

University of California, San Diego
Consent to Act as a Research Subject
Coenzyme Q10 for Gulf War Illness: A Replication Study

Introduction

Beatrice A. Golomb, MD, PhD is conducting a research study to see if coenzyme Q10 (a nutritional supplement) might provide benefit to symptoms and objective physical function in veterans with Gulf War illness.

- Research is voluntary - whether or not you join is your decision. You can discuss your decision with others (such as family, friends or another physician).
- You can say yes but change your mind later.
- If you say no, we will not hold your decision against you.
- Your decision will not affect your health care or any other benefits you may be entitled to.
- You can say no even if the person inviting you is part of your healthcare team.
- Please ask questions or mention concerns before, during or after the research.

This study will replicate Dr. Golomb's previous research study of this same nutritional supplement (coenzyme Q10) in a larger group of Gulf War veterans. We are trying to determine if Coenzyme Q10 helps with symptoms of Gulf War illness. Participation in this study may or may not benefit you directly but may result in new knowledge that may help other Gulf War veterans.

If you enroll in the study, you will participate in 6 study visits over a 9-month period. If you are currently on coenzyme Q10 and are willing to undergo a washout period, you will participate in an additional pre-washout visit prior to the run-in visit. Each study visit will include a virtual visit over Zoom, online questionnaires, computer games, biosample collection and a blood draw at a Quest lab (or similar lab) near your home. Each visit, blood draw and questionnaires, together, will last up to 3.5 hours. You will take the study drug (Coenzyme Q10 or placebo – the inactive drug) 3 times a day.

The most commonly expected risks of the study are boredom while completing the online questionnaires or risk of a bruise from the blood draw.

The most serious risks of the study may include loss of confidentiality or insomnia from the coenzyme Q10 if taken close to bedtime.

The alternative to study participation is to not participate.

Additional, detailed information about this research is provided below. Please feel free to ask questions before signing this consent.

Why have you been asked to participate, how you were selected, and what is the approximate number of participants in the study?

You have been asked to participate in this study because you are a Gulf War veteran, deployed to the Middle East between August 1, 1990 and July 31, 1991, and meet symptom criteria for Gulf War illness. Up to 500 participants may be enrolled in this study. This research is funded by the Department of Defense and is being conducted under an Investigational New Drug (IND) application with the Food and Drug Administration (FDA)

What will happen to you in this study and which procedures are standard of care and which are experimental?

If you agree to be in this study, the following will happen to you:

Study Visits: You will be asked to participate in a total of **6 study visits** over a **9-month period**, and if applicable, one pre-washout visit prior to the run-in visit. Study procedures will be completed remotely through an online Zoom Pro televisit and at a local laboratory facility (like Quest) near your home.

Study Visit Timeline	Study Visit Procedures
*Pre-Washout Visit (if applicable)	<p><u>Total Study Visit Time = 2 hours</u></p> <ul style="list-style-type: none">• <u>Blood Draw at a Local Quest, Labcorp or other lab Facility</u> (fasting, minimum 8 hours)• <u>Blood Pressure, Height and Weight</u>• <u>Physical Function Test</u> (timed chair rises)• <u>Online Questionnaires</u>• <u>Compensation:</u> \$30 in a Visa Gift Card will be mailed to your home after completion of the study visit and blood draw.
Run-In Visit	<p><u>Total Study Visit Time = 2.5-3.5 hours</u></p> <ul style="list-style-type: none">• <u>Blood Draw at a Local Quest, Labcorp or Other lab Facility</u> (fasting, minimum 8 hours)• <u>Urine kit</u> (collected by you at home)• <u>Blood Pressure, Height and Weight</u>• <u>Online Questionnaires</u>• <u>Physical Function Test</u> (timed chair rises; 4-meter walking velocity; standing balance three ways)• <u>Start Study Drug</u> : Mailed to your house.
Baseline Visit (1-2 weeks after Run-In)	<p><u>Total Study Visit Time = 2.5-3.5 hours</u></p> <ul style="list-style-type: none">• <u>Blood Draw at a Local Quest, Labcorp or Other lab Facility</u> (fasting, minimum 8 hours)• <u>Blood Spot Card</u> (collected by you at home)• <u>Blood Pressure, Height and Weight</u>

	<ul style="list-style-type: none"> • <u>Online Questionnaires</u> • <u>Physical Function Test</u> (timed chair rises; 4-meter walking velocity; standing balance three ways) • Pill Count • <u>Continue to take the Study Drug</u>: A refill of the study drug will be mailed to your house. • <u>Compensation</u>: \$118 in a Visa Gift Card will be mailed to your home after completion of run-in and baseline study visits and blood draw.
Month 3.5 Visit	<p style="text-align: center;"><u>Total Study Visit Time = 2.5-3.5 hours</u></p> <ul style="list-style-type: none"> • <u>Blood Draw at a Local Quest, Labcorp or Other lab Facility</u> (fasting, minimum 8 hours) • <u>Blood Pressure, Height and Weight</u> • <u>Online Questionnaires</u> • <u>Physical Function Test</u> (timed chair rises; 4-meter walking velocity; standing balance three ways) • Pill Count • <u>Continue to take the Study Drug</u>
Month 3.75 Visit (1 week after Month 3.5 Visit)	<p style="text-align: center;"><u>Total Study Visit Time = 2.5-3.5 hours</u></p> <p><u>Open Label Phase Begins (all participants on active treatment)</u></p> <ul style="list-style-type: none"> • <u>Blood Draw at a Local Quest, Labcorp or Other lab Facility</u> (fasting, minimum 8 hours) • <u>Urine kit (collected by you at home)</u> • <u>Blood Spot Card (collected by you at home)</u> • <u>Blood Pressure, Height and Weight</u> • <u>Online Questionnaires</u> • <u>Physical Function Test</u> (timed chair rises; 4-meter walking velocity; standing balance three ways) • Pill Count • <u>Continue to take the Study Drug</u>: A refill of the study drug will be mailed to your house. • <u>Compensation</u>: \$330 in a Visa Gift Card will be mailed to your home after completion of the M3.5 and M3.75 study visits and blood draw.
Month 7 Visit (final study visit)	<p style="text-align: center;"><u>Total Study Visit Time = 2.5-3.5 hours</u></p> <ul style="list-style-type: none"> • <u>Blood Draw at a Local Quest, Labcorp or Other lab Facility</u> (fasting, minimum 8 hours) • <u>Blood Spot Card (collected by you at home)</u> • <u>Blood Pressure, Height and Weight</u> • <u>Online Questionnaires</u> • <u>Physical Function Test</u> (timed chair rises; 4-meter walking velocity; standing balance three ways) • Pill Count • <u>Compensation</u>: \$150 in a Visa Gift Card will be mailed to your home after completion of the study visit and blood draw.
Month 9 Visit	<p style="text-align: center;"><u>Total Study Visit Time = ~1 hour</u></p> <ul style="list-style-type: none"> • <u>Blood Pressure, Height, and Weight</u> • <u>Online Questionnaires</u>

(2-month post discontinuation follow-up)

- Physical Function Test (timed chair rises)
- Compensation (Optional): \$350 in a Visa Gift Card will be mailed to your home after completion of the study visit.

***Pre-Washout Visit:** The pre-washout visit is for those Gulf War veterans with Gulf War illness who are currently taking coenzyme Q10 (coQ10) and willing to undergo a washout period. The purpose of the visit is to assess clinical state and coQ10 levels on your initial coQ10 (which may be different from treatment coQ10), and to gauge how symptoms and coQ10 levels are affected on withdrawal.

Study Drug: You will randomly receive 100mg of coenzyme Q10, 300mg of coenzyme Q10 or placebo (the inactive pill). Neither you nor the study staff will know your treatment assignment. The study pharmacist will know which treatment you are taking. At the Month 3.75 Visit, all participants will receive the active treatment but will not know if they are taking 100mg of coenzyme Q10 or 300mg of coenzyme Q10.

Online Questionnaires: You will be asked to complete several online questionnaires prior to each study visit. You will be asked questions that pertain to your health history, current medications, military and deployment history, health symptoms and environmental exposures (military and civilian).

Blood Draw: The amount of blood drawn at each visit will be approximately 2 tablespoons, for a total of ~10 tablespoons of blood drawn over the course of the 9-month study period. For those who will complete a pre-washout visit, the total amount of blood drawn will be ~12 tablespoons.

How much time will each study procedure take, what is your total time commitment, and how long will the study last?

The total time commitment will be 9 months and will include 6 study visits. The blood draws at Quest or another laboratory facility will take about 20 minutes (this includes check-in and a possible short wait). Questionnaires will take approximately 1.5 hours to complete and will be required prior to each of the 6 study visits. Each virtual visit will take about 1.5 hours (includes taking anthropometrics, saliva sample collection, blood spot card, physical function test, computer games and interviewer questions).

If you are currently on coenzyme Q10 and are willing to undergo a washout period, you will participate in an additional pre-washout visit prior to the run-in visit. The blood draws at Quest or another laboratory facility will take about 20 minutes (this includes check-in and a possible short wait). Questionnaires will take approximately 1 hour to complete and will be required prior to the visit. Each virtual visit will take about 45 minutes (includes taking anthropometrics and timed chair rises).

What will happen to information and/or biospecimens collected from me?

The data and/or specimens we collect with your identifiable information (for example, your name, medical record number, or date of birth) as a part of this study may be used to answer other research

questions or may be shared with other investigators for other research. If we do so, we will remove all identifiable information before use or sharing. Once identifiers have been removed, we will not ask for your consent for the use or sharing of your data and/or specimens in other research.

Biospecimens (such as blood, tissue, or saliva) collected from you for this study and/or information obtained from your biospecimens may be used in this research or other research, and shared with other organizations. You will not share in any commercial value or profit derived from the use of your biospecimens and/or information obtained from them.

What risks are associated with this study?

Participation in this study may involve some added risks or discomforts. These include the following:

1. Possible bruising, pain, infection or dizziness from the blood draw. All blood draws will be performed by trained nurses, or phlebotomists to minimize any of these risks.
2. Some people may report insomnia after taking with Coenzyme Q10 particularly close to bedtime. To reduce your risk of insomnia; we suggest that you always take the last dose of the study drug in the early evening.
3. There is a risk of headache and GI discomfort (nausea, vomiting, constipation, diarrhea or indigestion) from taking Coenzyme Q10. Contact the study team if you experience these side effects.
4. There is a risk of increased bleeding if you are taking a blood thinner (like Coumadin/Warfarin) while taking Coenzyme Q10. We ask that you report any new medications to the study team immediately.
5. Most evidence indicates that Coenzyme Q10 will not have a material difference in blood sugar. Nonetheless, if you are on blood sugar lowering medication, it may be prudent to monitor your blood glucose after you initiate the study.
6. Possible fatigue and muscle discomfort from completing the chair rises. You may request a break, if you feel fatigued, or stop the testing.
7. Loss of confidentiality is a possible risk, but all safeguards will be undertaken to prevent this from happening. Please refer to the confidentiality section below.
8. Questionnaires can lead to boredom or annoyance. You can take a break from testing if this occurs. (You are not required to answer any question that makes you uncomfortable; however, all answers are important to the study.)

Because this is a research study, there may be some unknown risks that are currently unforeseeable. You will be informed of any significant new findings.

What are the alternatives to participating in this study?

The alternative to participation in this study is to not participate in this study.

What benefits can be reasonably expected?

There may or may not be any direct benefit to you from these procedures. The investigator(s), however, may learn more about Gulf War illness. All participants will receive the opportunity to be placed on the active treatment (during the open label phase of the study) which may help with their Gulf War illness symptoms.

Can you choose to not participate or withdraw from the study without penalty or loss of benefits?

Participation in research is entirely voluntary. You may refuse to participate or withdraw at any time without penalty or loss of benefits to which you are entitled. If you decide that you no longer wish to continue in this study, you will be required to let the study investigator know by contacting our office at q10study@health.ucsd.edu or 619-736-7114, and we ask that if possible, you schedule a final “close-out” visit.

If you stop participating, we cannot remove the information we have already collected about you or specimens we have already collected from you.

You will be told if any important new information is found during the course of this study that may affect your wanting to continue.

Can you be withdrawn from the study without your consent?

You may be withdrawn from the study if you are unable to follow the directions from study staff or Dr. Golomb feels it is in your best medical interest to not participate.

Will you be compensated for participating in this study?

In compensation for your time and travel, you will receive up to \$978, in the form of a Visa Gift Card for participating in this research. The compensation schedule is as follows:

If applicable: \$30 for the Pre-Washout Visit

\$118 for the Run-In and Baseline visits combined (1 gift card)

\$330 for the Month 3.5 and Month 3.75 visits combined (1 gift card)

\$150 for the Month 7 visit (1 gift card)

Optional: \$350 for the Month 9 visit (1 gift card)

In accordance with UC San Diego policy, if you receive compensation in excess of \$600 per calendar year, your name and Social Security Number (SSN) will be collected and released to the UC San Diego Office of Accounting to process the Form 1099-Misc for Internal Revenue Service (IRS) tax-reporting purposes.

For those who are concerned about disclosing your SSN, you will have the option to waive the final gift card (\$350 for the Month 9 visit) to keep your total compensation under \$600 (\$598), thus not requiring the submission of your SSN. The SSN requirement will only be triggered if you do not opt out of receiving the last (Month 9) Visa Gift Card. You can indicate your choice on page 8 of this consent.

Are there any costs associated with participating in this study?

You will be required to provide your own transportation to a Quest lab in your area for a blood draw with each study visit. You will also need to provide your own computer/tablet with internet connection which is required for the Zoom visits and completion online surveys.

What if you are injured as a direct result of being in this study?

If you are injured as a direct result of participation in this research, the University of California will provide any medical care you need to treat those injuries. The University will not provide any other form of compensation to you if you are injured. You may contact the Office of IRB Administration at (858) 246-4777 or irb@ucsd.edu for more information about this, to inquire about your rights as a research subject or to report research-related problems.

What about your confidentiality?

Research records will be kept confidential to the extent allowed by law. Research files are kept in a locked cabinet in a locked room when not in use. The database is on a password-protected computer. Research files and the database will only be accessible to Dr. Golomb and her research team, all of whom have completed confidentiality training. All identifying information will be stored indefinitely.

Department of Defense USAMRMC Human Subjects Protection Office (HRPO) along with the study monitor, the Food and Drug Administration, and the Office of IRB Administration at the University of California San Diego (UCSD) may have access to research records as part of their responsibility to protect human subjects.

Who can you contact if you have questions?

Dr. Golomb's research staff _____ has explained this study to you and answered your questions. If you have other questions or research-related problems, you may reach the Golomb Research Group at q10study@health.ucsd.edu or 619-736-7114.

You may contact the Office of IRB Administration at (858) 246-4777 or irb@ucsd.edu for more information about this, to inquire about your rights as a research subject or to report research-related problems.

What else is important for me to know?

A description of this clinical trial will be available on www.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 Web site at any time.

What are my rights when providing electronic consent?

California law provides specific rights when you are asked to provide electronic consent:

- You have the right to obtain a copy of the consent document in a non-electronic format.
- You have the right to provide consent in a non-electronic format.
- If you change your mind about electronic consent, you have the right to request your electronic consent to be withdrawn and you can then provide consent in a non-electronic format; however, a copy of your electronic consent will be maintained for regulatory purposes. If you wish to withdraw your electronic consent please tell the study team.

This agreement for electronic consent applies only to your consent to participate in this research study.

When giving a signing reason for DocuSign purposes, selecting “I approve this document” means you agree to participate in the research described in this form.

Optional Month 9 compensation gift card

As described above, UCSD requires us to report participants’ SSN to the IRS if they receive over \$600 in compensation in a calendar year. If you are concerned about disclosing your SSN to the IRS, you may choose to opt out of the Month 9 gift card to keep your compensation under \$600. Please indicate your choice by initialing the appropriate line below:

_____ NO, I do not want to opt out and I would like to receive the Month 9 gift card.

_____ YES, I would like to opt out and I DO NOT want to receive the Month 9 gift card.

Signature Block for Adults Able to Provide Consent

Participant	
<i>I have received a copy of this consent document and a copy of the “Experimental Participant's Bill of Rights” to keep. Selecting “I approve this document” means I agree to participate in the research described in this form.</i>	
<hr/>	
Printed Name of Participant	
<hr/>	
Signature of Participant	Date
<hr/>	
Person Obtaining Consent	
<i>I document that:</i>	
<ul style="list-style-type: none">• <i>I (or another member of the research team) have fully explained this research to the participant.</i>• <i>I have personally evaluated the participant’s understanding of the research and obtained their voluntary agreement.</i>	
<hr/>	
Printed Name of Person Obtaining Consent	
<hr/>	
Signature of Person Obtaining Consent	Date
<hr/>	
Witness (if applicable)	
<i>I document that the information in this form (and any other written information) was accurately explained to the participant. The participant appears to have understood and freely given consent to join the research.</i>	
<hr/>	
Printed Name of Witness	
<hr/>	
Signature of Witness	Date
<hr/>	