VIRGINIA MILITARY INSTITUTE
Lexington, Virginia

GENERAL ORDER)
NUMBER 49) 16 August 2012

CADET HEIGHT, WEIGHT, BMI AND BODY FAT ASSESSMENT

1. **Purpose and Applicability**. This order establishes the policy for administering the Corps of Cadets body composition measurement of height, weight, body mass index (BMI), and body fat assessment as part of the Physical Training Program. It applies to the Corps of Cadets during the academic year.

2. **Responsible Officials**. The Commandant of Cadets is responsible for managing the Corps Physical Training Program (PTP) to include the body composition measurement. Each Company Tactical Officer is responsible for conducting the body composition measurement except body fat assessment for their company. The Post Physician is responsible for conducting the body fat assessment.

3. **General**. Health and fitness are directly related to a successful VMI experience. The Physical Training Program is designed to encourage a lifestyle of year-round fitness which includes a routine body composition measurement. The goal is to achieve and maintain optimal body composition by incorporating proper nutrition into a rigorous exercise regimen.

4. **Body Composition Measurement.** Each semester cadets will have their height and weight measured by their Company Tactical Officer who will then calculate their BMI. Cadets exceeding the required height/weight or BMI standard will be notified by their Company Tactical Officer to report to the VMI Health Center for a body fat assessment. Cadets are required to have their body fat assessment completed within three days after they are notified.

   A. Height. Measurement will be taken with the cadet in any uniform. Shoes will not be worn. The cadet will stand on a flat surface with the head held horizontal looking directly forward, with the line of vision horizontal, and the chin parallel to the floor. The body should be straight, but not rigid, similar to the body position when at attention. Measurement will be recorded to the nearest inch. If the height fraction is less than 1/2 inch, round down to the nearest inch. If the height fraction is 1/2 inch or greater, round up to the nearest inch.

   B. Weight. Measurement will be taken with the cadet in any uniform. Shoes will not be worn. Any extraneous equipment or outer clothing will be removed when the Army combat uniform (ACU) is worn. The measurement will be made on calibrated scales and recorded to the nearest pound with the following guidelines: If the weight fraction is less than 1/2 pound, round down to the nearest pound. If the weight fraction is 1/2 pound or greater, round up to the nearest pound. Subtract 3 pounds for clothing worn during official weight checks.

C. Body Mass Index. According to the Centers for Disease Control, "Body Mass Index (BMI) is a number calculated from a person's weight and height. BMI provides a reliable indicator of body fatness for most people and is used to screen for weight categories that may lead to health problems." Overweight is defined as a BMI of 25 to 29.9 while obesity is defined as a BMI of 30 or above (See charts below). The recommended upper limit of body fat as a percentage of body mass is 25.0%.

BMI Formula

$$\text{BMI} = \frac{\text{(weight in pounds x 703)}}{\text{height in inches}^2}$$

(lbs/inches^2)

BMI	WEIGHT STATUS
Below 18.5	Underweight
18.5–-24.9	**Normal**
25.0–29.9	Overweight
30.0 and Above	Obese

5. **Body Fat Assessment**. VMI Health Center personnel will administer the body fat assessment. They will measure body fat using only the circumference-based method with one set of measurements (Males: height, neck circumference, and abdominal circumference at the navel. Females: height, neck circumference, waist circumference at the thinnest portion of the abdomen, and hips). No substitute methods of assessment are permitted. This method is valid because of the emphasis on abdominal circumference, the site of human body fat deposition that is most strongly associated with health risks, and which corresponds to other VMI goals including appropriate appearance and healthy exercise habits.

A. Cadets exceeding the body fat standard will be required to report to the VMI Health Center on a monthly basis for a body fat assessment, medical screening, and nutritional counseling by the Post Physician.

B. Once cadets meet the acceptable body fat standards they will no longer be required to report to the VMI Health Center on a monthly basis.

6. **Testing Standards**.

A. Cadets in their first or second semester at VMI must meet the height/weight and body fat standards detailed in Appendix A.

B. Cadets in their third semester and beyond at VMI and beyond must meet the height/weight and body fat standards detailed in Appendix B.

FOR THE SUPERINTENDENT

Jeffrey H. Curtis
Colonel, USAF (Ret.)
Chief of Staff

DIST: E, Cadets

OPR: Cadet Life

Appendix A

HEIGHT/WEIGHT AND BODY FAT STANDARDS FOR 1ST AND 2ND SEMESTER CADETS

ACCEPTABLE HEIGHT/WEIGHT STANDARDS

MALES		FEMALES	
Height (Inches)	**Weight (Lbs)**	**Height (Inches)**	**Weight (Lbs)**
60	139	58	122
61	144	59	127
62	148	60	132
63	153	61	136
64	158	62	140
65	163	63	145
66	168	64	149
67	174	65	154
68	179	66	160
69	184	67	163
70	189	68	168
71	194	69	173
72	200	70	178
73	205	71	183
74	211	72	189
75	217	73	194
76	223	74	199
77	229	75	205
78	235	76	210
79	241	77	216
80	247	78	222
		79	227
		80	233

ACCEPTABLE BODY FAT STANDARDS

MALES	FEMALES
26%	32%

Appendix B

HEIGHT/WEIGHT AND BODY FAT STANDARDS FOR CADETS IN THEIR 3RD SEMESTER AND BEYOND

ACCEPTABLE HEIGHT/WEIGHT STANDARDS

MALES		FEMALES	
Height (Inches)	**Weight (Lbs)**	**Height (Inches)**	**Weight (Lbs)**
60	136	58	121
61	140	59	125
62	144	60	129
63	149	61	134
64	154	62	138
65	159	63	143
66	163	64	147
67	169	65	152
68	174	66	156
69	179	67	161
70	185	68	166
71	189	69	171
72	195	70	176
73	200	71	181
74	206	72	186
75	212	73	191
76	217	74	197
77	223	75	202
78	229	76	207
79	235	77	213
80	240	78	218
		79	224
		80	230

ACCEPTABLE BODY FAT STANDARDS

MALES	FEMALES
22%	32%