# ISE 3230 A Balanced Meal in College

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# **Motivation**









# **Assumptions**





**Student** in the Ohio State University (O-H-I-O!)





**Balanced Nutrition** based on personal needs

(Height / Weight / Gender / Age / Meal Type/ Activity Level)





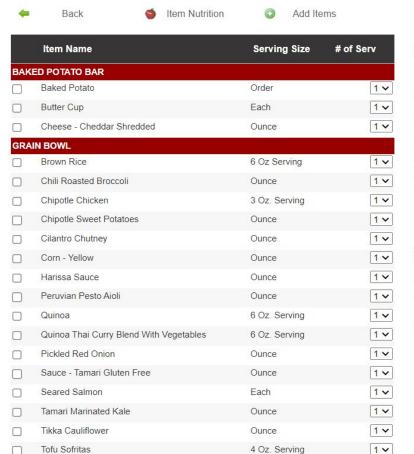
Meal at the **grain bowl station** in the Union Market (priced by weight)





Minimize total **price** of the meal

#### Ohio Union Operations - DAILY MENU - Union Market





## I Am Allergic To...

□ Dairy □ ®Eggs

□ NPeanuts

☐ Shellfish

□ A Sov

☐ NTree Nuts

☐ **§** Wheat

### My Diet Preference

☐ WVegan (Order No Cheese)

☐ **W**Vegetarian

Clear Filters



#### **Brown Rice**



## Nutrition Information

1	Sorvinge	Per Container	ontaine	
	Servings	rei Containei	Ulltaille	

Amount Per Serving Calories

230 % Daily Value

Total Fat 1.5g	2%
Saturated Fat 0g	0%
Irans Fat 0g	
Cholesterol Omg	0%
Sodium Omg	0%
Total Carbohydrate 49g	16%

Dietary Fiber 1g Total Sugars 0g Protein 5a

Calcium 3.06mg 0% Iron 3.09ma 15% Vitamin C 0mg 0%

\* The % Daily Value (DV) Tells You How Much A Nutrient In A Serving Of Food Contributes To A Daily Diet. 2000 Calories A Day Is Used For General Nutrition Advice

Ingredients: WATER, DRY LONG GRAIN BROWN RICE(PARBOILED LONG GRAIN **BROWN RICE)** 

			nutrition information			
Category	Food	Size	Calories	Fat	<b>Total Carb</b>	Protein
	Brown Rice	Ounce	38.33	0.25	8.17	0.83
	Chipotle Sweet Potatoes	Ounce	24.57	0.03	5.71	0.46
C	Quinoa	Ounce	33.33	0.58	5.83	1.33
Carb	Quinoa Thai Churry Blend With					
	Vegetables	Ounce	31.67	1	4.33	1
	Corn - Yellow	Ounce	25	0	6	0
	Chipotle Chicken	Ounce	43.33	1.67	0.33	6
Protein	Seared Salmon	Each	440	34	0	33
	Tofu Sofritas	Ounce	35	2	1.25	3
	Chili Roasted Broccoli	Ounce	20	1	1	0
Veggies	Tamari Marinated Kale	Ounce	10	0	1	0
veggles	Tikka Cauliflower	Ounce	25	2	2	0
	Pickled Red Onion	Ounce	15	0	3	0
	Sauce - Harissa Sauce	Ounce	30	1	5	0
Sauce	Sauce - Peruvian Pesto Aioli	Ounce	25	1	5	0
Sauce	Sauce - Cilantro Chutney	Ounce	20	1.5	2	2
	Sauce - Tamari Gluten Free	Ounce	15	0	2	3

# Sample result

## **Buckeyes**

- Female
- 19 years old
- 155 cm tall
- 42 kg
- Lightly active
- Meal: dinner



## **Brutus**

- Male
- 22 years old
- 185 cm tall
- 90 kg
- Very active
- Meal: lunch



# Sample result - Buckeyes





Female | 19 years old | 155 cm tall | 42 kg

Lightly active

Meal: dinner

Calories: 434 kcal

**Price (without dining dollar):** \$ 6.58

Price (with dining dollar): \$4.28

**Recommended meals:** 

- Brown Rice: 3.75 ounce

- Chipotle Chicken: 4.64 ounce

- Tikka Cauliflower: 2.94 ounce

- Pickled Red Onion: 1.06 ounce

## Sample result - Brutus



Male | 22 years old | 185 cm tall | 90 kg

Very active

Meal: lunch

Calories: 1324 kcal

Price (without dining dollar): \$ 16.84

Price (with dining dollar): \$10.94

**Recommended meals:** 

- Brown Rice: 12.85 ounce

- Chipotle Chicken: 7.66 ounce

– Seared Salmon: 1 piece

- Pickled Red Onion: 4 ounce

## If we had more time ...

Choose the station / restaurant

- Consider sleep / stress / allergy factors
- Plan different meals for a week

