

# Team 7: Interactive Systems and Healthier Lifestyles

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# Research Goals

- ⦿ How successful people are in using computers and interactive systems to help foster a healthier lifestyle
- ⦿ Study how many people actually use these applications
- ⦿ See if it actually makes a difference in people's lives
- ⦿ Research Topics
  - Athletic Training
  - Weight Loss
  - Diet Tracking
  - New Applications/Innovations

# Research Methods

- ⦿ Academic Research
- ⦿ Surveys
- ⦿ In-person Interviews
- ⦿ Self-experiences

# Apps for Athletic Training

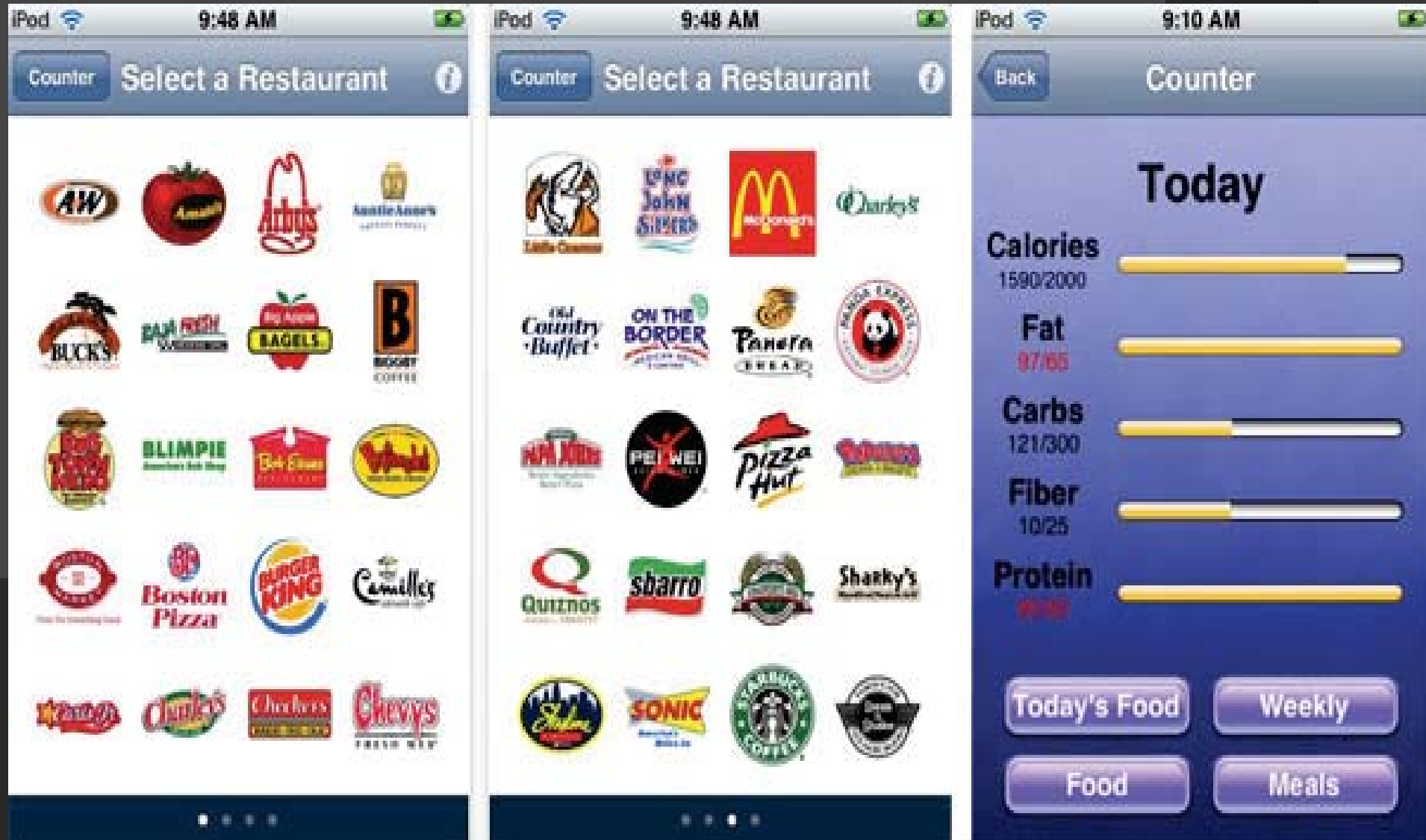
- ◎ Gym Hero
  - Easy to use
  - Provides detailed summaries of workouts
  - Optional auto-fill to show you what you did your last workout
- ◎ Fitness Builder
  - Provides over 750 different workouts
  - Tracks-workout, exercise and body stats
  - Tracks progress, provides user with progress maps

# Apps for athletic Training

## ◎ Ubersense

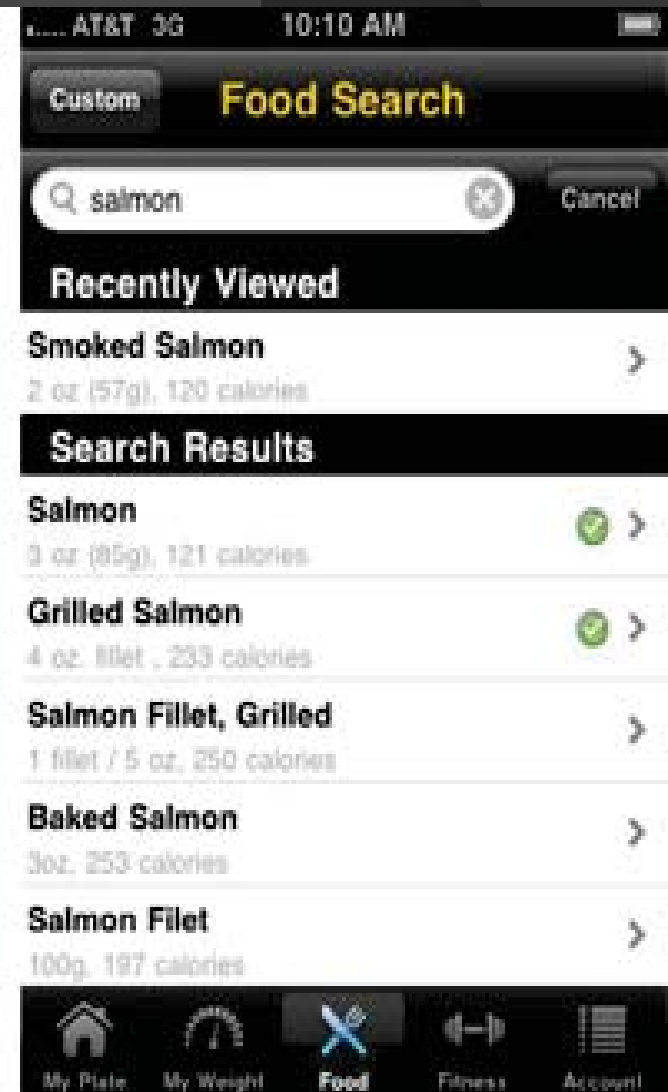
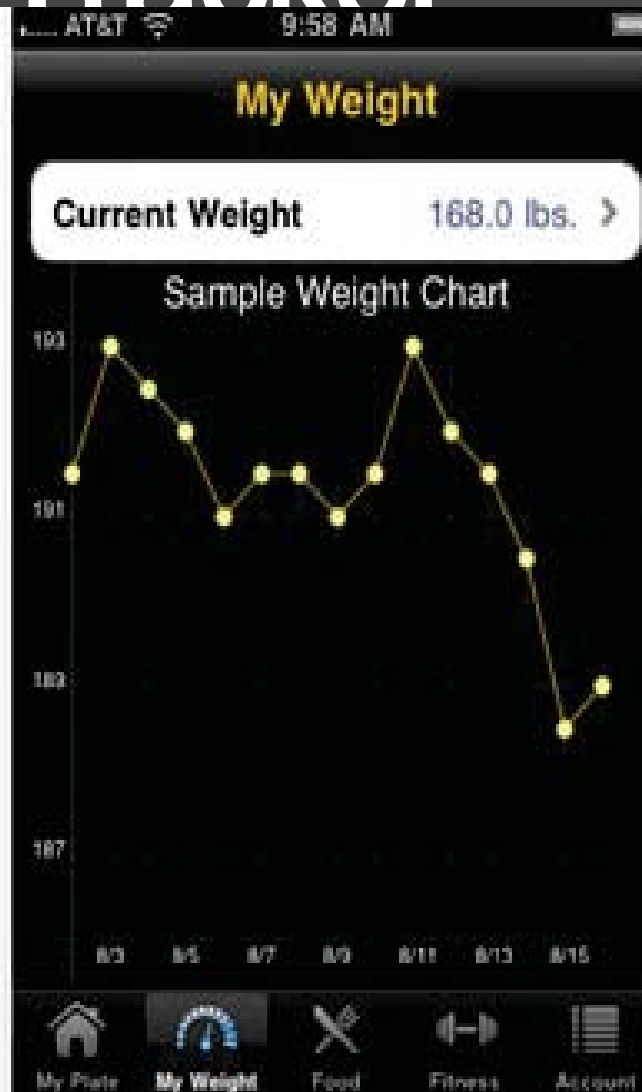
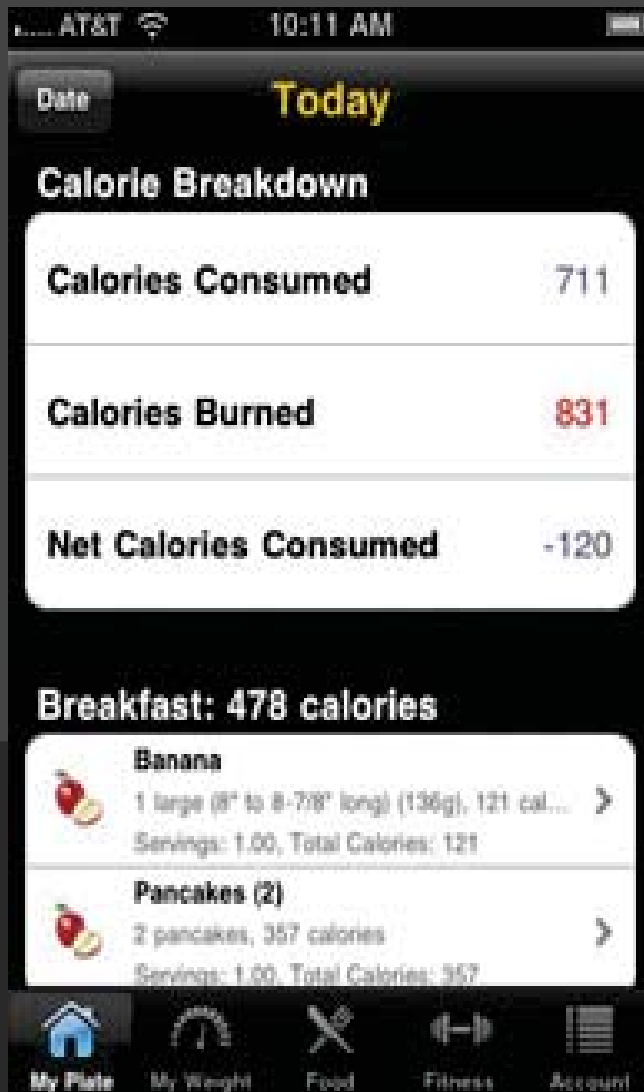
- Allows coaches or athletes videotape and analyze their technique, allowing them compare themselves and track their progress.
- Used by athletes while training for the London Olympics

# 'Fast Food Calorie Counter'



- ① One will be forced to eat abhorrently disgusting food. With a database of over 9,000 menu items from 73 major fast food chains, this nifty little app will provide you with all the "nutrition" information you need to make the best of a bad situation. Flip this app open and watch with horror as your friends stuff their faces with the nutritional equivalent of castor oil.

# 'LIVESTRONG Calorie Tracker'





- ⦿ This app's deceptively blunt name is something of a misnomer. Yes, the Calorie Tracker will count every calorie you consume, but it'll also give you a comprehensive breakdown of your fat, protein, cholesterol, sodium and carbohydrate intake. Arguably its most impressive feature, however, is its palatial database, which offers nutritional information for a staggering 625,000 food and restaurant items. Besides, no less an authority than Lance Armstrong endorses this lil' guy. He's as healthy as they get.

# '40•30•30'



- ① No carbs, good carbs, bad carbs -- playing the trendy diet game can often be more confusing than a game of drunken Mah-Jong. Unlike other regimens, though, '40•30•30' doesn't require you to cut out one food group altogether. Instead, it asks you to eat an optimally nutritious ratio of 40-percent carbohydrates, 30-percent proteins and 30-percent fats. Just enter your daily haul into the app, find your ratio, and calibrate your diet accordingly. Even if your doctor doesn't buy into the '40•30•30' ratio, you can still use the app to help achieve your own macronutrient balance.

# Calorie Counter & Diet Tracker

myfitnesspal

Daily Weekly Nutrients

THURSDAY / Dec 16, 2010

Your Daily Summary

**2310** CALORIES REMAINING [Add to Diary](#)

Goal	Food	Exercise	Net
2310	+ 0	- 0	0

News Feed

**bricker** lost 2 pounds since her last weigh-in! She's lost 28 pounds so far. 01:59 PM

**mike** has logged in for 10 days in

Home My Diary Progress Friends More

Edit **Diary** Add

Goal	Food	Exercise	Net	Remaining
2310	681	0	681	1629

THURSDAY / Dec 16, 2010

**Breakfast** 529 cal [Edit](#)

**Cereals ready-to-eat, KRAFT, PO...** 498 [Delete](#)  
2 cup (1 serving)

**Milk - Lowfat, 1% milkfat** 13 [Delete](#)  
1 fl oz

**Sugars - Granulated (sucrose)** 16 [Delete](#)  
1 tsp

**Coffee - Brewed from grounds** 2 [Delete](#)  
1 cup (8 fl oz)

**Lunch** 152 cal [Edit](#)

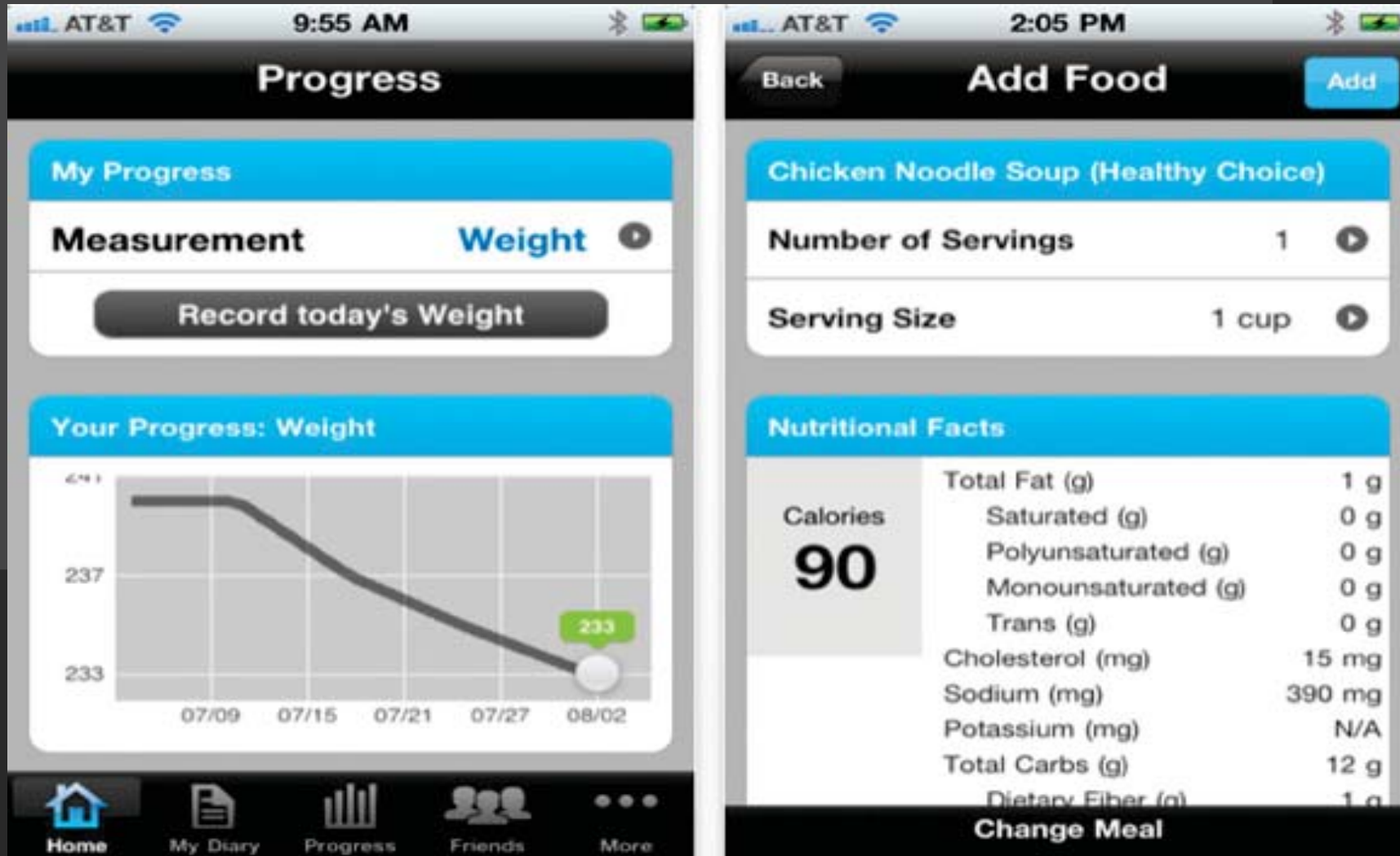
**Bread - Whole-wheat** 110 [Delete](#)  
1.6 slice

**OSCAR MAYER, Turkey Breast (s...** 42 [Delete](#)  
1 serving 4 slices

Home My Diary Progress Friends More

- After you log in and register your weight loss (or gain) goals and your exercise habits, you can use Calorie Counter to tap into its large food database. The app provides you nutritional facts about the food you eat. You log in and add the information about your meals each day, and Calorie Counter keeps track of your calorie intake and the progress you're making toward your goals.

# Calorie Counter & Diet Tracker



- ① The app also enables you to invite your friends to become a part of your weight watching program. Calorie Counter has very high ratings in the App Store. The more you learn to use it, the easier it becomes to maintain it as a daily log.

# Top Weight Loss Applications

- **Loselt**
  - Look up food and track your calories
  - Track your exercise
  - Lets you know how many calories to eat per day based on your weight loss goals
- **Fooducate**
  - Scan the barcode of the food packaging and it will give you the calorie count and the processing techniques.
  - Good for people who try to eat organic foods
- **Locavore**
  - Tells you what foods are in season and how many days you have left to enjoy its full flavor
  - Uses your phones GPS positioning to find local places to buy locally grown, fresh produce.



# Top Weight Loss Applications

## ⦿ Endomondo

- Tracks your route while exercising via Google Maps
- Tracks workout history to compare later.

## ⦿ My Fitness Pal

- Takes your height, weight, goal weight, and lifestyle into account before giving recommendations
- Breaks your total goal weight into monthly goal weights, which is a helpful motivator
- You can also access calorie counts and nutritional information from local restaurants

# Cochrane Study

- A team of Cochrane researchers identified 14 studies in which 2,537 overweight or obese participants were randomized to either an interactive computer program or another treatment for weight loss.
- Participants who were randomized to computer interventions lost more weight after six months than those receiving no intervention or minimal interventions, but less than those who received treatment in person.
- Participants who took part in computer interventions for weight maintenance were more successful at keeping off weight than those receiving no or minimal interventions, but less so than those receiving face-to-face treatment.

# International Electronic Journal of Health Education claims:

- ① “Health apps on smartphones are one of the most highly used apps as nearly 30% of U.S. adults use health apps. It is projected that 500 million people globally by 2015 will be using health apps. Pew Internet research suggested adults ages 30 to 49 (32%) used health apps slightly more often than adults ages 18 to 29 (28%) and 50 and older age (20%) with numbers increasing annually for all adult age groups.”

# Archives of Internal Medicine Journal

- ⦿ A study posted in this journal shows that mobile technology can improve an adults' lifestyle.
- ⦿ Incentives were given to the participants, but results show that if mobile device is frequently then behavior changes in lifestyle will occur.
- ⦿ ↑ in fruit and vegetable intake, ↓ in sedentary leisure time

# Survey Results

- Sample Size: 44 people

How often do you exercise?

Have you ever downloaded a mobile application on your phone to help with weight loss, exercise, or athletic training?

How many times a week do you use mobile application on your phone to help with weight loss, exercise, or athletic training?

Would you ever be willing to use a mobile application of some sort to help with weight loss, exercise, or athletic training?



# Responses From Our Interviews

- “I believe that mobile phone apps can help people become healthier, by notifying them of food that may be healthy or unhealthy or different forms of exercise that can be beneficial.”
- “I don’t think they can help encourage a healthy lifestyle.”
- “I don’t really need help (or at least I don’t think I do) managing my lifestyle.”
- “They can encourage people to be more proactive with exercise and eating healthier.”
- “I think that apps could be used to help people access information that could help make healthy lifestyle choices, such as food choices, etc. I just don’t know how many people have access to smart phones or would know how to use the apps.”

# Conclusions

- ◎ The apps would be and are beneficial, but majority of people don't use them because:
  - Too complicated
  - Too much work
  - No need for them
  - Lack of knowledge
  - Lack of engagement
  - Lack of interest
  - Don't fit users' needs
- ◎ The less work for the user, the more likely they are to use the app.

# Works Cited

- Cox, Carolyn, and Cynthia Kratzke. "Smartphone Technology and Apps: Rapidly Changing Health Promotion." International Electronic Journal of Health Education. Ed. 15, 2012. <<http://www.aahperd.org/aahe/publications/iejhe/upload/Smartphones.pdf>>.
- MentalHelp.net. "Mobile Technology Helps Improve Lifestyle Coaching". 30 May 2012. [http://www.mentalhelp.net/poc/view\\_doc.php?type=news&id=146803](http://www.mentalhelp.net/poc/view_doc.php?type=news&id=146803)>.