped 1 (8 ounce) container plain yogurt

Method:

In a large skillet, heat oil over medium heat. In hot oil, cook cumin seeds, garam masala, cardamom, cayenne pepper, mustard seeds, salt, and garlic. When seeds start to pop, stir in chicken and potatoes. Cook for 15 minutes, or until chicken is nearly done. Stir in tomatoes, chard, and yogurt. Cover, and cook 15 minutes more, or until potatoes are tender and chicken is cooked through.

NutInfoPerServing: Calories: 251 Total Fat: 13.7g Cholesterol: 35mg Sodium: 427mg Total Carbs: 18.6g Dietary Fiber: 2.6g Protein: 14.2g

ServSize: 4

TotalCookTime: 50 mins

Recipe17:

Name: Indian Cauliflower

Ingredients:

large head cauliflower
 tablespoons vegetable oil
 teaspoon ground turmeric
 small onion, minced
 tomatoes, pureed
 teaspoon garlic powder
 teaspoons garam masala (optional)
 salt to taste
 head lettuce

Method:

Preheat the oven to 350 degrees F (175 degrees C). Cut off most of the cauliflower's stem and place the whole head in a baking dish.

Heat two tablespoons of oil and turmeric together in a small frying pan. Brush the cauliflower head with the oil and turmeric mixture.

Bake the cauliflower for 30 minutes.

While the cauliflower is cooking heat two tablespoons of oil in a frying pan, mix in the minced onions and saute until the are a medium brown color. Add the pureed tomatoes, garlic powder, garam masala and salt. Let this mixture simmer for 10 minutes.

Arrange lettuce leaves on a serving plate. Place the cauliflower on top of the lettuce. Pour the tomato curry over the cauliflower. Serve hot.

NutInfoPerServing: Calories: 168 Total Fat: 11.9g Cholesterol: 0mg Sodium: 63mg Total Carbs: 14.7g Dietary Fiber: 6.3g Protein: 4.6g

ServSize: 5

TotalCookTime: 50 mins

Recipe18:

Name: Indian Shrimp

Ingredients: 1 tablespoon tomato paste 1/2 teaspoon salt 1 teaspoon white sugar 1 teaspoon garam masala 1/2 teaspoon ground cumin 1/8 teaspoon ground red pepper 3 tablespoons finely chopped fresh cilantro 1 fresh jalapeno pepper, chopped 1 tablespoon fresh lemon juice 1 cup coconut milk 3 tablespoons vegetable oil 1 teaspoon black mustard seed 3 cloves garlic, minced 1 1/4 pounds medium shrimp - peeled and deveined 1 tablespoon cornstarch

1 tablespoon cold water

Method:

In a medium bowl, stir together tomato paste, salt, sugar, garam masala, ground cumin seed, ground red pepper, cilantro, jalapeno pepper, lemon juice, and coconut milk. Set coconut sauce aside.

Heat oil in a wok or frying pan over medium-high heat. When oil is hot, add the mustard seeds, and cook until they begin to pop. Immediately stir in garlic, and cook until garlic begins to brown. Add shrimp, and cook until shrimp is opaque; this should take only a minute or two. Pour the coconut sauce over the shrimp; cook until the sauce begins to simmer. In a small bowl, mix together cornstarch and water; stir into the sauce, and continue cooking until thick.

NutInfoPerServing: Calories: 338 Total Fat: 23.9g Cholesterol: 216mg Sodium: 582mg Total Carbs: 7.3g Dietary Fiber: 1.5g Protein: 25g

ServSize: 4

TotalCookTime: 30 mins

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Recipe19:

Name: Indian Chicken Curry

Ingredients: 8 bone-in chicken breast halves, skinless salt and pepper to taste 1 tablespoon olive oil 2 onions, peeled and quartered 1 teaspoon finely chopped fresh ginger root 1 teaspoon crushed garlic 1 tablespoon hot (Madras) curry powder 1 (15 ounce) can tomato sauce 1 (10 ounce) can coconut milk 4 whole cloves 4 pods cardamom 1 cinnamon stick salt to taste

Method:

Rinse chicken and pat dry; season with salt and pepper to taste. Heat oil in a large skillet over medium high heat, then saute chicken until browned. Remove chicken from skillet and set aside.

Saute onions in skillet until translucent; add ginger and garlic and saute until fragrant, then stir in curry powder.

Return chicken to skillet and add tomato sauce, coconut milk, cloves, cardamom and cinnamon stick. Season with salt to taste and stir all together.

Reduce heat to low and simmer until chicken is tender and cooked through (no longer pink inside), about 20 to 25 minutes.

NutInfoPerServing: Calories: 309 Total Fat: 15.3g Cholesterol: 81mg Sodium: 499mg Total Carbs: 11.1g Dietary Fiber: 2.8g Protein: 33g ServSize: 6

TotalCookTime: 45 mins

Recipe20:

Name: Indian Daal With Spinach

Ingredients: 1 1/2 cups red lentils 3 1/2 cups water 1/2 teaspoon salt 1/2 teaspoon ground turmeric 1/2 teaspoon chili powder 1 pound spinach, rinsed and chopped 2 tablespoons butter 1 onion, chopped 1 teaspoon ground cumin 1 teaspoon mustard seed 1 teaspoon garam masala 1/2 cup coconut milk

Method:

Rinse lentils and soak for 20 minutes.

In a large saucepan, bring water to a boil and stir in salt, lentils, turmeric and chili powder. Cover and return to a boil, then reduce heat to low and simmer for 15 minutes. Stir in the spinach and cook 5 minutes, or until lentils are soft. Add more water if necessary.

In a small saucepan over medium heat, melt butter and saute onions with cumin and mustard seeds, stirring often. Cook until onions are transparent, and then combine with lentils. Stir in garam masala and coconut milk and cook until heated through

NutInfoPerServing: Calories: 362 Total Fat: 13.4g Cholesterol: 16mg Sodium: 717mg Total Carbs: 44.9g Dietary Fiber: 18.3g Protein: 21g

ServSize: 4

TotalCookTime: 40 mins

Recipe21:

Name: Indian Tomato Chicken

Ingredients:

1 large onion, chopped

4 cloves garlic, chopped

1 slice fresh ginger root

1 tablespoon olive oil

2 teaspoons ground cumin

1 teaspoon ground turmeric

1 teaspoon salt

1 teaspoon ground black pepper

1/2 teaspoon ground cardamom

1 (1 inch) piece cinnamon stick, chopped

1/4 teaspoon ground cloves

2 bay leaves

1/4 teaspoon ground nutmeg

6 skinless chicken thighs

1 (14.5 ounce) can whole peeled tomatoes, crushed

Method:

Place onion, garlic and ginger in a food processor and process into a paste. Heat oil in a large skillet over medium heat, add onion paste and saute, stirring continuously, for about 10 minutes.

Stir in the cumin, turmeric, salt, pepper, cardamom, cinnamon, cloves, bay leaves and nutmeg. Saute, stirring, for 1 to 2 minutes. Place chicken pieces in skillet and stir them around with the spice mixture until they are well coated.

Saute for another 4 minutes, then pour in the tomatoes with liquid and stir. Reduce heat to low and simmer for 1 to 2 hours, or until the oil has separated from the liquid. Stir

occasionally. (Note: If you simmer uncovered, the sauce will thicken; add water, or keep covered while simmering.)

NutInfoPerServing: Calories: 134 Total Fat: 5.4g Cholesterol: 57mg Sodium: 550mg Total Carbs: 7g Dietary Fiber: 1.6g Protein: 14.8g

ServSize: 6

TotalCookTime: 135 mins

Recipe22:

Name: Matar Paneer

Ingredients: 1 gallon whole milk 1 lemon, juiced 2 teaspoons olive oil

1 tablespoon cumin seeds

1 onion, finely chopped

1 red bell pepper, finely chopped

1/2 cup canned whole kernel corn

1/2 cup frozen peas

1/2 teaspoon garam masala

1/2 teaspoon ground turmeric

1/2 teaspoon chili powder

1/4 cup chopped fresh cilantro

Method:

In a large saucepan, bring the milk to a boil. Stir in the lemon juice. Continue cooking 15 minutes, stirring constantly, until curds have formed. Using a cheese cloth, separate the cheese from remaining liquid, and set aside.

Heat the olive oil in a skillet over medium heat. Stirring constantly, cook the cumin seeds and onion in the skillet until golden brown. Mix in the bell pepper, corn, and peas. Season with garam masala, turmeric, and chili powder. Continue to cook and stir 10 minutes, until vegetables are tender.

Mix the cheese into the skillet. Reduce heat to low, cover, and continue cooking 10 minutes. Sprinkle with cilantro to serve.

NutInfoPerServing: Calories: 681 Total Fat: 35.9g Cholesterol: 137mg Sodium: 554mg Total Carbs: 60.4g Dietary Fiber: 4.2g Protein: 35g

ServSize: 4

TotalCookTime: 65 mins

Recipe23:

Name: Palak Paneer

Ingredients: 6 tablespoons olive oil 2 cloves garlic, chopped 1 tablespoon grated fresh ginger root 2 dried red chile peppers 1/2 cup finely chopped onion 2 teaspoons ground cumin 1 teaspoon ground coriander 1 teaspoon ground turmeric 3/4 cup sour cream 3 pounds fresh spinach, torn 1 large tomato, quartered 4 sprigs fresh cilantro leaves 8 ounces ricotta cheese coarse sea salt to taste

In a large saucepan heat 3 tablespoons of olive oil and saute garlic, 1/2 tablespoon of ginger, red chilies (optional ingredient) and onion until brown. Mix in the cumin, coriander, turmeric and sour cream (add more or less to achieve desired creaminess). Add the spinach, handfuls at a time until it is cooked down, about 15 minutes total. Remove from heat and allow to cool slightly.

Pour spinach mixture into a blender or food processor and add the tomato, the remaining 1/2 tablespoon of ginger, and cilantro (add more or less according to taste). Blend for 15 to 30 seconds, or until the spinach is finely chopped. Pour back into the saucepan and keep warm over low heat.

In a medium frying pan heat 3 tablespoons of olive oil over medium heat, and fry cheese until browned; drain and add to spinach. Cook for 10 minutes on low heat. Season with salt to taste.

NutInfoPerServing: Calories: 483 Total Fat: 36.3g Cholesterol: 37mg Sodium: 544mg Total Carbs: 27.2g Dietary Fiber: 9.9g Protein: 19.5g

ServSize: 4

TotalCookTime: 45 mins

Recipe24:

Name: Eggplant Indian Style

Ingredients: 2 1/2 pounds eggplant 2/3 cup clarified butter 1 cup chopped onions 4 large ripe tomatoes, chopped 4 teaspoons crushed coriander seed

Method:

Preheat oven to 325 degrees F (165 degrees C).

Half eggplant(s) and bake for 20 minutes, or until tender. Using a potato masher or pastry blender, crush eggplant.

Heat clarified butter in a medium skillet over medium heat; saute onions until translucent. Stir in tomatoes and eggplant; cook, stirring, until liquid evaporated. Remove from heat and sprinkle with coriander.

NutInfoPerServing: Calories: 533 Total Fat: 39.7g Cholesterol: 87mg Sodium: 839mg Total Carbs: 44.5g Dietary Fiber: 11.2g Protein: 7.1g

ServSize: 4

TotalCookTime: 40 mins

Recipe25:

Name: Baked Ziti

Ingredients: 1 (16 ounce) package ziti pasta 24 ounces ricotta cheese 1 pound shredded mozzarella cheese 1 egg, beaten 1 (32 ounce) jar spaghetti sauce 1/4 cup grated Parmesan cheese

Method:

Bring a large pot of lightly salted water to a boil. Add ziti and cook for 8 to 10 minutes or until al dente; drain and rinse.

In a medium bowl, mix ziti, ricotta cheese, mozzarella cheese, egg and 1 1/2 cups spaghetti sauce.

Preheat oven to 375 degrees F (190 degrees C).

Lightly grease a 9x13 inch baking dish and spoon in ziti mixture. Top with remaining spaghetti sauce, followed by Parmesan cheese.

Bake in preheated oven for 30 minutes; let stand for 15 minutes before serving.

NutInfoPerServing: Calories: 657 Total Fat: 27.1g Cholesterol: 114mg Sodium: 971mg Total Carbs: 65.6g Dietary Fiber: 3.6g Protein: 36.1g

ServSize: 7

TotalCookTime: 60 mins

Recipe26: " Name: Basil Pesto Sandwich

Ingredients: 1 slice focaccia bread, cut in half horizontally 1 tablespoon mayonnaise 2 teaspoons basil pesto 2 tablespoons sun-dried tomato pesto 1/4 cup roasted red peppers 1/2 cup crumbled feta cheese 1/2 cup fresh basil leaves

Method:

In a small bowl, mix together mayonnaise and basil pesto; spread onto one half of bread. Spread other half with sun-dried tomato pesto. Arrange roasted red peppers on bottom piece. Cover with feta cheese, then fresh basil. Top with remaining slice of bread.

NutInfoPerServing: Calories: 721 Total Fat: 50.2g Cholesterol: 124mg Sodium: 2127mg Total Carbs: 40.9g Dietary Fiber: 3.5g Protein: 26.9g

ServSize: 1

TotalCookTime: 10 mins

Recipe27:

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Name: Brick Oven Pizza

Ingredients: 1 teaspoon active dry yeast 1/4 cup warm water 1 cup cold water 1 teaspoon salt 3 cups bread flour6 ounces low moisture mozzarella cheese, thinly sliced 1/2 cup no salt added canned crushed tomatoos

1/2 cup no salt added canned crushed tomatoes

1/4 teaspoon freshly ground black pepper

1/2 teaspoon dried oregano

3 tablespoons extra-virgin olive oil

6 leaves fresh basil, torn

Method:

Sprinkle yeast over warm water in a large bowl. Let stand for 5 minutes to proof. Stir in salt and cold water, then stir in the flour about 1 cup at a time. When the dough is together enough to remove from the bowl, knead on a floured surface until smooth, about 10 minutes. Divide into two pieces, and form each one into a tight ball. Coat the dough balls with olive oil, and refrigerate in a sealed container for at least 16 hours. Be sure to use a big enough container to allow the dough to rise. Remove the dough from the refrigerator one hour prior to using.

Preheat the oven, with a pizza stone on the lowest rack, to 550 degrees F. Lightly dust a pizza peel with flour.

Using one ball of dough at a time, lightly dust the dough with flour, and stretch gradually until it is about 14 inches in diameter, or about as big around as the pizza stone. Place on the floured peel. Place thin slices of mozzarella over the crust, then grind

a liberal amount of black pepper over it. Sprinkle with dried oregano. Randomly arrange crushed tomatoes, leaving some empty areas. Drizzle olive oil over the top.

With a quick back and forth jerk, make sure the dough will release from the peel easily. Place the tip of the peel at the back of the preheated pizza stone, and remove peel so that the pizza is left on the stone.

Bake for 4 to 6 minutes in the preheated oven, or until the crust begins to brown. Remove from the oven by sliding the peel beneath the pizza. Sprinkle a few basil leaves randomly over the pizza. Cut into wedges and serve.

NutInfoPerServing: Calories: 146 Total Fat: 4.8g Cholesterol: 6mg Sodium: 197mg Total Carbs: 19.4g Dietary Fiber: 0.8g Protein: 5.8g

ServSize: 16

TotalCookTime: 2071 mins

Recipe28:

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Name: Cavatini

Ingredients: 1/4 cup butter 1 onion, chopped 1 green bell pepper, chopped 2 (4.5 ounce) cans sliced mushrooms, drained 2 pounds lean ground beef 1 (15 ounce) can tomato sauce 1 (32 ounce) jar spaghetti sauce 4 ounces chopped ham 1/2 cup cooked and cubed chicken 3 ounces sliced pepperoni sausage 1/4 teaspoon crushed red pepper flakes salt to taste ground black pepper to taste 3/4 cup seashell pasta 6 ounces rotini pasta 2 pounds mozzarella cheese, shredded 2 tablespoons grated Parmesan cheese

Method:

In a small skillet, saute onions, green peppers, and mushrooms in butter or margarine. Set aside.

Brown hamburger in a large skillet over medium heat. Drain. Mix in tomato sauce, pasta sauce, chopped ham, chopped chicken or turkey, pepperoni, salt, and red and black pepper. Add vegetable saute to hamburger mixture.

Cook pasta according to package directions. Drain.

Spread a little sauce over the bottom of two 9 x 13 inch pans. In each pan, place a layer of pasta, a layer of mozarella cheese, a hamburger sauce layer, a sprinkling of Parmesan cheese, and another layer of mozarella cheese. Repeat layers. Cover pans.

Bake at 350 degrees F (175 degrees C) for 30 to 45 minutes.

NutInfoPerServing: Calories: 480 Total Fat: 29.6g Cholesterol: 95mg Sodium: 1010mg Total Carbs: 21.6g Dietary Fiber: 2.4g Protein: 31.3g

ServSize: 16

TotalCookTime: 75 mins

Recipe29:

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Name: Chicago-Style Pan Pizza

Ingredients: 1 (1 pound) loaf frozen bread dough, thawed 1 pound bulk Italian sausage 2 cups shredded mozzarella cheese

- 8 ounces sliced fresh mushrooms
- 1 small onion, chopped
- 2 teaspoons olive oil
- 1 (28 ounce) can diced tomatoes, drained
- 3/4 teaspoon dried oregano
- 1/2 teaspoon salt
- 1/4 teaspoon fennel seed
- 1/4 teaspoon garlic powder
- 1/2 cup freshly grated Parmesan cheese

Preheat the oven to 350 degrees F (175 degrees C). Press the dough into the bottom and up the sides of a greased 9x13 inch baking dish.

Crumble the sausage into a large skillet over medium-high heat. Cook and stir until evenly browned. Remove the sausage with a slotted spoon, and sprinkle over the dough crust. Sprinkle mozzarella cheese evenly over the sausage.

Add mushrooms and onion to the skillet; cook and stir until the onion is tender. Stir in the tomatoes, oregano, salt, fennel seed and garlic powder. Spoon over the mozzarella cheese. Sprinkle Parmesan cheese over the top.

Bake for 25 to 35 minutes in the preheated oven, or until crust is golden brown.

NutInfoPerServing: Calories: 568 Total Fat: 27.2g Cholesterol: 69mg Sodium: 1634mg Total Carbs: 48.3g Dietary Fiber: 4.2g Protein: 33.3g

ServSize: 6

TotalCookTime: 65 mins

Recipe30:

Name: Chicken Mushroom Linguini

Ingredients: 6 ounces sliced fresh mushrooms 1 onion, chopped 1/4 cup butter 2 pounds boneless skinless chicken breasts, cut into 1 inch pieces 1/4 cup all-purpose flour 1 teaspoon salt 2 cups chicken broth 1 cup sour cream 1 (12 ounce) package dried linguine pasta 1/2 teaspoon minced garlic ground black pepper to taste

Method:

Bring a large pot of lightly salted water to a boil. Add linguine pasta, and cook until tender, about 8 minutes. Drain.

Meanwhile, melt butter in a large skillet over medium heat. Add onion and mushrooms, and cook until tender. Remove the onions and mushrooms from the skillet with a slotted spoon; set aside.

Add chicken pieces to the pan, and sprinkle with garlic. Cook and stir until evenly browned, and cooked through.

Whisk the flour and salt into the pan drippings until smooth. Gradually whisk in the chicken broth, and simmer over low heat until slightly thickened. Return the mushrooms and garlic to the pan, and stir in sour cream. Cook until heated through, but do not boil. Serve over linguine pasta.

NutInfoPerServing: Calories: 561 Total Fat: 19.7g Cholesterol: 125mg Sodium: 923mg Total Carbs: 49.6g Dietary Fiber: 2.8g Protein: 46g

ServSize: 6

TotalCookTime: 30 mins

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Recipe31:

Name: Chicken Alfredo with Fettucini Noodles

Ingredients:

1 pound fettuccini pasta

1 1/2 cups butter, divided

1 pound skinless, boneless chicken breast halves - cut into cubes

2 (16 ounce) containers whole milk ricotta cheese

1 pint heavy cream

1 teaspoon salt

1 cup grated Parmesan cheese

Method:

Bring a large pot of lightly salted water to a boil. Add fettuccini and cook for 8 to 10 minutes or until al dente; drain.

Melt 2 tablespoons butter in a large skillet over medium heat. Saute chicken until no longer pink and juices run clear.

In a large saucepan combine ricotta cheese, cream, salt, Parmesan cheese and remaining butter. Cook over medium heat until well combined, about 10 minutes. Stir in cooked fettuccini and chicken; cook until heated through.

NutInfoPerServing: Calories: 1028 Total Fat: 76.8g Cholesterol: 275mg Sodium: 1031mg Total Carbs: 46.9g Dietary Fiber: 1.9g Protein: 40.1g

ServSize: 8

TotalCookTime: 35 mins

Recipe32:

Name: Chicken and Asparagus Fettuccine

Ingredients: 12 ounces dry fettuccini pasta 2 cups 1 inch pieces fresh asparagus 1/2 cup butter 2 cups half-and-half cream 1/4 teaspoon garlic powder 1/4 teaspoon ground black pepper 1 pinch cayenne pepper 3/4 cup grated Parmesan cheese 1/2 pound cooked chicken breasts - cut into bite size pieces

Method:

Bring a large pot of lightly salted water to a boil. Add pasta, and cook for 8 to 10 minutes, or until al dente. Add the asparagus during the last 3 to 5 minutes of cooking. Drain, and transfer to a large bowl.

In a large saucepan over medium heat, combine butter and half-and-half. Cook until thick and bubbly. Season with garlic powder, black pepper, and cayenne pepper. Stir in Parmesan cheese and chicken, and heat through.

Pour sauce over pasta and asparagus, and toss to coat.

NutInfoPerServing: Calories: 572 Total Fat: 31.1g Cholesterol: 113mg Sodium: 454mg Total Carbs: 46.9g Dietary Fiber: 2.9g Protein: 28g

ServSize: 6

TotalCookTime: 40 mins

Recipe33:

Name: Italian Tacos

Ingredients: 1/2 pound Italian sausage pound ground beef
 (16 ounce) jar tomato pasta sauce
 teaspoon sugar
 taco shells, heated
 cups shredded mozzarella cheese
 tablespoon dried Italian seasoning

Method:

Combine the ground beef and Italian sausage in a large heavy skillet. Cook over medium heat until evenly browned. Drain off excess grease, and season meat with Italian seasoning.

Heat the pasta sauce in a saucepan over medium heat until heated through. When the sauce is warm, stir in the sugar.

Fill taco shells with the meat mixture, spoon pasta sauce over, and top with mozzarella cheese.

NutInfoPerServing: Calories: 252 Total Fat: 14.6g Cholesterol: 37mg Sodium: 398mg Total Carbs: 16.6g Dietary Fiber: 2.1g Protein: 13.8g

ServSize: 16

TotalCookTime: 25 mins

Recipe34:

Name: Lamb Casserole

Ingredients: 2 sprigs fresh parsley 2 sprigs fresh thyme 2 bay leaves 2 pounds lamb shank, cooked and diced 1 pound cubed ham steak 10 small onions 5 tomatoes - blanched, peeled and chopped

2 cloves garlic, chopped

4 cups chicken stock

2 (15 ounce) cans cannellini beans, drained and rinsed

6 links pork sausage links, halved

Method:

Tie the sprigs of parsley and thyme together with the bay leaves or place them in a cheesecloth and tie closed, because you will want to easily remove the herbs later. Place the herb bundle, lamb, ham, onion, tomato, garlic and stock in a large saucepan over medium-high heat.

Bring to a boil, reduce heat to low and simmer for about 1 hour. Stir in the beans and sausage and continue to simmer for about 15 minutes, or more if you want a thicker consistency.

NutInfoPerServing: Calories: 741 Total Fat: 41.1g Cholesterol: 160mg Sodium: 2240mg Total Carbs: 35.9g Dietary Fiber: 9g Protein: 54.5g

ServSize: 6

TotalCookTime: 110 mins

Recipe35:

Name: Muffuletta Sandwich

Ingredients: 1 (1 pound) loaf fresh Italian bread 1/3 cup olive oil 1/3 cup grated Parmesan cheese 1 tablespoon dried basil 1 tablespoon dried oregano 8 oil-cured black olives, pitted and chopped 8 pitted green olives, chopped 1/4 pound thinly sliced salami 1/4 pound thinly sliced ham 1/2 pound provolone cheese, sliced 1/4 pound mozzarella cheese, sliced

Method:

Slice bread in half lengthwise. Drizzle olive oil on both sides. Sprinkle both sides with parmesan cheese, basil and oregano.

On the bottom half, layer chopped black olives and chopped green olives, then the salami, ham, provolone, and mozzarella. Cover with top layer, and cut into 4 servings.

NutInfoPerServing: Calories: 1002 Total Fat: 61.5g Cholesterol: 111mg Sodium: 2410mg Total Carbs: 60.9g Dietary Fiber: 3.9g Protein: 49.4g

ServSize: 4

TotalCookTime: 15 mins

Recipe36:

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Name: Spinach Alfredo Pizza

Ingredients:

1 (10 ounce) package frozen chopped spinach, thawed and drained

1 (10 ounce) container Alfredo Sauce

1 (6 ounce) can sliced mushrooms, drained

1 (10 ounce) can artichoke hearts, drained and quartered

1/2 cup grated Parmesan cheese

4 cups shredded mozzarella cheese

2 unbaked pizza crusts

2 tablespoons olive oil

1 (2.25 ounce) can sliced black olives (optional)

Method:

Preheat the oven to 350 degrees F (175 degrees C). Spread pizza crusts out onto baking sheets or pizza pans.

Place the spinach and Alfredo sauce in a saucepan, and warm over medium heat. Stir occasionally. Spread 1tablespoon of olive oil onto each pizza crust. Spoon half of the Alfredo and spinach onto each crust, then arrange artichoke hearts over the sauce layer. Top each pizza with half of the mozzarella cheese and Parmesan cheese. Sprinkle mushrooms and black olives on top.

Bake pizzas one at a time for 20 minutes in the preheated oven, or until the bottom is nicely browned.

NutInfoPerServing: Calories: 266 Total Fat: 14g Cholesterol: 26mg Sodium: 797mg Total Carbs: 22g Dietary Fiber: 2g Protein: 13.5g

ServSize: 16

TotalCookTime: 50 mins

Recipe37:

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Name: Quick Spinach-Ricotta Calzones

Ingredients: 1 (11.3 ounce) can refrigerated dinner rolls, at room temperature Cornmeal for rolling 2 tablespoons olive oil 1 medium onion, finely chopped 2 (10 ounce) packages frozen chopped spinach, thawed and squeezed dry 2 large garlic cloves, minced 1/4 teaspoon ground nutmeg Salt and pepper, to taste 1 cup ricotta cheese 1 cup grated mozzarella cheese 1/4 cup Parmesan cheese Olive oil, for brushing Your favorite marinara-style pasta sauce

Method:

Separate rolls onto a cornmeal-sprinkled work surface. Cover with plastic wrap and let rest while preparing filling.

Heat oil in 12-inch skillet over medium-high heat. Add onion; saute until tender and golden, 2 to 3 minutes. Add spinach, garlic and nutmeg; saute, breaking up large clumps with a wooden spoon, until heated through, 2 to 3 minutes. Add salt and pepper. Transfer to a medium bowl; stir in ricotta. Let cool; stir in remaining cheeses.

Adjust oven rack to center position and heat oven to 450 degrees.

Sprinkling with cornmeal as necessary, roll out each roll into a 7-inch circle. Spoon a scant 1/2 cup of filling just below the center line, leaving a 1-inch border along the bottom half of the dough circle. Spoon filling just below the center line of the circle of dough, leaving a border along the bottom half of the circle. With wet fingertips, moisten the bottom border. Fold dough over filling and press edges together. Thoroughly seal by using fingertips to crimp and flute the edges or by pressing with the tines of a fork. Place on a large cookie sheet lined with parchment paper. (At this point, can be frozen up to 2 weeks.)

Brush tops with oil. Bake until golden brown, about 16 minutes (longer if frozen). Let cool slightly and serve with warm marinara sauce.

NutInfoPerServing: Calories: 276 Total Fat: 11.7g Cholesterol: 20mg Sodium: 618mg Total Carbs: 29.2g Dietary Fiber: 4.1g Protein: 15.6g

ServSize: 8

TotalCookTime: 30 mins

Recipe38:

Name: Stuffed Banana Peppers

Ingredients:

8 banana peppers 2 tablespoons butter 1/2 cup chopped onion 1/2 cup chopped celery 1 (28 ounce) can crushed tomatoes 1 (8 ounce) can tomato sauce 2 cloves garlic, minced 1 teaspoon dried basil 1 teaspoon dried oregano 2 1/2 teaspoons salt, divided 1/2 teaspoon ground black pepper, divided 1 egg 1 teaspoon Worcestershire sauce 1/2 cup grated Parmesan cheese 1 pound hot Italian sausage 1 pound mild Italian sausage $1 \frac{1}{2}$ cups bread crumbs

Method:

Cut off tops of peppers, and remove ribs and seeds. Chop edible portions of tops; set aside. Bring a large pot of salted water to a boil. Add peppers, reduce heat, and simmer until tender but still firm, about 5 minutes. Drain and set aside.

Heat butter in a medium skillet. Saute reserved chopped pepper, onion and celery until tender, 3 to 5 minutes. Stir in crushed tomatoes, tomato sauce and garlic. Season with basil, oregano, 1 1/2 teaspoons salt and 1/4 teaspoon pepper. Simmer uncovered for 10 minutes. Preheat oven to 350 degrees F (175 degrees C).

Meanwhile, in a large mixing bowl, combine egg, 1 teaspoon salt, 1/4 teaspoon pepper, Worcestershire sauce and Parmesan. Mix in hot sausage, mild sausage, bread crumbs and 1 cup of the tomato sauce mixture.

Using a piping bag or sausage stuffer, fill each pepper with the meat mixture. Place in a 3 quart casserole dish, and pour remaining tomato sauce mixture over peppers.

Bake uncovered in preheated oven for 1 hour.

NutInfoPerServing: Calories: 596 Total Fat: 42.6g Cholesterol: 126mg Sodium: 2203mg Total Carbs: 29.1g Dietary Fiber: 4.8g Protein: 25.1g ServSize: 8

TotalCookTime: 120 mins

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Recipe39:

Name: Vietnamese Fresh Spring Rolls

Ingredients:

2 ounces rice vermicelli

8 rice wrappers (8.5 inch diameter)

8 large cooked shrimp - peeled, deveined and cut in half

1 1/3 tablespoons chopped fresh Thai basil

3 tablespoons chopped fresh mint leaves

3 tablespoons chopped fresh cilantro

2 leaves lettuce, chopped

4 teaspoons fish sauce

1/4 cup water

2 tablespoons fresh lime juice

1 clove garlic, minced

2 tablespoons white sugar

1/2 teaspoon garlic chili sauce

3 tablespoons hoisin sauce

1 teaspoon finely chopped peanuts

Method:

Bring a medium saucepan of water to boil. Boil rice vermicelli 3 to 5 minutes, or until al dente, and drain.

Fill a large bowl with warm water. Dip one wrapper into the hot water for 1 second to soften. Lay wrapper flat. In a row across the center, place 2 shrimp halves, a handful of vermicelli, basil, mint, cilantro and lettuce, leaving about 2 inches uncovered on each side. Fold uncovered sides inward, then tightly roll the wrapper, beginning at the end with the lettuce. Repeat with remaining ingredients.

In a small bowl, mix the fish sauce, water, lime juice, garlic, sugar and chili sauce.

In another small bowl, mix the hoisin sauce and peanuts.

Serve rolled spring rolls with the fish sauce and hoisin sauce mixtures.

NutInfoPerServing: Calories: 84 Total Fat: 0.7g Cholesterol: 11mg Sodium: 306mg Total Carbs: 16.1g Dietary Fiber: 0.5g Protein: 3.4g

ServSize: 8

TotalCookTime: 50 mins

Recipe40:

Name: Fried Squid With Pineapple

Ingredients: 2 tablespoons vegetable oil 3 cloves garlic, minced 1 onion, cut into wedges 2 pounds squid, cleaned and cut into 1/2 inch rings 1/2 fresh pineapple - peeled, cored and chopped 4 stalks celery, cut into 2 inch pieces 4 tablespoons fish sauce 1 teaspoon white sugar 1 teaspoon ground black pepper

Method:

In a large skillet over medium high heat, heat the and the garlic. Fry until garlic is golden brown.

Add onion and stir-fry for 1 minute. Add squid and cook until they just turn white (do not overcook). Add the pineapple, celery, fish sauce, sugar and pepper. Stir fry for 2 minutes.

NutInfoPerServing: Calories: 329 Total Fat: 10.3g Cholesterol: 529mg Sodium: 1231mg Total Carbs: 20.8g Dietary Fiber: 2.1g Protein: 37.1g

ServSize: 4

TotalCookTime: 20 mins

Recipe41:

Name: Szechuan Spicy Eggplant

Ingredients:

1 large eggplant, diced 4 tablespoons soy sauce

1/4 cup chicken stock

1 teaspoon chili sauce

1 teaspoon white sugar

1/2 teaspoon ground black pepper

2 tablespoons oyster sauce

1 tablespoon cornstarch

4 tablespoons water

2 cloves garlic, minced

4 large green onions, finely chopped

1 tablespoon chopped fresh ginger root

1/2 pound medium shrimp - peeled and deveined

1 pound lean ground beef

1 tablespoon vegetable or sesame oil

Method:

Remove the eggplant stem and cut into 1-inch cubes. In a medium bowl, combine the soy sauce, chicken stock, chili sauce, sugar, ground black pepper and oyster sauce. Stir together well and set aside. In a separate small bowl, combine the cornstarch and water, and set aside.

Coat a large, deep pan with cooking spray over high heat and allow a few minutes for it to get very hot. Saute the garlic, half of the green onions, ginger and shrimp for 3 to 5 minutes, stirring constantly, until they begin to brown. Stir in the ground beef and cook for 3 more minutes, again stirring constantly, until browned.

Pour the eggplant into the pan and stir all together. Pour the reserved soy sauce mixture over all, cover the pan, reduce heat to medium low and let simmer for 15 minutes, stirring occasionally. Stir in the reserved cornstarch mixture and let heat until thickened. Finally, stir in the rest of the green onions and the sesame oil.

NutInfoPerServing: Calories: 457 Total Fat: 28.2g Cholesterol: 171mg Sodium: 1183mg Total Carbs: 15.6g Dietary Fiber: 4.2g Protein: 34.5g

ServSize: 4

TotalCookTime: 30 mins

Recipe42:

Name: Fast and Easy Tofu Lo-Mein

Ingredients:

1 (16 ounce) package extra firm tofu

- 2 tablespoons olive oil
- 2 (3 ounce) packages Oriental flavored ramen noodles
- 1 (16 ounce) package frozen stir-fry vegetables
- 1 1/2 cups water
- 1 tablespoon soy sauce, or to taste

Method:

Press tofu between paper towels to remove some of the water; cut in to bite size cubes. Heat olive oil in large skillet over medium-high heat. Add tofu, and fry until golden brown, about 15 minutes. Stir occasionally to prevent burning.

Meanwhile bring water to a boil in a medium saucepan. Add noodles from ramen packages, reserving the seasoning envelopes. Boil for about 2 minutes, just until the noodles break apart. Drain.

Add the stir-fry vegetables to the pan with the tofu, and season with the ramen noodle seasoning packet. Cook, stirring occasionally until vegetables are tender, but not mushy. Add noodles, and stir to blend. Season with soy sauce to taste and serve.

NutInfoPerServing: Calories: 388 Total Fat: 20.3g Cholesterol: 1mg Sodium: 1341mg Total Carbs: 38.6g Dietary Fiber: 3.9g Protein: 17.6g

ServSize: 4

TotalCookTime: 30 mins

Recipe43:

Name: Warm Goat Cheese Sandwiches

Ingredients: 1 (5 ounce) goat cheese, softened 1/2 cup basil pesto 3/4 cup sun-dried tomatoes, softened and chopped 2 pita breads, cut in half

Method:

Preheat the oven to 350 degrees F (175 degrees C).

Open the pita bread halves up into pockets. Spread goat cheese onto one side of the inside of each pita pocket. Spread a layer of pesto over the goat cheese. Sprinkle with sun-dried tomatoes. Place pita halves onto a baking sheet.

Bake for 3 to 5 minutes in the preheated oven, just until the filling is warm, and the bread is lightly toasted.

NutInfoPerServing: Calories: 393 Total Fat: 25.5g Cholesterol: 38mg Sodium: 794mg Total Carbs: 25.3g Dietary Fiber: 2.8g Protein: 17.4g

ServSize: 4

TotalCookTime: 25 mins

Recipe44: " Name: Mediterranean Pasta

Ingredients: 1/2 (8 ounce) package uncooked spaghettini 1/2 cup sun-dried tomatoes, packed without oil 1 tablespoon olive oil 1/2 cup chopped red onion 3 cloves garlic, sliced 1/2 cup sliced fresh mushrooms 1/4 cup sliced green olives 1/4 cup Italian seasoned bread crumbs freshly ground black pepper to taste

Method:

Bring a medium pot of lightly salted water to a boil. Add pasta and cook for 8 to 10 minutes or until al dente; drain. Place sun-dried tomatoes into a small pot, and add water to cover. Bring to a boil over medium-high heat, and cook for about 5 minutes, or until tender. Drain, chop, and set aside.

Heat olive oil in a large skillet over medium-low heat. Fry onion and garlic in the oil until onions are transparent, about 5 minutes. Add the mushrooms and sun-dried tomatoes; cook over low heat for about 5 minutes. Throw in the spaghettini, and toss to coat. Mix in the green olives. Serve hot with bread crumbs and lots of black pepper on top.

NutInfoPerServing: Calories: 218 Total Fat: 10.9g Cholesterol: 0mg Sodium: 1034mg Total Carbs: 26.7g Dietary Fiber: 3.4g Protein: 6.4g

ServSize: 2

TotalCookTime: 25 mins

Recipe45:

Name: Mexican Vegetable Rice

Ingredients:

- 2 tablespoons canola oil
- 1 cup diced onion
- 2 teaspoons minced garlic
- 1 1/2 cups white rice
- 1 1/2 teaspoons salt
- 3/4 teaspoon cayenne pepper
- 3 cups vegetable stock
- 1 (10 ounce) package frozen mixed peas and carrots, thawed
- 1 1/2 cups tomatoes, deseeded and diced
- 2 tablespoons chopped fresh parsley
- 2 green onions, chopped (optional)

Method:

In a large saute pan, saute onion, garlic, and rice in canola oil until onion is soft and rice is opaque. Add salt, cayenne pepper, and vegetable stock to the pan. Bring the liquid to a boil. Cover the pan and reduce heat to low, simmer for 20 minutes or until all of the liquid is absorbed.

Add vegetables and tomatoes. Cover pan and allow to sit for 5 minutes. Turn off heat. Sprinkle top of rice with parsley and green onions.

NutInfoPerServing: Calories: 227 Total Fat: 4.9g Cholesterol: 0mg Sodium: 655mg Total Carbs: 41.3g Dietary Fiber: 3g Protein: 5.1g

ServSize: 7

TotalCookTime: 15 mins

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Recipe46:

Name: Nut Burgers

Ingredients:

1/2 cup finely chopped walnuts
1/2 cup unsalted sunflower seeds
1 cup canned chickpeas, drained
1/4 cup diced red onion
1 beaten egg
1 tablespoon chopped fresh parsley
1/4 teaspoon fresh ground black pepper
1 tablespoon salt-free herb seasoning blend
2 tablespoons olive oil
2 slices mild Cheddar cheese
1 pita bread round
1/4 cup prepared Ranch salad dressing
2 leaves romaine lettuce
1 medium tomato, thinly sliced
1/2 avocado - peeled, pitted and sliced

Method:

Place walnuts and sunflower seeds in a dry skillet over medium heat. Cook, stirring occasionally until lightly toasted and fragrant, about 5 minutes.

In a medium bowl, mash garbanzo beans with a fork, or chop in a food processor. Stir in the onion, egg, parsley, and toasted nuts. Season with pepper and seasoning blend, and mix well.

Heat olive oil in a skillet over medium heat. Divide the bean mixture into 2 patties, and fry in the hot oil for about 3 minutes on each side, or until well browned and heated through. Place a slice of cheese over each patty, and remove from heat.

Place the pita round in the same dry skillet the nuts were in, and heat for about 1 minute on each side. Cut the round in half, spread ranch dressing inside of each, and line the pockets with romaine leaves. Place a cheesy patty into each one, and top with sliced tomato and avocado. Serve with tortilla or potato chips.

NutInfoPerServing: Calories: 1148 Total Fat: 88.1g Cholesterol: 144mg Sodium: 1029mg Total Carbs: 65.1g Dietary Fiber: 15.6g Protein: 34g

ServSize: 2

TotalCookTime: 25 mins

Recipe47:

Name: Portabello Mushroom Stroganoff

Ingredients: 3 tablespoons butter 1 large onion, chopped 3/4 pound portobello mushrooms, sliced 1 1/2 cups vegetable broth 1 1/2 cups sour cream 3 tablespoons all-purpose flour 1/4 cup chopped fresh parsley 8 ounces dried egg noodles

Method:

Bring a large pot of lightly salted water to a boil. Add egg noodles, and cook until al dente, about 7 minutes. Remove from heat, drain, and set aside.

At the same time, melt butter in a large heavy skillet over medium heat. Add onion, and cook, stirring until softened. Turn the heat up to medium-high, and add sliced

mushrooms. Cook until the mushrooms are limp and browned. Remove to a bowl, and set aside.

In the same skillet, stir in vegetable broth, being sure to stir in any browned bits off the bottom of the pan. Bring to a boil, and cook until the mixture has reduced by 1/3. Reduce heat to low, and return the mushrooms and onion to the skillet.

Remove the pan from the heat, stir together the sour cream and flour; then blend into the mushrooms. Return the skillet to the burner, and continue cooking over low heat, just until the sauce thickens. Stir in the parsley, and season to taste with salt and pepper. Serve over cooked egg noodles.

NutInfoPerServing: Calories: 514 Total Fat: 29.5g Cholesterol: 107mg Sodium: 527mg Total Carbs: 51.9g Dietary Fiber: 3.8g Protein: 13.5g

ServSize: 4

TotalCookTime: 30 mins

Recipe48:

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Name: Vegetarian Chilli

Ingredients:

1 (28 ounce) can diced tomatoes with juice

1 small onion, diced

- 1 (15 ounce) can white beans, drained
- 1 (15 ounce) can chili beans, with liquid
- 1 (1.25 ounce) package reduced sodium taco seasoning mix
- 1 (1 ounce) package ranch dressing mix
- 1 (12 ounce) package vegetarian burger crumbles
- 1 (8 ounce) package shredded Cheddar cheese (optional)

Method:

Mix the tomatoes, onion, white beans, chili beans, taco seasoning mix, and ranch dressing mix in a large pot over medium heat. Bring to a boil. Reduce heat to low, mix in

the burger crumbles, and continue cooking until heated through. Top with cheese to serve

NutInfoPerServing: Calories: 435 Total Fat: 15.7g Cholesterol: 39mg Sodium: 1691mg Total Carbs: 45g Dietary Fiber: 10g Protein: 29.6g

ServSize: 6

TotalCookTime: 15 mins

Recipe49:

Name: Zucchini Crab Cakes

Ingredients: 2 1/2 cups grated zucchini 1 egg, beaten 2 tablespoons butter, melted 1 cup bread crumbs 1/4 cup minced onion 1 teaspoon Old Bay Seasoning TM 1/4 cup all-purpose flour 1/2 cup vegetable oil for frying

Method:

In a large bowl, combine zucchini, egg, and butter or margarine. Stir in seasoned crumbs, minced onion, and seasoning. Mix well.

Shape mixture into patties. Dredge in flour.

In a medium skillet, heat oil over medium high heat until hot. Fry patties in oil until golden brown on both sides.

NutInfoPerServing: Calories: 195 Total Fat: 9.2g Cholesterol: 55mg Sodium: 357mg Total Carbs: 23g Dietary Fiber: 1.6g Protein: 5.4g

ServSize: 5

TotalCookTime: 30 mins

"

Recipe50:

Name: Cabbage Fat-Burning Soup

Ingredients: 5 carrots, chopped 3 onions, chopped 2 (16 ounce) cans whole peeled tomatoes, with liquid 1 large head cabbage, chopped 1 (1 ounce) envelope dry onion soup mix 1 (15 ounce) can cut green beans, drained 2 quarts tomato juice 2 green bell peppers, diced 10 stalks celery, chopped 1 (14 ounce) can beef broth

Method:

Place carrots, onions, tomatoes, cabbage, green beans, peppers, and celery in a large pot. Add onion soup mix, tomato juice, beef broth, and enough water to cover vegetables. Simmer until vegetables are tender. May be stored in the refrigerator for several days.

NutInfoPerServing: Calories: 93 Total Fat: 0.6g Cholesterol: 0mg Sodium: 479mg Total Carbs: 21g Dietary Fiber: 6g Protein: 4.2g

ServSize: 15

TotalCookTime: 45 mins

Recipe51:

Name: Healthier Chicken a la King

Ingredients: 3 tablespoons chopped onion 2 tablespoons all-purpose flour 1 teaspoon salt 1 cup milk 1/2 pound cooked, cubed chicken meat 1 hard-boiled egg, sliced 1 1/3 cups cooked spinach 3 tablespoons chopped onions

Method:

Place onion in a medium saucepan over low heat and sprinkle with flour and salt. Stir together and add milk. Bring to a boil and cook until thickened. Mix in chicken, egg and spinach. Heat through and serve.

NutInfoPerServing: Calories: 354 Total Fat: 9.5g Cholesterol: 212mg Sodium: 1424mg Total Carbs: 19.2g Dietary Fiber: 3.6g Protein: 47.1g

ServSize: 2

TotalCookTime: 20 mins

Recipe52:

"

Name: Spicy Potatoes and Scrambled Eggs

Ingredients: 2 potatoes, scrubbed 4 tablespoons vegetable oil, divided 3 eggs salt and pepper to taste 1/2 teaspoon ground cumin 1/2 teaspoon ground coriander 1/2 teaspoon turmeric powder 1/2 teaspoon chili powder 1/2 teaspoon salt

Method:

Poke potatoes with a fork so that their skins are pierced. Microwave potatoes on high until cooked inside. When potatoes are fully cooked, peel potatoes and cut potatoes to 1/8 size or to your liking. Set potatoes aside.

Add 2 tablespoons oil to skillet and scramble 3 eggs. Add salt and pepper to taste. Keep warm until potatoes are ready.

In another skillet, heat 2 tablespoons oil until hot. Then add salt, cumin, coriander and turmeric powder. Put in chili powder if you want it really spicy. Add potatoes and cook until potatoes are crispy and brown. Spicy potatoes and scrambled eggs are now ready to serve!

NutInfoPerServing: Calories: 198 Total Fat: 17.6g Cholesterol: 159mg Sodium: 344mg Total Carbs: 5.3g Dietary Fiber: 1g Protein: 5.2g

ServSize: 4

TotalCookTime: 25 mins

"

Recipe53:

Name: Spicy Garlic and Pepper Shrimp

Ingredients: 2 1/2 tablespoons vegetable oil 1/4 cup water 1 cup shredded cabbage 1 tablespoon minced garlic 8 large fresh shrimp, peeled and deveined 2 teaspoons crushed red pepper flakes 2 tablespoons sliced onion 1 tablespoon chopped fresh cilantro 1 tablespoon soy sauce

Method:

Heat 1 tablespoon oil in a skillet over high heat. Add cabbage and 1 tablespoon water stir-fry for 30 seconds. Remove cabbage from skillet and place on a serving platter. Heat the remaining 1 1/2 tablespoons oil in the skillet over high heat. Place the garlic and shrimp in the skillet and stir until garlic is lightly browned and shrimp turns pink. Add pepper, onion, cilantro, soy sauce and remaining water to the skillet. Stir-fry for 10 seconds. Pour the hot mixture onto the cabbage.

NutInfoPerServing: Calories: 405 Total Fat: 35.8g Cholesterol: 85mg Sodium: 1031mg Total Carbs: 11.8g Dietary Fiber: 3.3g Protein: 12.2g

ServSize: 1

TotalCookTime: 35 mins

Recipe54:

"

Name: Cherry Chicken Lettuce Wraps

Ingredients:

2 tablespoons canola oil
1 tablespoon minced fresh ginger root
1 1/4 pounds skinless, boneless chicken breast halves, cut into bite size pieces
2 tablespoons rice vinegar
2 tablespoons teriyaki sauce
1 tablespoon honey
1 pound dark sweet cherries, pitted and halved
1 1/2 cups shredded carrots
1/2 cup chopped green onion
1/3 cup toasted and sliced almonds

12 leaves of lettuce

Method:

Heat 1 tablespoon oil in a large skillet over medium high heat. Add ginger and chicken and saute until cooked through, about 7 to 10 minutes. Set aside.

In a large bowl, whisk together remaining 1 tablespoon oil, vinegar, teriyaki sauce and honey until mixed together. Add chicken mixture, cherries, carrot, green onion and almonds; toss together.

To Serve: Spoon 1/12 of the chicken/cherry mixture onto the center of each lettuce leaf; roll up leaf around filling and serve.

NutInfoPerServing: Calories: 283 Total Fat: 10.9g Cholesterol: 55mg Sodium: 129mg Total Carbs: 22.4g Dietary Fiber: 4.2g Protein: 25.1g

ServSize: 6

TotalCookTime: 25 mins

Recipe55:

"

" Name: Montreal Salsa Chicken

Ingredients: 1 pound boneless, skinless chicken breasts 1 1/2 teaspoons McCormick^{°°} Grill Mates^{°°} Montreal Chicken Seasoning 1/2 cup mild salsa 1/3 cup apricot preserves 1 tablespoon lemon juice 1 teaspoon McCormick^{°°} Chili Powder

Method:

Sprinkle chicken with Montreal Chicken Seasoning. In a small bowl, stir together salsa, preserves, lemon juice, and chili powder.

Grill chicken over medium coals 6-7 minutes per side or until done. Brush with salsa mixture during the last 3 minutes of grilling.

NutInfoPerServing: Calories: 204 Total Fat: 1.6g Cholesterol: 66mg Sodium: 306mg Total Carbs: 20.4g Dietary Fiber: 1.2g Protein: 27g

ServSize: 4

TotalCookTime: 20 mins

Recipe56:

Name: Low Fat Chicken Tostadas

Ingredients: 1 1/2 pounds skinless, boneless chicken breast halves - cooked 3 cups shredded romaine lettuce 1/2 cup chopped green bell pepper1/2 cup chopped tomatoes6 (6 inch) flour tortillas6 tablespoons fat free sour cream6 cups salsa6 tablespoons shredded Cheddar cheese

Method:

In a large bowl combine the chicken, lettuce, green bell pepper, tomatoes and onions. Mix together and set aside.

Heat tortillas by placing them in a large dry skillet over medium high heat and turning once until golden and puffy.

To Assemble Tostadas: Place a tortilla on a plate, top with some of the chicken mixture and garnish with sour cream, salsa and cheese. Repeat with all tortillas.

NutInfoPerServing: Calories: 409 Total Fat: 9.2g Cholesterol: 99mg Sodium: 1416mg Total Carbs: 39.2g Dietary Fiber: 6.1g Protein: 42.7g

ServSize: 6

TotalCookTime: 30 mins

Recipe57:

Name: Vegetarian Chickpea Sandwich

Ingredients:

1 (19 ounce) can garbanzo beans, drained and rinsed

1 stalk celery, chopped

1/2 onion, chopped

1 tablespoon mayonnaise

1 tablespoon lemon juice

1 teaspoon dried dill weed

salt and pepper to taste

bread as desired

Method:

Drain and rinse chickpeas. Pour chickpeas into a medium size mixing bowl and mash with a fork. Mix in celery, onion, mayonnaise (to taste), lemon juice, dill, salt and pepper to taste. Put on bread as desired.

NutInfoPerServing: Calories: 258 Total Fat: 5.8g Cholesterol: 3mg Sodium: 577mg Total Carbs: 43.5g Dietary Fiber: 8.5g Protein: 9.4g

ServSize: 3

TotalCookTime: 20 mins

Recipe58:

Name: Barbecue Tofu Sandwiches

Ingredients: 1 (12 ounce) package extra firm tofu 3 tablespoons vegetable oil 1 onion, thinly sliced 1 1/2 cups barbecue sauce 6 hamburger buns

Method:

Drain the tofu between paper towels until most of the water has been squeezed out. Slice tofu into 1/4 inch thick slices.

Heat vegetable oil in a large skillet, fry tofu strips until golden brown on both sides. Add onion and cook for a few minutes, until onion is at your desired consistency.

Pour in barbeque sauce (use more or less, according to your taste). Cook the mixture for ten minutes on low and serve on buns.

NutInfoPerServing: Calories: 291 Total Fat: 13.7g Cholesterol: 0mg Sodium: 756mg Total Carbs: 32.3g Dietary Fiber: 2.5g Protein: 10.8g

ServSize: 6

TotalCookTime: 15 mins

Recipe59:

Name: Chicken a la Creme

Ingredients: 1/4 cup butter 1 1/2 pounds chicken breast tenderloins or strips salt and pepper to taste 1 pint heavy cream

Method:

Melt half of the butter in a large skillet over medium-high heat. Season chicken tenders with salt and pepper, and saute them in butter until golden on all sides, about 10 minutes. Add the remaining butter, reduce heat to medium, and cook for 5 more minutes.

Pour the heavy cream into the skillet, and simmer gently for 5 minutes, stirring occasionally, until the sauce has thickened and chicken is cooked through. Best when served with fresh French bread for dipping.

NutInfoPerServing: Calories: 466 Total Fat: 38.4g Cholesterol: 195mg Sodium: 246mg Total Carbs: 2.2g Dietary Fiber: 0g Protein: 27.9g

ServSize: 6

TotalCookTime: 22 mins

Recipe60:

Name: Grilled Delmonico Steaks

Ingredients: 1/2 cup olive oil 1/4 cup Worcestershire sauce 6 tablespoons soy sauce 1/4 cup minced garlic 1/2 medium onion, chopped 2 tablespoons salt 1 tablespoon pepper 1 tablespoon crushed dried rosemary 3 tablespoons steak seasoning 3 tablespoons steak sauce (e.g. A-1) 4 (10 ounce) Delmonico (rib-eye) steaks

Method:

Combine the olive oil, Worcestershire sauce, soy sauce, garlic, onion, salt, pepper, rosemary, steak seasoning, and steak sauce in the container of a food processor or blender. Process until well blended.

Prick steaks on both sides with a fork, and place in a shallow container with a lid. Pour marinade over steaks, cover, and refrigerate at least 3 hours, or overnight.

Preheat an outdoor grill for medium heat, or light charcoal, and wait until coals are completely white. Soaked wood chips may be added to the coals when ready for a smoky flavor, if you like.

Remove steaks from marinade, and discard the marinade. Lightly oil the grilling surface, and place steaks on the grill. Cover, and grill steaks for about 10 minutes on each side, or to your desired degree of doneness.

NutInfoPerServing: Calories: 723 Total Fat: 59.7g Cholesterol: 104mg Sodium: 7339mg Total Carbs: 14.6g Dietary Fiber: 1.6g Protein: 31.9g ServSize: 4

TotalCookTime: 210 mins

"

Appendix C:

- Lactose intolerance: foods to avoid Bread Margarine Milk Cream Butter Yogurt whole milk Cheese Whey Orange sherbet
- Diabetes: foods to avoid Brown sugar Corn sweetener Corn sugar Fruit juice concentrate Honey Molasses Sugar syrup

High cholesterol: foods to avoid Eggs red meat Cheese Butter Bacon Beef Whole milk Coconut oil Palm oil Sesame oil Prawn Oyster Cream

Pregnancy: foods to avoid

Sushi Rare beef Raw eggs Mayonnaise Blue cheese Feta cheese Shark Swordfish King mackerel Tilefish Bluefish Striped bass Salmon Pike Trout Animal liver Raw sprout Heartburn: foods to avoid Orange juice Lemon Lemonade Grapefruit juice Cranberry juice Tomato Mashed potatoes French fries Raw onion Ground beef Marbled sirloin Chicken nuggets Buffalo wings Sour cream Cottage cheese Macaroni and cheese Spaghetti with sauce High Blood pressure:

High Blood pressure Cheese Canned vegetable Potato chips Tortilla chips Corn chips Hot dogs Bacon Sausage Smoked meats Processed meats Garlic salt Onion salt Ketchup Mustard Pickles

Appendix D

Rules

```
;;;;;;;;
                                     ;;;;;;;;
;;;;;;; These are the rules for the recipes ;;;;;;;
;;;;;;;;
                                     ;;;;;;;
(defrule rule1
(meat yes)
(cholWatch no)
(highCal yes)
(highFat yes)
(maxTime ?x)
(test (>= ?x 65))
(or (cuisine american) (cuisine any))
=>
(assert (recipe Recipe1)))
(defrule rule2
(meat yes)
(highCarb yes)
(meatDairy yes)
(dairy yes)
(bpWatch no)
(cholWatch no)
(highCal yes)
(highFat yes)
(maxTime ?x)
(test (>= ?x 40))
(or (cuisine american) (cuisine any))
```

=> (assert (recipe Recipe2))) (defrule rule3 (meat yes) (cholWatch no) (hbWatch no) (maxTime ?x) (test (>= ?x 20)) (or (cuisine american) (cuisine any)) => (assert (recipe Recipe3))) (defrule rule4 (meat yes) (meatDairy yes) (dairy yes) (bpWatch no) (cholWatch no) (hbWatch no) (highCal yes) (highFat yes) (maxTime ?x) (test (>= ?x 120)) (or (cuisine american) (cuisine any)) => (assert (recipe Recipe4))) (defrule rule5 (highCarb yes) (bpWatch no) (maxTime ?x) (test (>= ?x 35)) (or (cuisine american) (cuisine any)) => (assert (recipe Recipe5))) (defrule rule6 (meat yes) (highCarb yes) (pork yes) (bpWatch no) (cholWatch no) (highCal yes) (highFat yes) (maxTime ?x) (test (>= ?x 34)) (or (cuisine asian) (cuisine any)) => (assert (recipe Recipe6))) (defrule rule7 (meat yes)

```
(pork yes)
(dairy yes)
(bpWatch no)
(cholWatch no)
(hbWatch no)
(highFat yes)
(maxTime ?x)
(test (>= ?x 82))
(or (cuisine asian)
                            (cuisine any))
=>
(assert (recipe Recipe7)))
(defrule rule8
(meat yes)
(dairy yes)
(maxTime ?x)
(test (>= ?x 20))
(or (cuisine asian) (cuisine any))
=>
(assert (recipe Recipe8)))
(defrule rule9
(meat yes)
(spicy yes)
(cholWatch no)
(bpWatch no)
(maxTime ?x)
(test (>= ?x 25))
(or (cuisine asian) (cuisine any))
=>
(assert (recipe Recipe9)))
(defrule rule10
(meat yes)
(highCal yes)
(highFat yes)
(maxTime ?x)
(test (>= ?x 105))
(or (cuisine asian) (cuisine any))
=>
(assert (recipe Recipe10)))
(defrule rule11
(meat yes)
(highCarb yes)
(cholWatch no)
(maxTime ?x)
(test (>= ?x 30))
(or (cuisine asian) (cuisine any))
=>
(assert (recipe Recipe11)))
(defrule rule12
(meat yes)
```

```
(spicy yes)
(peanuts yes)
(hbWatch no)
(maxTime ?x)
(test (>= ?x 40))
(or (cuisine indian) (cuisine any))
=>
(assert (recipe Recipe12)))
(defrule rule13
(meat yes)
(spicy yes)
(highCarb yes)
(cholWatch no)
(bpWatch no)
(meatDairy yes)
(dairy yes)
(hbWatch no)
(highCal yes)
(highFat yes)
(maxTime ?x)
(test (>= ?x 120))
(or (cuisine indian) (cuisine any))
=>
(assert (recipe Recipe13)))
(defrule rule14
(meat yes)
(spicy yes)
(highFat yes)
(maxTime ?x)
(test (>= ?x 15))
(or (cuisine indian) (cuisine any))
=>
(assert (recipe Recipe14)))
(defrule rule15
(meat yes)
(spicy yes)
(meatDairy yes)
(cholWatch no)
(dairy yes)
(peanuts yes)
(hbWatch no)
(highFat yes)
(maxTime ?x)
(test (>= ?x 25))
(or (cuisine indian) (cuisine any))
=>
(assert (recipe Recipe15)))
```

(defrule rule16 (meat yes) (spicy yes) (dairy yes) (hbWatch no) (maxTime ?x) (test (>= ?x 50)) (or (cuisine indian) (cuisine any)) => (assert (recipe Recipe16))) (defrule rule17 (hbWatch no) (maxTime ?x) (test (>= ?x 50)) (or (cuisine indian) (cuisine any)) => (assert (recipe Recipe17))) (defrule rule18 (spicy yes) (seafood yes) (cholWatch no) (hbWatch no) (maxTime ?x) (test (>= ?x 30)) (or (cuisine indian) (cuisine any)) => (assert (recipe Recipe18))) (defrule rule19 (meat yes) (spicy yes) (dairy yes) (hbWatch no) (cholWatch no) (maxTime ?x) (test (>= ?x 45)) (or (cuisine indian) (cuisine any)) => (assert (recipe Recipe19))) (defrule rule20 (spicy yes) (highCarb yes) (maxTime ?x) (bpWatch no) (test (>= ?x 40)) (or (cuisine indian) (cuisine any)) => (assert (recipe Recipe20)))

(defrule rule21

```
(meat yes)
(hbWatch no)
(maxTime ?x)
(test (>= ?x 135))
(or (cuisine indian)
                              (cuisine any))
=>
(assert (recipe Recipe21)))
(defrule rule22
(spicy yes)
(highCarb yes)
(dairy yes)
(peanuts yes)
(cholWatch no)
(hbWatch no)
(highCal yes)
(highFat yes)
(maxTime ?x)
(test (>= ?x 65))
(or (cuisine indian) (cuisine any))
=>
(assert (recipe Recipe22)))
(defrule rule23
(meat yes)
(dairy yes)
(cholWatch no)
(hbWatch no)
(highFat yes)
(maxTime ?x)
(test (>= ?x 45))
(or (cuisine indian) (cuisine any))
=>
(assert (recipe Recipe23)))
(defrule rule24
(highCarb yes)
(dairy yes)
(cholWatch no)
(bpWatch no)
(highCal yes)
(highFat yes)
(maxTime ?x)
(test (>= ?x 40))
(or (cuisine indian) (cuisine any))
=>
(assert (recipe Recipe24)))
(defrule rule25
(highCarb yes)
(dairy yes)
(bpWatch no)
(cholWatch no)
(hbWatch no)
```

(highCal yes) (highFat yes) (maxTime ?x) (test (>= ?x 60)) (or (cuisine italian) (cuisine any)) => (assert (recipe Recipe25))) (defrule rule26 (highCarb yes) (dairy yes) (cholWatch no) (hbWatch no) (bpWatch no) (highCal yes) (highFat yes) (maxTime ?x) (test (>= ?x 10)) (pregWatch no) (or (cuisine italian) (cuisine any)) => (assert (recipe Recipe26))) (defrule rule27 (dairy yes) (bpWatch no) (cholWatch no) (hbWatch no) (maxTime ?x) (test (>= ?x 2071)) (or (cuisine italian) (cuisine any)) => (assert (recipe Recipe27))) (defrule rule28 (meat yes) (meatDairy yes) (pork yes) (dairy yes) (bpWatch no) (cholWatch no) (hbWatch no) (highFat yes) (maxTime ?x) (test (>= ?x 75)) (or (cuisine italian) (cuisine any)) => (assert (recipe Recipe28))) (defrule rule29 (meat yes) (meatDairy yes) (pork yes)

```
(dairy yes)
(bpWatch no)
(cholWatch no)
(hbWatch no)
(highCal yes)
(highFat yes)
(maxTime ?x)
(test (>= ?x 65))
(or (cuisine american) (cuisine any))
=>
(assert (recipe Recipe29)))
(defrule rule30
(meat yes)
(highCarb yes)
(meatDairy yes)
(dairy yes)
(cholWatch no)
(bpWatch no)
(highCal yes)
(highFat yes)
(maxTime ?x)
(test (>= ?x 30))
(or (cuisine italian) (cuisine any))
=>
(assert (recipe Recipe30)))
(defrule rule31
(meat yes)
(highCarb yes)
(meatDairy yes)
(dairy yes)
(bpWatch no)
(cholWatch no)
(highCal yes)
(highFat yes)
(maxTime ?x)
(test (>= ?x 35))
(or (cuisine italian) (cuisine any))
=>
(assert (recipe Recipe31)))
(defrule rule32
(meat yes)
(highCarb yes)
(meatDairy yes)
(dairy yes)
(cholWatch no)
(highCal yes)
(highFat yes)
(maxTime ?x)
(test (>= ?x 40))
(or (cuisine italian) (cuisine any))
=>
(assert (recipe Recipe32)))
```

```
(defrule rule33
(meat yes)
(meatDairy yes)
(pork yes)
(dairy yes)
(cholWatch no)
(hbWatch no)
(maxTime ?x)
(test (>= ?x 25))
(or (cuisine italian) (cuisine any))
=>
(assert (recipe Recipe33)))
(defrule rule34
(meat yes)
(highCarb yes)
(pork yes)
(bpWatch no)
(cholWatch no)
(hbWatch no)
(highCal yes)
(highFat yes)
(maxTime ?x)
(test (>= ?x 110))
(or (cuisine italian) (cuisine any))
=>
(assert (recipe Recipe34)))
(defrule rule35
(meat yes)
(highCarb yes)
(meatDairy yes)
(pork yes)
(dairy yes)
(bpWatch no)
(cholWatch no)
(highCal yes)
(highFat yes)
(maxTime ?x)
(test (>= ?x 15))
(or (cuisine italian) (cuisine any))
=>
(assert (recipe Recipe35)))
(defrule rule36
(dairy yes)
(bpWatch no)
(cholWatch no)
(maxTime ?x)
(test (>= ?x 50))
(or (cuisine italian) (cuisine any))
=>
```

```
(assert (recipe Recipe36)))
(defrule rule37
(meat yes)
(dairy yes)
(bpWatch no)
(cholWatch no)
(maxTime ?x)
(test (>= ?x 30))
(or (cuisine italian) (cuisine any))
=>
(assert (recipe Recipe37)))
(defrule rule38
(meat yes)
(pork yes)
(bpWatch no)
(cholWatch no)
(hbWatch no)
(highCal yes)
(highFat yes)
(maxTime ?x)
(test (>= ?x 120))
(or (cuisine italian) (cuisine any))
=>
(assert (recipe Recipe38)))
(defrule rule39
(seafood yes)
(peanuts yes)
(maxTime ?x)
(test (>= ?x 50))
(or (cuisine asian) (cuisine any))
=>
(assert (recipe Recipe39)))
(defrule rule40
(seafood yes)
(maxTime ?x)
(cholWatch no)
(bpWatch no)
(test (>= ?x 20))
(or (cuisine american) (cuisine any))
=>
(assert (recipe Recipe40)))
(defrule rule41
(spicy yes)
(bpWatch no)
(cholWatch no)
(hbWatch no)
(seafood yes)
(highFat yes)
```

```
(maxTime ?x)
(test (>= ?x 30))
(or (cuisine asian) (cuisine any))
=>
(assert (recipe Recipe41)))
(defrule rule42
(highFat yes)
(bpWatch no)
(maxTime ?x)
(test (>= ?x 50))
(or (cuisine asian) (cuisine any))
=>
(assert (recipe Recipe42)))
(defrule rule43
(dairy yes)
(bpWatch no)
(cholWatch no)
(hbWatch no)
(highFat yes)
(maxTime ?x)
(test (>= ?x 25))
(or (cuisine american) (cuisine any))
=>
(assert (recipe Recipe43)))
(defrule rule44
(hbWatch no)
(bpWatch no)
(maxTime ?x)
(test (>= ?x 25))
(or (cuisine mediterranean) (cuisine any))
=>
(assert (recipe Recipe44)))
(defrule rule45
(highCarb yes)
(bpWatch no)
(peanuts yes)
(maxTime ?x)
(test (>= ?x 15))
(or (cuisine mexican) (cuisine any))
=>
(assert (recipe Recipe45)))
(defrule rule46
(highCarb yes)
(dairy yes)
(peanuts yes)
```

```
(bpWatch no)
(cholWatch no)
(highCal yes)
(highFat yes)
(maxTime ?x)
(test (>= ?x 25))
(cuisine any)
=>
(assert (recipe Recipe46)))
(defrule rule47
(highCarb yes)
(dairy yes)
(cholWatch no)
(hbWatch no)
(highCal yes)
(highFat yes)
(maxTime ?x)
(test (>= ?x 30))
(or (cuisine italian) (cuisine any))
=>
(assert (recipe Recipe47)))
(defrule rule48
(highCarb yes)
(bpWatch no)
(hbWatch no)
(maxTime ?x)
(test (>= ?x 15))
(or (cuisine mexican) (cuisine any))
=>
(assert (recipe Recipe48)))
(defrule rule49
(dairy yes)
(cholWatch no)
(maxTime ?x)
(test (>= ?x 30))
                       (cuisine any))
(or (cuisine american)
=>
(assert (recipe Recipe49)))
(defrule rule50
(meat yes)
(hbWatch no)
(maxTime ?x)
(test (>= ?x 45))
(or (cuisine american)
                       (cuisine any))
=>
(assert (recipe Recipe50)))
```

```
(defrule rule51
(meat yes)
(meatDairy yes)
(dairy yes)
(cholWatch no)
(bpWatch no)
(maxTime ?x)
(test (>= ?x 20))
(or (cuisine american) (cuisine any))
=>
(assert (recipe Recipe51)))
(defrule rule52
(spicy yes)
(dairy yes)
(cholWatch no)
(highFat yes)
(maxTime ?x)
(test (>= ?x 25))
(cuisine any)
=>
(assert (recipe Recipe52)))
(defrule rule53
(spicy yes)
(seafood yes)
(highFat yes)
(cholWatch no)
(bpWatch no)
(maxTime ?x)
(test (>= ?x 35))
(cuisine any)
=>
(assert (recipe Recipe53)))
(defrule rule54
(meat yes)
(hbWatch no)
(maxTime ?x)
(test (>= ?x 25))
(cuisine any)
=>
(assert (recipe Recipe54)))
(defrule rule55
(meat yes)
(spicy yes)
(hbWatch no)
(maxTime ?x)
```

```
(test (>= ?x 34))
(cuisine any)
=>
(assert (recipe Recipe55)))
(defrule rule56
(meat yes)
(meatDairy yes)
(dairy yes)
(bpWatch no)
(cholWatch no)
(hbWatch no)
(maxTime ?x)
(test (>= ?x 30))
(or (cuisine mexican)
                        (cuisine any))
=>
(assert (recipe Recipe56)))
(defrule rule57
(highCarb yes)
(dairy yes)
(peanuts yes)
(pregWatch no)
(hbWatch no)
(maxTime ?x)
(test (>= ?x 20))
(cuisine any)
=>
(assert (recipe Recipe57)))
(defrule rule58
(maxTime ?x)
(bpWatch no)
(test (>= ?x 15))
(or (cuisine asian) (cuisine any))
=>
(assert (recipe Recipe58)))
(defrule rule59
(meat yes)
(meatDairy yes)
(dairy yes)
(cholWatch no)
(hbWatch no)
(highFat yes)
(maxTime ?x)
(test (>= ?x 22))
(or (cuisine american)
                        (cuisine any))
=>
(assert (recipe Recipe59)))
(defrule rule60
```

```
(meat yes)
(cholWatch no)
(bpWatch no)
(highCal yes)
(highFat yes)
(maxTime ?x)
(test (>= ?x 210))
(or (cuisine american) (cuisine any))
=>
(assert (recipe Recipe60)))
*****
;;;;;;;
                                         ;;;;;;;
;;;;;;; These are the intermediary rules
                                         ;;;;;;;
;;;;;;;
                                         ;;;;;;;
(defrule rule201
  (diabetes no)
  =>
  (assert (highCarb yes)))
(defrule rule202
  (vegetarian no)
  =>
   (assert (meat yes)))
(defrule rule203
  (lactoseIntolerant no)
  =>
  (assert (dairy yes)))
(defrule rule204
  (bloodPressure no)
  =>
   (assert (bpWatch no)))
(defrule rule205
  (heartburn no)
  =>
   (assert (hbWatch no)))
(defrule rule206
   (cholesterol no)
  =>
  (assert (cholWatch no)))
(defrule rule207
   (weightWatch no)
  =>
   (assert (highCal yes)
          (highFat yes)))
(defrule rule208
  (pregnant no)
  =>
   (assert (pregWatch no)))
```

```
(defrule rule209
  (healthConstraints no)
  =>
  (assert (cholWatch no)
           (hbWatch no)
           (bpWatch no)
           (pregWatch no)
           (diabetes no)
           (lactoseIntolerant no)))
(defrule rule210
  (religiousConstraints no)
  =>
  (assert (alcohol yes)
           (meatDairy yes)
           (pork yes)))
(defrule rule211
  (allergies no)
  =>
  (assert (seafood yes)
          (peanuts yes)))
(defrule rule212
  (religion none)
  =>
  (assert (religiousConstraints no)))
```

Appendix E

Source Code

```
#@author Saad Shakhshir and Saba Gul
#file: thought4food.py
import clips
yesNoList = ["yes", "y", "no", "n"]
yesList = yesNoList[0:2]
noList = yesNoList[2:]
def formatNormal(string, response):
    """Formats the string by just inserting the response"""
    if response.lower() in yesList:
       return string % 'yes'
    elif response.lower() in noList:
       return string % 'no'
    else: return string % response
def formatInverted(string, response):
    """Formats the string by inserting an inversion of the response.
So if the reponse was
    no, then the input in the string would be yes, and vice-versa"""
    if response.lower() in vesList:
       return string % 'no'
    else: return string % 'yes'
def formatReligion(string, response):
    """Formats the string by inserting the appropriate religion based
on the response.
    Jewish[J], Muslim[M], or None[N]"""
    if response.lower() == "j":
       return string % "jewish"
    elif response.lower() == "m":
       return string % "muslim"
    else: return string % "none"
def formatCuisine(string, response):
    """Formats the string by inserting the appropriate cuisine type
based on the response.
    American[A],
                  Asian[AS], Indian[I], Italian[IT], Mexican[M],
Mediterranean[ME], or Any[AN]?"""
    if response.lower() == "a":
       return string % "american"
    elif response.lower() == "as":
       return string % "asian"
    elif response.lower() == "i":
       return string % "indian"
    elif response.lower() == "it":
       return string % "italian"
    elif response.lower() == "m":
```

```
return string % "mexican"
   elif response.lower() == "me":
       return string % "mediterranean"
   else: return string % "any"
class Ouestion:
   """Stores a question"""
   def
         init (self, question, legalAnswer, assertionFormat,
assertionFunction):
       """question is a string, legalAnswers is a function that takes
in one argument
       and returns True if the argument is a legal answer to the
question
       assertionFormat is a formatted string that represents the
assertion to be entered
       into the clips database after asking this question
       assertionFunction is a function that takes in 2 arguments, the
assertionFormat and the
       response to the question and returns the assertion string"""
       self.question = question
       self.legalAnswer = legalAnswer
       self.assertionFormat = assertionFormat
       self.assertionFunction = assertionFunction
   def generateAssertion(self, response):
       """ Generates and returns the clips assertion for this question
based on response"""
                   self.assertionFunction(self.assertionFormat[:],
       return
response)
class YesNoNormalQuestion(Question):
   """ Creates a question that requires a yes/no answer.
                                                                  The
assertion will take
   the answer as it is"""
   def init (self, question, assertionFormat):
       Question. init (self, question, lambda x: x.lower() in
yesNoList, assertionFormat, formatNormal)
class YesNoInvertedQuestion(Question):
   """ Creates a question that requires a yes/no answer. The
assertion will take
   the response and invert it yes->no and no->yes"""
   def init (self, question, assertionFormat):
       Question. init (self, question,
                                           lambda x: x.lower() in
yesNoList, assertionFormat, formatInverted)
def superdoc(module):
   """Prints the documentation for each attribute in the module"""
   for i in dir(module):
       print "/" * 60
       print "/"*((60 - len(i))//2) + i + "/"*((60 - len(i))//2)
       print "/" * 60
       print getattr(module, i). doc
       print "\n\n"
```

```
class Recipe:
   """ A class to hold recipes """
          init (self, identifier, name, ingredients, method,
   def
nutrition, servings, time):
       self.identifier = identifier
       self.name = name
       self.ingredients = ingredients
       self.method = method
       self.nutrition = nutrition
       self.servings = servings
       self.time = time
   def repr (self):
       return "Name: " + self.name + "\n\nIngredients:\n"
self.ingredients + "\n\nMethod:\n" + self.method + "\n\nNutritional
Information per Serving:\n" + self.nutrition + "\n\nServing Size: " +
self.servings + "\n\nTotal Cooking Time: " + self.time
def readRecipesFromFile(filename):
    """ Reads the recipes from filename and returns a dictionary of
Recipe objects indexed by identifier"""
   recipes = \{\}
   recipeFile = open(filename, 'r')
   identifier, name, ingredients, method, nutrition, servings, time =
"","","","","","","",""
   for i in recipeFile:
       if i.startswith("Recipe"):
           identifier = i.strip()
           identifier = identifier.strip(": ")
       elif i.startswith("Name:"):
           name = i[len("Name:"):].strip()
       elif i.startswith("Ingredients:"):
           line = recipeFile.next()
           while(line.strip() != ""):
               ingredients += line
               line = recipeFile.next()
           ingredients = ingredients.strip()
       elif i.startswith("Method:"):
           line = recipeFile.next()
           while(line.strip() != ""):
               method += line
               line = recipeFile.next()
           method = method.strip()
       elif i.startswith("NutInfoPerServing:"):
           line = recipeFile.next()
           while(line.strip() != ""):
               nutrition += line
               line = recipeFile.next()
           nutrition = nutrition.strip()
       elif i.startswith("ServSize:"):
           servings = i[len("ServSize:"):].strip()
       elif i.startswith("TotalCookTime:"):
           time = i[len("TotalCookTime:"):].strip()
           recipe = Recipe(identifier, name, ingredients, method,
nutrition, servings, time)
           recipes[recipe.identifier] = recipe
```

```
identifier, name, ingredients, method, nutrition, servings,
time = "", "", "", "", "", "", ""
   recipeFile.close()
    return recipes
def askAndAssert(question):
    """Ask the user a question use the response to create an assertion
in the clips database"""
    response = raw input(question.question+"\n")
    if question.legalAnswer(response):
       clips.Assert(question.generateAssertion(response))
    else:
       print """I'm sorry. I was unable to understand your answer.
Please try again."""
       askAndAssert(question)
def isInteger(string):
    """Tests if the string is an integer and returns True if it is."""
    try:
       int(string)
    except ValueError:
       return False
    return True
assertion diabetes = "(diabetes %s)"
assertion vegetarian = "(vegetarian %s)"
assertion spicy = "(spicy %s)"
assertion time = "(maxTime %s)"
assertion meatAndDairy = "(meatDairy %s)"
assertion alcohol = "(alcohol %s)"
assertion pork = "(pork %s)"
assertion lactoseIntolerant = "(lactoseIntolerant %s)"
assertion bloodPressure = "(bloodPressure %s)"
assertion heartburn = "(heartburn %s)"
assertion cholesterol = "(cholesterol %s)"
assertion weightWatch = "(weightWatch %s)"
assertion peanuts = "(peanuts %s)"
assertion cuisine = "(cuisine %s)"
assertion getIngredients = "(getIngredients %s)"
assertion religion = "(religion %s)"
assertion seafood = "(seafood %s)"
assertion pregnant = "(pregnant %s)"
assertion religiousConstraints = "(religiousConstraints %s)"
assertion healthConstraints = "(healthConstraints %s)"
assertion allergies = "(allergies %s)"
assertion cravings = "(cravings %s)"
question diabetes = YesNoNormalQuestion("Do you have Diabetes?",
assertion diabetes)
question vegetarian = YesNoNormalQuestion("Are you a vegetarian?",
assertion vegetarian)
question spicy = YesNoInvertedQuestion("Do you mind spicy food?",
assertion spicy)
```

question time = Question("What is the maximum amount of time you would like to spend cooking (in minutes)?", isInteger, assertion time, formatNormal) question meatAndDairy = YesNoInvertedQuestion("Do you mind if there are both meat and dairy products in your dish?", assertion meatAndDairy) question alcohol = YesNoInvertedQuestion("Do you mind if there is alcohol in your dish?", assertion alcohol) question pork = YesNoInvertedQuestion("Do you mind if there is pork in your dish?", assertion pork) question lactoseIntolerant = YesNoNormalQuestion("Are you lactose intolerant?", assertion lactoseIntolerant) question bloodPressure = YesNoNormalQuestion("Do you have high blood pressure?", assertion bloodPressure) question heartburn = YesNoNormalQuestion("Do you suffer from heartburn?", assertion heartburn) question cholesterol = YesNoNormalQuestion("Do you have hiqh cholesterol?", assertion cholesterol) question weightWatch = YesNoNormalQuestion ("Are you currently trying to lose weight?", assertion weightWatch) question cuisine = Question("What type of cuisine would you like? American[A], Asian[AS], Indian[I], Italian[IT], Mexican[M], Mediterranean[ME], or Any[AN]?", lambda x: x.lower() in ["a", "as", "i", "it", "m", "me", "an"], assertion cuisine, formatCuisine) #question getIngredients = YesNoNormalQuestion("Would you like to go out for ingredients", assertion getIngredients) question religion = Question($\overline{}$ ""Are you a follower of any of the following faiths? Please select Jewish[J], Muslim[M], or Neither[N].""", lambda x: x.lower() in ["j", "m", "n"], assertion_religion, formatReligion) question seafood = YesNoInvertedQuestion("Are you allergic to seafood?", assertion_seafood) question peanuts = YesNoInvertedQuestion("Are you allergic to peanuts?", assertion peanuts) question pregnant = YesNoNormalQuestion("Are you pregnant?", assertion pregnant) question religiousConstraints = YesNoNormalQuestion("Do you have any religious dietary constraints?", assertion_religiousConstraints) question healthConstraints = YesNoNormalQuestion("Do you have any health-related dietary constraints?", assertion healthConstraints) question allergies = YesNoNormalQuestion("Do you have any allergies to specific foods?", assertion allergies) question cravings = Question("""If you have any specific cravings, please enter them now. For example, if you would like chicken and oregano then type: chicken oregano If you have no cravings then please type: no""", lambda x: True, assertion cravings, formatNormal) questions = (question_cuisine, question_spicy, question time, question vegetarian, question weightWatch, question religiousConstraints, question healthConstraints, question allergies) questionlist = [] questions muslim = (question alcohol, question pork) questions jewish = (question pork, question meatAndDairy)

```
questions healthConstraints
                                                    (question diabetes,
question lactoseIntolerant, question heartburn, question bloodPressure,
question cholesterol, question pregnant)
questions allergies = (question seafood, question peanuts)
recipes = readRecipesFromFile("recipesDatabase.txt")
def getFact(fact):
   """Returns the clips fact object corresponding to the fact string
passed in"""
   factList = clips.FactList()
   index = [i.CleanPPForm() for i in factList].index(fact)
   return factList.index(index)
def getFacts(identifier):
   """Returns a list of facts that start with identifier"""
    return filter(lambda x: x.CleanPPForm().startswith("(" +
identifier), clips.FactList())
def getAssertion(fact):
    """ Returns the second part of the fact. Fact = (<tag>
<assertion>), e.g if fact1=(diabetes no), then
   getAssertion(fact1) = no"""
   index = fact.CleanPPForm().index(" ")
   assertion = fact.CleanPPForm()[index:].strip()
   return assertion.strip(") ")
def checkCravings(cravings, recipe):
   """Returns True if all the cravings are in the recipe. Otherwise
returns false"""
   for i in cravings:
       if not i.lower() in recipe.ingredients.lower():
           return False
   return True
def printAllRecipes(cravings):
   results = getFacts("recipe")
   toPrint = []
   for i in results:
       toPrint.append(recipes[getAssertion(i)])
   if len(toPrint) != 0:
       if cravings:
           askAndAssert(question cravings)
           cravings = getFacts("cravings")
           if len(cravings) != 0:
               cravings = getAssertion(cravings[0])
               if cravings not in noList:
                   cravings = cravings.split()
                   toPrint = filter(lambda x: checkCravings(cravings,
x), toPrint)
    if len(toPrint) != 0:
       print "Congratulations, we have found the following
recipe(s):\n\n"
       for i in toPrint:
           print i
           print "\n" + "*"*60 + "\n\n"
   else:
```

```
print "I'm sorry, we were unable to find a recipe that meets
your specific requirements"
def adjustQuestionList(question, li):
    """ Adjusts the question list based on the answer to the previous
question""
    index = li.index(question)
    if question is question religiousConstraints:
        results = getFacts("religiousConstraints")
        if len(results) == 0:
            return
        assertion = getAssertion(results[0])
        if assertion.lower() in yesList:
            li.insert(index+1, question religion)
        results[0].Retract()
    elif question is question religion:
        results = getFacts("religion")
        if len(results) == 0:
            return
        assertion = getAssertion(results[0])
        if assertion.lower() == "muslim":
            for i in questions muslim:
                li.insert(index+1, i)
        elif assertion.lower() == "jewish":
            for i in questions jewish:
                li.insert(index+1, i)
        results[0].Retract()
    elif question is question healthConstraints:
        results = getFacts("healthConstraints")
        if len(results) == 0:
            return
        assertion = getAssertion(results[0])
        if assertion.lower() in yesList:
            for i in questions healthConstraints:
                li.insert(index+1, i)
        results[0].Retract()
    elif question is question allergies:
        results = getFacts("allergies")
        if len(results) == 0:
            return
        assertion = getAssertion(results[0])
        if assertion.lower() in yesList:
            for i in questions allergies:
                li.insert(index+1, i)
        results[0].Retract()
def runThought4Food(cravings=False):
    clips.Clear()
    clips.BatchStar("ruleset.txt")
    #clips.BatchStar("intermediaries.txt")
    questionList = list(questions)
    for i in questionList:
       askAndAssert(i)
        clips.Run()
        adjustQuestionList(i, questionList)
    printAllRecipes(cravings)
```

if __name__ == '__main__':
 runThought4Food()