

Nutrition and Fitness on Chapman Campus

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Abstract

The grand challenge our team recognized was that maintaining good overall health on college campuses is very difficult. Our team's solution was to make nutritious eating and exercising convenient and easy to for Chapman students via our menu and fitness plan. The menu and fitness plan contributes to society at large because our scientific-based menus & Fitness plans were created to as a means of creating a healthy lifestyle convenient as possible.

The Fitness Plan

The Warm Up
<ul style="list-style-type: none"> 10-30 minutes of aerobic exercise <ul style="list-style-type: none"> Examples: running, cycling, walking, jogging, etc Importance: to prevent injury by increasing muscle temperature and blood flow to the heart, lungs, and muscles <ul style="list-style-type: none"> It should be full-body warmup even if you are planning to work out a few muscle groups
The Exercise
Weekly Schedules
<ul style="list-style-type: none"> These workouts should be done 2 to 3 times each week Weeks 1 and 2: 1 set of 10 repetitions of each exercise with 60 seconds rest between each exercise Weeks 3, 4, and 5: 2 sets of 10 repetitions of each exercise with 60 seconds rest between each exercise Week 6 and on: 3 sets of 10 repetitions of each exercise with 60 seconds rest between each exercise
The Different Exercises
<ul style="list-style-type: none"> For each exercise choose a weight that is neither too heavy nor too light for you You do not need to do every exercise but choose the ones that align with your workout goals
<div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"> <p>The Squat</p> </div> <div style="width: 33%;"> <p>Dead Lift</p> </div> <div style="width: 33%;"> <p>Barbell Overhead press</p> </div> </div>
<div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"> <p>Medium Lat Pulldown</p> </div> <div style="width: 33%;"> <p>Seated Cable Row</p> </div> <div style="width: 33%;"> <p>Triceps Pushdown</p> </div> </div>
<div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"> <p>Biceps Curl</p> </div> <div style="width: 33%;"> <p>Crunch</p> </div> <div style="width: 33%;"> <p>Bench Press</p> </div> </div>
The Cooldown
<ul style="list-style-type: none"> After exercises begin post-workout stretches: lunging hip flexor stretch, cat-cow stretch, standing calf stretch, etc. Importance: reduce muscle tension as well as reducing muscle injuries and improving your performance for the next workout

Conclusion

So what is left for our group and this project? Because of recent events that have put campus to a virtual setting it made it hard to really implement our project to the full extent that we wanted to. However we think it is super important that we try and get our results out to the Chapman population. When we return to campus hopefully this fall we plan at the very least putting up our menu around campus dining options. We also plan to put our work out instructions around the freshman dorms. After further surveys we found that this information might be most useful for them because of the new Henley Gym.

Introduction

- College students have a general consensus of an ideal, nutritional diet but fail to apply this knowledge because of convenience and preferred tastes of food (Abraham et al., 2018) and they also often times choose foods of convenience such as fast food or junk food due to assignments, work, or other responsibilities (Gorgulho, 2012).
- In a survey conducted during our first semester of approximately 100 Chapman students, it was found that students have a hard time maintaining a healthy lifestyle during school due to lack of motivation as well as lack of knowledge.
- Academic performance was shown to increase with a healthy lifestyle
- Our goal was to promote a healthier lifestyle for Chapman students and show the importance of combining a healthy diet with regular exercise by providing a convenient and easy to use plan for both nutrition and fitness

Methodology

The menu

- Nutritional data was gathered from the websites of the various restaurants on campus and compared to our nutritional research on healthy eating.
- The menus were then created which provided the healthiest options offered at each restaurant along with calorie counts.

The fitness plan

- We conducted a survey that asked Chapman students how to help them achieve their fitness goals and most of the students wanted a general fitness plan that can be used by all genders.
- A fitness plan that targets the major muscle groups and can be used by all genders was then developed based on our fitness research.

The Menu

Jamba Juice
Top 5 Healthiest Smoothies (lowest calories per serving)
<ul style="list-style-type: none"> Vanilla Blue Sky (210 Cal) Strawberry Whirl (210 Cal) Peach Perfection (210 Cal) Mega Mango (210 Cal) Strawberry Paradise (220 Cal)
Top 5 Most nutritious Items (Most nutrients per serving, no ranking)
<ul style="list-style-type: none"> Orange-C booster (240 Cal) Greens n' Ginger (230 Cal) Apple n' Greens (250 Cal) Vanilla Blue Sky (210 Cal) Vanilla Blue Sky Bowl (330 Cal)
Starbucks
A healthy Caffeine fix
<ul style="list-style-type: none"> Unsweetened coffee (iced or hot) (5 Cal per serving) Unsweetened Americano (iced or hot) (15 Cal per serving) Unsweetened Espresso (iced or hot) (10 Cal per serving) <p>If you would like extra flavors, syrups can be used in moderation If you would like cream or dairy in your coffee, use coconut, soy or almond milk</p>
Healthy yet flavorful (not coffees)
<ul style="list-style-type: none"> Unsweetened teas (iced or hot, applies to any flavor) (45 Cal average based on standard recipe) *Note: Guava and Peach Iced tea are more sweetened and has more calories and therefore excluded from this list Very berry hibiscus refresher (70 Cal per serving) Strawberry Acai refresher (90 Cal per serving) Mango Dragon fruit refresher (90 Cal per serving)
Some things to eat
<ul style="list-style-type: none"> Classic oatmeal (160 Cal) Egg and cheese Protein Box (470 Cal) Spinach feta and egg white wrap (280 Cal) Reduced fat turkey bacon and egg white breakfast sandwich (230 Cal) Hearty Blueberry Oatmeal (220 Cal)

Future Directions

Our final goal is to get our project out to students of Chapman. We are currently in the process of coordinating with the Fitness Center on how we could work together to get our project to the students. We also reached out to the people in charge of orientation week and the Chapman website but we have not received responses due to the current pandemic. We hope once our current situation has calmed down our project will be available to every student at Chapman.

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Top 5 Healthiest Entrees
<ul style="list-style-type: none"> Taco salad with no bowl, with grilled chicken, beans, salsa verde, fajita vegetables, and lettuce (345 cal) Burrito bowl with grilled chicken, brown rice, beans, fajita vegetables, lettuce (530 cal) Loaded tortilla soup (160 cal) Naked burrito with grilled chicken, beans, pico de gallo, brown rice, lettuce, fajita vegetables (450 cal) Vegetarian burrito with a wheat tortilla, brown rice, beans, pico de gallo (465 cal)
Healthy Additions
<ul style="list-style-type: none"> Lettuce (0 cal) Fajita vegetables (35 cal) Pico de gallo (10 cal) Guacamole [healthy fat] (130 cal) Beans (130-140 cal) Salsa verde (15 cal) Salsa roja (20 cal) Cilantro (0 cal) Fiery habanero (20 cal)

Einstein Bagels
Top 5 Healthiest breakfast combo(bagel +topping) (lowest calories per serving)
<ul style="list-style-type: none"> Everything(280 kcal) + reduced-fat plain shmeat(100kcal) Asiago (290kcal) + smoked salmon shmeat(110kcal) Blueberry(280kcal) + honey almond shmeat(120kcal) Cinnamon raisin(290kcal) + strawberry shmeat(120kcal) Plain(270 kcal) + bacon & cheddar(200kcal)
Top 5 Healthiest lunch combo (lowest calories per serving)
<ul style="list-style-type: none"> Hummus Veg Out (420kcal) Nova Lox(500kcal) Tasty Turkey(510kcal) Albuquerque Turkey(680kcal) Pepperoni chicken(680kcal)