

# In Summary...

from the **INSTITUTE OF MEDICINE**

*Shaping the Future for Health*

## **Weight Management: State of the Science and Opportunities for Military Programs**

The primary purpose of fitness and body composition standards in the U.S. Armed Forces has always been to select individuals best suited to the physical demands of military service, based on the assumption that proper body weight and composition supports good health, physical fitness, and appropriate military appearance.

The current epidemic of overweight and obesity in the United States affects the military services. The pool of available recruits is reduced because of failure to meet body composition standards for entry into the services and a high percentage of individuals exceeding military weight-for-height standards at the time of entry into the service leave the military before completing their term of enlistment.

To aid in developing strategies for prevention and remediation of overweight in military personnel, the U.S. Army Medical Research and Materiel Command requested the Committee on Military Nutrition Research to review the scientific evidence for: factors that influence body weight, optimal components of a weight loss and weight maintenance program, and the role of gender, age, and ethnicity in weight management.

### **Key questions addressed:**

1. What are the essential components of an effective weight/fat loss program, and the most effective strategies for sustaining weight loss?
2. How do age and gender influence success in weight management programs?
3. Which strategies would be most and least effective in a military setting, and should military programs be more proactive in

identifying and discouraging dangerous weight-loss practices?

4. To what extent should weight/fat control programs and policies be standardized across the services versus tailored to the individual service?

5. How can diet be effectively dealt with as a weight management component in the military setting and should pharmacological treatment be considered for use in the military?

6. How should individuals at increased risk of weight gain be dealt with?

7. What are the knowledge gaps in weight management programs relative to the military?

### **Summary of Key Recommendations:**

- Each service should provide training on diet and health at initial entry, including fundamentals of energy balance, caloric content of common foods, appropriate portion sizes, and the importance of maintaining high levels of daily activity.
- Education programs on maintaining healthy weight should also be directed towards military spouses and families.
- The services should make the incorporation of “heart healthy” menus as standard fare in base dining facilities a priority.
- Assessments for weight-for-height (BMI) and percent body fat should be conducted quarterly rather than annually or semi-annually.
- Incidence of disordered eating behaviors needs to be documented and addressed across all branches of the military.
- An effective weight management program must include a reduced calorie diet, an

exercise program that combines aerobic and strength training, counseling on behavior modification, and a structured follow-up program that includes regular contact with weight management counselors

- A military operational specialty (MOS) should be established to train personnel responsible for implementation of weight management programs.
- Evaluation of military weight-management programs is essential, and requires following personnel who have completed the program for a minimum of 2-5 years,

and preferably for their entire military career.

- Pharmacological treatment with FDA-approved drugs could be considered for military operational specialties that do not preclude the use of central nervous system-active agents, following NHLBI standards for obesity treatment.
- The military should explore the use of internet-based programs for maintaining contact with personnel regardless of their duty stations.



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*Weight Management: State of the Science and Opportunities for Military Programs* is available for sale from the National Academies Press; call (800) 624-6242 or (202) 334-3313 (in the Washington metropolitan area), or visit the NAP home page at [www.nap.edu](http://www.nap.edu). The full text of this report is available at <http://www.nap.edu>

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