Document type: Current and final approved Informed Consent Form

Short Title: Sulforaphane in a New Jersey (NJ) Population of Individuals With Autism

Official Tittle: Sulforaphane in Autism: A Treatment Trial to Confirm Phenotypic Improvement With Sulforaphane Treatment in a New Jersey (NJ) Population of Individuals With Autism

ClinicalTrials.gov Identifier: NCT02677051

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CONSENT TO TAKE PART IN A RESEARCH STUDY

TITLE OF STUDY: "Sulforaphane in autism. A treatment trial to confirm phenotypic improvement with sulforaphane treatment in a NJ population of individuals with autism".
Principal Investigator: Steve Buyske, PhD

This consent form is part of an informed consent process for a research study and it will provide information that will help you to decide whether you wish to volunteer for this research study. It will help you to understand what the study is about and what will happen in the course of the Study.

If you have questions at any time during the research study, you should feel free to ask them and should expect to be given answers that you completely understand.

After all of your questions have been answered, if you still wish to take part in the study, you will be asked to sign this informed consent form.

You are not giving up any of your legal rights by volunteering for this research study or by signing this consent form.

Who is conducting this research study?
Dr. Steve Buyske is the Principal Investigator of this research study. A Principal Investigator has the overall responsibility for the conduct of the study. However, there are often other individuals who are part of the research team.

Dr. Buyske may be reached at 848-445-7680.
His mailing address is:
Department of Statistics
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559 Hill Center, 110 Frelinghuysen Rd
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The study doctor or another member of the study team will also be asked to sign this informed consent. You will be given a copy of the signed consent form to keep.

SPONSOR OF THE STUDY: This study is being sponsored by The Governor's Council for Medical Research and Treatment of Autism of New Jersey.

Why is this study being done?
This study will try to determine if sulforaphane treatment (a compound that comes from eating certain vegetables) improved social interaction and certain behaviors in male individuals 13 – 30 years old as measured by standard tests used in diseases like autism. It will also try to understand differences in response to this compound. For this study we will use an approved source called Avmacol®.

Why have you been asked to take part in this study?

You have been asked to join this study because you are a male between the age of 13 and 30 and have been diagnosed with autism.

Who may take part in this study? And who may not?
You/your child may take part in this study if:
If you/your child has autistic disorder

- You are male.
- You/your child are between the ages of 13 – 30 years old.

You/your child may not take part in this study if:

- You/your child do not have a parent or legal guardian.
- You/your child have had a seizure within 2 years of this time.
- You/your child can not or will not complete all visits and adherence to study regimen.
- You/your child have an infection or are being treated with antibiotics.
- You/your child have a chronic medical disorder (e.g., heart disease, stroke or diabetes) or major surgery within 3 months prior to enrollment.
- You/your child has a history of abnormal liver, thyroid or kidney function.
- You/your child have a diagnosis of autism spectrum disorder other than autistic disorder, for example, Asperger, PDD-NOS etc.

How long will the study take and how many subjects will participate?
This trial will be done in 40 people and treatment will last for18-weeks. A final “close out” visit will be done at 22 weeks.

What will You/your child be asked to do if You/your child take part in this research study?

You/your child will participate in an interview to find out about you/your child’s diagnosis. The interview and related questionnaires may take up to 1 hour to complete. This will all take up to 2 hours to finish.

If you/your child meets all the criteria for being in this study, you/your child will continue to the treatment phase of the study. You/ your child will receive evaluations and medical test by the study team, including the study doctor, Eveline Traeger, MD an autism specialist. This may include a blood draw or a cheek swab and a urine sample. Some of the blood sample, or the urine sample and cheek swab will be used for research and will be used to test for certain chemicals normally found in the blood (biomarkers) and as a source of DNA. Cheek swabs and urine samples may be used when we are unable to get a blood stick or draw from you/your child. These tests may take up to 1 hour to complete. The tests are called the Aberrant Behavioral Checklist (ABC), the Social Responsiveness Scale (SRS) and the Clinical Global Impressions test (CGI).

You/your child will also be assigned a “randomization number”. This number will come from a computer program that choses numbers at random, sort of like flipping a coin. The “randomization number” will determine which group you/your child will be in. They will either be in the group that receives active supplement (sulforaphane) or the group that receives a placebo (non-harmful, inactive substance). You/your child will not know which group You/your child are in while in the study, nor will the study personnel. You/your child will be required to take a small number of aspirin sized pills daily for 18 weeks. The number of pills depends on body weight. The capsule may be swallowed whole. If you/your child cannot swallow the capsule a pill grinder will be provided and the ground pill can be mixed with food.

If you/your child are found to have clinical blood/urine test results outside normal limits, we will ask you/your child to discontinue study medication. If after 2 weeks the lab values return to within the study’s acceptable limits and you/your child wish to remain in the study and the study doctor agrees we will then ask you/your child to resume the study medication.

If the lab tests remain abnormal you/your child will discontinue study medication permanently (though will continue to be followed-up in the study).

Follow up visits with the study doctor will be at weeks 4, 10, 18 and 22. In each week the study doctor will do a screening and ask questions to see if there are any adverse effects. In each of these weeks the study doctor will use three questionnaires to see if there is change in you/your child’s autism symptoms. Each of these visits will take about an hour.

In weeks 4 and 10 additional study medication/placebo will be given to you/your child.

At weeks 4 and 18 you/ your child will receive evaluations and medical test by the study team, including the study doctor. This may include a blood draw to see if there are changes in things like liver and kidney function and to make sure you/your child is healthy enough to remain in this study.

Study medication/placebo will be completed in week 18 and some of the blood draw canbe used to see if there are changes in biomarker levels.

The final visit will be in week 22. During this visit the study doctor will do a screening and ask questions to see if there are any adverse effects and use three tests to see if there is change in you/your child’s autism symptoms after being off of the medication/placebo. This visit may include a blood draw to see if there are changes in things like liver and kidney function. This will complete the study. This will take about an hour.

Will there be any cost to you to take part in this study?
There will be no costs to you/your child to take part in this study.

Will you be paid to take part in this study?
You will receive $ 30.00 for taking part in this study according to the following schedule, $5.00 for each of the scheduled visits.

Schedule of Study Evaluations:

Time Line	Informed consent	Diagnosis, ADOS DSM	Study medication	Tests of autism symptoms	Physical exam and maybe clinical blood tests	Screening / questioning for adverse effects	Sample for biomarker analysis	sam for ana
Screening /Enrollment visit:	Y	Y	N/A	N/A	N/A	N/A	N/A	N
Baseline visit:	N/A	N/A	y	CGI, ABC and SRS.	y	N/A	y	
4 week (follow-up) visit:	N/A	N/A	y	CGI, ABC and SRS	y	y	n	
10 week (follow-up) visit:	N/A	N/A	y	CGI, ABC and SRS	n	y	n	
18 week (treatment stop) visit:	N/A	N/A	n	CGI, ABC and SRS	y	y	y	
22 week (final/closeout) visit:	N/A	N/A	n	CGI, ABC and SRS	y	y	y	

What are the risks and/or discomforts you/your child might experience if You/your child take part in this study?
If your blood is drawn, there may be a bruise, or bleeding, or infection, at the place where your blood is drawn. However, infection is rare.

You/your child should not take any over-the-counter medicines, herbal products, vitamins or food supplements while taking part in this study, unless you tell the study doctor and get permission from the study doctor to go on taking these medicines. You will follow the instructions of the study doctor about the use of any of these products.

You/your child should also tell the study doctor about all medicines that other doctors may have prescribed for you/your child to take.

Reproductive Risks: This study is in male subjects only. There are no known reproductive risks for men.

Risk of the supplement: One risk to subjects is the potential side effects of the study medicine. The study medicine comes from eating cruciferous vegetables (like broccoli). The form used in this study is well tolerated and has shown no toxicity in other studies at similar doses. Side effects of sulforaphane include: flatulence (gas), weight gain, gastrointestinal disturbances (large bowel movement, soft stool), and increased urination. These effects are expected to be minor if they occur.

Loss of Confidentiality: As with all studies there is a small chance of loss of confidentiality. Please see pages 6 and 7 for more information.

Are there any benefits for you if you choose to take part in this research study?
The benefits of taking part in this study may be:

Confirmation that sulforaphane treatment may influence social interaction, abnormal behavior, and verbal communication in male individuals with autistic disorder without serious side effects would be a major step in helping families and individuals with autism and may benefit the subject directly. However, it is possible that you might receive no direct personal benefit from taking part in this study.

What are your alternatives if you don't want to take part in this study?
Your alternative is not to take part in this study.

How will you know if new information is learned that may affect whether you are willing to stay in this research study?
During the course of the study, you will be updated about any new information that may affect whether you are willing to continue taking part in the study. If new information is learned that may affect you after the study or your follow-up is completed, you will be contacted.

How will information about you be kept private or confidential?
Those that wish to enter the study will be given a participant number which will be used on all study related documents during the study.

All efforts will be made to keep your personal information in your research record confidential, but total confidentiality cannot be guaranteed.

All data including screening data, physical results, blood test results, phenotypic data and test results will be securely sent to or brought to the Data manager. Data will be stored in both electronic files and hard copy source documents. The source documents will be coded and will be stored in locked file cabinets in a locked room. Any electronic data will be stored on password protected computers on a secure network within the University and not accessible by outside individuals.

Sample collection tubes will not contain Protected Health Information (PHI) which is individual information that can identify you (e.g. names, phone numbers etc.). Each collection tube will be labeled with the subject's unique ID number. Data analysis and reporting will be done with the Unique ID number only.

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

Certificate of Confidentiality
The study has received a Certificate of Confidentiality from the federal government, which will help us protect the privacy of our research studies. The Certificate protects against the involuntary release of information about subjects collected during the course of our covered studies. The researchers involved in the studies cannot be forced to disclose the identity or any information collected in the study in any legal proceedings at the federal, state, or local level, regardless of whether they are criminal, administrative, or legislative proceedings. However, you or the researcher may choose to voluntarily disclose the protected information under certain circumstances. For example, if you or your guardian requests the release of information in writing, the Certificate does not protect against that voluntary disclosure. Furthermore, federal agencies may review our records under limited circumstances, such as a Department of Health and Human Service (DHHS) request for information for an audit or program evaluation or a Food and Drug Administration (FDA) request under the Food, Drug and Cosmetics Act.

You should understand that a Confidentiality Certificate (COC) does not prevent you or a member of your family from voluntarily releasing information about yourself or your child/teen's involvement in this research. Note however, that if an insurer or employer, learns about your child/teen's participation, and obtains your consent to receive research information, then the investigator may not use the COC to withhold this information. This means that you and your family must also actively protect your child/teen's own privacy. This COC does not imply DHHS approval.

Genetic Information Nondiscrimination Act (GINA)
Since some genetic variations can help to predict the future health problems of you and your relatives, this information might be of interest to health providers, life insurance companies, and

others. Therefore, your genetic information potentially could be used in ways that could cause you or your family economic stress.

There are state and federal laws that protect against genetic discrimination. A federal law, the Genetic Information Nondiscrimination Act makes it illegal for health insurance companies, group health plans, and most employers to discriminate against you based on your genetic information. This law generally will protect you in the following ways: (1) health insurance companies and group health plans may not request your genetic information that we get from this research; (2) health insurance companies and group health plans may not use your genetic information when making decisions regarding your eligibility or premiums; and (3) employers with 15 or more employees may not use your genetic information that we get from this research when making a decision to hire, promote, or fire you or when setting the terms of your employment. However, it does not protect you against discrimination by companies that sell life insurance, disability insurance, or long-term care insurance

National Database for Autism Research (NDAR):
Data from this study may be submitted to the National Database for Autism Research (NDAR). NDAR is a computer system run by the National Institutes of Health that allows researchers studying autism to collect and share information with each other. With an easier way to share, researchers hope to learn new and important things about autism more quickly than before.

During and after the study, the researchers will send information about you or your child's health and behavior and in some cases, you or your child's genetic information, to NDAR. However, before they send it to NDAR, they will remove information such as name, address, and phone number, and replace that information with a code number. Other researchers nationwide can then file an application with the National Institutes of Health to obtain access to your study data for research purposes. Experts at the National Institutes of Health who know how to protect health and science information will look at every request carefully to minimize risks to you and your child's privacy.

You and your child may not benefit directly from allowing you or your child's information to be shared with NDAR. The information provided to NDAR might help researchers around the world treat future children and adults with autism spectrum disorders so that they have better outcomes. NDAR will report to Congress and on its website about the different studies that researchers are conducting using NDAR data; however, NDAR will not be able to contact you or your child individually about specific studies.

You may decide now or later that you do not want to share you and your child's information using NDAR. If so, contact Steve Buyske, the researcher who is conducting this study, and he will tell NDAR, which can stop sharing the research information. However, NDAR cannot take back information that was shared before you changed your mind. If you would like more information about NDAR, this is available on-line at http://ndar.nih.gov.

Do you give permission to send your/your child's data to NDAR (check one)?
Yes_____ No_____ Initials:_____

What will happen if you do not wish to take part in the study or if you later decide not to stay in the study?
Participation in this study is voluntary. You may choose not to participate or you may change your mind at any time.

If you do not want to enter the study or decide to stop participating, your relationship with the study staff will not change, and you may do so without penalty and without loss of benefits to which you are otherwise entitled.

You may also withdraw your consent for the use of data already collected about you, but you must do this in writing to:

Dr. Buyske
His mailing address is:
Department of Statistics
Rutgers University
559 Hill Center, 110 Frelinghuysen Rd
Piscataway, NJ 08854

If so your data will be destroyed and NDAR will be notified to remove your information.

If you decide to withdraw from the study for any reason, you may be asked to return for at least one additional visit for safety reasons.

Who can you call if you have any questions?
If you have any questions about taking part in this study or if you feel you may have suffered a research related injury, you can call the study doctor:

Dr. Steve Buyske
Department of Statistics
848-445-7680.

If you have any questions about your rights as a research subject, you can call:

IRB Director

732-235-9806 New Brunswick/Piscataway

And
Human Subject Protection Program
732-235-8578 - New Brunswick

What are your rights if you decide to take part in this research study?
You have the right to ask questions about any part of the study at any time. You should not sign this form unless you have had a chance to ask questions and have been given answers to all of your questions.

PERMISSION (Authorization) TO USE OR SHARE HEALTH INFORMATION THAT IDENTIFIES YOU FOR A RESEARCH STUDY

Information about you and your health is personal and private, so this information generally cannot be used in research without your written permission. The next few paragraphs tell you about how researchers want to use and share your health information in this research study. Your information will only be used as described here or as allowed or required by law. Ask questions if you do not understand any part of the research or the use of your health information. If you sign this consent form, you agree to let the researchers use your information in the research and share it with others as described below.

What is the purpose of the research and how will my information be used?
You are being invited to take part in this research study which is described at the beginning of this form. The purpose of collecting and using your health information for this study is to help researchers answer the questions that are being asked in the research.

What information about me will be used?

- Medical history or treatment.
- Laboratory/diagnostic tests.
- Psychological testing, surveys or questionnaires.
- Genetic information.

Who may use, share or receive my information?
The research team may use or share your information collected or created for this study with the following people and institutions:

- Rutgers University researchers involved in the study.
- The Rutgers University Institutional Review Board and Compliance Boards.
- The Office for Human Research Protections in the U.S. Dept. of Health and Human Services.
- The study sponsor, The Governor's Council for Medical Research and Treatment of Autism of New Jersey/Autism Center of Excellence coordinating center at Montclair state.
- Members of a data safety monitoring board.
- The National Institutes of Health.
- The Food and Drug Administration.

Those persons or organizations that receive your information may not be required by Federal privacy laws to protect it and may share your information with others without your permission, if permitted by the laws governing them.

Will I be able to review my research record while the research is ongoing?
No. We are not able to share information in the research records with you until the study is over. To ask for this information, please contact the Principal Investigator, the person in charge of this research study.

Do I have to give my permission?
No. You do not have to permit use of your information. But, if you do not give permission, you cannot take part in this research study. (Saying no does not stop you from getting medical care or other benefits you are eligible for outside of this study.)

If I say yes now, can I change my mind and take away my permission later?
Yes. You may change your mind and not allow the continued use of your information (and to stop taking part in the study) at any time. If you take away permission, your information will no longer be used or shared in the study, but we will not be able to take back information that has already been used or shared with others. If you say yes now but change your mind later for use of your information in the research, you must write to the researcher and tell him or her of your decision:
Dr. Steve Buyske*PhD.*
His mailing address is:
Department of Statistics
Rutgers University
559 Hill Center, 110 Frelinghuysen Rd
Piscataway, NJ 08854

How long will my permission last?
"There is no set date when your permission will end. Your health information may be studied for many years."

AGREEMENT TO PARTICIPATE

1. Subject consent:

I have read this entire form, or it has been read to me, and I believe that I understand what has been discussed. All of my questions about this form or this study have been answered.

Subject Name:_____

Subject Signature:_____

Date:_____

2. Signature of Investigator/Individual Obtaining Consent:

To the best of my ability, I have explained and discussed the full contents of the study including all of the information contained in this consent form. All questions of the research subject and those of his/her parent or legally authorized representative have been accurately answered.

Investigator/Person Obtaining Consent (printed name):_____

Signature:_____ Date: _____

NOTE: SIGNATURE PAGE FOLLOWS IMMEDIATELY.

AGREEMENT TO PARTICIPATE

1. Subject Consent:

I have read this entire form, or it has been read to me, and I believe that I understand what has been discussed. All of my questions about this form or this study have been answered.

_____ **I agree** **OR** _____ **I do not agree** to continue to participate.
(Initial (Initial)

Subject Parent/Legal guardian Name: _____

Subject Parent/Legal guardian Signature:_____
Date:_____

2. Signature of Investigator/Individual Obtaining Consent:

To the best of my ability, I have explained and discussed the full contents of the study including all of the information contained in this consent form. All questions of the research subject have been accurately answered.

Investigator/Person Obtaining Consent:_____

Signature:_____ Date: _____