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### Analyzing Nutritional Availability on Low Income

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# FOOD HEROES

# Food Security @ Good Fortune

DEE 3999, Food Systems Researchers





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## **OUR TEAM**



**MATT**Project Manager



**BEC**Data Manager



ALI Media Manager



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## WEEKLY MENU

Menus for each day of the week



### **TOTAL DATA**

Total data from menus



### **DISCUSSION**

What did we observe in the market?



### CONCLUSION

Concluding statements and what we learned









# WEEKLY MENU

01

Monday through Sunday, \$100 and \$150 budget on left and right side respectively

## MONDAY







MONDAY

#### **BREAKFAST**

VIETNAMESE BAGUETTE

& EGG with cup of water

228.6 CALORIES

11G PROTEIN 7G FAT

\$.50

\$.85

#### LUNCH

RICE Just rice

386 CALORIES

**6G PROTEIN** 2G FAT

86G CARBS

#### DINNER

**DUCK BREAST &** \$1.43 SWEET POTATO MASH

> 24.33G PROTEIN 316.83 CALORIES 3.93G FAT

#### SNACK

DATES & PEANUT BUTTER yum yum

61G CARBS 7G PROTEIN 418.25 CALORIES 16.25G FAT

PER PERSON: \$3.27, 1349.68 CALORIES

\$150 MENU: WHAT WAS ADDED

#### Breakfast:

1 cup whole milk, \$.58, 13q carbs, 6q protein, 6q fat, 130 calories per person Lunch:

2oz spam, \$.74, 1q carb, 7q protein, 16q fat, 176 calories per person

Dinner:

1 cup broccoli, \$.50, 3.75q carbs, 1.35q protein, .84g fat, 27.96 calories per person Snack:

No dates, 2 pop tarts instead. \$.88, 70g carbs, 3g protein, 8g fat, 364 calories per person **Total Day:** 

\$5.12, 250g carbs, 58.68g protein, 41.94g fat, 1612.78 calories per person





## **TUESDAY**



#### **TUESDAY**

#### **BREAKFAST**

VIETNAMESE BAGUETTE & 2 EGGS

279.4 CALORIES

with cup of water

30.8G CARBS 17G PROTEIN 9.8G FAT

\$ 66

#### LUNCH

FRIED RICE \$.71

rice, eggs, onion, carrot, and soy sauce 368.2 CALORIES

64.27G CARBS 7.8G PROTEIN 8.88G FAT

#### DINNER

ROASTED DUCK LEGS & \$2.11 WINGS, SQUASH & NOODLES

Duck, sweet potatoes, broccoli tips
576.75 CALORIES
87.38G CARBS
37.13G PROTEIN
8.75G FAT

\$150 MENU: WHAT WAS ADDED

#### Breakfast:

1 cup whole milk, \$.58, 13g carbs, 6g protein, 6g fat, 130 calories per person

#### Dinner:

 $\frac{1}{2}$  cup squash, \$.32, 7.38g carbs, 1g protein, 0g fat, 33.5 calories per person

#### Total Day:

\$4.06, 216g carbs, 70.2g protein, 49.38g fat, 1589.2 calories per person

PER PERSON: \$3.48, 1124.35 CALORIES 182.445G CARBS, 61.925G PROTEIN, 27.43G FAT







## WEDNESDAY







**BREAKFAST** 

DATES AND RICE \$ 92 with cup of water

> 110.32G CARBS 4G PROTEIN 471.5 CALORIES 1.58G FAT

LUNCH

DUCK STOCK AND RICE NOODLES 80G CARBS

543 CALORIES

22G PROTEIN 15 G FAT

\$1.73

DINNER

ROASTED DUCK LEGS & \$.90 WHITE RICE

> 57.32G CARBS 16.5G PROTEIN 343.25 CALORIES 5.33G FAT

\$150 MENU: WHAT WAS ADDED

Breakfast:

1 banana, \$.21, 28q carbs, 1q protein, 0.4q fat, 116 calories per person

**Total Day:** 

\$3.76, 275.64g carbs, 47.5g protein, 21.76g fat, 1488.4 calories per person

PER PERSON: \$3.55, 1357.75 CALORIES 247.64G CARBS, 42.5G PROTEIN, 21.91G FAT







#### **BREAKFAST**

**RICE & LENTILS** with a cup of water

> 8.5G PROTEIN 270 CALORIES 5G FAT

.34

#### LUNCH

RICE & LENTILS WITH \$1.15

with soy sauce & sesame oil 66.5G CARBS 8.9G PROTEIN 478.62 CALORIES

#### DINNER

CURRY RICE NOODLES \$1.22 pan fried tofu, steamed bok choy

> 89.5G CARBS 13G PROTEIN 464 CALORIES 6G FAT

#### **SNACK**

ROASTED PEANUTS 888.5 CALORIES

96G CARBS 28.7G PROTEIN

\$1

PER PERSON: \$3.70, 2101.12 CALORIES 309.5G CARBS, 59.1G PROTEIN, 69.3G FAT



\$150 MENU: WHAT WAS ADDED

#### Breakfast:

1 cup whole milk, \$.58, 13q carbs, 6q protein, 6q fat, 130 calories per person Cereal, \$1.05, 57g carbs, 18g protein, 9g fat, 381 calories per person Lunch:

Mini dumplings and broccoli, \$1.91, 52g carb, 17g protein, 9q fat, 357 calories per person

#### **Total Day:**

\$5.76, 294g carbs, 89.8g protein, 74.31g fat, 2203.99 calories per person





## **FRIDAY**





### **FRIDAY**



#### **BREAKFAST**

2 HARD BOILED EGGS \$.33 with salt and stuff

304 CALORIES

.8G CARBS 12G PROTEIN 9.6G FAT

#### LUNCH

CRUMBLED TOFU TOAST tofu, curry paste, baguette toast

247.5 CALORIES

22G CARBS 6.5G PROTEIN 4.28G FAT

\$.83

\$.89

#### DINNER

CURRIED LENTILS, \$.98 CARROTS & RICE lentils, carrots, rice, curry paste 105G CARBS 25.5G PROTEIN 382.25 CALORIES 1.25G FAT

#### **SNACK**

DATES AND PEANUT BUTTER

380 CALORIES 61G CARBS 7G PROTEIN 17G FAT

PER PERSON: \$3.61, 1313.75 CALORIES 138.48G CARBS, 37.91G PROTEIN, 45.23G FAT \$150 MENU: WHAT WAS ADDED

#### Lunch:

Tuna on toasted buns, \$2.91, 58q carbs, 28q protein, 13.25q fat, 465 calories per person

#### **Total Day:**

\$4.86, 224.8g carbs, 72.5g protein, 141.45g fat, 1531.25 calories per person





## **SATURDAY**





#### **BREAKFAST**

PAN FRIED CRUMBLED TOFU, & RICE tofu, rice, soy sauce

404 CALORIES

419 CALORIES

88G CARBS 13G PROTEIN 5.5G FAT

\$.88

\$.73

\$1.28

#### LUNCH

ROASTED ZUCCHINI & RICE

92.1G CARBS 8.4G PROTEIN 2.6G FAT

DINNER

STEAMED SQUASH, TOFU & BROCCOLI

25.38G CARBS 15.01G PROTEIN 9.63G FAT

149.5 CALORIES

#### SNACK

DATES & PEANUT BUTTER

\$.89 61G CARBS 7G PROTEIN

380 CALORIES

7G PROTEIN 17G FAT

PER PERSON: \$3.78, 1352.5 CALORIES 180.48G CARBS, 37.41G PROTEIN, 32.73G FAT



\$150 MENU: WHAT WAS ADDED

#### Lunch:

Lentils, \$.10, 14.5g carb, 5.5g protein, 0g fat, 80 calories per person

#### Total Day:

\$3.79, 281g carbs, 48.91g protein, 34.73g fat, 1432.5 calories per person













#### SUNDAY

**BREAKFAST** 

SCRAMBLED EGGS AND RICE

86G CARBS 9G PROTEIN 4.4G FAT

\$.51

419.6 CALORIES

LUNCH

LENTILS AND RICE
duck stock, lentls, curry paste, rice
724.5 CALORIES
31.

105.5G CARBS 31.75G PROTEIN 19.5G FAT

\$2.02

DINNER

SAUTEED VEGGIES AND TOFU bok choy, onions, tofu

12.24G CARBS

\$.56

58.69 CALORIES 5.38G PROTEIN 1.91G FAT

PER PERSON: \$3.09, 1202.79 CALORIES 203.74G CARBS, 46.13G PROTEIN, 25.81

\$150 MENU: WHAT WAS ADDED

Lunch:

4 buns, \$1.25, 28g carb, 7g protein, 12g fat, 240 calories per person Dinner:

½ serving dumplings, \$.55, 21g carbs, 6.5g protein, 1g fat, 119 calories per person Snack:

Two pop tarts. \$.88, 70g carbs, 3g protein, 9g fat, 373 calories per person

Total Day:

\$5.36, 322.74g carbs, 62.63g protein, 47.81g fat, 1963.77 calories per person







## **TOTAL DATA**

How many calories and macros per person in the whole week







## **Total Calories Both Carts**

	\$100 budget	
	Cal/person	% Calories
Carbs	6144.224	59.13%
Protein	1385.564	13.33%
Fat	2861.154	27.54%
Total	10390.942	100.00%

	\$150 budget	
	Cal/person	% Calories
Carbs	6434.82	54.00%
Protein	1778.88	14.93%
Fat	3702.42	31.07%
Total	11,916	





## DISCUSSION

What we noticed during our venture into Good Fortune, and how it impacted our trip







- Next to a major highwayaccessible for cars, difficult for people without cars
- Uber was \$12 each way
- Lots of variety and multicultural
- Some items were expensive like milk, some very cheap like rice





## • REFLECTION ::::

How well did you do in meeting the family's caloric needs? How nutritious is the diet?

We met our family's caloric needs for 1 day, and generally ended up around 1,300 calories per person per day. Their diet is fairly nutritious, with a good balance of protein and carbohydrates, and we avoided lots of processed foods. Our family had 1 serving of vegetables all days except for 1, allowing for them to have at least some vitamins in their diet.

What effect did the larger budget have on the nutritional value of the foods you selected and why?

The larger budget allowed us to give our family more calories per meal per day, along with a higher amount of protein per meal. We found that generally the foods with more calories and protein were more costly.







How did the diets vary with increasing money to spend?

Yes, in this case we always went for the cheapest item or version we could find, this allowed us to grab more variety and calories of the shelf then if not.

In the market you shopped in, did you see foods that you were unfamiliar with?

As culinary students we recognized some of the cuisine we found there, but not all. Depending on certain culture they would fair better or worse. For instance an Asian American family would be able to find their hallmarks and possibly better meal plan than us, yet a white American family would have a much harder time.





## • REFLECTION ::::

Do you think your food and cooking knowledge gives you an advantage in this scenario? If so, how? If not, why not?

Yes, absolutely, being able to take a cost control class, make a variety of tasty meals and break foods such as the duck, allowed to stretch a penny a real long away. For instance the Duck made up our for 5 nights, since we were able to use all the parts.

Why do you think obesity is frequently a problem for lower income families in this country?

As we bought food, an importance on carbs and fats was placed above sugar moderation and vital nutrient supply. In a sense it's almost impossible for low income families to get the correct amount of nutrients in a diet while also focusing on just reaching the bare minimum









## CONCLUSION

Reflecting on our trip, shopping lists and prepared menus, what can we infer?



"By going out and attempting to meal plan for a family, it puts a real perspective on the strain impoverished families are facing every day. We also struggled while having more time and experience than most of these families."

**—TEAM FOOD HEROES** 





## THANKS!









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