

Providing Health Information to College Students in the Digital Age

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Student Health Services
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Learning Objectives

- Identify college students' 4 most believable sources of health information.
- Discuss initiatives that other universities are using.
- Discuss types of health information that students report receiving.
- Brainstorm innovative practices that Mason can implement.
- Identify opportunities for collaboration.

TED Talk: Mick Cornett: How an obese town lost a million pounds

http://video.ted.com/talk/podcast/2013P/None/MickCornett_2013P



Lessons learned from Oklahoma City:

- Identify the issue
- Have a conversation
- Publicize
- Make a commitment to change
- Get stakeholders, sponsors, businesses involved
- Get people talking about it
- Build the infrastructure
- Assess progress and re-evaluate

Let's look at the literature

- Vader, et al, Univ. of Texas, Where do college students get health information? Believability and use of health information sources.
- Analyzed the 2006 ACHA database.
- 94,806 students at 117 colleges/universities:
- 4 most believable sources of health information:

1) health center medical staff



2) health educators



3) faculty or coursework



4) parents



Demographics

- Who utilized health center medical staff the most?
 - Older students
 - Women
 - Full time students
 - Black and Hispanic students
 - Students who live on campus
 - Graduate students
 - Fraternity or sorority members

Demographics – cont.

- Who utilized health center medical staff the least?
 - International students
 - Male students



Conclusions

- Health center medical staff, health educators and faculty/coursework were underutilized in relation to their perceived believability
- Parents – used most and believed most
- Delivery style is as important as the content



From our Canadian colleagues:

- Kwan, et al, Univ. of Toronto used the same tool to survey 1202 Canadian students.
 - 46% of students reported not receiving any health information



- Internet was most common source – but the least believable



Health center medical staff and health educators were the most believable sources.



Types of health info. received

- Sexual assault/relationship violence prevention 26.0%
- Physical activity & fitness 25.5%
- STD prevention 21.3%
- Alcohol/drug prevention 20.0%
- AIDS/HIV infection prevention 18.9%
- Diet and nutrition 16.6%
- Tobacco use prevention 15.5%
- Pregnancy prevention 13.5%
- Violence prevention 11.4%
- Injury prevention/safety 9.1%
- Suicide prevention 3.4%

Sources of Health-related Info.

• Internet	78.8%
• Parents	65.6%
• Friends	61.5%
• Health Center medical staff	56.2%
• Magazines	53.9%
• Television	52.5%
• Health educators	47.1%
• Leaflets, pamphlets, flyers	46.3%
• Faculty/coursework	40.0%
• Campus newspaper articles	20.1%
• Campus peer educators	13.6%
• Resident assistants	12.1%
• Religion	6.7%

Believability of the Health Source

• Health Center medical staff	91.7%
• Health educators	89.9%
• Faculty/coursework	64.1%
• Leaflets, pamphlets, flyers	45.5%
• Parents	45.0%
• Campus peer educators	38.5%
• Campus newspaper articles	35.4%
• Resident assistants	29.3%
• Magazines	19.4%
• <i>Internet</i>	17.4%
• Friend	17.2%
• Television	13.1%
• Religion	11.4%

Health information-seeking in the digital age, Percheski & Hargittai, Northwestern U

Surveyed 1,060 first-year students.

Sources of health information:

- Family and friends 89.5%
- *Internet* 78.0%
- Health Center medical staff 75.5%
- Other media 74.6%

Recommends that health professionals provide information in multiple formats. Internet is used as an additional source, not as a substitute source of health information.

From the Project Information Literacy Progress Report 2009

- Studied how college students from 6 campuses seek information.
- Almost all of the 2318 respondents turned to the same information sources in the initial stages of any research – course related or everyday life research.



- Friends
- Personal collection
- Government websites

From the Project Information Literacy Progress Report 2009

- Scholarly research databases
- Social networks
- ***Instructors***
- Other search engines
- Blogs
- ***Library shelves***



68% of students reported researching health and wellness info. over the past 6 months.

Recommendations from the literature:

- Let's educate the parents.
- Create up-to-date health information programming for parents to share with their students.
- Use every opportunity as a teachable moment.
- Motivational Interviewing training for health center medical staff.



ACHA 2013 Annual Meeting

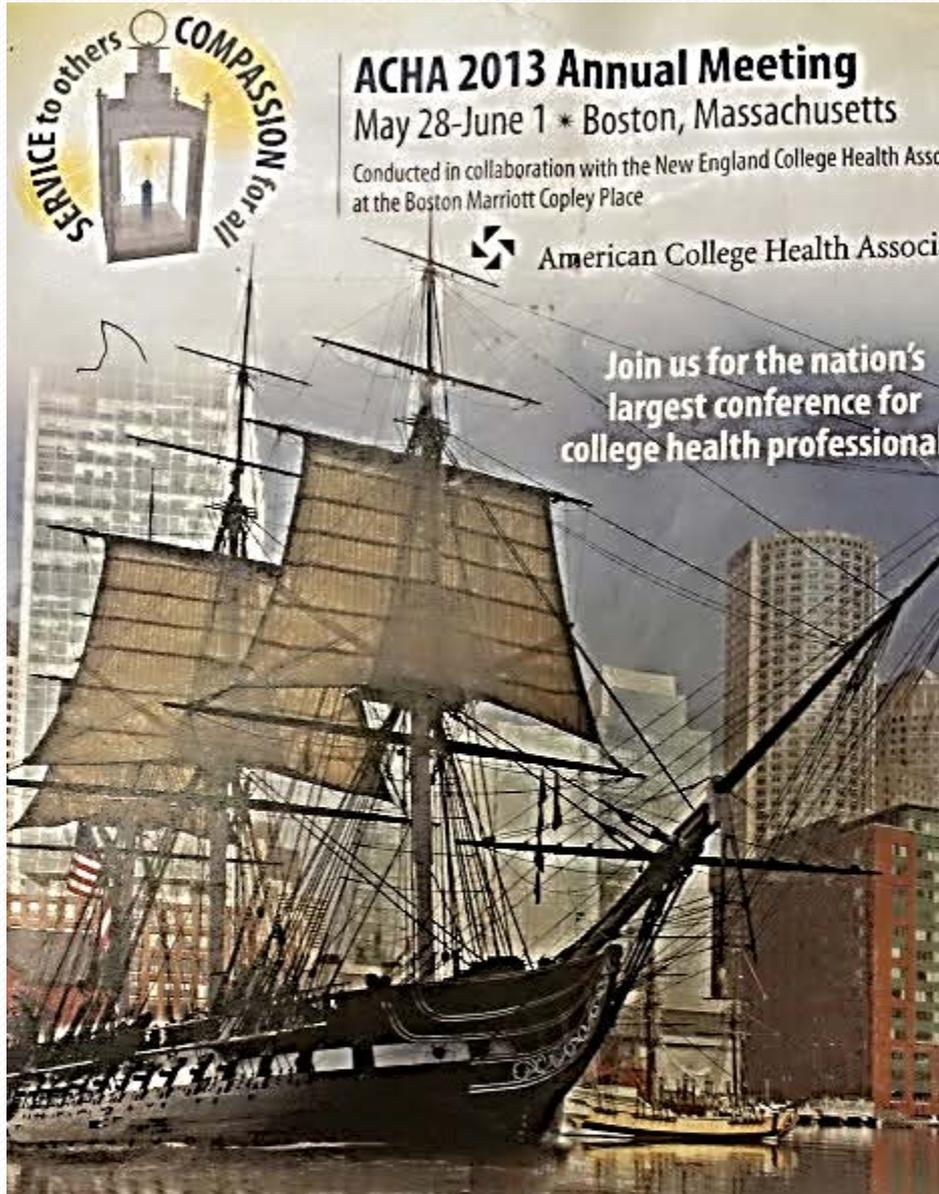
May 28-June 1 * Boston, Massachusetts

Conducted in collaboration with the New England College Health Association at the Boston Marriott Copley Place



American College Health Association

Join us for the nation's
largest conference for
college health professionals



Leveraging Technology to Support Comprehensive Health Promotion Programs

Michael P McNeil, EdD, CHES, FACHA

Examples

2000 – 2000
 Generation Z – 1990 – now
 Internet, social networks, on demand
 "digital natives"
 are reaching out to individuals or campus offices
 he need to have information for students on their
 have used their phone to look up health or
 have software applications or "apps" on their
 manage their health
 have looked online for health information,
 t users with desktop access and 59% of all
 —Pew Internet & America Life Project
THE INTERNET FOR HEALTH
 to have used the Internet to find health info:
 generally find online health information "very useful"
 e changed their personal behavior because of
 r or other health care provider because of health
 — Kaiser Family Foundation

- Interactive Healthy Campus Map**
www.healthycu.org
- Online Health Information:**
goaskalice.columbia.edu
- Managing BASCIS:**
www.basicsfeedback.com
- Sleep Information & Self-Assessment (with Feedback):**
www.sleep.columbia.edu
- Online 21st Birthday Card:**
<http://21stbirthday.columbia.edu/greeting/>
- Tracking Utilization:**
Google Analytics – analytics.google.com
- Self-Managed E-mail Systems:**
Mailchimp, Constant Contact
- Online Course Systems:**
Courseworks, Blackboard, Moodle
- Clicker Technology:**
iClicker, Turning Point



Making the Fiscal Case

Social Media

- Social media is designed to be like a conversation. Most health promotion efforts are one directional
- Mobile internet users are more likely...to post comments and reviews online about health and health care (Pew Internet Project)
- A single tweet can auto-update Twitter & Facebook
- Can auto-tweet when using mailing software (one e-mail can truly be an e-mail, a tweet, and a Facebook update)
- Twitter can be useful to close the web on other social media and technology-based promotion efforts
- Need to "like," "share," and "retweet" the work of others
- Cannot rely on social media invites to actually produce attendees/participants
- Social media engagement needs to include a "call to action"

Reflective Thoughts for

1. How has the digital era impacted student connections to traditional brochures, posters, etc.?
2. How has the easy access to information impacted students? To what extent to develop health literacy?
3. How should health promotion leverage the influence of technology to increase student involvement with students' personal limits?
4. How has the digital era impacted student connections to traditional health promotion efforts?
5. How do we get ahead of the technology curve?
6. How can we leverage the influence of technology on students to increase their health literacy?
7. Who can help you develop the rationale for applying technology to health promotion?
8. Which key collaborative partners are needed to successfully leverage technology for health promotion initiatives?

Technologically-Invested

- Websites with health information
- Sharing positive health behavior data online (CORE, ACHA-NCHA, etc.).

- Online access to policy.
- Training modules for student leaders.
- Online policy feedback systems.

- E-mail messages from key



Accurate and Culturally Competent Information

Health Promoting Policy

Creating Health Promoting Environments

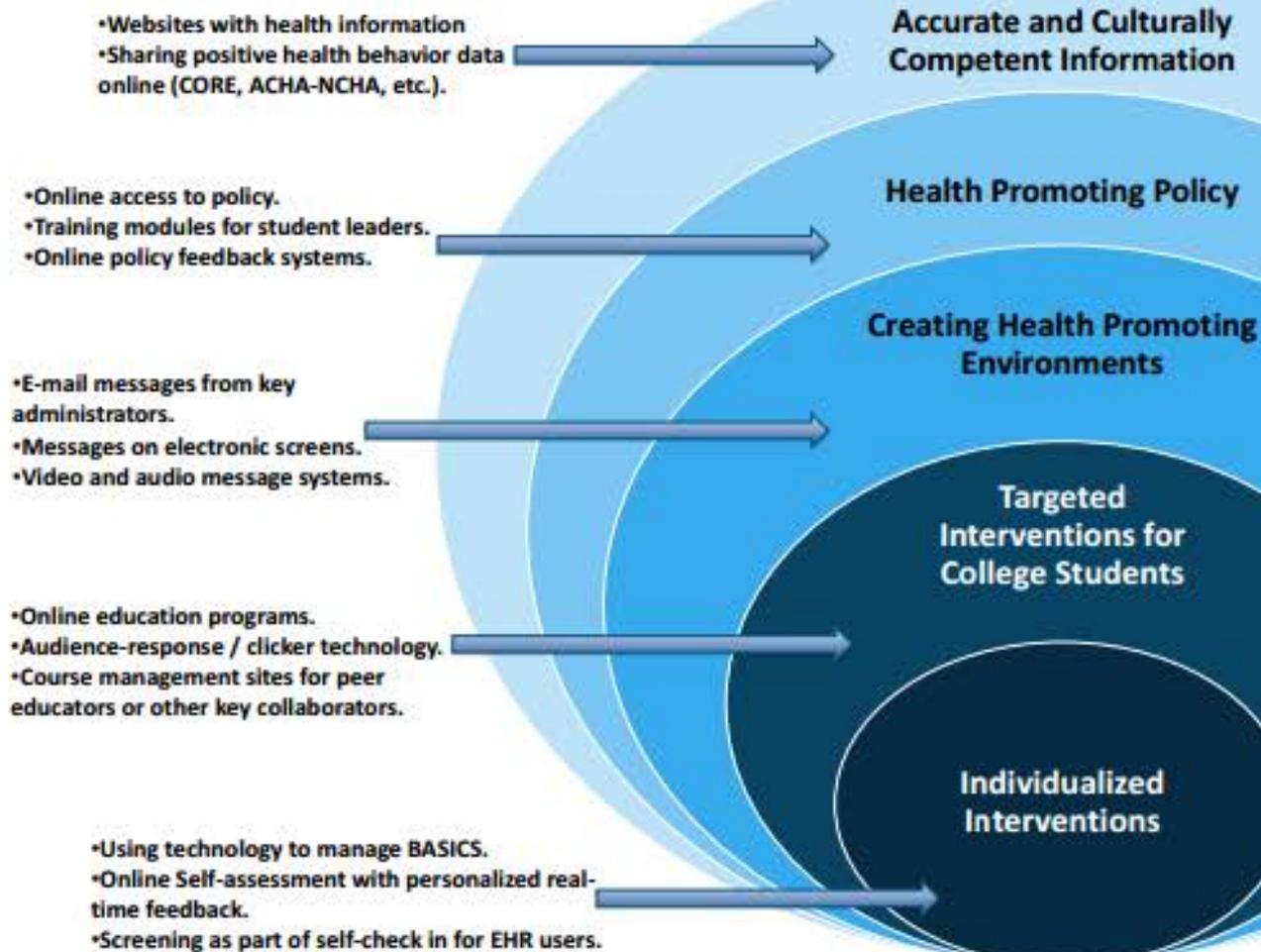
● Leveraging Technology to Support Comprehensive Health Promotion Programs

- Students turn to the web before reaching out to individuals or campus offices.

- - A 24/7 expectation by students results in the need to have information for students on their schedule
- - 29% of cell owners aged 18-29 have used their phone to look up health or medical information
- - 15% of cell owners aged 18-29 have software “apps” on their phones that help them track or manage their health
- - 78% of wireless internet users have looked online for health information, compared with 70% of internet users with desktop access and 59% of all American adults. (Pew Internet and American Life Project)

- How young people use the Internet for health information:
- 15-24 year olds who have used the Internet to find health information:
- 4/10 say they find online health information “very useful”
- 4/10 say they have changed their personal behavior because of health information they got online
- 3/7 have seen a doctor or health care provider because of health information they got online
(Kaiser Family Foundation)

Technologically-Involved



- What does NOT work:

- Quick Response (QR) codes.



- Tech tools that are slower than other options.
- Items that require extensive downloads or configurations.
- Efforts that require registration or log-in before use.
- Most health related Apps (70-90%) are not used for more than 30 days.

<http://health.columbia.edu/services/alice>

- Interactive Healthy Campus Map: www.healthycu.org
- - Online Health Information: www.goaskalice.columbia.edu
- - Managing BASICS: www.basicsfeedback.com
- - Sleep Information & Self-Assessment (with feedback):
www.sleep.columbia.edu
- - Online 21st Birthday Card:
<http://21stbirthday.columbia.edu/greeting/>
- - Tracking Utilization: Google Analytics -
www.analytics.google.com
- - Self-managed Email systems: mailchimp, Constant Contact
- - Online course systems: Courseworks, Blackboard, Moodle
- - Clicker Technology: iClicker, Turning Point

Happy 21st Birthday

Alice

Cheers! Salud! Feliz Aniversario!
Celebrare! L'Chaim! Alegria!
давайте оставаться здоровыми
Janam Din Mubarak! à votre santé 喜び



SURVEY

Start Here! ↓

- This survey will ask you 7 short questions about your plans for celebrating your 21st birthday. All of your answers will remain confidential. Aggregate data based on participant responses will be used by Health Services to develop prevention and intervention programs related to alcohol. By selecting "yes" below, you agree to participate in the survey. We welcome you to review [additional details about your participation. \(PDF\)](#)

NO

YES

LIQUOR

WINE

BEER

One Drink =

1 shot glass (1.5 oz)

1 rum & coke = 2 drinks

1 vodka cranberry = 2 drinks

One 12 oz margarita = 2-4 drinks

One Long Island Tea = 3-5 drinks

BLOOD ALCOHOL CALCULATOR

Weight:

Gender:

Male

Female

No blood alcohol calculator is 100% accurate as Blood Alcohol Concentration (BAC) depends on a number of factors. This tool is meant as a guideline.

SUBMIT

MORE INFO?

- Go Ask Alice!
- Health Services at Columbia
- College Drinking Prevention



YOUR GIFT!

Complete the survey above to receive your gift...



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ALICE! HEALTH PROMOTION

For Health Promotion Professionals

Alice! Health Promotion is pleased to offer these downloadable resources for our colleagues. The list below is organized **by topic** of the sessions/materials offered. For additional information on these or other Alice! resources, please [contact us](#).

- [Alcohol, Tobacco, and Other Drugs](#)
- [General Health Promotion](#)
- [Leadership](#) Alcohol, Tobacco, and Other Drugs
- [Peer Education](#)
- [Other Resources](#)

Alcohol, Tobacco, and Other Drugs

[Developing a Web-based 21st Birthday Card, Presented February 2010 at the Illinois Higher Education Center, Michael McNeil](#)

[Developing Tobacco Cessation Programs on Campus: Lessons Learned, Presented March 2008 at the 7th National Tobacco Symposium on Young Adults, Michael McNeil](#)

[Drugs on Campus: A Pre-Conference Training, Presented November 2007 at the Bacchus Network General Assembly, Michael McNeil](#)

[I Said No to Drugs...But the Drugs Wouldn't Listen, Presented October 2008 at Virginia ABC College Conference, Michael McNeil](#)

[Leveraging Technology to Support Comprehensive Alcohol](#)

More About This Topic:

[21st Birthday Greeting Card](#)

[AlcoholEDU](#)

[BASICS](#)

[CU Move](#)

For Health Promotion Professionals

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[Interactive Trainings](#)

[Nutrition Initiatives](#)

[Outreach Initiatives](#)

[Policy Initiatives](#)

[Sexual and Reproductive Health Resources](#)

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New Q&As

[Can electronic cigarettes help me quit smoking?](#)

[Energy drinks and weight loss?](#)

[Can an unhealthy relationship become healthy?](#)

[Arousal while breastfeeding](#)

[Difficulty maintaining eye contact](#)

[Recently Posted Q&As](#)



Ask your question

Couldn't find an answer to your health issue in the Q&A Library? We're always happy to hear from you, so please send us your question.

[▶ Ask your question](#)

Quick Quiz

Sleep: Too much or too little? Learn how to get just the right amount!

[▶ see entire test](#)

How much do you know about stress?

[▶ see entire test](#)

More Coffee = Better Workout? Test your knowledge. [▶ see entire test](#)

THEME OF THE WEEK

Relating and Dating

Week of:

THIS WEEK'S POLL

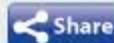
Did you make a New Year's resolution?

Go Ask Alice! on Facebook

[Browse Our Q&A Library](#)[Have Alice! Come to You](#)[Fun Stuff](#)[Health Info & Resources](#)[About Us](#)[Quick Quizzes](#) | [Raves and Rants](#) | [Themes](#) | [Polls](#) | [The Go Ask Alice! Book of Answers](#)

ASK ME.
I KNOW.
I'LL TELL YOU
WHERE TO GO.

Fun Stuff

[g+](#) [1](#)

Who doesn't want to have some fun when online? We know most of our readers come to us because of our long history of providing reliable, accurate, updated, culturally-competent information and a range of thoughtful perspectives. We also know that you can have some fun and learn at the same time. Check out the collection of fun stuff we've gathered for you.

Quick Quizzes

Do you know what you think you know? Check out the variety of quick quizzes that have been developed just for you, our readers. Each quick quiz is no more than 10 questions (multiple choice or true/false) and you will get feedback at the end of each quick quiz. As with our site, you can do these anonymously and we provide related questions & answers for each question and the quick quiz as a whole. Don't forget that you can e-mail quizzes to friends and share them online in over 300 places.

Themes

Each week *Go Ask Alice!* publishes a theme. Sometimes on the serious side, sometimes on the funny side, sometimes based on a song lyric we heard this week. Check out the current theme along with several of the most recently posted themes.

Polls

Go Ask Alice! posts bi-weekly polls so that we can hear from you! Visit our polls page to register your vote and see several of the most recent polls. Each poll also features links to related questions from our extensive Q&A library.

Raves & Rants

Have something to say about *Go Ask Alice!*? Check out a collection of comments submitted by

Go Ask Alice Poll 06/07/13:

How do you stay up-to-date with new Go Ask Alice!

Q & As?

- 97% (1706) By email - I signed up for Go Ask Alice! In your Box
- 0% (5) I'm a fan of Go Ask Alice! on Facebook.
- 0% (0) I follow Go Ask Alice! on Twitter.
- 1% (26) I visit the Homepage often.
- 1% (25) I don't check for new Q&As. I visit the site when I have a specific question in mind.

Creating an Interactive Healthy Campus

Michael P McNeil, EdD, CHES, FACHA & Amanda Daugherty, MPH, CHES

Faculty, and staff with information and resources that advisors.

Connect with health resources
of resources

the resources that literally surround the campus
locating and distinguishing healthful resources
developing positive health habits

of this system over a list form or multiple web pages is evident
such resources with ease and through a variety of Internet
(mobile devices). Additionally, the map can be easily updated
new areas of interest.

have long complained about the decentralization of services
locating resources. By providing a "one stop shop" of
ful living, the map can enable new students to quickly become
Columbia community and help continuing students to broaden
and access to local tools for healthful living. Additionally,
ready making use of the Columbia community's resources will
their awareness of additional community and campus
provide feedback to further improve map offerings. Such
to reduce barriers such as lack of awareness or perceptions of
healthful resources, while increasing belief in students' personal
healthy behaviors.

Number of Columbia undergraduate and graduate students who
enough sleep to feel rested in the morning from 37%
and 48% (graduate) to 39% (undergraduate) and 50%
ively.

Number of students who report feeling overwhelmed or
they have to do from 40% to 36% .

Number of students engaging in some type of physical activity
32% to 35% .

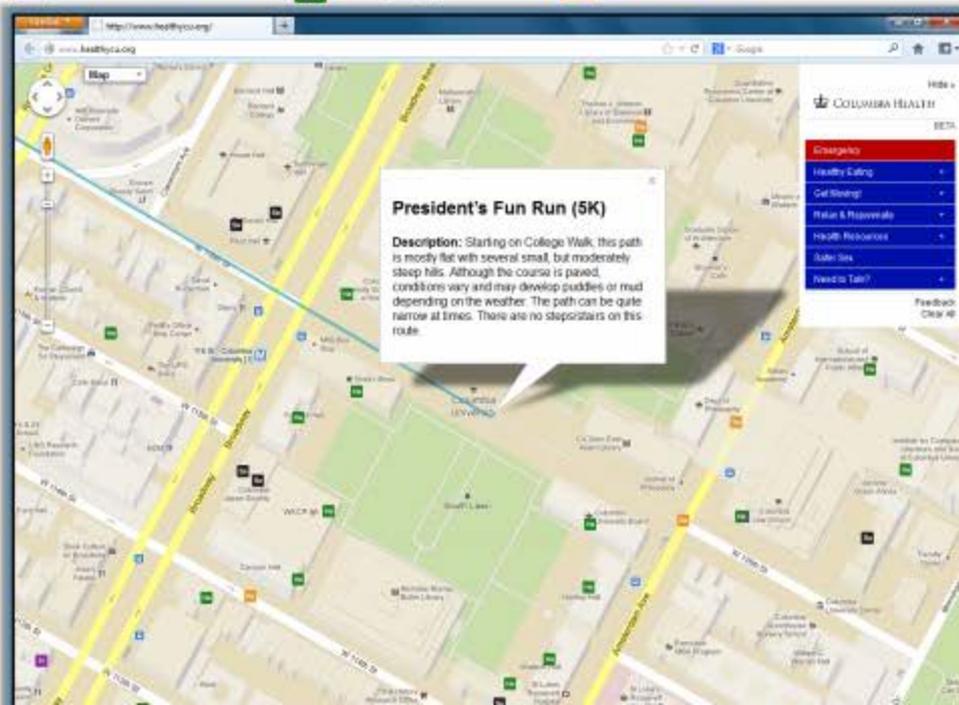
Number of students who report consuming the FDA
or more servings of fruits and vegetables per day from 10%

*"The map is great and very useful! I wish my
undergraduate institution had a map like this."*

— 2nd Year MPH Student

www.healthycu.org

C Columbia Health **O** Health-Related Off Campus **Mo** Get Moving **Se** Safer Sex
H Health-Related On Campus **He** Healthy Eating **Re** Relax & Rejuvenate



PARTNERS:

- Alice! Health Promotion
- Counseling and Psychological Services
- Disability Services
- Medical Services
- Dining Services
- Residential Programs
- Athletics
- Information Technology
- Accessibility Consultant
- Student partners (App Development)

TECHNOLOGY:

- Built on the Google Map API
- Custom icons
- Student developer programmed
- Accessibility for users with disabilities

DEVELOPMENT STAGES:

- Content identification and development
- Graphic development
- Menu programming and icon placement
- Programming
- Testing (alpha stage)
- User testing (beta stage)
- Enhancements

LESSONS LEARNED:

- Technical programming takes far longer
- Programing to work on different browsers
- Student developers are creative and innovative
- Content is plentiful, need to narrow down
- Partnerships matter
- User feedback improves the results

FUTURE DIRECTIONS:

- Map options for each campus
- Inclusion of new resources
- Improve navigation through user testing
- Link icons to other health communication resources
- Integrate into new student orientation
- Share coding with college health colleagues

Interactive healthy campus map for Mason might include:

1. **Emergency care**
- 2. **Healthy Eating** - where to find fresh produce - on campus? - off campus?
 - - vending machines with healthy snack options
- 3. **Exercise venues** “Get Moving!”
 - - indoors and outdoors
 - - walking and running paths
 - - other on campus physical activity resources
 - - off campus exercise facilities?
- 4. **Relax and Rejuvenate**
 - - stress busters
 - - Yoga and meditation
- 5. **Health resources** - SHS, CAPS, Insurance, LGBTQ, Lactation rooms, Dentist, PT
- 6. **Need to talk?** - CAPS, WAVES, ODS, LGBTQ, RAs, others

ITU Support Center
itservices.gmu.edu



Student Health Services

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- STUDENTS
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- VISITORS & MAPS
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- MY MASON
- PEOPLE FINDER

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HAND WASHING AWARENESS WEEK

December 4-10 is National Hand Washing Awareness Week.

Some of us are getting caught dirty handed! Only 39% of Americans say they always wash their hands after coughing or sneezing. Only 77% of men and 93% of women washed their hands publicly in 2010.

Proper hand washing (at least 20 seconds) is one of the best ways to prevent the spread of illness and infection. Check out some tips for better hand washing.



Student Health Services' mission is to provide high quality health care, counseling, health education and prevention services to George Mason University students.

Enrolled students are eligible to receive health care. There is no charge to be seen by one of our health care providers. There are nominal fees for lab work, medications, treatments, dressings, and supplies. We

Announcements

- Hand Washing Awareness Week

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SERVICES

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Care**

ADD/ADHD Medication

Allergy Clinic

Flu Shot

Laboratory Services

**Medical Record
Management**

Men's Health

Mental Health

Nutrition Counseling

Smoking Cessation ▾

Women's Health ▾

Pharmacy

Travel Clinic

STI/STD Screening

Primary & Acute Health Care

Primary Care

Currently enrolled Mason students are eligible to receive confidential primary care services during operating hours. Appointments are available and SHS accepts walk-in patients for acute illness or injury. Call 703-993-2831 to schedule an appointment. Services include, but are not limited to:

- diagnosis and treatment of illness
- diagnosis and treatment of injury
- screening exams
- health and wellness counseling

Student Health Services (SHS) utilizes a holistic approach to healthcare and our services are tailored to the unique needs of each individual. In addition, we provide referrals to healthcare providers and specialists in the community as needed.

Acute Care

Student Health Services provides primary care ambulatory health services, which includes the treatment of minor injuries and acute illness, during scheduled operating hours. Walk-in hours are open to students experiencing:

- Injury

Quick Links

- [SHS Hours & Locations](#)
- [Patient Satisfaction Survey](#)
- [Pay online](#)
- [Fee List](#)



Student Health Services

STUDENTS

FACULTY & STAFF

VISITORS & MAPS

TODAY@MASON

MY MASON

PEOPLE FINDER

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HEALTH EDUCATION

Eating Well

Eating Disorders

Flu (Influenza) ▾

Healthy Lifestyle ▾

- Eating Well
- Exercise
- Sleeping

Hepatitis

Internet Addiction

Lyme Disease

Meningitis

MRSA

New, Graduating, &
Distance Education
Students

Now that you have settled into Mason, you have had a chance to sample the wide variety of foods offered by our [Dining Services](#). You may have also ventured out to eat at some of the restaurants around Fairfax and D.C. We would like to share some tips for helping you eat well as you enjoy the food and dining options that are available.

Schedule an appointment with the Nutritionist at Student Health Services (703-993-2831) for one-on-one encouragement or to discuss these and other exercise and nutrition tips. You can also schedule an appointment with one of the SHS healthcare providers who take a special interest in nutrition counseling.

Tips For Eating Well

- Watch your **portion size**. A serving of meat, fish or poultry is 2-3 ounces (about the size of a deck of cards). A serving of cheese is 1½ ounces. A serving of pasta is only ½ a cup! Restaurant portions are frequently larger than standard portion sizes; share with a friend or save half for later.
- Be aware of **the calories you drink**. 20 oz. soda – 240

Quick Links

- [SHS Hours & Locations](#)
- [Patient Satisfaction Survey](#)
- [Pay online](#)
- [Fee List](#)

Mason's Health and Fitness Expo



Smartphones and Apps



How Apps are changing family medicine, Journal of Family Practice, Helen Lippman, July 2013

Most popular apps used by physicians in their practice:

- Epocrates Essentials - comprehensive clinical reference suite
- MedCalc - medical formulas, scores, scales and classifications
- Medscape Mobile - drug and condition reference, medical news, CME courses
- DynaMed - clinical reference
- VisualDX - visual diagnostic clinical support
- MicroMedex Drug Information - comprehensive information on drugs, dosages and interactions
- Skyscape - repository of drug and clinical information
- Diagnosaurus DDx - diagnostic search tool

Health-related Apps prescribed by health care providers:

- Anxiety



- Headache/migraine – iHeadache

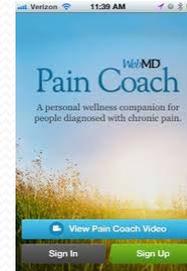


- Medications



- MedMory, MyOC, MyPill

- Pain - WebMD Pain Coach



- Sleep - Sleep Diary



- Weight loss - Calorie Count, Lose It!, MyFitnessPal



Health apps for college students:

- Lose it!



- I map my run



- Grocery list



- Fitness Buddy



- Run Keeper



- Others - Epocrates Rx, Mobile at CDC, Medline Plus Mobile, CINAHL, WebMd Mobile

Conclusions:

- Although students start their research about health information on the Internet, the Internet was perceived to be one of the least believable sources.
- Health center medical staff and university health educators were perceived to be the most believable sources of health-related information.
- Delivery style is as important as the content.
- Provide health information in multiple formats. The Internet is used as an additional source, not as a substitute source of health information.

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