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- www.gutsweb.org/addchange
- E-mail: guts@channing.harvard.edu
- Call: 617-525-2279

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You're online all the time anyway, so why not become a fan of GUTS on Facebook or follow us on Twitter? We'll keep you posted with study updates, health news, and more!

 www.facebook.com/harvardguts

 www.twitter.com/harvardguts

Dear Participants,

We know it's been a long time since the last newsletter, and many of you are wondering what's new with GUTS. One question we hear a lot is, "Am I still in the study?" Yes, you are still in the study! We know your life is very busy but we hope that you'll continue to participate. By taking a couple of minutes every other year to fill out the questionnaire, you contribute to the study of important health issues in young adults.

Thanks again for your participation and for your thoughtful e-mails and Facebook messages. We read and discuss them all!



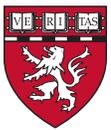
A. Lindsay Frazier, M.D.



Rosalind Wright, M.D.

P.S. Even if it's been a while, we always love to hear from you!

GROWING UP TODAY STUDY



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News from GUTS Researchers

MANY OF YOU HAVE TOLD US through e-mails or on Facebook, “I want to know more about what you’ve found out through GUTS research.” We asked GUTS researchers to explain what they’ve found about their topic of interest from your questionnaires, and what new projects are in store for some GUTS participants.

Food Allergies

Although food allergies are an increasingly common problem for many children and young adults, the sad truth is that no one really knows why. With a generous grant from the Food Allergy Initiative in Chicago, GUTS investigators have begun to study this difficult problem. Two longtime GUTS investigators, Dr. Lindsay Frazier and Dr. Carlos Camargo, have been joined by Dr. Michael Young to examine specifically how mothers’ diet and vitamin D status around the time of pregnancy may have contributed to the development of food allergies in their children. By bringing together so many years of data—from both mothers in Nurses’ Health Study II and their children in GUTS—the investigators are in a unique position to address important questions about the causes of food allergies. The entire GUTS team thanks you for answering the food allergy questionnaires that we have sent you over the past couple of years!

Eating Disorders

Over the past year GUTS researchers have published several papers on factors associated with binge eating and purging (i.e., using vomiting and laxatives to control weight) among GUTS participants. In addition, Dr. Alison Field was asked to present about the effects of binge eating on young adults’ health to the American Psychiatric Association committee, which is proposing changes on how eating disorders are defined in the manual that doctors, researchers, and insurance companies use to diagnose, research, and treat eating disorders. The revised definitions, which can be found at <http://www.dsm5.org/ProposedRevisions/Pages/EatingDisorders.aspx>, include Dr. Field’s suggestion, based on GUTS data, to classify people who binge eat at least weekly as having an eating disorder.

As part of a new grant from the National Institutes of Health, Dr. Field will be using GUTS data to determine the best definitions for eating disorders. She will be collaborating with researchers in the United Kingdom, who study a similar group of young adults, to make sure the definitions suggested by GUTS work well in other populations.

Recent GUTS Publications

- Drinking alcohol, getting little sleep, and spending recreational time on the Internet caused weight gain among GUTS female respondents. (Berkey CS et al. *J Pediatr* 2008)
- Study members who identified as sexual minorities began drinking alcohol earlier than heterosexual participants and were at greater risk of binge drinking. (Corliss HL et al. *Arch Pediatr Adolesc Med* 2008)
- Higher consumption of dairy milk, yogurt, and dairy protein resulted in significantly increased height growth. Non-dairy animal protein and vegetable protein were not linked to height growth, nor were cheese or total calories consumed. (Berkey CS et al. *Cancer Epidemiol Biomarkers Prev* 2009)
- GUTS participants who identify as lesbian or gay were less likely to report bullying others and more likely to report being bullied than heterosexual study members. (Berlan E et al. *J Adolescent Health* 2010)
- Compared to those who ate dinner together as a family “never or some days,” GUTS participants who ate family dinner most days of the week were less likely to have disordered eating behaviors. (Haines J et al. *Eating Disorders* 2010)
- Adolescent girls who drank alcohol were at increased risk for benign breast disease, which may increase their risk for breast cancer later on. (Berkey et al. *Pediatrics* 2010)
- We surveyed mothers of GUTS members to ask how they felt about their daughters receiving the HPV vaccine. 68% of mothers surveyed wanted to vaccinate their daughters at age 13–15, in contrast to national recommendations to vaccinate at 11 or 12. (Kahn J et al. *Pediatrics* 2009)

Visit www.gutsblog.com for a full list of GUTS publications.

New Areas of Research

Benign Breast Disease

Benign breast disease (BBD) is a common condition for many women. It is defined by benign, non-cancerous changes in breast tissue (dense, irregular, bumpy consistency) throughout the menstrual cycle. It can often result in pain or discomfort. Although many women experience this condition, little is known about what causes it or what it may mean for health later in life. It is possible that BBD may be linked with an increased risk of breast cancer, but the risk is not well understood.

Dr. Frazier is beginning a new project with selected GUTS participants who reported BBD on previous questionnaires. The project will examine information from medical records and tissue specimens, as well as diet data from GUTS to help determine potential links between diet and BBD. This project will be unlike any other BBD project in that researchers will be able to combine data from GUTS with data from mothers in the Nurses' Health Study to see if BBD runs in families. Your participation in this important project will be greatly appreciated!

Reproductive Health

Many of you have expressed interest in letting us know that you have been pregnant and have children. Now that most of you have reached adulthood, we would like to take a more in-depth look at your reproductive history. We have added questions about your reproductive health to this year's GUTS 1 questionnaire, including a section to catch-up with experiences you have already had. Drs. Jorge Chavarro and Stacey Missmer will use this data to study questions surrounding fertility, such as why some women are able to become pregnant more quickly than others. We will continue to collect this information in future questionnaires.

We are also planning to collect information from women about pelvic pain and endometriosis. Endometriosis can cause severe pain and potentially affect fertility, but little is known about how to prevent or treat the disease—particularly in young women. In addition, we are evaluating different strategies for studying fertility in men, including the collection of biological specimens by mail. Remember, your participation is key!

Stress

Another area of research in GUTS is stress and health. We know that one's 20s can be a very stressful time in life, but few researchers have examined this topic in a young adult population. Selected participants will be invited to participate in a new study looking at whether or not daily stress can affect a hormone called cortisol in the body. Cortisol is relatively easy to study because it is secreted into saliva. So we can measure your "stress" response by examining your spit!

Sexual Orientation and Health

Transitions of any kind can be stressful, but they can also mark the beginning of new experiences and growth. GUTS researchers are studying one particular area of transition: sexual orientation. We are conducting research on how often GUTS participants reported sexual orientation changes, when they are more likely to report changes, and how the patterns in changes over time relate to life experiences in young adulthood. Because of the dedication of GUTS participants of all sexual orientations, this will be the first time ever that a large-scale study has taken a serious look at this important life experience. Stay tuned for results of this research!

Recent GUTS Results

GUTS 1 2007:

- 8.4% of you volunteer at least 1–4 hours per month.
- 79.7% of you have never been married; 11.3% of you are married.
- 9% of you are partnered; and .8% of you are divorced/separated/widowed.

GUTS 2 2008:

- Almost a quarter of you sleep 6 hours or less per night. (Get some more sleep, GUTS!)
- Half of all GUTS guys surveyed spend between 1–10 hours each weekend playing video games.

Your Top Questions from Facebook

Who are you guys? Am I still in this study?

You're receiving this because you are enrolled in the Growing Up Today Study (GUTS) I or II. When you were 9–14, your mother, who participates in a similar study for nurses called the Nurses' Health Study, enrolled you in the study. GUTS was initially focused on looking at diet and weight change among youth and has now expanded to cover a more diverse range of topics that reflect the fact that you are now young adults. GUTS is important because not only do we have an opportunity to learn more about health and disease in young adults, but since we have information about your mom's health as well, we can learn more about diseases that run in families.

Why do you ask such personal questions?

We recognize that we ask about a lot of things that people might not want to talk about openly. However, we ask about these topics because we want to learn more about how they can affect your health. Everything you tell us is confidential and we store your identifying information, like your name and address, separately from your responses.

Do you inform my parents/guardian/local law enforcement about my results?

NO, we do NOT inform anyone about your results. In fact, we are so serious about your privacy that we have what's called a "certificate of confidentiality" from the federal government. Basically, that means that even if we were subpoenaed by any law enforcement officials, we are legally allowed to refuse to release any of your data.

Who is funding GUTS?

GUTS is funded through grants from the federal government and non-profit organizations. Our study is jointly sponsored through Harvard Medical School and Brigham and Women's Hospital in Boston.

Why do you need my SSN?

We have asked in the past for your Social Security number because it helps us update our contact information for you if we lose touch (e.g., when you've moved). We keep your SSN strictly confidential, and only a handful of senior staff have access to it. As we said before, your privacy is very important to us!

Can you tell me if I'm doing anything wrong with my health? What's the best method for [gaining weight, losing weight, muscle tone, etc.]?

We're glad you're thinking about your health! While we can't offer you individual suggestions, we can tell you about some great websites that can be resources for you. **Go Ask Alice** (<http://www.goaskalice.columbia.edu>) answers any health questions you might be curious about, including physical and mental health. **Mypyramid.gov** can help you figure out your individual nutritional needs.

When's the next questionnaire coming out?

If you're in GUTS 1 (born between 1981 and 1987) you have a new survey available to fill out now at **GUTSweb.org**. GUTS 2 participants, your new 2010 survey will be coming your way in the Fall. Watch for our email or for the paper questionnaire by mail.

Make sure we have your e-mail address so we can invite you to complete your next questionnaire. E-mail us at **guts@channing.harvard.edu**

What's with the giant food section? Where did the giant food section go?

We ask about what you eat because we know that as you get older, you may eat differently than when you were a kid. Even among adults, people's eating habits can change from year to year. Eating patterns may change because new foods and beverages are heavily advertised or because there is new information showing that certain foods are very good or bad for your health. It is important to keep asking you what you eat because your eating patterns may be very different than the last time you completed a questionnaire. The last time we asked GUTS I participants about what they ate was in 2001. We know your lives have changed a lot since then, so next year we will be asking you about the types of foods you now eat and where you buy them.

As part of a new grant from the National Institutes of Health, we will be studying the eating patterns of adolescents and young adults in GUTS II. Americans are cooking less and relying more on prepared foods, such as pizza, take-out Chinese food, sandwiches, and prepared entrees. However, little is known about how much prepared food young adults eat. We will study how these foods and a wide variety of popular flavored drinks, such as Gatorade and Red Bull, are related to health.

Who We Are

Ever wonder who exactly makes up the GUTS questionnaires you receive? Here are the researchers and support staff who work together to send each questionnaire to you.

Back row: Jenn Hankins, Research Coordinator (She makes the web questionnaires you fill out.); Lauren Nichols, GUTS Research Assistant; Gary Chase, Project Manager for the Nurses' Health Study (He coordinates the coding room, where your questionnaires are processed.)

Middle row: Dr. Jorge Chavarro; Dr. Stacey Missmer; Dr. Alison Field; Laura Anatale Tardiff, GUTS Project Manager (and Facebook page admin); Dr. Cathy Berkey; Dr. Rosalind Wright; Dr. Jess Haines

Seated: Dr. Heather Corliss; Dr. Karen Mitchell; Dr. Bryn Austin; Amy Burns, GUTS Research Assistant

Not pictured: Dr. Lindsay Frazier; Dr. Hee-Jin Jun; Stevenson Fisher, Participant Manager (and co-Facebook page admin)

