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**APPENDIX A**  
**MEDICAL HISTORY FORM**

## **Medical History/Screening Form**

### Instructions:

Please take your time and fill this out as accurately as possible. Answer to the best of your ability. This information will be kept in strict confidence.

Name \_\_\_\_\_ **Gender:** (circle one)    MALE    FEMALE  
Birth date \_\_\_\_\_ Age \_\_\_\_\_  
Home address \_\_\_\_\_  
Home telephone \_\_\_\_\_

### **Past Medical History:** (circle any that you have had)

Kidney disease    Kidney stones    Heart disease    Liver disease    Diabetes    Cancer    Colitis

Seizures    Broken bones    Arthritis    Amenorrhea    Other: \_\_\_\_\_

*Please provide details of any condition you circled above:*

### **Operations:** (List all and note year)

### **Illnesses or accidents requiring hospitalization:** (List all and note year)

### **Allergies to medications:**

**Medications you currently take:** (List all, with doses if possible; include oral contraceptives, nutritional supplements, and herbal products)

### **Personal History:**

Do/did you smoke? \_\_\_\_\_ How much? \_\_\_\_\_ For how many years? \_\_\_\_\_ When did you quit? \_\_\_\_\_  
Do you exercise? \_\_\_\_\_ How often? \_\_\_\_\_ For what time length? \_\_\_\_\_ What types of exercise do you engage?

Has anyone in your family had osteoporosis? Yes    No    If yes, what is his/her relation to you? \_\_\_\_\_

### **Females:**

Do you have regular menstrual cycles (at least one per month)? Yes    No    If no, please describe:  
Are you pregnant? Yes    No    Unsure

Signature \_\_\_\_\_

Date \_\_\_\_\_

**APPENDIX B**  
**MEDICAL/PHYSICAL ACTIVITY UPDATE**

## **Medical History/Physical Activity Update Form**

Name \_\_\_\_\_ Date \_\_\_\_\_

*Have you had any medical problems arise since you completed your last medical history update?*

*If so, please list them:*

Have you seen a physician for any conditions since your mid-study medical history update? \_\_\_\_\_  
If so, please provide description of medical condition:

Are you taking any new medications not listed on your previous medical histories? \_\_\_\_\_  
If so, please list the medications, the dosages, and the frequency.

Do you smoke? \_\_\_\_\_ How much?

If you are female, have you had any changes in the frequency of your menstrual cycle? \_\_\_\_\_  
Please note changes below.

Have you participated in all your scheduled Corps of Cadets exercise activities since the last update?

**If not, please provide the following information on those missed after the mid-study update:**

Approximate dates of exercise sessions missed

Number of Exercise sessions missed \_\_\_\_\_

Reasons for missing exercise sessions

Do you exercise outside of your scheduled Corps of Cadets exercise activities? \_\_\_\_\_

If yes, please provide details:

**APPENDIX C**  
**SUPPLEMENT COMPLIANCE UPDATE**

Dear Study Participant:

Its time for your supplement update! Please respond with the following information:

1. Since our last contact (two weeks ago), how many times did you miss taking your calcium supplement?
2. What days did you miss?
3. Please list the reasons for not taking the supplements.

THANKS for your cooperation!!!                    --Beth Watson

APPENDIX D  
THREE-DAY FOOD DIARY

## 3-Day Dietary Record

NAME \_\_\_\_\_ DATE \_\_\_\_\_

### INSTRUCTIONS:

Please list all of the foods and drinks you have consumed for two weekdays and one weekend day. Make sure that at least one of the days is a "typical" weekday. Please be sure to estimate the amount you ate (a medium potato, an 8-oz glass of milk,  $\frac{1}{2}$  cup of peas, etc.) as well as the cooking method (fried, baked with no fat, boiled, etc). If you eat in a fast food restaurant, you may omit the cooking method (but please specify if chicken is grilled or fried). Make sure you list things you have added to foods (2 tsps sugar on cereal, 1 Tbsp cream in coffee), and the time the food was eaten. Below is a sample record, partially filled out. Thank you for your help!

Day of the Week:	M	T	W	Th	F	S	Sun (Circle one) _____	Subject # _____
	<b>MEAL</b>	<b>TIME EATEN</b>	<b>FOOD EATEN</b>	<b>AMOUNT</b>				<b>COOKING METHOD</b>
<b>BREAKFAST</b>	7 : 30 am	Corn flakes	$\frac{3}{4}$ cup			None		
	7 : 30	1% fat milk	1 cup			On cereal		
	7 : 30	sugar	2 tsps			On cereal		
	7 : 30	orange	1 large			None		
<b>SNACK</b>	9 : 30 am	Medium bagel Whipped cream cheese	1 whole 2 Tbsp			Toasted, no butter On bagel		
<b>LUNCH</b>	11 : 30 am	McDonald's Big Mac	1					
	11 : 30	Small fries	1 order					
	11 : 30	Large cola	1					
<hr/>								

Day of the Week:	M	T	W	Th	F	S	Sun	Subject # _____ (Circle one)
<b>MEAL</b>	<b>TIME EATEN</b>	<b>FOOD EATEN</b>			<b>AMOUNT</b>	<b>COOKING METHOD</b>	<b>CODE # (Leave blank)</b>	
<b>BREAKFAST</b>								
<b>SNACK</b>								
<b>LUNCH</b>								
<b>SNACK</b>								
<b>DINNER</b>								
<b>SNACK</b>								
<b>OTHER</b>								

Day of the Week:	M	T	W	Th	F	S	Sun	Subject # _____ (Circle one)
<b>MEAL</b>	<b>TIME EATEN</b>	<b>FOOD EATEN</b>			<b>AMOUNT</b>	<b>COOKING METHOD</b>	<b>CODE # (Leave blank)</b>	
<b>BREAKFAST</b>								
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<b>OTHER</b>								
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Subject # \_\_\_\_\_

Day of the Week:	M	T	W	Th	F	S	Sun	(Circle one)
MEAL	TIME EATEN	FOOD EATEN			AMOUNT	COOKING METHOD		CODE # (Leave blank)

**BREAKFAST**


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**SNACK**


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**SNACK**


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**SNACK**


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**OTHER**

APPENDIX E  
CONSENT FORM

# VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

## Informed Consent for Participants of Investigative Projects

**Title of Project:** Changes in Bone Mineral Density and Biomarkers of Bone Turnover with Calcium Supplementation During Initial Military Exercise Training

**Investigator:** Elizabeth Watson, Capt, USAF, RD

**Investigator:** Sharon M. (Shelly) Nickols-Richardson, PhD, RD

**I. Purpose:** The purpose of this project is to examine changes in bone mineral density and biochemical markers of bone turnover from military exercise training and calcium supplementation in freshmen Corps of Cadets students. Approximately 120 students (18 to 22 years of age) will participate in this 4-month study. **There are no negative repercussions if you choose not to participate in this study; you are free to participate in the study or not, and your decision will not affect your status in the Corps of Cadets.**

**II. Procedures:** Prior to being included in this research study, I will have completed a Medical History/Screening Form that helped to determine if there were reasons why I should not have participated in this study. The results of this Medical History/Screening Form indicate that I am an appropriate participant for this study. Thus, I will complete the listed procedures once in August and again in December:

- (1) arrive in Room 229, Wallace Hall on the Virginia Tech campus at my scheduled appointment day/time;
- (2) sign the consent form (at baseline testing only) and complete a brief Medical/Physical Activity Update (10 minutes);
- (3) stand next to a stadiometer to have body height measured and stand on a digital scale to have body weight measured (5 minutes);
- (4) lie on or sit next to the dual energy X-ray absorptiometer (DXA) as directed by a Licensed Radiologic Technologist – Limited who will conduct DXA scans of my whole body, lumbar spine, hip, and forearm for bone mineral density testing (20 minutes);

**NOTE: If I am pregnant or think that I may be pregnant, I should not undergo DXA scans and should withdraw from this study because radiation exposure from DXA scans may cause harm to my unborn fetus.**

- (5) fast overnight (do not consume any foods or beverages except water) from midnight until the time of my appointment between 8:00 and 9:00 am;
- (6) have 20 mL of whole blood drawn from my arm by a Licensed Medical Technician (10 minutes);
- (7) provide ~ 60 mL of second void urine (urinate once at home in the morning so that the urine sample provided is from the second time of urination since midnight; 10 minutes);
- (8) consume breakfast foods and beverages if desired;
- (9) be instructed on how to complete 3-Day Dietary Records and complete the Medical/Physical Activity Update (10 minutes);
- (10) after the baseline testing session, be assigned to receive and consume Viactiv<sup>TM</sup> for the duration of the study and receive a supply of my supplements, or be assigned to the control group that does not receive Viactiv<sup>TM</sup>. (If assigned to the control group, I will be offered a 4-months supply of Viactiv<sup>TM</sup> at the end of the study, if I desire it.)

During the course of the study, I will:

- (11) respond to email queries of supplement compliance (if assigned to the group receiving supplements) approximately every two weeks.

I understand that participation in this study will require approximately one hour of my time at each testing session. I also understand that I may require more or less time than estimated to complete each procedure and that I will be given ample opportunity to complete all procedures in an unhurried manner.

**III. Risks:** I understand that there are no known risks associated with ingestion of Viactiv™ supplements for healthy individuals, but that I should report any adverse effects that I believe to be from my supplement intake to the investigator as soon as possible.

I understand that exposure to radiation will occur during DXA scans for measurement of my bone mineral density. Radiation exposure will occur from the DXA scans because the DXA machine uses x-ray technology. Radiation exposure is measured in milliRads (or mR). My total amount of exposure is 20 mR (whole body = 1 mR, lumbar spine = 7 mR, hip = 7 mR, forearm = 5 mR) during each testing time and my cumulative total exposure is 40 mR if I complete all DXA scans throughout the 4 months of this study. Because my combined total exposure for the entire study represents 4% of the estimated exposure expected to increase cancer risk in only 0.03% of the population, I understand that this dose is very small, and poses minimal risk compared to radiation doses from dental bite-wing films (334 mR) and environmental background exposure (100 to 400 mR per year) expected to occur in one 12-month period. The following table lists the radiation limits for an adult research participant according to the National Institutes of Health, Office for Protection from Research Risks (NIH-OPRR), compared to my exposure during this study.

NIH-OPRR Radiation Limits for an Adult Research Participant	My Exposure During Participation in this Research Study
Whole body (single dose) = 3,000 mR	Whole body (single dose) = 1 mR
Whole body (annual cumulative dose) = 5,000 mR	Whole body (annual cumulative dose) = 2 mR
Lumbar spine (single dose) = 5,000 mR	Lumbar spine (single dose) = 7 mR
Lumbar spine (annual cumulative dose) = 15,000 mR	Lumbar spine (annual cumulative dose) = 14 mR
Hip (single dose) = 5,000 mR	Hip (single dose) = 7 mR
Hip (annual cumulative dose) = 15,000 mR	Hip (annual cumulative dose) = 14 mR
Forearm (single dose) = 5,000 mR	Forearm (single dose) = 5 mR
Forearm (annual cumulative dose) = 15,000 mR	Forearm (annual cumulative dose) = 10 mR
	ANNUAL CUMULATIVE EXPOSURE (whole body + lumbar spine + hip + forearm) = 40 mR during 12 months

I have been informed of this risk and may choose to not complete any one, combination, or all of these DXA scans. If in the event that any scan is unreadable or unusable, a replacement scan will not be conducted to avoid further exposure. **I further understand that if I am pregnant or think that I may be pregnant that I should not undergo DXA scans because radiation exposure from DXA scans may cause harm to my unborn fetus.** These DXA scans will be conducted in the BONE Laboratory, Room 229 Wallace Hall, on the Virginia Tech campus by the Principal Investigator or Graduate Research Assistant who are both Licensed Radiologic Technologists – Limited in the Commonwealth of Virginia.

I understand that a bruise may result from the blood collection procedure with no known detrimental effects to my health or well-being. I understand that to avoid or minimize bruising that a Licensed Medical Technician will draw my blood. I will be allowed to sit or recline in the most comfortable position for myself during my blood draw. I may rest for as long as needed after my blood is drawn and will be provided with breakfast foods and beverages after my blood (and urine) are collected. Two attempts to draw my blood (or two needle sticks) will be allowed. If a second attempt is unsuccessful, no further tries for collection of my blood will be performed. All personnel involved in drawing and handling my blood have undergone training for Bloodborne Pathogen Exposure Control administered by the Environmental Health and Safety Services of the Occupational Health Lab Safety Division at Virginia Tech. I understand that Universal Precautions will be taken by research personnel during handling of my blood (and urine) samples. I further understand that my blood will be tested for HIV and hepatitis if there is exposure of my blood to any researcher.

**IV. Benefits of this Project:** It is likely that I will benefit from participation in this research in several ways including receiving personal information regarding changes in my bone mineral density and bone turnover during exercise training. I will also benefit through evaluation of my lean muscle mass, body-fat composition, dietary intake, and examination of my physical activity. I will be provided with my individual results from each procedure. I will be referred to an appropriate health care professional, if necessary, based on my individual results. Any and all costs related to such referral will be borne by me and not by Virginia Tech. My individual

results will be provided to my Primary Care Physician (PCP) if I so request in writing and by initiating and completing a release of information form from my PCP's office. The general public will benefit from my participation in this study as new relationships between calcium supplementation and changes in bone mineral density during exercise training will be observed with implication for bone deterioration and osteoporosis prevention. I understand that my participation in this research project is voluntary. I have not been promised or guaranteed benefits to encourage my participation in this study. I further understand that there is no promise that I will benefit from this research project.

**V. Extent of Anonymity and Confidentiality:** Due to the inability to assure anonymity, I understand that confidentiality of my results will be preserved. I understand that this means that all of my data will be kept confidential. A three-digit code number will be assigned to me. All data recording sheets will be identified by code number only and not by my name. I understand that a master list of participant's code numbers will be kept in a locked filing cabinet separate from completed data that will also be maintained in a locked filing cabinet. I further understand that only the investigator of this study or students of this investigator will be allowed access to any data. However, if I so choose, my individual results will be provided to my PCP if I so request in writing by initiating and completing a release of information form from my PCP's office. My individual results released to my PCP will be identified by my name and not by my code number.

**VI. Compensation:** I will not be compensated or paid to be in this research project. However, I will receive calcium supplements, and my individual results from each procedure that I complete.

**VII. Freedom to Withdraw:** I understand that I can withdraw from this study at any time without penalty. I am free to not participate in any procedure included in this study without penalty. I understand that there may be circumstances under which the investigator may determine that I should not continue to participate in this project.

**VIII. Approval of Research:** This research has been approved, as required, by the Institutional Review Board for Research Involving Human Subjects at Virginia Polytechnic Institute and State University and by the Department of Human Nutrition, Foods and Exercise.

**IX. Subject's Responsibilities:** I voluntarily agree to participate in this study which will involve the following activities: arrive in Room 229, Wallace Hall at my scheduled appointment dates; read and sign this consent form; have body height and weight measured; complete DXA scans for bone mineral density testing; have fasted overnight from midnight until the time of my appointment to have 20 mL of whole blood drawn from my arm; provide ~60 mL of second void urine; and consume breakfast foods and beverages if desired. I will truthfully answer all questions of the investigator including questions regarding my compliance with supplement intake, medication use, physical activity, and pregnancy status. During the study, I will complete 3-Day Dietary Records and Medical/Physical Activity prior to the first appointment and twice during the study; consume my supplements as instructed throughout the duration of this study; and follow all directions of the investigator as related to this project.

**X. Subject's Permission:** I have read and understand the Informed Consent and conditions of this project. I have had all my questions answered. I hereby acknowledge the above and give my voluntary consent for participation in this project. If I participate, I may withdraw at any time without penalty. I agree to abide by the rules of this project.

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Participant's Signature

Date

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Investigator's Signature

Date

Should I have any questions about this research or its conduct, I may contact:

Elizabeth Watson, Capt, USAF, RD, Investigator: (540) 231-7708

OR

Sharon M. (Shelly) Nickols-Richardson, PhD, RD, Co-Investigator: (540) 231-5104

OR

H.T. Hurd, Chair, IRB, Research Division: (540) 231-5281

**APPENDIX F**  
**RECRUITMENT LETTER**

Dear future Cadet,

Annually, the military loses millions of dollars due to stress fractures and bone problems among its personnel. As a future Cadet, your assistance in a research project designed to decrease these losses is requested. The purpose of this study is to assess the changes that take place in bone density during the initial exercise training program for new cadets. Some study participants will receive Viactive, a calcium, vitamin D, vitamin K supplement during the study. If you are not selected to receive the supplement during the study, an equivalent supply will be offered to you at the end of December.

The study consists of several basic parts: collecting information about your health and diet history, measuring your bone density once in August and again in December, and collecting fasting blood and urine samples at the beginning and end of this study period. During the study, you will be periodically asked to report changes in health status, physical activity, and compliance with taking your supplements.

The bone density measurements are performed on a machine called a DXA. It uses radiation to measure bone density, similar to an x-ray. The total amounts of radiation exposure during the study will be much less than those involved in the typical dental x-ray. The DXA allows us to look at bone density in various areas of the body. Using this technique, we have been able to identify students at risk for osteoporosis, and provide them information on preventing this debilitating disease. The DXA will also assess your muscle mass and body fat composition, so you can see the improvements made during your exercise training program.

The fasting blood sample and urine samples will be used to measure calcium status and other markers involved in the study. There is a risk of minor bruising at the blood draw site, but a trained phlebotomist will collect all samples, to minimize these risks.

You are assured of complete confidentiality. An identification code or number will be assigned to you, and only the researchers will have access to the code numbers. All information will be stored in a locked filing cabinet separate from the code number listing. At no time will the researchers release your information without your written consent. You may halt participation in the study at any time, without repercussions. You will be provided a detailed written consent form prior to your initial testing.

This study presents the opportunity to learn more about your health, while assisting research that may help save money and improve the health of future military members. This project will be approved by the Institutional Review Board for Research Involving Human Subjects at Virginia Polytechnic Institute and State University, and by the Department of Human Nutrition, Foods, and Exercise. A medical history/study screening form and 3-day food diary have been included in this packet. If you consent to participating in the study, please fill them out and return them?????????

Thank you in advance for your time and assistance. Please feel free to email me at elwatson@vt.edu, or call me at (540) 951-4676 if you have questions or concerns about the research at any time.

Sincerely,

Elizabeth Watson, Capt, USAF

**APPENDIX G**  
**IRB APPROVAL**



### Institutional Review Board

Dr. David M. Moore  
IRB (Human Subjects) Chair  
Assistant Vice Provost for Research Compliance  
CVM Phase II - Duckpond Dr., Blacksburg, VA 24061-0442  
Office: 540/231-4991; FAX: 540/231-7736  
e-mail: moored@vt.edu

11 July 2000

### MEMORANDUM

TO: Elizabeth Watson and Sharon Nickols-Richardson  
HNF&E (0430)

FROM: David M. Moore

SUBJECT: IRB APPROVAL – “Changes in Bone Mineral Density and Biomarkers of Bone Turnover with Calcium Supplementation During Initial Military Exercise Training” – IRB #00-219

The above referenced protocol was submitted for full review and approval by the Virginia Tech IRB at its June 12, 2000 meeting, and further consideration and discussion of the proposal occurred during its July 10, 2000 meeting, at which time the board voted approval of this proposal for a period of (12) months, effective today.

Approval of your research by the IRB provides the appropriate review as required by federal and state laws regarding human subject research. It is your responsibility to report to the IRB any adverse reactions that can be attributed to this study.

To continue the project past the 12-month approval period, a continuing review application must be submitted (30) days prior to the anniversary of the original approval date and a summary of the project to date must be provided. Our office will send you a reminder of this (60) days prior to the anniversary date.

APPENDIX H  
SELECTED STATISTICS

### Repeated Measures ANOVA for Selected BMD Scores

<b>DXA Score (gm/cm<sup>2</sup>)</b>	<b>Variable</b>	<b>DF</b>	<b>Mean Squared</b>	<b>Pr&gt;F</b>
Whole Body	time	1	0.0	0.104
	time*drug	1	0.0	0.164
	error(time)	28	0.0	
	drug	1	0.0	0.342
	error(drug)	28	0.0	
Lumbar Spine 1-4	time	1	0.0	0.409
	time*drug	1	0.0	0.838
	error(time)	28	0.0	
	drug	1	0.0	0.211
	error(drug)	28	0.0	
Femoral Neck	time	1	0.0	0.226
	time*drug	1	0.0	0.236
	error(time)	28	0.0	
	drug	1	0.0	0.753
	error(drug)	28	0.0	
Trochanter	time	1	0.0	0.421
	time*drug	1	0.0	0.781
	error(time)	28	0.0	
	drug	1	0.0	0.198
	error(drug)	28	0.0	
Ward's Triangle	time	1	0.0	0.060
	time*drug	1	0.0	0.610
	error(time)	28	0.0	
	drug	1	0.0	0.759
	error(drug)	28	0.0	
Total Proximal Femur	time	1	0.0	0.057
	time*drug	1	0.0	0.969
	error(time)	28	0.0	
	drug	1	0.0	0.282
	error(drug)	28	0.0	
Total Forearm	time	1	0.0	0.897
	time*drug	1	0.0	0.237
	error(time)	28	0.0	
	drug	1	0.0	0.230
	error(drug)	28	0.0	

### Repeated Measures ANOVA for Selected Hormones

Hormone (ng/ml)	Variable	DF	Mean Squared	Pr>F
IGF-1	time	1	37569.5	0.015
	time*drug	1	11409.6	0.163
	error(time)	27	5552.1	
	drug	1	14485.7	0.175
	error(drug)	27	7468.9	
Osteocalcin	time	1	128.8	0.001
	time*drug	1	0.1	0.909
	error(time)	27	9.9	
	drug	1	1.6	0.896
	error(drug)	27	92.9	
Growth Hormone	time	1	0.1	0.906
	time*drug	1	2.8	0.378
	error(time)	23	3.4	
	drug	1	10.2	0.266
	error(drug)	23	7.9	
Testosterone	time	1	0.1	0.843
	time*drug	1	0.0	0.989
	error(time)	27	1.7	
	drug	1	0.2	0.914
	error(drug)	27	19.3	

### Repeated Measures ANOVA for Selected Dietary Factors

FACTOR	Variable	DF	MEAN SQUARED	PR > F
Vitamin D	time	2	22820.5	0.074
	time*drug	2	4297.2	0.600
	error(time)	48	8312.5	
	drug	1	33865.8	0.239
	error(drug)	24	23233.0	
Vitamin K	time	2	3932.6	0.263
	time*drug	2	3601.2	0.294
	error(time)	48	2866.1	
	drug	1	8934.6	0.186
	error(drug)	24	115692.8	

**Repeated Measures ANOVA for Selected Dietary Factors (cont.)**

FACTOR	Variable	DF	MEAN SQUARED	PR > F
Calories	time	2	2249702.8	0.001
	time*drug	2	148647.5	0.591
	error(time)	48	279229.4	
	drug	1	1071824.9	0.189
	error(drug)	24	587346.4	
Carbohydrate	time	2	29409.6	0.036
	time*drug	2	2173.6	0.762
	error(time)	48	8158.2	
	drug	1	41522.5	0.105
	error(drug)	24	14674.1	
Fat	time	2	3442.3	0.001
	time*drug	2	585.2	0.260
	error(time)	48	422.8	
	drug	1	532.7	0.478
	error(drug)	24	1024.1	
Protein	time	2	5791.9	<0.001
	time*drug	2	762.0	0.167
	error(time)	48	409.4	
	drug	1	51.1	0.832
	error(drug)	24	1113.2	
Phosphorus	time	2	152291.5	0.333
	time*drug	2	1698990.7	0.294
	error(time)	48	135251.0	
	drug	1	311506.1	0.235
	error(drug)	24	209851.6	
Dietary Fiber	time	2	71.8	0.113
	time*drug	2	13.5	0.644
	error(time)	48	31.1	
	drug	1	108.3	0.104
	error(drug)	24	37.9	
Soluble Fiber	time	2	0.684	0.724
	time*drug	2	0.477	0.798
	error(time)	48	2.11	
	drug	1	0.004	0.971
	error(drug)	24	2.76	
Caffeine	time	2	7353.2	0.118
	time*drug	2	3052.5	0.402
	error(time)	48	3285.2	
	drug	1	18118.3	0.179
	error(drug)	24	9449.8	

**APPENDIX I**  
**VITA**

**Maj (S) Elizabeth M. Watson, RD, RDH**

**Dietitian, United States Air Force (Aug 1990- Present)**

**Positions Held (in reverse chronological order):**

**Graduate Student**, Virginia Polytechnic Institute and State University—pursuing a Master's of Science in Nutrition; developing expertise in general nutrition, bone density, and research arenas.

**Food Service and Nutrition Programs Manager**, Luke Hospital—Responsible for management of cafeteria and patient food services providing over 30,000 meals annually. Controlled \$250,000 annual subsistence budget and supervised 15 staff members. Responsible for all clinical nutrition assessment and education programs for hospital and for base population of over 70,000.

**Health Promotions Manager**, Luke Air Force Base—Responsible for development, planning, conducting of prevention programs for a beneficiary population of over 70,000. Program oversight included: tobacco cessation, stress management, cancer prevention, physical fitness monitoring, drug/alcohol counseling, and weight management; recognized as the “Outstanding Health Promotions Program” for Air Education and Training command, 1997.

**Clinical Manager**, Keesler Medical Center—Created, monitored quality assurance programs; developed Medical Center clinical nutrition policies; coordinated schedules for clinical dietitians, diet technicians, and outpatient clinics; implemented computerized diet ordering and drug-food interaction programs.

**Clinical Dietitian**, Keesler Medical Center—Responsible for inpatient care at a 250 bed facility. Excelled in a variety of settings, to include: Medical/Surgical, Psychiatric, Cardiac Care, and Special Care Units; Dialysis Team expert; Diabetes Care instructor; Critical Care dietitian, and Nutrition Support Team.

**Dietetic Intern**, Andrews Air Force Base—successfully completed internship program and all requirements to become a fully qualified Registered Dietitian

**Diet Technician** ARA Services (Jan 1989 - Jun 1990)

Sentara Norfolk General Hospital, Norfolk, VA—assessed patient calorie intakes, collected diet histories, and provided therapeutic diet education to patients at a 1,000 bed medical center

**Trayline Personnel** (July 1988 - Dec 1988)

Riverside Regional Medical Center, Newport News, VA—prepared patient foods, assembled meal trays, and checked trayline accuracy; gained knowledge of foodservice administration

**Registered Dental Hygienist** (Aug 1986 - Nov 1987)

Dr. W.T. Green, DDS, Newport News, VA

**EDUCATION:**

**B.S. in Human Foods and Nutrition, with Highest Honors**

Hampton University (Jan 1988 - May 1990), Hampton, VA

**B.S. in Dental Hygiene**

Old Dominion University (Aug 1983 - Aug 1986), Norfolk, VA