

Obesity's Increasing Threat to Military Readiness: The Challenge to U.S. National Security

PERSPECTIVE



American Security Project



In this Report

In FY2022, the U.S. Army has failed to meet its recruiting goal by 25%, in large part due to the decreasing number of qualified military available people from which to recruit. Americans are becoming increasingly overweight and rates of obesity are climbing rapidly, contributing directly to this problem. The problem has worsened since the release of a 2018 ASP report on this issue. If current trends continue, the Armed Forces are unlikely to have the capacity to carry out all of the missions they are expected to. Expanding on their 2018 report, the authors recommend several new options to address the reality of obesity and the subsequent recruiting shortfalls.

IN BRIEF

- 77% of Americans in the 17-24 age bracket are not eligible for military service due to a variety of factors. Being overweight is the biggest individual disqualifier at 11% of this population.
- Obesity is growing as a national problem, inhibiting the military's ability to meet recruiting goals. This issue will compound over time, resulting in an inability for the military to carry out its mission.
- We recommend several courses of action to address the recruiting shortfall:
 - Align fitness standards to meet the actual requirements of intended military occupational specialties.
 - Expand treatment and medication options
 - Assess effectiveness of pre-accession military fitness programs and consider expansion if successful
 - Use social media as an incentive or motivator
 - Explore new types of technologies and apps to improve fitness
 - Increase non-combat automation
 - Offer truly competitive pay
- This cannot be solved by the military alone. It will require a comprehensive national and local approach.

About the Authors

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Introduction – A Worsening Problem

In June of 2018, the American Security Project published a report titled “Obesity: An Epidemic that Impacts our National Security.”¹ In that report, we stated:

“Obesity is an epidemic that is threatening our national security. Because of this problem, our armed services are finding it increasingly difficult to recruit qualified applicants to man the force – meaning that, downstream, we will be unable to defend our national security interests around the world.”

We detail specifically why obesity is increasingly challenging the ability of our nation to meet its military recruiting goals and make recommendations on how to solve this problem.

Obesity in adults is defined as the condition where “weight is higher than what is considered healthy for a given height” using the Body Mass Index (BMI) as a screening tool to indicate an index of 30.0 or higher.²

Now, four years later, it is evident that despite our warnings, the problem has persisted and indeed worsened, and compounding factors have resulted in the U.S. Army’s failure to achieve its recruiting goal for FY2022 by a staggering 25%—some 15,000 recruits short of the requirement.³ Acknowledging the failure but appearing to dismiss alarm over the severity of the problem, Secretary of the Army Christine Wormuth stated, “The Army will maintain its readiness and meet all of our national security requirements. If recruiting challenges persist, we will draw on the Guard and Reserve to augment active duty forces, and may need to trim our force structure.”⁴ This incredible optimism despite the worst year of recruiting since the inception of the all-volunteer force is nothing short of astonishing.

Our June 2018 report accurately detailed the problem then, but now it has risen to catastrophic proportions. The immense decline in accessions for our Army is adequate proof that if this trend continues—and we see it as continuing and compounding over time—the military’s readiness to protect our country is in jeopardy. In 2018 we estimated that 30% of the youth in the 17-24 age bracket had obesity, and the latest data indicates that in 2018, 33% of those in the 18-25 age bracket had obesity, increasing from a mere 6% in 1978.⁵ These brackets represent the prime recruiting population for our military. There is no reliable statistic that indicates this epidemic will abate—in fact, the statistical trends show it is going to get worse.

The focus of this paper is to illuminate the severity of this problem, and, once again, to offer some solutions to reduce obesity as a disqualifying factor, and thereby increase the number of those “qualified military available.” Along with this, we make recommendations about how the military must adapt to the reality of the situation.

A Problem Exacerbated by the COVID-19 Pandemic

The COVID-19 pandemic, the aftermath of which is still unfolding, appears to have exacerbated these obesity trends. In an American Psychological Association survey conducted in February 2021, one year after the World Health Organization declared a global pandemic, 42% of respondents reported undesired weight gain averaging around 29 pounds, while 10% reported weight gain greater than 50 pounds.⁶ An alternative study of 15 million U.S. patient records from one year before and one year after the pandemic determined that 39% of this sample gained weight above a normal fluctuation.⁷ Of this population, 27% gained 12.5 pounds or less, 10% gained 27.5 pounds or less, and 2% gained more than 27.5 pounds.⁸ Furthermore, in the period from August 2019 to August 2020, obesity rates in persons aged 2-19 years increased from 19.3% to 22.4%, with the monthly rate of body mass index (BMI) increase

doubling vs the pre-pandemic period.⁹ Even within the active duty servicemember population, obesity rates increased from 19.8% to 22.1% over the course of the pandemic.¹⁰

While this development is concerning on its own, the unique conditions that triggered pandemic weight gains may prove more enduring than prior causes of obesity. Most notably, sudden and significant unemployment, market busts, underemployment, and rising consumer prices across the economy as a result of COVID-19 combined to put millions of Americans in positions of economic insecurity and uncertainty.¹¹ In the early pandemic, tens of millions of Americans lost their jobs.¹² Due to stay-at-home orders, occupancy restrictions, and



economic restructuring, these people remained unemployable until remote work options and COVID-19 relaxations began to take effect. Even after job market rebounds, unemployment remained higher than pre-pandemic figures.¹³ Financial hardship stemming from COVID-19 such as sudden unemployment, reduced hours, and a poor job market undoubtedly incentivized families and individuals to turn to nutrient-poor and higher-calorie foods that are typically cheap and affordable.¹⁴

More abstractly, the consequences of COVID-19 and its second-order effects on education, work, and social interactions inflicted appreciable psychological duress on large swaths of the American population. Stress, anxiety, depression, and other mental health disorders can negatively impact eating behaviors and decrease motivation to exercise. Specifically, stressed individuals tend secrete greater amounts of cortisol, a hormone that, among other deleterious effects, increases appetite, particularly for high fat, high sugar foods.¹⁵ This “distress” hormone also drives intake of “comfort” food and overrides the normal signs of satiety and the overall regulation of feeding. These chemicals are distinct from regular hunger hormones that signal the brain to stop eating once the appetite is satiated rather than when the source of stress is alleviated.¹⁶

The lasting conditions of COVID-19, especially the loss of wealth and purchase power for more nutritious food options, will likely exacerbate anticipated obesity trends. Models that pre-date the pandemic by two months projected that 40-50% of all American adults will have obesity by 2030, with 18% of that figure suffering from severe obesity.¹⁷ Obviously, not all these individuals are relevant for military recruitment due to disqualifying factors such as age, criminal history, or drug usage. It does, however, portend the further shrinking of qualified military available pool from which recruits can be drawn.

A more alarming and undermeasured trend is the weight gain experienced by children and young adults during the pandemic.¹⁸ Obesity among adults who would otherwise constitute eligible military recruits is certainly an immediate challenge which COVID-19 compounded, but obesity in the next generation could be greater by an order of magnitude. Youth is a formative phase of life and exposure to regular physical activity and balanced diet can be

determinative for a child's future. Likewise, unhealthy consumption habits can also calcify during adolescence. Already, in a study of Kaiser Permanente Southern California electronic health record data during the pandemic, obesity and overweight status in children ages 5 to 11 increased from 36.2% to 45.7%.¹⁹ Although the ultimate outcome of the pandemic is yet to be realized, it may be that significant young adult populations ingrained poor health and exercise habits during this time. The impact on women also affects their future children. Women who are overweight or have obesity prior to conceiving a pregnancy predispose the developing fetus to maladaptive programming, shaping the weight and health destiny of that child, who is imprinted with increased likelihood of excess fat accumulation and cardiometabolic consequences. This affects the child at birth and throughout its lifespan.²⁰

A Compounding Problem that Endangers Readiness

As Secretary Wormuth states, our Army will continue to meet our nation's security requirements, but we believe the long-term implications are dire. The FY2022 National Defense Authorization Act sets the size of the U.S. Army at 485,000.²¹ The Army's recruiting goal for 2022 was 60,000,²² representing nearly 13% of August 2022's active duty force of 464,924.²³ It failed to meet that goal. As is typical, it will take the better part of a year to assimilate the 45,000 people actually recruited into the combat ready force. Basic training comes first, then occupational specialty training, and finally transfer into a deployable unit. The deficit of recruits, combined with the time it takes to train them, creates stresses on the total size of the force as the Army also must account for attrition from those exiting the service. While there are sufficient forces today to cover the U.S.' current military requirements and obligations, this does increase the fear over what gaps may be missed during a mobilization or crisis—and Russia's military failures in Ukraine demonstrate the consequences of a force lacking sufficient training. If that deficit in American recruits continues year after year, the compounding effect would indeed be disastrous, and we see no indications that this trend will improve. The recruiting gap of 15,000 soldiers represents 3.2% of the current active duty force. Multiplied over the course of five years, and that continuing gap could represent more than a 17% reduction in the size of the active duty Army from current levels. We just don't see how, if this trend continues, our Army can fulfill its commitments.

While the Army did not meet its mission, the other services did—but they had no other option other than to take recruits already entered into their delayed entry program pools²⁴ (potential recruits signed up for future enlistment) and advance their entry to boot camp during FY22 in order to make up the deficit in immediate accessions or shippers. This phenomenon creates a dangerous precedent which puts increasing pressure on the recruiter for the next year. This is a compounding problem which portends doom for the upcoming years. The Marine Corps usually goes into the new recruiting year with 50% of its quota already in the delayed entry pool—but this year (FY2023) it is only 30%.²⁵ The Air Force is down to 10% (versus the usual 25%), and the Navy is somewhat similar.²⁶ With these delayed entry pools partially drained for next year, we predict the deficit in recruits will grow even larger, meaning our estimate of a 17% reduction in the size of the Army is likely optimistic.

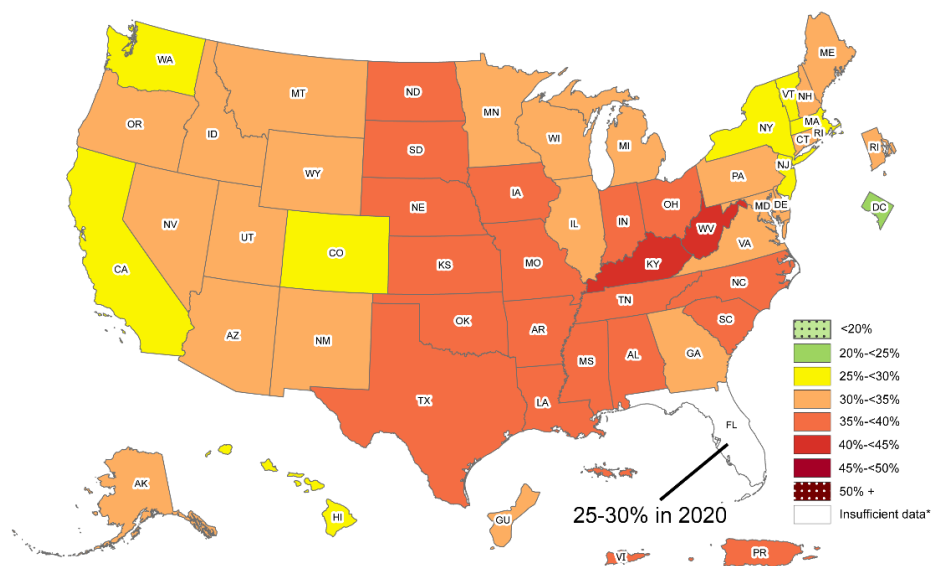


A U.S. Marines Recruiting Stand at the Grant County Fair at Moses Lake, WA in 2021. USMC photo.

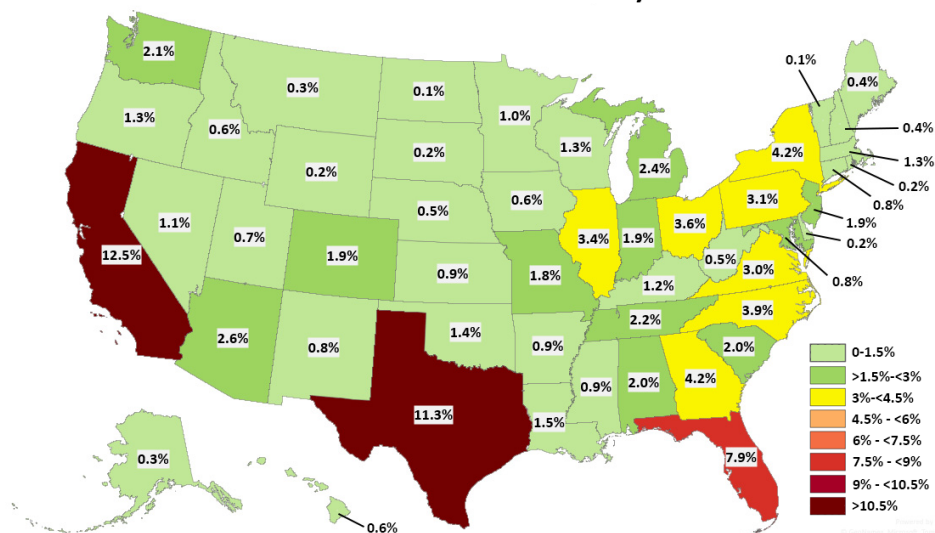
The Challenge for Recruiters

The person suffering the most immediate impact of the loss of eligible manpower is the recruiter, who must carry the burden of enlisting those young men and women every day. In the experience of one of the report authors who commanded the Eastern U.S. recruiting region for the Marine Corps between 1999-2001, a typical Marine recruiter is usually a sergeant or staff sergeant serving in an outpost targeting a region that should support their assigned recruiting mission goals.

2021 CDC Data on Obesity Prevalance by State and Territory



2017 State Contributions to Total Military Recruitment



Comparing CDC Data on obesity by state in 2021²⁷ to the percentage of military recruits from each state in FY2017²⁸—the most recent data available.

A normal mission might only require two completed recruit contracts a month. But in order to meet recruiting goals throughout different periods in the year, recruiters are always looking to “ship” recruits later in the year, putting

them into a “pool” to spread their accession and create an even, predictable flow of recruits to enter active duty service—the size of which is regulated by Congress.

Two recruits per month might not seem significant, but the recruiter will often have to contact dozens, or sometimes more than 100 “eligible” potential recruits in order to secure just one contract. With a diminishing population from which to recruit, this becomes increasingly difficult. The other services are facing much the same problem and still have to “make mission” in their assigned quotas. Some would say that next to combat, this is the most difficult duty for any soldier, sailor, airman, Marine, or guardian. Potential recruits are not flocking *en masse* to the recruiters’ door every day—it is the recruiter who is usually initiating contact through a variety of mediums. If there is any bright side to events over the past year, it is the dissipation of COVID-19 requirements, making access to potential recruits somewhat easier than during the restrictions required by pandemic conditions. But nonetheless, the job is incredibly difficult, and it is not helped any by the proliferation of youth with obesity and the ever-decreasing pool of “qualified military available” youth today.

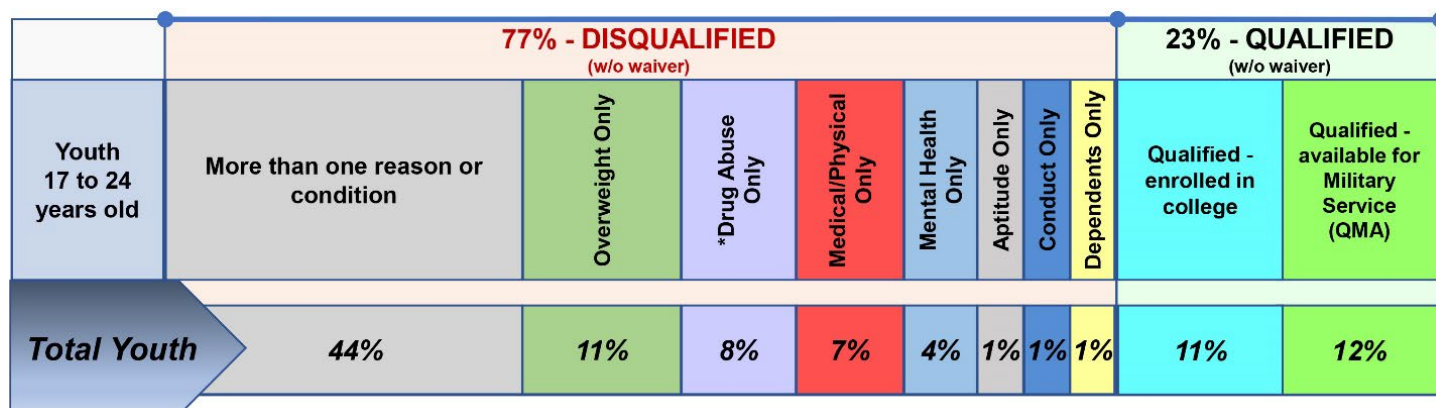


Chart of qualified military available in 2020 from a yet-to-be-released military report shared with ASP.

The data above, from a yet-to-be-released military report shared with ASP,²⁹ indicates that 77% of youth are currently disqualified from military service, up from 71% in 2013.³⁰ These trends represent more than a warning—they indicate the reality that we are not going to make mission as a country next year unless there are changes.

Of course, obesity is not the only reason for disqualification. Other medical issues, vaccination status, physical fitness, criminal records, and educational requirements all play into this, and now record employment is becoming a factor. In FY17 (the latest data available on the DoD’s website) the total number of non-prior service military applicants was 245,649, of which 159,583 were accessions, or roughly 65%.³¹ The disparity in successfully recruited individuals versus applicants is a result of a number of factors closely related to the qualified military available factors above, including criminal history, obesity, low test scores, lack of education, loss of interest, or other issues. There has been talk about reducing the standards for an accession; i.e., relaxing the high school graduation requirement (or possessing a GED equivalent certificate). The Army briefly eliminated this requirement in 2022, but quickly reversed course after reevaluating.³² As authors of this report can testify—having first served since the late 60’s when the draft was prevalent—reducing many of these standards would have disastrous effects, and we recommend against it. We do, however, believe that fitness standards should be adjusted to meet the reality of the roles recruits are intended to fulfill. A recruit intended to be a maintenance technician or a drone operator does not need to meet the same fitness requirement as those entering the infantry.

Recommendations

In the 2018 report we listed five points that needed to be addressed to combat obesity in our youth:

- Increase the level of physical fitness of our youth;
- Wean our youth off social media and onto fitness programs;
- Encourage the use of fitness apps and other electronic fitness trackers;
- Expand Junior Reserve Officer Training Corps units nationwide; and
- Reauthorize child nutrition programs.

All of these are still valid, but little progress has been made over the past four years. We have not seen a significant expansion of high school JROTC units with the exception of the Coast Guard, which is adding two new units in 2022 for a total of six.³³ Renewed interest in physical fitness of our youth has not materialized despite the overwhelming evidence of increasing obesity. Child nutrition programs do continue to enjoy reauthorization and support. However, as of this writing the 2022 Child Nutrition Reauthorization has not been passed—a must if we intend to be serious about addressing obesity.

Due to the nature of differing human physiology, metabolism, environmental factors, and behaviors, a uniform approach is insufficient to address the obesity crisis. Rather, different solutions may need to be tailored to individuals to achieve the intended reduction in weight, or to prevent obesity from occurring.

Recognizing the challenge that obesity poses to the percentage of qualified military available individuals, and understanding that the problem cannot be solved instantly, we believe the United States needs to combat obesity seriously while simultaneously making changes to reflect the current reality of the recruiting challenge. To better address the obesity challenge that endangers our country, we recommend the following additional measures:

Align Fitness Standards to Meet Actual Requirements of Intended Military Occupational Specialties

One possible solution to the shrinking pool of eligible recruits is to match fitness standards to specific roles or “military occupational specialties” (MOS), thereby conditionally expanding the “qualified military available.”

Many military-aged Americans are excluded from military eligibility due to their weight and fitness despite possessing the education, skills, and physical suitability for various mission critical duties. Combat jobs certainly necessitate higher levels of fitness, but these roles are only a fraction of military occupations as demonstrated by the Army’s fiscal year 2019 recruitment figures, where 65% of recruits were destined for non-combat roles.³⁴ The physical demands placed on clerks, accountants, IT technicians, public affairs specialists, lawyers, psychiatrists, and healthcare administrators in their daily routines, for example, are lenient by comparison.

It's not just support staff that operate under less strenuous conditions, but also select warfighters such as UAV pilots and cyber officers. Success in these roles is defined by technological savvy rather than pure physical fitness, which puts the military at a disadvantage when it excludes promising candidates due to their weight or lack of athleticism. Furthermore, the military’s need for these roles is only expected to grow. For instance, in fiscal year 2017, U.S. Air Force drone operators outnumbered any other type of pilot.³⁵ Since this milestone, demand for UAV operators has grown and outstripped supply. In fiscal year 2019, for example, the Air Force needed 1,652 drone pilots but could

only secure 1,320.³⁶ Just recently, the U.S. Army also revealed plans to grow its cyber corps from roughly 3,000 personnel to over 6,000.³⁷ Reconciling a dwindling applicant pool with expanding labor force demands will virtually require a revision of inflexible recruitment standards.

The U.S. Air Force has already once before changed UAV pilot medical standards in order to “broaden the pool of qualified candidates to all rated career fields,” which is a small leap from modifying initial entry fitness standards.³⁸ Specifically, the Air Force Medical Readiness Agency determined that drone operators did not need to meet the medical standards designed for an aircrew operating at altitude.³⁹ Instead, they are now held to Ground-Based Operator medical standards, a pragmatic change that more closely reflects the rigor and conditions of their role. Additionally, the Air Force even revised standards that would “otherwise prevent flying,” enabling recruiters to target broader audiences since “a waiver is no longer needed” to join the Air Force in this specific capacity.⁴⁰

Similarly, the Army’s Occupational Physical Assessment Test (OPAT) and an older version of its Army Combat Fitness Test (ACFT) both make use of fitness gradients that determine what category of military occupational specialties a soldier is best suited for. “Black” or “Heavy” standard on the ACFT reflects a high athletic achievement and qualifies soldiers for combat arms, “Gray” designation is the minimum score for soldiers with “significant” physically demanding jobs, and “Gold” standards are for soldiers in “moderate”

OCCUPATIONAL PHYSICAL ASSESSMENT TEST (OPAT)				U.S. ARMY	
FOUR-PART TEST		4 SCORING LEVELS		WHY IT MATTERS TO YOU	
Standing Long Jump	Seated Power Throw	Heavy ★★★	Infantry, Armor and Artillery	Tests physical potential	Predicts likelihood of injuries
		Significant ★★	Engineer and air defense	Serves as a gender-neutral standard for all occupations	
Strength Deadlift	Interval Aerobic Run	Moderate ★	Most healthcare and admin jobs	Puts the right person in the right job based on physical aptitude	
		Unqualified	Does not meet physical demands	Reduces attrition	Increases potential for recruit success

U.S. Army Image

physically demanding roles which describes most office and administrator positions.⁴¹ Conceptually, these systems acknowledge that not all military jobs demand the same level of fitness and lend credibility to the argument that the Army should consider this before rejecting a potential recruit.

Ultimately, the qualifications and training applied to individual recruits should be tailored to the requirements of their intended position, just as is done in the private sector. A private company would not waste resources or time providing superfluous training that is irrelevant to the role and responsibilities of its employees. However, as overall health is important to the investment the military makes in its personnel, it could enroll those personnel in non-fitness-dependent positions in fitness regimens designed to improve overall health and geared towards improvement rather than setting an irrelevant bar for disqualification.

The idea that every soldier or Marine needs to be a rifleman first is outdated thinking that is no longer reflective of the battlespace in which our military is operating. Just as not every infantryman needs to qualify for special forces, not every accountant needs to qualify as an infantryman. While the fitness of our military undoubtedly carries many benefits, it is not a necessary component of every military specialty and should not bar someone from recruitment into a position that does not require high fitness levels. A maintenance technician, drone operator, or cyber specialist simply does not need to be able to run five miles. If people are interested in these positions, the Armed Forces should not turn down otherwise qualified or talented individuals to fulfill such roles on account of their weight, nor should they necessarily require them to meet the same fitness standard as every other recruit.

Assess Effectiveness of Pre-Accession Military Fitness Programs and Consider Expansion if Successful

More publicly available information is needed about the success or failure rates of the fitness elements of delayed entry programs. Poolees enrolled into delayed entry programs are not yet considered accessions. In the case of the Marine Corps, poolees may defer their enlistment for a maximum of 410 days in some circumstances in order to prepare for entry into training. During this time, poolees may finish school, get in physical shape, handle other personal matters, or even choose to opt out of the program and end their interest in enlisting.

As fitness training is a major component of delayed entry programs, we contend that more data and information is needed about their success, that it should be made easily accessible, and this data should guide the path forward.

To its credit, the U.S. Army is implementing a new pilot called the Future Soldier Preparatory course, which includes a 90-day fitness track designed to help potential recruits achieve a BMI that is no more than 2% above the accession standard, significantly increasing their chances for enlistment.⁴² We commend the implementation of this pilot program and look forward to seeing the results. Early data suggests that the program may be on the right track, as 58 out of 97 participants in the first class successfully entered basic training after just two weeks of fitness instruction, representing 60%.⁴³ If the program continues to be successful, we would support its expansion to help fill the shortfall.

Expand Treatment and Medication Options

One item we did not include in our 2018 list of recommendations was medication and medical treatment. Unfortunately, many do not view obesity as the disease that it is: one that requires treatment like any other chronic condition. Making treatment options such as medications more obtainable to those interested in military service would likely help reduce the number of people considered too overweight to be recruited.

There has been incredible progress on the use of medications to combat obesity,⁴⁴ and there is great potential for these medications to be used to address the overall obesity crisis and to increase the percentage of qualified military available people. Discussion and presentations at a recent event by the Endocrine Society revealed that there is adequate medical evidence that obesity can be defeated by not only attacking it with the recommendations we made in our previous report, but by also addressing it as a disease that can also be treated medically.⁴⁵

Advancements over the past few decades have resulted in the development of new FDA-approved anti-obesity medications. Unfortunately, these medications are not always covered by health insurance policies, including Medicare.⁴⁶ As Medicare sets standards that influence private insurers, covering these medications would likely influence private insurers in a similar direction.⁴⁷ Overall, the treatment of obesity, including the use of medications, would likely result in significant cost savings and increased economic activity nearing \$750 billion over the course of a generation for both private insurers and the U.S. Government.⁴⁸ As treating obesity-related health complications is extremely expensive, treating obesity itself contributes to overall increased productivity and overall cost savings that significantly outpace the initial expense. Coverage around treatment and medication needs to be addressed by Congress if we are going to solve this problem.

Furthermore, the treatment of obesity should be considered holistically, or as a continuum, in that there may be medical options or procedures available that may aid in one individual's ability to lose weight and qualify for military service that aren't ideal for another individual. Research shows that only 25% of people are able to lose 10% of their

body weight and maintain that loss with lifestyle changes alone,⁴⁹ indicating that more treatment options are needed. The viability of these treatments should be considered, particularly if they represent manageable risks or burdens relating to health and logistical considerations. It may be that medications or various other options can assist a potential recruit in meeting initial fitness requirements and enable them to assume military duties with little or no further intervention. As part of continuing research on obesity and the trends affecting the fitness of youth entering eligible recruiting age, it's also important to better understand the most effective methods for improving the health of adolescents, whether through pharmacotherapy, improved behavior, or environmental change. Additionally, considerations will need to be made for the likelihood these medications could be abused by those affected by eating disorders, body dysmorphia, and societal pressures.

With knowledge of advancing treatments, two of the panelists at the Endocrine Society's brief, Dr. Ricardo Correa and Dr. Amy Rothberg, were both optimistic that, to quote, "we will have declining rates of obesity" and were "encouraged" by the outlook. Despite medical advancements, the authors of this report remain profoundly concerned about the extreme severity of current trends and statistics, but if we dedicate as much attention and research to obesity as we once did, to say, smoking or to cancer, then there is a chance it can be defeated. If we do not, then the next several years will be tough, and the future of our defense establishment depends on efforts to overcome this problem.

Use Social Media as an Incentive or Motivator

In our 2018 report, we identified social media as a factor in encouraging sedentary behavior. We now believe that this assertion neglected to embrace the potential of social media as a tool for influence and education in a positive direction. Rather than fighting the power and draw of social media, its power should be harnessed. While there are certainly numerous studies on the ways it can be harmful, and considerations about eating disorders and body dysmorphia must be made, we believe there are many untapped opportunities to use it for the benefit of both physical and mental health.

Social media apps like Instagram and TikTok are known for the attention given to "influencers"—those with massive followings generated by interesting, knowledgeable, humorous, and attractive content. Often, these influencers are considered conventionally attractive, offering beauty tips, imagery, and information that attracts an audience wishing to admire or emulate them. Influencers could be tapped to use their followings to introduce more content on their own healthy eating and fitness habits in order to motivate their audiences to make healthy changes to their own behaviors. Some influencers have gained their audience through offering fitness and healthy eating tips,⁵⁰ demonstrating an 'appetite' for this type of content. As social media activity is often a business for these influencers, an incentive structure on this



An example of a popular fitness influencer on Instagram.

type of content may need to be considered. However, there should be caution when using this approach, especially if reinforcing ideas around achieving “impossible” beauty standards that unintentionally increase cases of bulimia or anorexia. At the same time, there may be challenges to this approach due to evolving viewpoints over body positivity and beauty standards, and they should be considered in the context of promoting realistic health practices.

Additionally, as social media apps use algorithms to offer more content designed to pique the user’s interest and keep them engaged based on the content they or others have viewed, social media companies should be encouraged to tweak their algorithms to offer more content on fitness and healthy eating. For instance, social platforms could promote fun or interesting exercise techniques to try or simplified and accessible recipe videos designed to showcase how simple or delicious healthy eating can be.

In other cases, using social media as a reward or incentive for exercise and healthy eating could be beneficial. Many apps and features already exist for limiting screentime and access to certain apps. For parents interested in increasing the fitness level of their children, a software-based locking mechanism could be implemented to grant access to social media apps after a certain amount of physical activity was completed. The use of Fitbit-style devices or other fitness tracking tech embedded in phones could be used to monitor progress towards a daily unlock of social media apps, thus encouraging physical activity. As social media companies are making efforts to improve their image, they should consider developing this form of a parental lock as a societal good.

Explore New Types of Technology and Apps to Increase Fitness

A plethora of fitness apps already exist and attract a great many users. However, they are limited in the types of individuals that may be inclined to use them.

In a prime example of a non-fitness app encouraging physical activity, *Pokémon GO*, a mobile-based game, requires physical activity mostly in the form of walking to achieve game objectives. Downloaded over one billion times but waning in popularity since its 2016 release,⁵¹ the game provides an interesting case study for the ways in which an app could be used to help achieve fitness goals amongst an audience that wasn’t specifically looking for a fitness app. For users, the game marked a moderate increase in physical activity that returned to baseline after six weeks,⁵² indicating a limited attention span for such apps, and that new and interesting ways of interaction are likely needed if an app developer wishes to retain the audiences’ continued interaction and thus its activity level over time.

Additionally, apps could potentially assist military recruiters in an effort to get candidates in shape before their enlistment. The U.S. military has experimented with fitness apps, but none currently appear to be readily accessible. The U.K.’s army has a fitness app designed for this purpose.⁵³ Apps like this can be designed specifically with military fitness goals in mind and assist candidates with progress trackers towards meeting those goals. In this instance, an app could be connected directly with military recruiters to reach an interested pool of candidates and monitor progress toward their intake.

Finally, the military branches could consider creating apps that simply challenge users to see if they “have what it takes” to meet the military standard. Rather than linking user data directly to recruiting efforts, this type of app could simply be used to encourage the fitness of the general population, with challenges designed specifically for military utility. Military-created or -inspired exercises could differentiate these apps sufficiently from general fitness apps as to make them interesting for those who may be military minded or considering a military career. Such apps could be

regularly updated with new exercises or challenges for users to complete, with themes based on current or historical military duties and requirements in order to keep interest.

Another idea would be to take lessons learned from popular virtual fitness programs like those offered by Peloton. While the appeal of Peloton may be in its group virtual experience combined with live instruction, elements of this could be adapted for use in an app to encourage societal or prospective military recruit fitness. The point is, we need to be creative about the ways we use technology to both encourage and track progress on both an individual and societal level.

Increase Non-Combat Automation

Recognizing current trends in obesity and decreasing qualified military available candidates, the military may be faced with the reality that it is not going to make mission on recruiting. This means that in order to maintain its mission readiness, the Armed Forces will need find ways to do the same amount of work or more with fewer people, which is likely to include relying on greater levels of non-combat automation. While the idea of automation and machines performing the work of military personnel obviously brings up questions about combat automation, that is a controversial subject outside the scope of this report.

Less controversial in an understaffed environment is the idea that non-combat duties can plausibly be fulfilled by machines, freeing up scarce personnel to perform other tasks, or augmenting their ability to complete the tasks at hand. For instance, robots are now being used in routine maintenance procedures in the Air Force, saving time and reducing the risk of injury to personnel.⁵⁴ In



A radome repair robot sanding the surface of an F-15 radome at Robins Air Force Base. U.S. Air Force photo.

another instance, the Navy was experimenting with robots to assist with flight deck operations on aircraft carriers, such as moving munitions, with the idea it would reduce the number of crew necessary to carry out these duties.⁵⁵ From fueling, to cleaning, to other routine tasks, automation holds promise that lessens the burden on the force while enhancing its ability to meet mission.

Offer Truly Competitive Pay

Amongst many reasons recruiting is so difficult, and alongside the major impact obesity has on the number of qualified military available, is that unemployment is now at a historic low, reducing the attraction of a military career. While the military offers some excellent benefits, particularly when it comes to healthcare and education, its economic competitiveness vs. the private sector can be unappealing particularly when factoring in the dangers and major life adjustments required. In today's economy, it is often not good enough to merely be competitive against jobs requiring equivalent skills in the private sector—it must be appealing. Congress needs to consider a variety of factors beyond just the Employment Cost Index when determining military pay.

Many military leaders, ourselves included, have routinely praised the military's people as being its greatest asset.⁵⁶ As a country, we collectively praise the sacrifices made by our soldiers, sailors, airmen, Marines, guardians, and their families as they make the choice to serve. Congress should reflect its praise with pay that is viewed as unquestionably good. There is certainly significant debate about how military pay is set, and considerations to be made about the value of bonuses and benefits afforded to military personnel when comparing base pay.

We frequently hear the argument that if you don't like your minimum wage job, free market principles dictate that you should quit and find a better paying job. In this case, the free market appears to be attracting job seekers elsewhere. For many entering the military as an E1 private,⁵⁷ the military base pay is below the minimum wage for an equivalent full-time job in their state.⁵⁸ That's not a particularly motivating factor to seek a military career, and is likely a strong disincentive, even when factoring in a signing bonus or health benefits. For a job that commands so much national respect and reverence, it should command financial respect as well. Congress recently passed a significant pay increase for the military, but it did so prior to the current inflation situation, and while it is considering yet another increase to address this, we believe that our service men and women should never be struggling to make ends meet.

Conclusion

If left unaddressed, the current challenges to military recruiting will prove disastrous to U.S. national security. Our nation's military comprises the backbone of our security, and our nation's people provide the backbone for the military. But too few of them qualify for military service, and many others aren't interested.

Obesity remains the biggest single disqualifier for military service today, and it's a problem with effects going beyond the impact on military service qualifications. The impact of obesity on healthcare costs alone is enormous— it decreases survivability from disease and increases the chance of suffering from a variety of related ailments, including diabetes and heart disease. We have tools to treat obesity like the disease that it is. We should shape our policies to use these tools and build the healthy society a nation of our status deserves. As a nation, we value our individual freedom of choice, but unfortunately our bodies are physiologically and instinctively hardwired to crave unhealthy foods, saturated fats, and sugars that are normally scarce in nature, but are no longer scarce in our grocery stores. Our physiology gives us less of a personal choice than we think, and our nation is suffering from dangerous levels of obesity as a result. Like smoking and cancer, our policies should be shaped to address the health and security crisis obesity has become.

American culture around healthy diet and exercise is overdue for an update, but so too is the military culture around recruiting. If we want the All-Volunteer Force to survive, it must adapt to the reality of the times instead of holding onto outdated thinking that may lose the next war. That means aligning our recruiting requirements with the duties of the job, attracting the best talent, and making sure we're making an appropriate effort to help those that are interested in joining the military qualify to do so.

What is also abundantly clear is that while changes to the military approach to recruiting can help attract more recruits and expand the pool from which they are selected, the military cannot be expected to fix this problem entirely on its own. Because of obesity's nature as a disease, healthcare, diet, exercise, and environmental factors impacting this issue will need to be addressed. That's not the military's responsibility—it's our responsibility as a country.

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