ACTIVE 4.28 NAC Adult Consent

Please complete the survey below.

Thank you!

Consent Version: 04.28.21

Sponsor / Study Title:

The National Center for Complementary and Integrative Health (NCCIH) / "Identifying Biological Signatures of N-Acetylcysteine for Non-Suicidal Self-Injury in Adolescents and Young Adults"

Principal Investigator:

(Study Doctor)

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(612) 273-9800

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Address:

Ambulatory Research Center

2312 S. 6th St., Fl 2

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If your doctor is also the person responsible for this research study, please note that they are interested in both your clinical care and the conduct of this research study. You have the right to discuss this study with another person who is not part of the research team before deciding whether to participate in the research.

This research is supported by The National Center for Complementary and Integrative Health (NCCIH). The grant number is 1R61AT009995-01. The study intervention is provided by Swanson Health Products.

Key Information About This Research Study

The following is a short summary to help you decide whether or not to be a part of this research study. More detailed information is listed later on in this form.

What is research?

There are important differences between research and treatment plans:

The goal of research is to learn new things in order to help groups of people in the future. Investigators learn things by following the same plan with a number of participants, so they do not usually make changes to the plan for individual research participants. You, as an individual, may or may not be helped by volunteering for a research study. The goal of clinical care is to help you get better or to improve your quality of life. Doctors can make changes to your clinical care plan as needed. Research and clinical care are often combined. One purpose of this informed consent document is to provide you clear information about the specific research activities of this study.

Why am I being asked to take part in this research study?

We are asking you to take part in this research study because you are a young woman who currently engages in self-harm with at least 1 episode in the past 2 months and have a history of at least 5 prior episodes of self-harm.

What should I know about a research study?

Someone will explain this research study to you. Whether or not you take part is up to you. You can choose not to take part. You can agree to take part and later change your mind. Your decision will not be held against you. You can ask all the questions you want before you decide.

Why is this research being done?

This study will test an investigational use of an antioxidant supplement called N-acetylcysteine (NAC). An "investigational use" is a use that is being tested and is not approved for sale for this use in the United States by the U.S. Food and Drug Administration (FDA). This study aims to measure the biological effects of two doses (NAC) versus placebo (capsules that look like NAC but contain no active drug).

How long will the research last?

We expect that you will be in this research study for 4 weeks.

What will I need to do to participate?

You will be assigned to one of three study treatment groups and be asked to take the study treatment as directed. During the in-person visits, you will complete questionnaires, have two MRIs (a way to take pictures of the brain), and have blood draws. There will also be online questionnaires that will be completed at home

More detailed information about the study procedures can be found under "What happens if I say yes, I want to be in this research?"

Is there any way that being in this study could be bad for me?

Taking NAC may cause gastrointestinal adverse effects including nausea, stomach discomfort, diarrhea, and constipation, as well as headache and chest tightness.

More detailed information about the risks of this study can be found under "What are the risks of this study? Is there any way being in this study could be bad for me? (Detailed Risks)"

Will being in this study help me in any way?

We cannot promise any benefits to you or others from your taking part in this research. However, possible benefits include reducing self-harm, but this cannot be guaranteed. You may get placebo, which is a capsule that looks like a drug, but has no drug in it.

Information from this study might help researchers to better understand self-harm or come up with new tests or medications to help others in the future.

What happens if I do not want to be in this research?

You do not have to be in this study to get help for your self-harm. Treatment alternatives include a range of psychotherapy approaches and medications prescribed by a psychiatrist or a primary doctor. The study doctor can tell you more about these options if you'd like.

Detailed Information About This Research Study

The following is more detailed information about this study in addition to the information listed above.

How many people will be studied?

We expect about 46 people will be in this research study.

What happens if I say "Yes, I want to be in this research"?

If you decide you want to participate in this research, you will have the following visits and procedures.

Visit 1 (Day 0) In-person or through video conferencing:

This visit will last about 4 hours.

You will sign this consent form (in person (ink/paper) or using electronic signature in case of video conferencing. You will have a clinical assessment to determine eligibility for this study. We will ask you to fill out several questionnaires on your own at the visit and will also ask you to answer questions from the study team. These questions will be about your symptoms, thoughts, recent trauma, and personal information. It will also ask about the money people in your house earn, as well as their education and work.

Visit 2 (Day 1) In-person:

This visit will last about 3 hours.

You will complete COVID-19 screen and follow COVID-19 related safety precautions including social distancing and use of facial mask You will fill out a safety questionnaire prior to your MRI You will be asked to provide a urine sample for a toxicology screen (for drugs and alcohol) and a pregnancy test. The study doctor will tell you if the toxicology screen is positive or if the test shows you are pregnant. Your urine sample will only be kept until we are able to complete the tests described in this form, and then your sample will be destroyed. You will have an MRI. An MRI uses powerful magnets and radio waves to make pictures of body tissues and structure. You will be asked to remove all metal objects and lay inside the MRI scanner. You will keep your eyes open and look at a plus sign on the screen, called a fixation cross. You'll be asked to look at it and not think about anything in particular. During other parts of the scan, you can rest, listen to music, or even sleep if you want. You will have a blood draw (about 1 tablespoonful). You will be given a 4-week supply of the study treatment that you are assigned to. The study treatment you will get will be chosen by chance, like flipping a coin. Neither you nor the study doctor will choose what study treatment you are assigned. You have one in three chance of being placed one of the groups below. Neither you nor the study doctor will know which study treatment you are getting. The three study treatment groups are: Group 1: 5400mg of NAC

Group 2: 3600mg of NAC with Placebo

Group 3: Placebo only

You should take five capsules in the morning and four capsules in the evening.

Phone Call:

You will receive a phone call from the study staff 3 to 5 days after starting the study treatment. This is a check-in call to answer any questions or concerns that may have come up. It will also help assess any side effects from the study treatment.

At-home Questionnaires (Day 7):

The questionnaires will take about 15 minutes to complete.

You will complete the questionnaires on-line at home. The questionnaires will ask about your feelings, and whether you have thought about hurting yourself or have hurt yourself. You do not need to return to the study site for this part of the research.

Visit 3 (Day 14) In-person or through video conferencing:

This visit will last 30 minutes.

You will fill out some questionnaires about how you feel. You will also answer questions about whether you have thought about hurting yourself or have hurt yourself. You will continue to take five capsules in the morning and four capsules in the evening for two more weeks.

At-home Questionnaires (Day 21):

The questionnaires will take about 15 minutes to complete.

You will complete the same set of on-line questionnaires at home, as you did on Day 7. The questionnaires will ask about your feelings, and whether you have thought about hurting yourself or have hurt yourself. You do not need to return to the study site for this part of the research.

Visit 4/Final Visit (Day 28):

This visit will last about 3-8 hours.

You will complete COVID-19 screen and follow COVID-19 related safety precautions including social distancing and use of face mask You will fill out some questionnaires about your symptoms, feelings, and thoughts about hurting yourself, including an MRI safety questionnaire. You will have another MRI. You will be asked to remove all metal objects and lay inside the MRI scanner. You will keep your eyes open and look at a fixation cross. You will be asked to provide a urine sample for a toxicology screen and a pregnancy test You will have a blood draw (about 1 tablespoonful) intravenously (IV) before your final dose of study treatment. Since the study protocol includes a series of blood draws, you will have the option of either placing an IV catheter or having a series of separate needlesticks for your blood deaws. The IV catherer option has the advantage of limiting the number of times your skin has to be broken and allows for blood samplesto be taken more easily throughout the rest of the visit. If you would prefer a series of needle sticks, you can let the study staff know of that choice.

You will take your final dose of study treatment. You will have 2-5 more blood draws via IV (about 1 teaspoonful each) over the course of the day, beginning after your final dose of study treatment. Your blood samples will be stored for up to 5 years so researchers can perform follow-up tests or additional analysis related to this study. Final Phone Call

In addition, 24-72 hours after your final dose of the study treatment, you will receive a phone call from the study staff to assess any side effects and to answer any remaining questions or concerns.

What happens if I say "Yes", but I change my mind later?

Your participation in this study is voluntary. You can decide not to be in the study, and you can leave the research study at any time and no one will be upset by your decision.

If you decide to leave the research study, contact the investigator to let her know.

Choosing not to be in this study or to stop being in this study will not result in any penalty to you or loss of benefit to which you are entitled. This means that your choice not to be in this study will not negatively affect your right to any present or future medical care, your academic standing as a student, or your present or future employment.

If you stop being in the research, data that has already been collected about you will not be destroyed, but new information will not be collected. You will be asked whether the investigator can collect information from your routine medical care, such as your medical records. If you agree, this information will be handled the same as the information obtained for the research study.

What are the risks of being in this study? Is there any way being in this study could be bad for me? (Detailed Risks)

Oral NAC: Oral NAC may cause gastrointestinal adverse effects including rash, itchiness, nausea, stomach discomfort, diarrhea, and constipation, as well as headache and chest tightness. It is possible that you could have problems and side effects or NAC that nobody knows about yet. Current Medications: It is possible that taking, receiving NAC may change how your regular medications, vaccines, or supplements work. It is very important that you tell the study doctor about any medications, supplements, or vaccines before you take them during the study. IV Placement and Blood Collection: Risks include dizziness and/or fainting, pain at the site, bleeding, bruising, blood clot, and infection. Questionnaires: Some of the questions you will be asked may make you feel uncomfortable or upset. These pertain to psychiatric and medical history, behavioral and psychiatric symptomatology, as well as a puberty staging questionnaire. You do not have to answer any question that makes you feel uncomfortable. Confidentiality: There is a risk of loss of confidentiality of your information. You will read more about the protection of your information later in this form. Please ask the study doctor or study staff if you would like to know more about how your information will be protected while you are in this study. You may be emailed an electronic copy of this signed and dated consent form. There may be risks of loss of privacy and confidentiality if the electronic copy of this consent form is viewed and/or stored on a personal electronic device (PED), especially if that PED is shared with other users or is lost, hacked, or subject to a search warrant or subpoena. Also, the electronic copy of the consent may not be able to be permanently removed from a PED. MRI Scan: MRI machines use a strong magnet and radiofrequency magnetic fields to take images of your body. The scanning process is similar to an x-ray or CT scan, but MRI does not use ionizing radiation (high-energy radiation that can potentially cause damage to DNA) like x-rays

or CT scans. Standard clinical MRI uses a 1.5 Tesla (T) magnets, and at most research centers, the research MRI systems for human use have field strengths of 3T and 4T. This study uses a 7T magnet. Imaging at these field strengths is not considered a significant risk according to FDA guidelines. The risks associated with MRI scans are: Projectiles: Objects with magnetic properties can be pulled into the magnet and turn into projectiles. To minimize this risk we ask that subjects remove all metallic items (watches, cell phones, hair pins, etc.) prior to entering the scanner and by controlling access to the scanner. Claustrophobia: The scanner is a long narrow tube that may cause some people to feel claustrophobic. Hearing Damage: The noise generated by the operation of the scanner during a study is loud enough to cause hearing damage if you do not wear hearing protection. Hearing protection is required and is provided by the investigator. Nerve Stimulation: Some people experience localized tingling, twitching, or muscle contractions during MRI scans. This is expected, but if it is uncomfortable please notify the investigator. Disruption of Devices: Some devices can be damaged by magnetic fields and should not be brought into the scanner room. This includes some implanted devices such as pacemakers, cochlear implants, insulin pumps, nerve stimulators, etc. If you have any implanted device notify the investigator. Heating of Devices: The radiofrequency waves used in MRI can heat conductive materials such as metal implants (screws, plates, rods, wires, artificial joints, etc.), certain tattoo inks, certain clothing fabrics, jewelry, medication patches, wigs, etc. You will be asked to remove these items if possible. If they cannot be removed, you will be asked to provide more information to allow MRI staff to be able to make determination on the safety of proceeding with the scan. A thorough pre-scan questionnaire will allow us to minimize the risk of device disruption and heating. You will be in constant contact with the investigator and should notify the investigator immediately, via the squeeze ball, if you notice anything unusual, become claustrophobic, think that your hearing protection is not adequate, or if you experience nerve stimulation that is uncomfortable.

In addition, there is a risk of unknown effects related to participation in MRI research. Long-term effects of exposure to high magnetic fields are unknown. Most people experience no short-term ill effects from the strong magnetic field, but some people report dizziness, mild nausea, headache, a metallic taste in their mouth, or sensations of flashing lights. These symptoms, if present, subside shortly after leaving the magnet. If any sensations experienced during participation cause discomfort or pain, notify the researcher right away and your participation will stop and you will be taken out of the magnetic field.

Will I receive any imaging results after an MRI?

The images or pictures created during this study are for research purposes only and are not intended to provide health care to you. However, if the results from the magnetic resonance imaging show something unusual in the pictures, a Radiologist trained in reading the pictures will look at them. The pictures will not contain any personal information except your age and pertinent medical history collected as part of the research. There will be no charge to you for having the Radiologist look at your pictures. The investigator will contact you if the recommendation of the Radiologist is to further investigate the unusual results of the pictures with your own physician. However, further medical follow up is not a part of this study and the study does not have funds set aside for this purpose. Therefore, if the results do show something unusual, any medical follow up cost will be your responsibility and/or the responsibility of your health insurance carrier.

Could I have an allergic reaction?

Sometimes people have allergic reactions to drugs. If you have a very bad allergic reaction, you could die. Some things that happen during an allergic reaction that could be a sign or symptom of a life-threatening allergic reaction (anaphylaxis) are:

A rash A fast pulse Sweating A feeling of dread Swelling around the eyes and mouth Swelling of the throat Wheezing Having a hard time breathing A sudden drop in blood pressure (making you feel dizzy or lightheaded) Inability to breathe without assistance You should get medical help and contact the study doctor or study staff if you have any of these or any other side effects during the study.

What do I need to know about reproductive health and/or sexual activity if I am in this study?

If you are pregnant or nursing a child while taking NAC, there may be risks to you, the embryo, fetus or nursing child. Nobody knows what all the risks are right now.

The risks of exposure to high magnetic fields, like those in an MRI, are unknown for fetuses. Therefore, if you are a female who is capable of becoming pregnant, and you have any reason to believe that you might be pregnant, you should not participate in this study.

Will I receive any new information during the study?

If the study doctor or study staff learns any new information that might change your mind about continuing in the study, the study doctor or study staff will tell you about it.

Will I know about any new information about the effects of MRIs on human health?

Personnel in the Center for Magnetic Resonance Research (CMRR), the site where you are participating in MRI research, maintain a list of the names and contact information of all participants included in research at this facility. This information is required and will be used by CMRR to notify participants of significant new information about the effects of MR on human health that develop over the course of MRI research. Participant's identifying information is stored securely and it is maintained in a confidential manner by persons with oversight of research conducted at the CMRR.

Will it cost me anything to participate in this research study?

Taking part in this research study will not lead to any costs to you.

You and your insurance company will be charged for the health care services that you would ordinarily be responsible to pay. In some cases, insurance will not pay for services ordinarily covered because these services are performed in a research study. You should check with your insurance to see what services will be covered by your insurance and what you will be responsible to pay.

What happens to the information collected for the research?

Efforts will be made to limit the use and disclosure of your personal information, including research study and medical records, to people who have a need to review this information. We cannot promise complete confidentiality. Organizations that may inspect and copy your information include the Independent Review Board (IRB), Advarra IRB, the committee that provides ethical and regulatory oversight of research, NCCIH, and other representatives of this institution, including those that have responsibilities for monitoring or ensuring compliance.

If we learn about current or ongoing abuse or neglect, we may be required or permitted by law or policy to report this information to authorities.

Data or Specimens Collected

If you change your mind later, be aware that your samples may or may not be withdrawn from the research, depending on the study site's policies. You can ask the study doctor or study staff about this.

Your samples will not be labeled with your name or other directly identifying information. Your samples will have a code instead. The list that matches the code with your name will be stored separately from your samples. If identifiers are removed from your identifiable private information or identifiable samples that are collected during this research, that information or those samples could be used for future research studies or distributed to another investigator for future research studies without your additional informed consent.

The study site, monitors, auditors, Advarra IRB, the University of Minnesota Research Compliance Office and other University compliance units, the US Office of Research Integrity (ORI), the US Office for the Protection of Human Research Protections (OHRP), the US Food and Drug Administration (FDA) may be granted direct access to your medical records to conduct and oversee the research. By signing this document, you are authorizing this access. We may publish the results of this research. However, we will keep your name and other identifying information confidential.

A description of this clinical trial will be available on http://www.ClinicalTrials.gov, as required by U.S. Law. This Web site will not include information that can identify you. At most, the Web site will include a summary of the results. You can search this Web site at any time.

Certificate of Confidentiality

The study center has a Certificate of Confidentiality from the federal government. This helps protect your privacy. The Certificate means that the, study center does not have to give out identifying information about you even if asked to do so by a court of law. The study center will use the Certificate to resist any demands for identifying information.

The Certificate only applies to the study center. You can still give out information about yourself or about your involvement in the study if you wish. As well, the study center can't use the Certificate to withhold your research information if you give your written consent to give it to an insurer, employer, or other person.

There are some limits to the Certificate's protection. The study center will voluntarily provide the information to:

a member of the federal government who needs it in order to audit or evaluate the research; individuals at the study center, the funding agency, and other groups involved in the research, if they need the information to make sure the research is being done correctly; the federal Food and Drug Administration (FDA), if required by the FDA; state and local authorities, about abusive behavior (toward a child, a partner, or an elderly person) people who say they are going to hurt themselves or someone else Will I receive research test results?

Most tests done on samples in research studies are only for research and have no clear meaning for health care. If the research with your identifiable information or samples gives results that do have meaning for your health, the investigators will contact you to let you know what they have found.

Will anyone besides the study team be at my consent meeting?

You may be asked by the study team for your permission for an auditor to observe your consent meeting. Observing the consent meeting is one way that the University of Minnesota makes sure that your rights as a research participant are protected. The auditor is there to observe the consent meeting, which will be carried out by the people on the study team. The auditor will not document any personal (such as name, date of birth) or confidential information about you. The auditor will not observe your consent meeting without your permission ahead of time.

Whom to contact about this study

During the study, if you experience any medical problems, suffer a research-related injury, or have questions, concerns or complaints about the study, please contact the Investigator at the telephone number listed on the first page of this consent document. If you seek emergency care, or hospitalization is required, alert the treating physician that you are participating in a research study.

An institutional review board (IRB) is an independent committee established to help protect the rights of research subjects. If you have any questions about your rights as a research subject, and/or concerns or complaints regarding this research study, contact:

By mail: Study Subject Adviser

Advarra IRB

6940 Columbia Gateway Drive, Suite 110

Columbia, MD 21046

or call toll-free: 877-922-4724 or by email: adviser@advarra.com Please reference the following number when contacting the Study Subject Adviser: Pro00036469.

To share feedback privately with the University of Minnesota Human Research Protection Program (HRPP) about your research experience, call the Research Participants' Advocate Line at 612-625-1650 (Toll Free: 1-888-224-8636) or go to z.umn.edu/participants. You are encouraged to contact the HRPP if:

Your questions, concerns, or complaints are not being answered by the research team. You cannot reach the research team. You want to talk to someone besides the research team. You have questions about your rights as a research participant. You want to get information or provide input about this research.

Will I have a chance to provide feedback after the study is over?

The HRPP may ask you to complete a survey that asks about your experience as a research participant. You do not have to complete the survey if you do not want to. If you do choose to complete the survey, your responses will be anonymous.

If you are not asked to complete a survey, but you would like to share feedback, please contact the study team or the HRPP. See the contact information listed on page 1 of this form for study team contact information and "Whom do I contact if I have questions, concerns or feedback about my experience?" of this form for HRPP contact information.

Can I be removed from the research?

The person in charge of the research study can remove you from the research study without your approval. Possible

reasons for removal include if you become suicidal, if you engage in self-harm that requires urgent or emergency care, if you have intolerable side effects from the study treatment, or if you do not follow the instructions from the study team.

What happens if I am injured while participating in this research?

In the event that this research activity results in an injury, treatment will be available, including first aid, emergency treatment and follow-up care as needed. Care for such injuries will be billed in the ordinary manner to you or your insurance company. If you think that you have suffered a research related injury, let the study physicians know right away.

You do not give up any of your legal rights by signing this form.

Be aware that your health care payer/insurer might not cover the costs of study-related injuries or illnesses.

Will I be compensated for my participation?

If you agree to take part in this research study, we will pay you as follows for your time and effort:

Visit 1 (Day 0) (In-person or through video conferencing): $40 Visit 2 (Day 1) In-person: $50 At-home Questionnaires (Day 7): $10 Visit 3 (Day 14) (In-person or through video conferencing) questionnaires: $10 At-home Questionnaires (Day 21): $10 Visit 4/Final Visit (Day 28) In-person: $200 If you complete all study visits/questionnaires, this totals $320 for the entire study.

Payment will be made using a pre-paid debit card called Greenphire ClinCard. It works like a bank debit card. We will give you a debit card and each time you receive a payment for participation in this study, the money will be added to the card after each completed visit.

You may use this card at any store that accepts MasterCard or you can use a bank machine to remove cash. However, there may be fees drawn against the balance of the card for cash withdrawals (ATM use) and inactivity (no use for 3 months). We will give you the "ClinCard Frequently Asked Questions" information sheet that answers common questions about the debit card. You will also receive letters with additional information on how you can use this card and who to call if you have any questions. Be sure to read these letters, including the cardholder agreement, for details about fees.

The debit card system is administered by an outside company. The company, Greenphire, will be given your name. They will use this information only as part of the payment system. Your information will not be used for any other purposes and will not be given or sold to any other company. Greenphire will not receive any information about your health status or the study in which you are participating.

Use of Identifiable Health Information

We are committed to respecting your privacy and keeping your personal information confidential. When choosing to take part in this study, you are giving us the permission to use your personal health information that includes health information in your medical records and information that can identify you. For example, personal health information may include your name, address, phone number or social security number. Those persons who get your health information may not be required by Federal privacy laws (such as the Privacy Rule or what you may know as "HIPAA") to protect it. Some of those persons may be able to share your information with others without your separate permission. Please read the separate HIPAA Authorization form that we have provided and discussed.

How will my information be used in publications and presentations?

We may publish the results of this research in scientific, medical, academic or other journals or reports, or present the results at conferences. Information that makes it easy to identify you (such as your name and contact information, SSN and medical records number) will not be part of any publication or presentation. If you have an extremely unique or rare condition that is not shared by many others, it is possible that some people may be able to determine your identity even without these identifiers.

[Attachment: "2021.04.28 Cullen 26890 Adult Consent.pdf"]

Permission for Optional Future Re-Contact:

The following research activities are future re-contact optional activities, meaning that you do not have to agree to them in order to participate in the research study. Please indicate your willingness to participate in these optional activities by placing your initials next to each activity.

1) I will allow the members of the study team to contact me in the future to request information about my progress.

◯ Yes, I agree.
◯ No, I disagree.

2) The investigator may contact me in the future to see whether I am interested in participating in an expanded portion of this study.

◯ Yes, I agree.
◯ No, I disagree.

Signatures
Your signature documents your permission to take part in this research. You will be provided a copy of this signed document.

3) Signature of participant

_____

4) Printed name of participant

_____

5) Date

_____