



“Light your game on fire”

Mrs. McCaffrey-Smith
Stockbridge Valley School
10-12 grade Animal Science
emccaffrey@stockbridgevalley.org

Introduction

- *Classroom Information:*
 - FIAMIN' MAPLE Beef Jerky was made by Stockbridge Valley School, Animal Science class with Mrs. McCaffrey-Smith, Agriculture teacher. With the assistance of Mr. Debraccio, FACS teacher and Ms. Benatti, Art teacher.

Product

It's a tasty source of protein for those in a rush either to work in the morning or a student athlete on their way to a big game. Plus, it's a great workout treat to replenish your energy afterwards.

- *Recipe:*

Ingredients

½ cup balsamic vinegar
½ cup Wesson oil
1 tablespoon mustard
1 tablespoon crushed red pepper
1 tablespoon cayenne pepper
2 tablespoon ketchup
½ cup worcheshire sauce
¼ cup Cajun seasoning
1 cup dark maple syrup
1 tablespoon salt
¼ cup brown sugar
1 tablespoon black ground pepper
3 lb. beef bottom round roast

Directions

1. In large bowl add balsamic vinegar and oil
2. Vigorously whisk in mustard
3. Add the remaining dry ingredients
4. Mix until they are well blended
5. Cut meat a quarter inch thick
6. Add meat to marinate and let sit in the refrigerator overnight
7. Dehydrate 5-10 hours or to your own specification

- *Local Product Acknowledgement:*

- Mrs. McCaffrey-Smith Bottom Round Roast
- Stockbridge Valley FFA-Maple syrup

Market Analysis

- *Target Audience:*

- Our customers are student athletes. Sports players who are working hard.

- Athletes are looking for lots of protein that they can eat.
 - High protein, low fat, low calories.
 - Modified, JV and Varsity student athletes who are looking for a good source of protein at a low cost. These athletes are looking for a quick snack that provides all these things. It's quick and easy you just rip open and eat. These athletes don't have to be home to eat this snack they can take it to practice or a game with them it's just quick, easy and delicious.
- *Market Testing:*
- Out of the 88 people who sampled this product 76 people liked this product. 80 of the 88 would like to eat this product again. 69 out of 88 people would also buy this product. When it comes to changing this product the majority of the people would not change anything. There was a decent amount of people that would like it to be hotter or spicier. After doing this testing we now know that the public enjoys this product and would like to have it again. When it comes to disliking this product there were only 12 people and these 12 people did not say what characteristic of the jerky they did not enjoy.

- *Cost Analysis:*
- What type of container will you use? **Vacuum Seal plastic bag**
 - What is the cost of that container? **\$0.06 per bag**
 - What is the cost of labor per batch?**\$5.00 per batch**
 - The cost for us to make each bag is **\$5.26**
 - The cost from us to the retailer is **\$8.76**
 - The cost from the retailer to the consumer is **\$12.52**

Marketing Plan

- *Environment:*
- Our product will be available at the Stockbridge Valley Foods and The SVCS School in the cafeteria, school store and at all home sporting events. The main reason we choose these places is because of the number of students who go to the stores to purchase snacks during their sports season. At school students and student athletes will have the choice to buy some jerky for protein either right before practice and after a game.
- *Marketing Campaign:*
- Flamin' Maple Beef Jerky "Light your game on fire"
 - Website:
<https://sites.google.com/stockbridgevalley.org/flaminmaplebeefjerky/home>
 - Poster: see attached pdf
 - Radio advertisement: see attached audio file

Beef Nutrition

- *ZIP Analysis:*

Zinc:

- Essential to keep the immune system strong, helping heal wounds and supports normal growth
- There is 6.31mg of zinc per 100g of beef
- **Zinc benefits** come from its presence within all bodily tissue — it's needed for healthy cell division, and it acts like an antioxidant, fighting free radical damage and slowing the aging process.
- The recommended allowance for zinc in the U.S. is 8 mg per day for women and 11 mg for men

Iron:

- Iron is an important component of hemoglobin
- Essential for blood production
- Helps muscles use oxygen
- Sharpens concentration and memory

Protein-

- Most powerful substance in the body, essential for life
- Protein is a macronutrient which provides energy and calories that you can get from beef.
- The lifespan of most proteins totals two days or less. The body needs protein to grow and heal so it is good if you eat jerky.

- *Storage & Handling:*

Tips for safe handling:

- Sanitary practices should be used when handling raw beef:
 - Wash hands thoroughly for 20 seconds
 - Use clean utensils and bowls
 - Marinade should be refrigerated, do NOT reuse marinade
 - Use a food dehydrator that will maintain a temperature of at least 130 degrees to 140 degrees throughout the meat drying process
 - Keep the raw meat away from any dried meat, other ingredients and already prepared foods.
 - After washing cutting surfaces and any equipment used, it is most effective to soak everything in a bleach solution and allow it to air dry

Methods for Eliminating Pathogens:

- **Post -drying heating** → Place strips on a cookie sheet and place in an oven heated to 275 degrees for 10 minutes **Pre-cooking meat** → Cook

the meat until it has reached 160 degrees and then it can be placed in the dehydrator

- **Vinegar Soak** → Soak the meat in a vinegar based marinade and then dry it before placing in the dehydrator

Storing Your Beef Jerky:

- When packaging your jerky, the most ideal package would be one that is airtight and can easily be opened and closed. The package needs to resist moisture as well as be impermeable to gases and odors.
- The best place for jerky to be stored in is a cool, dark and dry area. The cooler the environment is, the longer the jerky will last.
- Jerky will stay at its best quality in a sealed container and at room temperature for 2 weeks, 3-6 months in the refrigerator, and 1 year in the freezer

Look on these websites for more help:

http://extension.oregonstate.edu/fch/sites/default/files/documents/pnw_63_2_makingjerkyathome.pdf
<https://www.clemson.edu/extension/hgic/food/pdf/hgic3504.pdf>
https://edmonson.ca.uky.edu/files/jerky_safety.pdf