UF Institutional Review Board
UNIVERSITY of FLORIDA

INFORMED CONSENT FORM
to Participate in Research, and

AUTHORIZATION
to Collect, Use, and Disclose Protected Health Information (PHI)

INTRODUCTION

Name of person seeking your consent:_____

Place of employment & position: _____

Please read this form which describes the study in some detail. A member of the research team will describe this study to you and answer all of your questions. Your participation is entirely voluntary. If you choose to participate you can change your mind at any time and withdraw from the study. You will not be penalized in any way or lose any benefits to which you would otherwise be entitled if you choose not to participate in this study or to withdraw. If you have questions about your rights as a research subject, please call the University of Florida Institutional Review Board (IRB) office at (352) 273-9600.

GENERAL INFORMATION ABOUT THIS STUDY

1. Name of Participant ("Study Subject")

_____

2. What is the Title of this research study?

Resveratrol and Exercise to Treat Functional Limitations in Late Life (RESTORES)

3. Who do you call if you have questions about this research study?

Principal Investigator: Thomas W. Buford, 352-273-9212

Study coordinators and other research staff: 352-273-9212

Medical safety officer: Bhanuprasad Sandesara, MD, 352-413-0592 (pager, 24 h)

4. Who is paying for this research study?

The proposed sponsor of this study is the National Institute on Aging. A private company, Reserveage Organics, is providing nutritional supplement (resveratrol and placebo) for this research study.

5. Why is this research study being done?

The purpose of this research study is to evaluate the effects of combining physical exercise with a resveratrol supplementation on the physical function of older adults.

You are being asked to be in this study because you are over 65 years of age.

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.

WHAT CAN YOU EXPECT IF YOU PARTICIPATE IN THIS STUDY?

6. What will be done as part of your normal clinical care (even if you did not participate in this research study)?

No procedures in this study will be part of your normal clinical care.

7. What will be done only because you are in this research study?

An initial telephone screening indicated that you may be eligible to participate in the study. The first study visit ("Screening visit") will further determine if you are eligible to participate. Should you be eligible to participate in the study, you will be asked to participate in a structured physical activity program for 12 weeks as well as consume the nutritional supplements provided to you. You will also be asked to return to the clinic for several additional assessment visits to monitor your safety and measure study results.

This exercise program includes: walking, lower-body and upper-body strengthening, flexibility, and balance training. You will be asked to attend two physical activity sessions per week for 12 weeks at our physical activity center. These sessions will be led by our study staff and will introduce you to exercise parts of the program in a safe

manner. To reduce any chances of injury, exercises will be light at first and will slowly increase in difficulty. This will allow the study staff to tailor the program to your individual needs and abilities.

You will be randomly assigned (like flipping a coin) into one of three groups: exercise and lower-dose resveratrol, exercise and higher-dose resveratrol, or exercise and placebo (an identically appearing pill containing no resveratrol). Resveratrol is a compound commonly found in the skin of red grapes with reported beneficial health effects. You will be asked to consume your provided supplementation daily. You will not know which supplement you are taking.

If you wish to participate, your first visit will be to determine your eligibility for the study. Details regarding the tests to be conducted during this screening visit and other study visits (if you are eligible) are described below. Visits will take place at the University of Florida Institute on Aging (IOA), and the physical activity program will take place at the IOA Health Promotion Center.

Screening Visit: The screening visit is expected to take 1 to 2 hours. Details of study procedures that will be conducted during this visit are below. The order of these procedures may vary based on the schedules of study staff.

Written Consent
Before any tests or procedures are performed, you will be asked to give written consent to participate in this research study. The study team member will explain in detail what is involved in the study and you will be given the opportunity to ask and have answered any questions. If you decide that you would like to participate in the study we will ask you to sign this consent form.

Questionnaires
You will be asked questions about your medical history as well as your physical activity habits. You will also be asked to complete a short test of memory and reasoning.

Physical Measurements and Exam
We will take measurements of your height, body weight, pulse, and blood pressure. A medical professional will also give you a short physical exam to determine if it is safe for you to participate in the study.

Tests of physical performance
You will be asked to complete a test of your physical ability. The test will include being asked to walk at a fast pace for a distance of 400 meters (1312 feet).

Medical records release authorization
The study team will ask you to sign the Medical Records Release Authorization. We would like to have this form signed by you if we need to request your health records if you are hospitalized or any health problems worsen and the study team has to report details of these events to regulatory authorities (Institutional Review Board, the study sponsor, etc.) to ensure your safety during participation in this research study. This form will be signed only once – during the Screening Visit. Health information

collected using this release will be used only for any health events that occur during your participation in this research.

At the end of this visit, the study team will determine if you can participate in this study. If you are not eligible, this will be your only study visit.

Baseline Visit: Should you be eligible for the study, you will be asked to return to the clinic for the baseline study visit. This visit is expected to take 2 to 3 hours and will include:

Physical measurements
We will take measurements of your height, body weight, pulse, and blood pressure.

Blood Draw
You will be asked to fast before your appointment because blood will be collected during this visit. We will provide a snack for you before you continue with your visit procedures, after we draw your blood. We will collect approximately 2 tablespoons of blood from a small vein in your arm or hand. The purpose of this blood draw is to determine levels of certain compounds in your blood that will help us determine some details of your health and study eligibility. Should you remain eligible after completing the rest of the screening battery, you will be called to inform you of your eligibility status based on these tests.

Questionnaires
You will be asked questions about your overall health – including questions about pain and your perception of your physical abilities.

Physical Performance Tests
You will be asked to complete tests of your physical ability. You will perform tests of your physical ability that include:

1. You will be asked to walk at your usual pace for a distance of 13 feet (4 meters) two (2) separate times
2. You will be asked to stand from sitting position, without using your arms. If you are able to perform this task, you will be to stand up from and sit down on chair five (5) times as fast you as can
3. You will be asked to maintain your balance while standing in three (3) different positions, 1) with your feet together, 2) with the heel of one beside the big toe of the other foot, and 3) the heel of one foot in front of and touching the toes of the other foot
4. You will be asked to walk as far as you can for a duration of 6 minutes

Assessment of lower-body muscle strength
You will be asked to perform a test which requires pushing your leg against a machine which pushes against you to measure the strength of your leg muscles.

You will also be provided with your nutritional supplement (Resveratrol or placebo) to be taken orally until your next appointment.

Additionally, you will be provided with an armband physical activity monitor to wear for approximately seven (7) days and provided instructions for its use as well as a dietary assessment form with instructions for completing it.

Optional Study Visits

You will be also asked if you would like to participate in additional study visits. These visits are described in a separate consent form that you will be asked to sign if you decide take part in these optional study visits.

6 Week Visit: This visit is expected to take 1 to 2 hours and will include:

- Measurement of pulse and blood pressure
- Collection of another blood sample after you have fasted the evening before
- Questions about any adverse experiences since last visit
- Performing 6 minute walk test
- Perform test of lower-body muscle strength
- You will also be provided with your nutritional supplement (Resveratrol or placebo) to take until your next appointment
- We will collect dietary assessment questionnaire you were given during your last study visit

12 Week (close-out) Visit: This will be the final study visit. It is expected to take 2 to 3 hours and will include:

- Measurement of pulse and blood pressure
- Collection of another blood sample after you have fasted the evening before
- Questions about any adverse experiences since last visit
- Questions about your perception of your physical abilities (as during baseline visit)
- Questions about your health (as during baseline visit)
- Perform tests of physical performance and strength (as during baseline visit)
- We will collect physical activity monitor that was provided to you for use at home

If you have any questions now or at any time during the study, please contact one of the research team members listed in question 3 of this form.

During your study visit, the study team will ask you to report serious health events that occurred to you since you last assessment visit. If more details about the event are required, the study team will use Medical Records Release Authorization that you signed at the Screening visit. Information collected will pertain only to this particular medical event.

8. How long will you be in this research study?

If you qualify for the study, your expected participation in the study is approximately three to four months – though it may be slightly longer if conflicts arise in scheduling of assessment visits.

9. How many people are expected to take part in this research study?

We expect approximately 60 people to pass screening and participate in the study.

WHAT ARE THE RISKS AND BENEFITS OF THIS STUDY AND WHAT ARE YOUR OPTIONS?

10. What are the possible discomforts and risks from taking part in this research study?

There are some possible discomforts and risks associated with participating in the study.

The potential risks associated with resveratrol supplementation are not fully known at the present time. Resveratrol is similar to the synthetic estrogen and may have estrogenic activity. Resveratrol might also interact with blood thinners such as warfarin, and non-steroidal, anti-inflammatory medications, thereby increasing the risk for bleeding. Adverse effects of resveratrol have not been reported at doses of 1000 mg/day, 1500 mg/day and 2000 mg/day; however, long-term side effects are not known. In our resveratrol pilot study which was conducted on older adults, resveratrol supplementation at doses of 300 mg/day and 1000 mg/day had minimal effects on results of blood tests of older adults, and there were no big differences in the number of participants reporting adverse or side effects (e.g. headaches) between group taking 300 mg or 1000 mg of resveratrol a day.

There is a risk of losing your balance and falling associated with the physical performance-based testing (e.g., walking and rising from a chair). A fall also places you at risk of a bone fracture. We will minimize this risk by: (1) safely escorting you to chairs located along the walking course should you become unsteady; (2) following you at a close distance; and, (3) being at your side should you need assistance.

The risks of drawing blood from a vein include discomfort at the site of puncture; possible bruising and swelling around the puncture site; rarely an infection; and, uncommonly, faintness from the procedure.

There may be some discomfort in the beginning of the study from increasing your physical activity. The possibilities include, but are not limited to, some muscle and joint stiffness. This stiffness generally subsides in 1 or 2 days, and is not considered to be serious. You might experience an exercise-related injury such as a strain, sprain, or other injury to your muscles or joints. Other possible adverse physical

responses include abnormal blood pressure, fainting, abnormal heart beats, and, in rare instances, heart attack, stroke, and death. Every effort is made to minimize these risks by reviewing information about your health before the activities begin. We will minimize these by showing you how to properly do the exercises in a safe manner and performing warm-up and cool-down exercises. We will also monitor heart rate and blood pressure before and after your exercise sessions. You will also be encouraged to report and discuss any discomforts with members of the study staff.

Taking part in this research may involve providing information that you consider confidential or private. Efforts such as coding research records, keeping research records secure and allowing only authorized people to have access to research records, will be made to keep your information safe.

Researchers will take appropriate steps to protect any information they collect about you. However, there is a slight risk that information about you could be revealed inappropriately or accidentally. Depending on the nature of the information, such a release could upset or embarrass you, or possibly affect your insurability or employability. Questions 17-21 in this form discuss what information about you will be collected, used, protected, and shared.

This study may include risks that are unknown at this time.

Participation in more than one research study or project may further increase the risks to you. If you are already enrolled in another research study, please inform one of the research team members listed in question 3 of this form or the person reviewing this consent with you before enrolling in this or any other research study or project.

Throughout the study, the researchers will notify you of new information that may become available and might affect your decision to remain in the study.

If you wish to discuss the information above or any discomforts you may experience, please ask questions now or call one of the research team members listed in question 3 in this form.

11a. What are the potential benefits to you for taking part in this research study?

Potential benefits of this study to you include learning information about your health and overall physical function. Also, you will have the opportunity to receive supervised exercise training and instruction about how to maintain physical activity habits at home. Participation in these activities has the potential to improve your health and quality of life.

11b. How could others possibly benefit from this study?

Information gained from participation in this study may help to provide doctors with new information for recommending exercise treatments. The study may also provide scientists and physicians with new knowledge about the use of resveratrol and potential beneficial effects when combined with exercise.

11c. How could the researchers benefit from this study?

In general, presenting research results helps the career of a scientist. Therefore, the Principal Investigator listed in question 3 of this form may benefit if the results of this study are presented at scientific meetings or in scientific journals.

Dr. Anton, a Sub-Investigator, is a paid adviser to Reserveage Organics that makes the resveratrol product that will be used in the study. Please feel free to ask any questions you may have about this matter.

12. What other choices do you have if you do not want to be in this study?

If you do not wish to be in this study, please tell a study team member and do not sign this form.

13a. Can you withdraw from this study?

You are free to withdraw your consent and to stop participating in this study at any time. If you do withdraw your consent, you will not be penalized in any way and you will not lose any benefits to which you are entitled. If you decide to withdraw your consent to participate in this study for any reason, please contact one of the research team members listed in question 3 of this form. They will tell you how to stop your participation safely.

If you have any questions regarding your rights as a research subject, please call the Institutional Review Board (IRB) office at (352) 273-9600.

13b. If you withdraw, can information about you still be used and/or collected?

If you withdraw, no further information will be collected. Information already collected from you may be used in final data analyses.

13c. Can the Principal Investigator withdraw you from this study?

You may be withdrawn from the study without your consent for the following reasons:

- The Principal Investigator feels it is necessary for your health or safety. You will be informed if this decision is made and the reason for this decision.
- New information suggests that taking part in the research study may not be in your best interests.
- The sponsor or the Principal Investigator has decided to stop the study for any other reason.

You may also be withdrawn from the study if you do not follow the instructions given to you by the Principal Investigator or the study team.

WHAT ARE THE FINANCIAL ISSUES IF YOU PARTICIPATE?

14. If you choose to take part in this research study, will it cost you anything?

Study Drugs and Devices
Resveratrol or placebo, Lidocaine for Muscle Biopsy Procedure (as needed), and the Accelerometer will be provided at no cost to you while you participating in this study.

Study Sercives
The Sponsor will pay for all services required as part of your participation in this study as described above in the question "*What Will Be Done Only Because You Are In This Research Study*". If you receive a bill for these services, please contact Dr Buford at 352-273-5918 or the study coordinator at 352-273-9212.

Any other medical services provided to you that are not directly required by this study will be billed to you or your insurance company in the usual manner.

15. Will you be paid for taking part in this study?

Yes, you will be compensated up to $115 in the form of gift cards. A gift card in the amount of $25 will be given at the completion of the screening visit. If you are eligible and choose to participate, gift cards in the amount of $30 will be given upon completion of each additional study assessment visit. You will not be compensated for attending the study physical activity program. However, we may provide transportation or transportation assistance for attending the physical activity program should you need it.

Participants may qualify for this travel assistance based on the following criteria:
1. Not having transportation to attend intervention sessions
2. Medical condition which prohibits driving and other forms of transportation not available
3. Financial issues associated with cost of transportation
4. Unique situation (these will be discussed with team prior to status determination)

Travel assistance may also be possible if attending assessment visits from a significant distance. If you need and think you may qualify for travel reimbursement, you should speak to a member of the study team about this possibility. The team member will discuss this possibility with you and ask to sign a form indicating that you understand the type of reimbursement and criteria for continuing to qualify for the assistance.

16. What if you are injured because of the study?

If you are injured as a direct result of your participation in this study, only the professional services that you receive from any University of Florida Health Science Center healthcare provider will be provided without charge. These healthcare

providers include physicians, physician assistants, nurse practitioners, dentists or psychologists. Any other expenses, including Shands hospital expenses, will be billed to you or your insurance provider.

You will be responsible for any deductible, co-insurance, or co-payments. Some insurance companies may not cover costs associated with research studies or research-related injuries. Please contact your insurance company for additional information.

The Principal Investigator will determine whether your injury is related to your participation in this study.

No additional compensation is offered. The Principal Investigator and others involved in this study may be University of Florida employees. As employees of the University, they are protected under state law, which limits financial recovery for negligence.

Please contact one of the research team members listed in question 3 of this form if you experience an injury or have questions about any discomforts that you experience while participating in this study.

17. How will your health information be collected, used and shared?

If you agree to participate in this study, the Principal Investigator will create, collect, and use private information about you and your health. This information is called protected health information (PHI). In order to do this, the Principal Investigator needs your authorization The following section describes what PHI will be collected, used and shared, how it will be collected, used, and shared, who will collect, use or share it, who will have access to it, how it will be secured, and what your rights are to revoke this authorization.

Your protected health information may be collected, used, and shared with others to determine if you can participate in the study, and then as part of your participation in the study. This information can be gathered from you or your past, current or future health records, from procedures such as physical examinations, x-rays, blood or urine tests or from other procedures or tests. This information will be created by receiving study treatments or participating in study procedures, or from your study visits and telephone calls. More specifically, the following information may be collected, used, and shared with others:

- First and last name
- Contact information
- Date of birth
- Social security number for compensation
- Information about your health status such as weight and height
- Complete past medical history to determine eligibility criteria
- Laboratory test results
- Answers to health questionnaires
- Answers to cognitive abilities questionnaires

- Physical performance test results

This information will be stored in locked filing cabinets or on computer servers with secure passwords, or encrypted electronic storage devices.

Some of the information collected could be included in a "limited data set" to be used for other research purposes. If so, the limited data set will only include information that does not directly identify you. For example, the limited data set cannot include your name, address, telephone number, social security number, photographs, or other codes that link you to the information in the limited data set. If limited data sets are created and used, agreements between the parties creating and receiving the limited data set are required in order to protect your identity and confidentiality and privacy.

18. For what study-related purposes will your protected health information be collected, used, and shared with others?

Your PHI may be collected, used, and shared with others to make sure you can participate in the research, through your participation in the research, and to evaluate the results of the research study. More specifically, your PHI may be collected, used, and shared with others for the following study-related purpose(s):

- To determine if you are eligible for the study.
- To determine if changes in health and well-being in response to exercise depend on the type of nutritional supplement taken.

Once this information is collected, it becomes part of the research record for this study.

19. Who will be allowed to collect, use, and share your protected health information?

Only certain people have the legal right to collect, use and share your research records, and they will protect the privacy and security of these records to the extent the law allows. These people include:

- the study Principal Investigator (listed in question 3 of this form) and research staff associated with this project.
- other professionals at the University of Florida or Shands Hospital that provide study-related treatment or procedures.
- the University of Florida Institutional Review Board (IRB; an IRB is a group of people who are responsible for looking after the rights and welfare of people taking part in research).

20. Once collected or used, who may your protected health information be shared with?

Your PHI may be shared with:

- the study sponsor (listed in Question 4 of this form).
- United States governmental agencies who are responsible for overseeing research.

Otherwise, your research records will not be released without your permission unless required by law or a court order. It is possible that once this information is shared with authorized persons, it could be shared by the persons or agencies who receive it and it would no longer be protected by the federal medical privacy law.

21. If you agree to take part in this research study, how long will your protected health information be used and shared with others?

Your PHI will be used and shared with others until the end of the study, which is the time when the study has been closed with University of Florida's IRB.

You are not required to sign this consent and authorization or allow researchers to collect, use and share your PHI. Your refusal to sign will not affect your treatment, payment, enrollment, or eligibility for any benefits outside this research study. However, you cannot participate in this research unless you allow the collection, use and sharing of your protected health information by signing this consent and authorization.

You have the right to review and copy your protected health information. However, we can make this available only after the study is finished.

You can revoke your authorization at any time before, during, or after your participation in this study. If you revoke it, no new information will be collected about you. However, information that was already collected may still be used and shared with others if the researchers have relied on it to complete the research. You can revoke your authorization by giving a written request with your signature on it to the Principal Investigator.

SIGNATURES

As an investigator or the investigator's representative, I have explained to the participant the purpose, the procedures, the possible benefits, and the risks of this research study; the alternative to being in the study; and how the participant's protected health information will be collected, used, and shared with others:

Signature of Person Obtaining Consent and Authorization	Date

You have been informed about this study's purpose, procedures, possible benefits, and risks; the alternatives to being in the study; and how your protected health information will be collected, used and shared with others. You have received a copy of this Form. You have been given the opportunity to ask questions before you sign, and you have been told that you can ask questions at any time.

You voluntarily agree to participate in this study. You hereby authorize the collection, use and sharing of your protected health information as described in sections 17-21 above. By signing this form, you are not waiving any of your legal rights.

Signature of Person Consenting and Authorizing	Date