Spooked by obesity trends, the U.S. military is redefining its basic fitness standards

For the first time in 14 years, the military is rewriting its body composition standards and the methods used to determine whether troops are too fat to serve. Pentagon officials intend to publish a new policy later this year, a document expected to have sweeping effects on how the military defines and measures health and fitness. The review comes amid rising concern about obesity. Among civilians, it is shrinking the pool of qualified prospective recruits. And in the active-duty force, a rising number of overweight troops poses risks to readiness and health care costs. 

You can look around and see all the soldiers that are pushing that belly," said Dr. David Levitsky, a professor of nutritional science and human ecology at Cornell University who has studied military nutrition and obesity. "They have to do something about it." The current policy requires service members to maintain body fat levels below a key threshold - 26 percent for men and 36 percent for women. And for years the Pentagon has required the services to enforce that using a notoriously low-tech "tape test." Those standards are at the core of long-simmering controversies that pit questions of fairness against those of military readiness.

Troops who fail to pass the test are enrolled in remedial fitness programs that can stigmatize or even end a military career. Yet many others believe rigid fitness standards are a vital component of the military profession, rules that stress the importance of military bearing and ultimately save lives on the battlefield. Today, new research and technology is available, enabling the military's health experts to reassess the value, practicality and fairness of those rules. The objective now is to identify and leverage the best, most financially feasible way to distinguish between troops who are truly unhealthy and those who have nontraditional body types but are otherwise fit. "The question is: Is that the best way for us to assess body composition?" said one defense official familiar with the review.

The official requested anonymity because the internal review is controversial and senior officials have not yet made any final decisions. "What was good in 2002 might not be the best we can do in 2016." The pending changes may be far reaching. For the first time the matter will be addressed primarily by military health professionals - many of them trained physicians and scientists. Previously the issue was handled by the Pentagon's personnel division. "We are taking a slightly different perspective on this, focusing on the health: What determinants can we identify that would relate to predispositions for injury or illness?" the defense official said.

'BMI is absolutely useless' One fundamental question is whether the military should revise its longstanding reliance on the height-weight screening that determines a person's body-mass index, or BMI. The official assessment of body composition starts with the BMI test to determine if their height and weight align sufficiently to suggest they are fit. The troops who fail that test must then undergo a more complete a tape test to estimate their body fat percentage. Medical experts say the BMI is flawed at each end of the spectrum. It unfairly penalizes weight lifters and other athletic people who are healthy but have a lot of muscle mass that increases their
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weight. And the BMI test can fail to catch unfit troops who are naturally tall and thin. "When you have groups of individuals who are fit and highly trained, then BMI is absolutely useless," said Dr. Dympna Gallagher, the director of the body composition unit at the New York Obesity Nutrition Research Center. Military health officials are looking for a new way to determine the specific location of body fat.

"Is it visceral fat around the abdominal organs? Or is it total body fat?" the defense official said. "So the goal is to try to determine, based on the science, how do you test - in hundreds of thousands of individuals - the type of fat they have, in a manner that is quick and attainable and is relevant to health?" That's why the tape test is facing such scrutiny. It uses a cloth tape to measure neck and waist circumference and from that, a tester calculates estimated body fat. Critics say the results are wildly inaccurate compared to more sophisticated and costly tools, such as underwater immersion or full-body X-rays.

In fact, in 2013, Military Times challenged the tape test by assessing 10 active-duty troops and then putting them in a hydrostatic "dunk tank," considered one of the most accurate methods for determining an individual's body fat composition. The results showed that the tape test was wrong - every time. And in nine of the 10 cases, the tape test measured troops' body fat percentages far higher than the dunk tank. The worst exposed a 66 percent difference between scores. The challenge is that the military must test more than a million people every year, sometimes in austere conditions like on a ship at sea or within an infantry unit deployed to a war zone. "Time is an issue, resources are an issue - you can't do an MRI or a CAT scan on every service member to look at their body fat. That is very labor intensive and resource intensive and difficult to do," the defense official said.

While Defense Department officials examine potential changes, their proposals will have to be coordinated with leaders of the individual services before a final policy emerges. Internally, however, there is "disagreement on what right looks like," the defense official said. Promoting healthy lifestyles some leaders worry that that focusing on BMI scores and body fat percentages can obscure the broader goal of promoting healthy lifestyles. That involves eating right, exercising daily, getting sufficient sleep and not drinking too much. "I don't want someone just to meet the body screening I want them to live a healthy lifestyle," said Command Sgt. Maj. John Troxell, the senior enlisted adviser to the chairman of the Joint Chiefs of Staff. "That means: Don't go for two weeks and lose a bunch of weight and use methods that are not smart or prescribed to get your body weight down or your body fat down to meet a certain standard."

Nevertheless, Troxell said, the force needs strong fitness requirements. "Any change to our policy has to take into account, first and foremost, that we've got to have men and women who can perform their duties ... under the worst conditions on their worst day of their life, whether it's in combat, whether it's a fire on a ship, whether its on the flight line where there's an emergency." Troxell acknowledged concerns about rising obesity rates limiting the military's
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recruiting pool. He pointed to recent studies that show 75 percent of young Americans are ineligible for military service, many of whom are simply too fat to meet basic standards. But lowering standards to expand that recruiting pool is flawed logic, he said. "If we do that, we have a potential liability on the battlefield. The minute we lose that competitive advantage in combat because our enemies are training harder than we are, we'll have more problems than we have right now." One study of combat troops in Afghanistan found that overweight soldiers were 40 percent more likely to suffer an injury during deployment. Levitsky, the Cornell professor, said health care costs, which consume about 10 percent of the Pentagon's budget, are a key consideration, too.

Obesity is related to conditions that are expensive to treat, such as heart disease, diabetes and hypertension. "If they can somehow weed out those individuals, they would save a lot of money," he said. "What they are realizing is that even after people come into the military and they pass all the health standards, that the risk of becoming obese is still very high. "The major concern is, what are the health costs going to be later on in life? Not right now, but five years - 10 years - 20 years down the line? There are significant health costs. I'm sure their economists are looking at this right now very carefully." Data is hard to come by Obesity in the active-duty force has soared during the past several decades.

In 2001, 1.6 percent of the force received an outpatient diagnosis of obesity, according to Defense Department health data. That more than tripled to 5.3 percent in 2010. It's unclear where those numbers stand now, though. The Defense Health Agency refused to fulfill Military Times request for more recent obesity data. Seeing cause for concern, the individual services have responded by implementing remedial fitness programs - comprehensive health and wellness plans designed to get wayward personnel back into fighting shape. They are mandatory for troops who fail fitness and body composition tests. But finding data on those programs is difficult as well. The Navy, for instance, was unable to provide Military Times with its Fitness Enhancement Program enrollment numbers, a spokesman said, due to computer software updates and ongoing system maintenance. The Air Force also was unable to provide forcewide enrollment data on its Fitness Improvement Program. "We do not have the current enrollment for FIP since this program is managed at the individual base level," said Maj. Bryan Lewis, a spokesman for Air Force headquarters at the Pentagon. Instead, Lewis provided the percentage of airmen who pass the service's annual fitness test. That rate, he said, has ticked up from 92.4 percent in 2011 to 95.9 in 2015. Marines who fail to meet standards are assigned to the Body Composition Program. Annual enrollment in the BCP has ranged between 1.1 percent and 1.4 percent of the total force during the past several years, according to data provided by the Marine Corps Force Fitness Department. The program appears to work, too. Since 2011, in a single year no more than 185 Marines have been thrown out of the service for being too fat. The Army did not respond to Military Times' request for data about its remedial fitness programs. 'I wasn't blessed with good genes'
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Those remedial programs have saved plenty of military careers over the years. But many troops who've been assigned to one of them decry the tape test as inaccurate and unfair, rightly dubious of its reliance on specific body measurements rather than overall physical fitness. Senior Airman Jaclyn Barile, a health administration technician at Whiteman Air Force Base in Missouri, suffered an injury last year that disrupted her fitness routine. Consequently, she began to fear what the tape test would reveal once her waist was measured. "I wasn't blessed with good genes," she told Military Times. "I've been working out consistently and losing weight, but there's one problem: my waist. My waist has always run a little bigger no matter what my fitness level, and it's the only part of the fitness test that stresses me out." Troops cite a variety of reasons for why the tape test does not treat everyone equal. "How about a female that has had a child versus one that has not? Their body does undergo changes, ... but the Air Force doesn't take that into account," said Senior Master Sgt. Lonney "CJ" Johnson, who is assigned to Tyndall Air Force Base in Florida.

Hospital Corpsman 2nd Class Christopher Ward criticized the tape test, too, calling it a blunt tool. "The measurements we use are unbelievably unreliable, and some people's careers are determined by these measurements," he said. With that being said, it's their own fault for letting it get that bad, just as much as it is the system's fault for doing bi-annual checks as opposed to something random." Ward opposes the idea of easing standards. "It's not like the [military's] tattoo policy; a tattoo doesn't really reflect on someone's work ethic or ability to serve, but being overweight or obese is a liability to the person and the people around them in an emergency situation," he said. Plenty of other troops share that sentiment. Marine Pvt. Richard Faler is one of them. A defense message system specialist, he once was considered unfit to serve. At 305 pounds, Faler fell far outside the Marine Corps' weight standard for his 5-foot-10-inch frame. It was only after dropping 90 pounds that he was finally cleared to attend boot camp. Faler, who now weighs in at about 150 pounds, said he thinks the Defense Department should hold Americans to even tougher standards if they wish to serve. "The standards are fine, if not a little too low," he told Military Times. "Even though I, with the help of family and my recruiters, made the height-weight and [fitness] standards to ship to boot camp, I wish that I reached the fitness level of where I was midway through boot camp. "Starting at the minimum Marine Corps standard was difficult," he added. "I know it is designed to be as hard as you make it, but if the fitness standards were a little higher, I believe I would have been even better off."

The new force wide body composition rules are intended to set a baseline, minimum standard. The individual services would still be free to impose more rigorous requirements or additional metrics if they desire, officials said. The Marine Corps, for example, evaluates its troops' general appearance and requires personnel to include a full-body photograph of themselves in uniform as part of each promotion packet. Traditionally, the service also has been more strict when it comes to measuring body fat. That has changed though. Marine officials recently eased those standards. Under new rules that took effect in July, Marines who score extremely well on their fitness tests will be exempt from static body fat requirements. The service's policy is now on par with
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minimum force wide standards for older personnel. Women in their late 30s are permitted to pack on a few extra pounds as the maximum body fat allowed for their age group was raised from 27 to 28 percent. And men over 36 can have a max of 20 percent body fat, an exemption previously limited to men over 40. The Marine Corps also has halted use of the traditional tape test, moving to "self-tensioning" devices that experts call more accurate. And the service is considering creating a new job specialty for fitness instructors. The Navy also has eased rules. For years, it had just two age categories: under 40 and over 40. Now they Navy has four, each with its own standards. The youngest personnel must maintain the lowest body fat levels while older sailors are allowed to carry some extra weight and still meet requirements. The Air Force was granted a waiver in 2009 that allows it to use an alternative tape-test method, one that measures the circumference of the abdomen rather than the neck and waist. Some health experts believe abdominal measurements are a better indicator of body fat that poses the most significant health risk. The Army, meanwhile, has begun a review of its body composition policies but officials are waiting to implement any changes until after the Pentagon releases its revised policy later this year. STORY BY Military Times, Aug 7 | Andrew Tilghman