

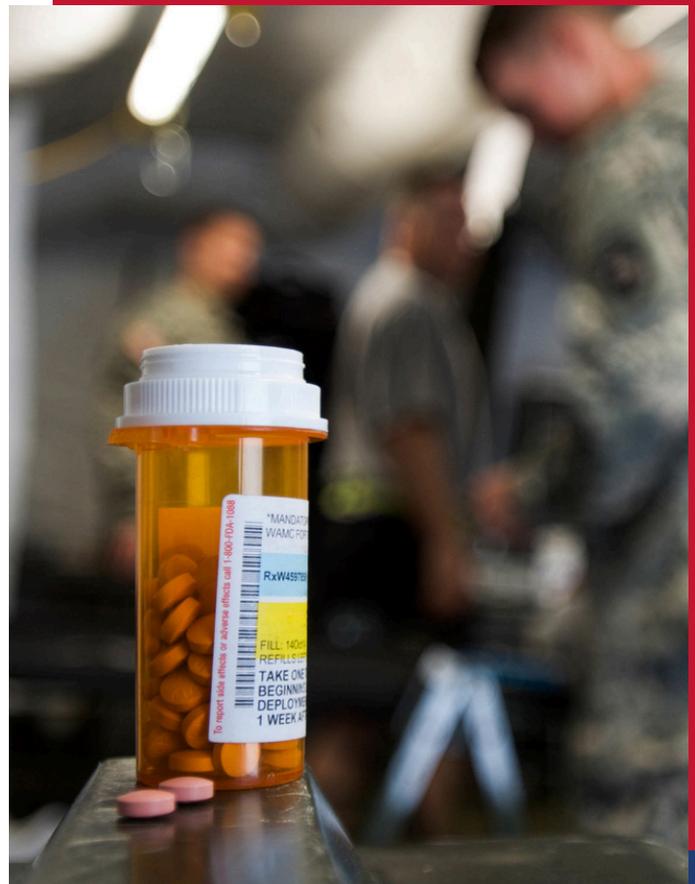
Risky Weight-Loss Products:

Hidden Threats to Military Health and Readiness

PERSPECTIVE PAPER



American Security Project



In This Report

Amid growing rates of overweight, obesity, and disordered eating in the U.S. Armed Forces, risky weight-loss products (RWLPs) pose an emerging threat to service member health and readiness. These products, including dietary supplements, compounded GLP-1 drugs, and counterfeit GLP-1 drugs, are neither approved by the U.S. Food and Drug Administration nor tested for safety, quality, or efficacy. As a result, RWLPs may contain harmful ingredients and/or contaminants and are associated with various adverse health events.

Elevated rates of unhealthy weight-loss behaviors and eating disorder diagnoses in military populations suggest that demand for self-driven, easily accessible weight-loss solutions, such as RWLPs, may be increasing. Meanwhile, as pressure mounts for personnel to meet body composition, fitness, and military appearance standards, structural and cultural barriers limit service members' access to proven medical treatment for overweight and obesity. The Department of Defense should take urgent action to mitigate factors driving use of RWLPs, expand obesity prevention efforts, and remove barriers to safe and effective treatment.

IN BRIEF

- **Enormous nationwide demand for GLP-1 medications has generated an influx of copycat products that are not FDA-tested for safety, quality, or efficacy.** These substances, including dietary supplements, compounded GLP-1 drugs, and counterfeit GLP-1 drugs, are associated with a range of mild to severe health consequences.
- **Elevated rates of disordered eating and unhealthy weight-control behaviors indicate that service members' use of RWLPs may be rising.** Active-duty eating disorder diagnoses rose 60% between 2019 and 2023, and nearly 45% of military personnel report using combination products.
- **RWLPs pose a threat to individual health and collective military readiness.** Service members taking combination products have reported heart palpitations, abdominal pain, dizziness, and seizures, while compounded GLP-1s have been linked with over 1,000 adverse events ranging from nausea to acute pancreatitis across the U.S. population.
- **Structural and cultural factors such as body composition standards and weight stigma place service members at increased risk of developing unhealthy weight-control behaviors.** The DOD should urgently deconstruct barriers to proven obesity treatment to ensure personnel receive safe and effective care from a licensed medical professional.

About the Author

Katherine Yusko is a senior research fellow at the American Security Project, where she leads research portfolios on military readiness, strategic competition, and energy security.

Thanks go to Thomas Ullman, Laura Bucci, and Spencer Posey for their contributions to this report, and to Richele Corrado, Matthew Wallin, and Courtney Manning for their expertise and guidance.

Introduction

In December 2025, just under a year into its renewed push for increased military health and fitness, the Pentagon released a memorandum declaring that “body composition is a vital component for the warrior ethos and foundational to lethality.”¹ This intensive focus on military body composition has placed a spotlight on the growing overweight and obesity epidemic within the Armed Forces,² but it coincides with another concerning trend: rising rates of eating disorders and dangerous weight-control behaviors among personnel.³

As military demand for weight-loss solutions increases, the rise of glucagon-like peptide-1 (GLP-1) receptor agonists has opened new treatment pathways for service members with obesity. However, the enormous nationwide demand for these drugs has generated an influx of copycat products which are neither tested nor approved by the U.S. Food and Drug Administration (FDA). These cheap, easily accessible knockoffs are attractive options for service members seeking rapid weight-loss solutions, but they lack evidence to support their efficacy and may carry serious health risks.⁴

With limited government oversight and enforcement capacity, the market has flooded with GLP-1 copycats of varying degrees of safety and efficacy.⁵ Over the last five years, three key types of these risky weight-loss products (RWLPs) have emerged: weight-loss supplements, compounded GLP-1 drugs, and counterfeit GLP-1 drugs. Dietary supplements intended for weight loss have been available for decades, but they are increasingly (and misleadingly) marketed as less expensive, prescription-free alternatives to branded GLP-1 medications.⁶ Compounded GLP-1 drugs began to proliferate in 2022, when the FDA declared shortages of semaglutide and tirzepatide (the active ingredients in FDA-approved GLP-1 medications).⁷ Around the same time, illegal online retailers began selling counterfeit GLP-1s—falsified powders or solutions disguised as branded GLP-1s or purporting to contain the same active ingredients.⁸

Service members’ careers depend on their ability to meet strict body composition and fitness standards despite poor on-base nutrition options,⁹ unusual or prolonged working hours, insufficient sleep, and high-stress environments. As a result, military personnel are susceptible to the temptation of easily accessible, inexpensive RWLPs, with many already consuming weight-loss supplements on a regular basis.¹⁰ Although several FDA-approved GLP-1 drugs are fully covered for eligible active-duty service members under TRICARE Prime health insurance,¹¹ structural and cultural factors, including fear of career setbacks and pervasive weight stigma,¹² discourage many from seeking weight management advice or obesity treatment through licensed medical professionals in the Military Health System (MHS).

There is no existing data on the number of service members using compounded or counterfeit GLP-1s, but related trends paint a concerning picture. Eating disorder diagnoses among active-duty service members rose 60% between 2019 and 2023,¹³ and military studies demonstrate elevated rates of dangerous weight-control behaviors, such as use of laxatives, self-induced vomiting, and combination products—a dietary supplement category including weight-loss supplements.¹⁴ These trends indicate that service members may be utilizing RWLPs at increasing rates.

To mitigate these substances’ threats to individual health and collective readiness, the Department of Defense (DoD)¹⁵ should undertake a service-wide investigation of RWLP use in active-duty populations and implement educational programming on their risks. The Armed Forces should also urgently address factors driving the use of RWLPs and dismantle barriers to formal, evidence-based treatment. This will require standardized and clarified service policies on the use of approved GLP-1s, streamlined access to safe and effective treatment, increased provider education, and expanded efforts to combat obesogenic factors in military environments.



*Recruits participate in a strength assessment;
Photo by Cpl. Sarah M. Grancock*

Types of Risky Weight-Loss Products

This report defines a “risky weight-loss product” as a consumable substance (oral, injectable, or otherwise) used for the purpose of weight loss that is neither approved by the FDA nor evaluated for safety, quality, or efficacy. This analysis will discuss three key categories of RWLPs—weight-loss supplements,¹⁶ compounded GLP-1 drugs, and counterfeit GLP-1 drugs—and examine the risks they pose to military health and readiness.

KEY DEFINITIONS	
Weight-Loss Supplements <i>21 U.S.C. § 321(ff)</i>	Dietary supplements are ingestible products containing “dietary ingredients.” Weight-loss supplements are dietary supplements marketed for weight loss purposes. These products often contain various vitamins, minerals, herbs, botanical compounds, and amino acids, frequently including one or more stimulant ingredients. ¹⁷ Weight-loss supplements are not drugs and may not claim to treat, diagnose, cure, or prevent disease.
Compounded GLP-1 Drug <i>21 U.S.C. §§ 353a–b</i>	A compounded GLP-1 drug is a medication tailored to meet the clinical needs of an individual patient and prepared by a licensed pharmacist, a licensed physician, or, in the case of an outsourcing facility, a person under the supervision of a licensed pharmacist. Compounding pharmacies may not mass-produce drugs that are “essentially copies” of FDA-approved medications unless these medications are in shortage.
Counterfeit GLP-1 Drug <i>21 U.S.C. § 321(g)</i>	A counterfeit GLP-1 drug is a falsified drug which purports to be the product of an FDA-registered GLP-1 drug manufacturer. Counterfeit GLP-1 drugs are illegal and may contain incorrect active ingredients, incorrect dosages, no active ingredient, or other harmful ingredients.

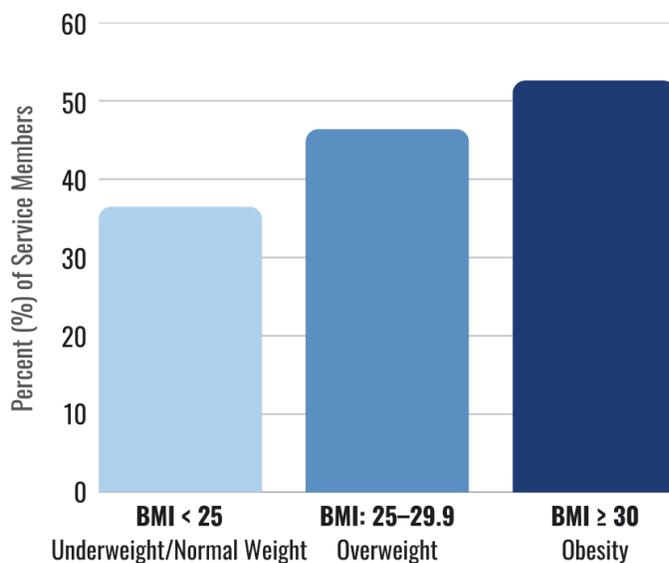
Definitions adapted from the U.S. Food and Drug Administration; Federal Food, Drug, and Cosmetic Act (21 U.S.C. §§ 321, 331, 353a–b)

Weight-Loss Supplements

Despite a lack of evidence to support their effectiveness,¹⁸ dietary supplements intended for weight loss have a long history of use in military populations. Combination products, a dietary supplement category including those marketed for weight loss, muscle-building, and pre-/post-workout support, are the most commonly used supplements among service members aside from multivitamins.¹⁹ Combination products have become increasingly popular in recent years, with nearly 45% of active-duty service members consuming them regularly in 2021.²⁰ Weight loss is among the most frequently cited reasons for supplement use in active-duty populations,²¹ and service members with overweight and obesity are more likely to use combination products than their normal-weight counterparts.²²

Combination Product Use by BMI Among Military Personnel

(Source: Knapik et al., *The Journal of Nutrition*, 2021)



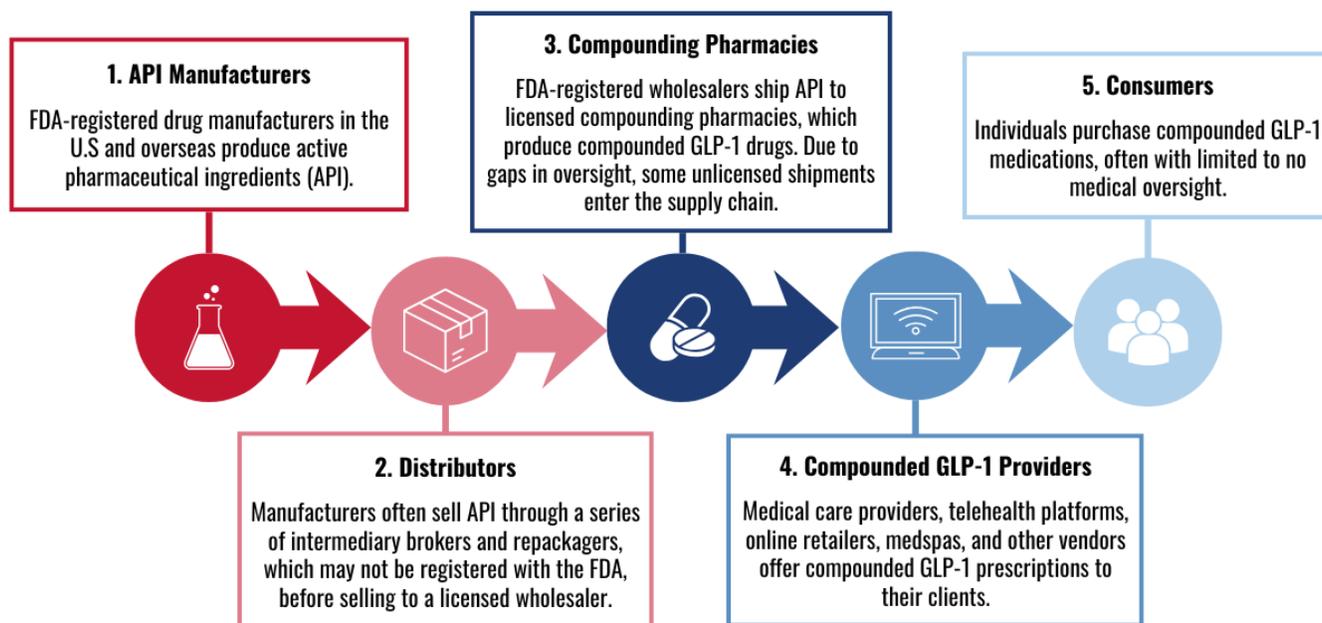
Many supplement companies have attempted to ride the coattails of GLP-1 drugs' success by using the term "GLP-1" in their marketing or claiming that their products support similar physiological processes.²³ For instance, some products pledge to "supercharge GLP-1 production" or offer "natural GLP-1 support." However, supplement companies are not required to prove such claims and do not require FDA approval to market their products;²⁴ as a result, this language is often misleading, and products can be detrimental to consumer health. Due to the products' accessibility and on-trend marketing strategies, combination products intended for weight loss are nonetheless likely to continue gaining popularity among service members seeking weight management solutions.²⁵

Compounded GLP-1 Drugs

Compounded GLP-1 drugs are GLP-1 medications produced by FDA-registered outsourcing facilities and state-licensed 503A compounding pharmacies.²⁶ Unlike weight-loss supplements, these drugs are a relatively new phenomenon. During the FDA-declared shortages of tirzepatide and semaglutide between 2022 and 2025, compounding pharmacies could legally produce compounded GLP-1s en masse;²⁷ these formulations became widely available through medical care providers, telehealth platforms, online retailers, and medical spas at a dramatically lower price point than branded GLP-1s.²⁸ Although the FDA has declared the GLP-1 shortages over and begun cracking down on entities who continue to offer compounded GLP-1 drugs,²⁹ many compounding pharmacies are exercising a legal loophole allowing for continued production if the compounded product is a custom formulation (not "essentially a copy") of a commercially available, FDA-approved medication.³⁰ As a result, compounded GLP-1 drugs with altered dosages, additional ingredients like B12 and glycine, or different administration routes than branded medications are still available to consumers.³¹

Compounded drugs are subject to less stringent requirements than FDA-approved medications.³² It remains legal to compound semaglutide containing up to 15% impurities, with no requirement to test for heavy metals or residual solvents if the manufacturer deems it unnecessary.³³ Third-party investigations have confirmed that compounded GLP-1s may contain contaminants, bacteria, incorrect dosages of the active ingredient or no active ingredient at all, and/or unknown, undisclosed, and potentially unsafe ingredients.³⁴ For instance, in a 2024 investigation of various compounded tirzepatide samples, Eli Lilly identified products containing active ingredients with chemical structures distinct from the FDA-approved medications and at least one that was entirely composed of sugar alcohol.³⁵

Compounded GLP-1 Drug Supply Chain



Counterfeit GLP-1 Drugs

Counterfeit GLP-1 drugs are black-market substances posing as GLP-1 medications or ingredients. Unlike compounded drugs, which are legally produced by registered compounding entities within U.S. national and state-level regulatory frameworks, counterfeit drugs are illegal.³⁶ These substances do not require a prescription or medical oversight for purchase and are easily accessible online as powders, pills, and injectables. In 2025, counterfeit Ozempic units were even discovered within the legitimate U.S. drug supply chain.³⁷

Potentially containing any number of harmful ingredients or contaminants, as well as incorrect dosages of the active ingredient, counterfeit GLP-1 drugs can be extremely dangerous to consumers.³⁸ Some vendors have attempted to circumvent FDA regulations by including a “not for human consumption” disclaimer while still providing instructions for human use,³⁹ but most counterfeits offer no such warning. Despite their risks, these falsified products are plentiful online, with illicit pharmacies in the U.S. distributing an estimated 734,000 “prescriptions” per month in early 2024.⁴⁰

Risks to the Military

Because RWLPs are not tested or approved by any government agency, consumers cannot verify the safety of these products, which may contain incorrect dosages, contaminants, and harmful or prohibited substances⁴¹ known to lead to adverse health events.⁴² This uncertainty poses serious risks to service member health, threatens military readiness, and creates national security vulnerabilities.

Adverse Health Events

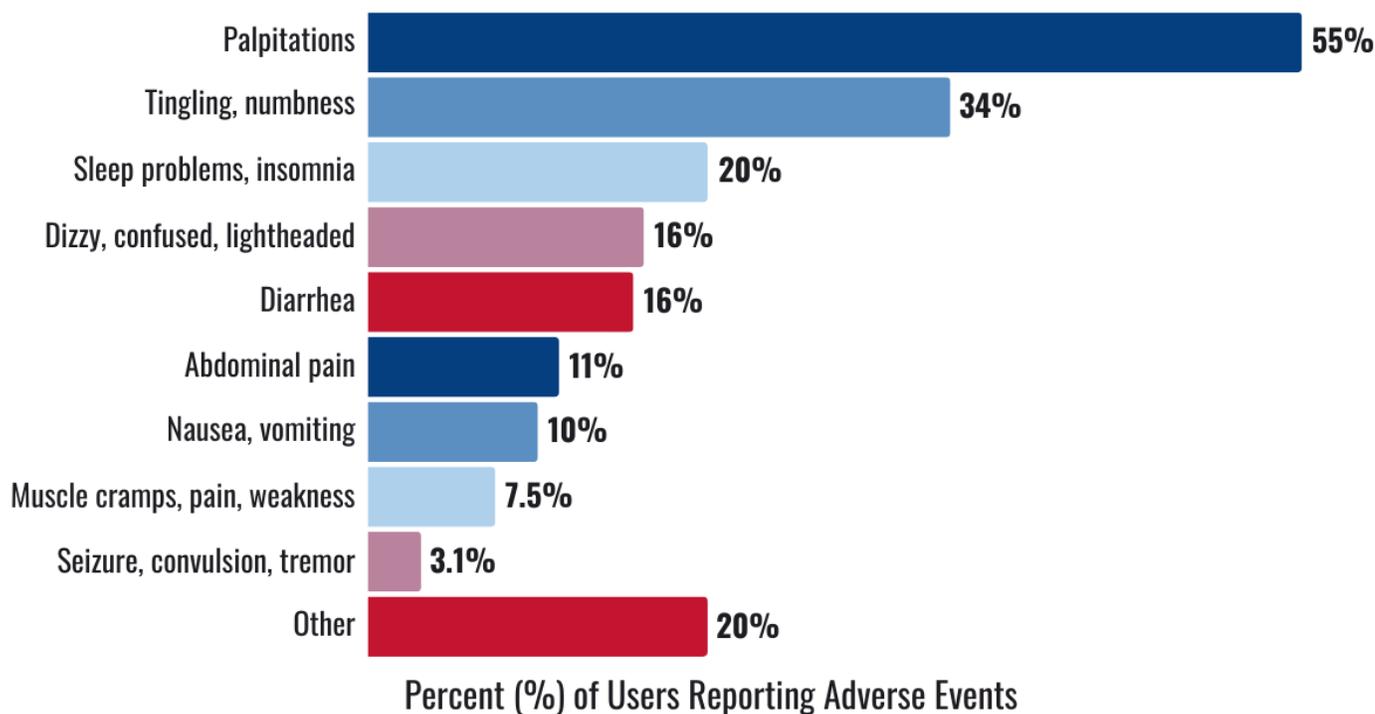
The FDA has published warnings about the potential for weight-loss supplements to be “contaminated with dangerous hidden ingredients”⁴³ that can lead to severe health complications, including cardiovascular events, liver injury, and stroke.⁴⁴ Researchers have confirmed that the ingredients in these products are frequently misrepresented. In 2024, studies of weight-loss supplements sold online, on bases, and near military installations found that over 80% of tested products had inaccurate labels, either containing undisclosed ingredients or advertising ingredients that were not detected within the product.⁴⁵

Of all the various dietary supplement categories, combination products (including weight-loss supplements) are the most frequently associated with adverse health events in military populations.⁴⁶ In a 2022 study of active-duty service members, participants taking combination products reported experiencing heart palpitations, abdominal pain, vomiting, diarrhea, dizziness, and even seizures.⁴⁷ Policymakers are taking steps to reduce these risks by passing legislation that requires military-distributed supplements to be certified by trusted third parties, but this legislation is currently limited to supplements procured and distributed to members of the U.S. Special Operations Command.⁴⁸

Unapproved GLP-1 drugs are also associated with a range of serious health consequences. As of July 2025, the FDA has linked compounded GLP-1s with over 1,000 adverse events⁴⁹ ranging from nausea to acute pancreatitis,⁵⁰ and even more severe reactions have been associated with counterfeit drugs.⁵¹ These incidents prompted the FDA to release a statement in 2025 warning consumers about the quality and safety risks of unbranded, unapproved GLP-1s.⁵² Patients using FDA-approved GLP-1 medications have also reported adverse events, some similar to those linked with compounded formulations and some unique; however, research indicates that compounded GLP-1s carry more severe risks than branded medications.⁵³ One 2025 study found that compounded GLP-1 users were more likely than branded GLP-1 users to report adverse events including abdominal pain, diarrhea, nausea, suicidality, and gallbladder inflammation, and indicated that compounded GLP-1 users were more than twice as likely to report hospitalization associated with adverse events.⁵⁴

Adverse Effects of Combination Products Among Military Personnel

(Source: Knapik et al., Journal of the Academy of Nutrition and Dietetics, 2016)



28.8% of military personnel who used combination products reported experiencing at least one of the above adverse effects.

Risks to Readiness

For service members, adverse health events associated with RWLPs can lead to lost duty time, impaired performance, and/or hospitalization, each of which disrupts routine military operations and places additional strain on overcommitted units.⁵⁵ These risks may be exacerbated by the lack of medical oversight and guidance associated with RWLPs. Additionally, service members taking RWLPs in lieu of legitimate medical treatment may experience health complications due to untreated obesity or comorbid conditions.⁵⁶ This is particularly problematic for service members in crucial roles or on deployment in hostile, high-threat environments.⁵⁷

Outside of adverse events, improper use of RWLPs poses a risk to physical performance. While loss of muscle mass and bone density is typical during periods of significant weight reduction,⁵⁸ proper use of FDA-approved GLP-1 medications involves a diet and exercise plan developed in coordination with a licensed medical provider to mitigate these effects through protein intake and resistance training.⁵⁹ Unapproved GLP-1s are typically consumed with little to no physician oversight; as a result, service members face an increased risk of lean mass loss and reduction in performance.⁶⁰ Additionally, without dietary guidance from a medical provider, personnel may experience impaired performance due to vitamin deficiencies and malnutrition.⁶¹

Finally, service members taking RWLPs risk punitive action or even separation due to potential consumption of DoD-prohibited substances.⁶² Weight-loss supplements frequently contain prohibited ingredients such as 1,4-dimethylamylamine (1,4-DMAA), ephedra alkaloids, methylsynephrine, and 2-aminoisoheptane HCl (DMAHA).⁶³ A 2024 study of weight-loss supplements sold online found that around one-third of tested products contained ingredients prohibited by the Department of Defense.⁶⁴ However, these prohibited ingredients are often excluded from product labels, making it impossible for military personnel to verify that supplements are within regulations.⁶⁵

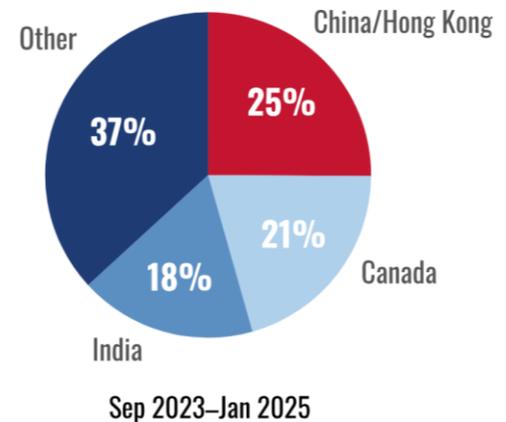
Supply Chain Risks

Regulatory gaps in the pharmaceutical supply chain present risks for both civilians and service members using unapproved GLP-1s. The FDA is unable to inspect all outsourcing facilities, but those inspections it does conduct often expose unsafe and unsterile manufacturing practices and conditions.⁶⁶ However, the problem begins much earlier in the supply chain; many foreign and domestic bulk manufacturers, which provide active ingredients to compounding pharmacies,⁶⁷ have never been inspected by U.S. authorities.⁶⁸

The majority of bulk semaglutide used for compounding is imported from overseas sources, primarily China.⁶⁹ As of April 2025, less than a quarter of Chinese semaglutide manufacturers had been inspected since they began marketing the drug,⁷⁰ and assessments that did occur produced concerning results. U.S. inspections of several major Chinese producers—collectively responsible for nearly half of foreign semaglutide shipments to the U.S. between 2023 and 2024—revealed violations of FDA-mandated manufacturing practices that could lead to consumer harm.⁷¹ These are not isolated incidents; Chinese drug manufacturers have a record of noncompliance with FDA regulations,⁷² and the consequences have been severe. In 2008, for instance, the FDA linked the deaths of at least 81 Americans to contaminated, Chinese-made batches of the blood thinner heparin.⁷³

Origins of Illegal Semaglutide/Tirzepatide Shipments

(Source: Safdar and Karavetsos, Partnership for Safe Medicines, 2025)



In addition to FDA-registered yet uninspected manufacturers, unregistered foreign manufacturers are attempting to sneak illegal shipments of semaglutide and tirzepatide into the United States. In 2025, the Partnership for Safe Medicines reported that over 80% of unlicensed shipments between September 2023 and January 2025 were admitted into the country, with China contributing more illicit shipments than any other nation.⁷⁴

Insufficient inspection of bulk semaglutide and tirzepatide imports is both a public health liability and a national security risk. Compounding pharmacies do not always vet the manufacturers of their ingredients and frequently do not disclose them to consumers, preventing service members and civilians from determining whether the active ingredient in their compounded medication comes from a reputable source.⁷⁵ Launched in September 2025, a new FDA “green list” seeks to limit the import of GLP-1 ingredients from unverified sources, but its efficacy has not yet been evaluated.⁷⁶

Drivers of RWLP Use in the Military

The risks of RWLPs to military readiness and the factors driving their use are intertwined with the military’s unique culture, occupational demands, and health care system. While some aspects of military life push service members away from traditional health care, others pull service members toward RWLPs, with many of these pressures overlapping and compounding.

Body Composition Standards

All military personnel are required to meet service-specific body composition and fitness standards.⁷⁷ If they do not, they may face mandatory entry into weight management programs, consequences for career advancement (including lack of eligibility for promotion or command positions), and separation.⁷⁸ While intended to preserve readiness and

combat effectiveness, these standards place constant pressure on service members to manage their weight through any means necessary. This puts personnel at risk of developing harmful weight-control behaviors that have counterproductive effects on readiness, including disordered eating, overexercise, and RWLP use.⁷⁹

The Department of Defense’s growing scrutiny of military body composition and fitness policies since the beginning of the second Trump administration has intensified these pressures. Repeatedly posting slogans like “fit not fat”⁸⁰ on social media, Secretary of Defense Pete Hegseth has pledged to “restore a ruthless, dispassionate and common sense application of standards” in the military.⁸¹ In September 2025, he explained to the United States’ top military leaders, “Either you are disciplined, fit and trained, or you are out.”⁸²



*A Marine Corps sergeant conducts physical training with future Marines;
Photo by Sgt. Aidan Hekker*

Since January 2025, the DoD and individual services have announced several policy changes to this effect. These include more frequent body composition and fitness tests, daily physical training, and a service-wide shift from height and weight-based body composition measurements to waist-to-height ratio.⁸³ Some of these adjustments will likely have serious and avoidable consequences for service member well-being. For instance, in September 2025, the Army announced revisions “streamlining” its Body Composition Program. These changes removed “satisfactory progress” provisions allowing for safe, gradual weight loss and set a hard deadline of six months for participants to meet body composition standards,⁸⁴ increasing the risk that participants will adopt unhealthy strategies for rapid weight loss.

Weight Stigma

The administration’s rhetoric increases the urgency for service members to meet body composition standards, but it also contributes to a culture of shame and stigma, another risk factor for unhealthy weight-control behaviors.⁸⁵ The military has long embraced values such as strength, fitness, the warrior ethos, and the nebulous concept of a “military appearance” in which these values manifest physically.⁸⁶ As a result, overweight and obesity are often attributed to laziness or a lapse in discipline rather than the environmental and physiological factors known to contribute to increased adiposity. In 2006, the Army Weight Control Program noted that “excessive body fat...connotes a lack of personal discipline,” “detracts from military appearance,” and “may indicate a poor state of health, physical fitness, or stamina.”⁸⁷

Though this language has since been revised, weight bias continues to have material consequences for service members. Research shows that military personnel tend to associate an overweight appearance with reduced professional and leadership competence.⁸⁸ A 2017 study found that around half of service members with overweight and obesity experience weight stigma in the military, often in the form of mockery, denial of awards, and reduced career advancement opportunities.⁸⁹ The same study demonstrated that weight biases are associated with depressive symptoms and disordered eating behaviors such as fasting, purging, and use of laxatives.⁹⁰ In 2003, the Institute of Medicine reported that weight-related harassment by supervisors is a primary driver of these behaviors,⁹¹ which can be severely detrimental to personnel health and readiness.⁹²

In addition, perceived or actual weight stigma and discrimination by healthcare professionals often lead individuals with overweight or obesity to delay or avoid seeking formal healthcare.⁹³ Given the military’s emphasis on personal responsibility for weight management over appropriate medical intervention, this tendency may be even more pronounced for service members than the general population.⁹⁴

Ease of Access

RWLPs are tempting weight-control options for service members due to their accessibility. Weight-loss supplements, compounded GLP-1s, and counterfeit GLP-1s are all readily available online and can often be obtained with little to no oversight by a medical professional.⁹⁵ Weight-loss supplements are also accessible on and near military bases in exchanges, commissaries, and drugstores. Companies and retailers frequently offer military discounts for these products,⁹⁶ making them even more attractive to service members. For instance, in September 2024, Hims & Hers announced a 50% discount on compounded GLP-1 subscriptions for military personnel, first responders, and other “community heroes,” cutting the monthly cost to as low as \$99.⁹⁷

RWLPs also offer discretion for service members seeking to avoid stigma or administrative consequences. In 2003, the Institute of Medicine found that “military personnel are likely to enroll in commercial weight-reduction programs or to self-treat with supplements or over-the-counter medications rather than call attention to their weight, which invites possible disciplinary action or separation from the service with loss of benefits.”⁹⁸ More than twenty years later, the same factors motivating this behavior remain at play, encouraging service members to conceal challenges they may have maintaining body composition and appearance standards.

Limitations of Traditional Healthcare

In addition to the pull factors of RWLPs, structural barriers and treatment limitations discourage service members from seeking traditional obesity care. First, access to comprehensive obesity treatment is limited in the MHS and nationwide. Less than 1% of physicians in the United States are certified in obesity medicine,⁹⁹ and there are few opportunities for medical education on this topic.¹⁰⁰ This constrains both the quality and scope of care patients receive.¹⁰¹

Second, effective obesity treatment often requires an integrated care system involving an experienced provider, dietitian, behavioral health specialist, and exercise physiologist.¹⁰² Though efforts are underway to address this challenge, the MHS care delivery model is still largely siloed.¹⁰³ Additionally, military-specific lifestyle challenges limit the effectiveness of comprehensive lifestyle intervention, a foundational obesity treatment mechanism integrating nutrition, physical exercise, and behavioral therapy.¹⁰⁴ Disproportionate volumes of ultra-processed and fast food on base,¹⁰⁵ combined with long, irregular, and often sedentary working hours, make it difficult for service members to adhere to strict diet and exercise regimens.

In addition to comprehensive lifestyle intervention, bariatric surgery and obesity medications (OMs)¹⁰⁶ are common treatment approaches for civilian patients. However, bariatric surgery is not a plausible route for most service members, as this procedure precludes reenlistment and can result in separation for active-duty personnel.¹⁰⁷ A number of OMs, including several FDA-approved GLP-1 drugs, are completely covered under TRICARE Prime for eligible service members.¹⁰⁸ However, OM utilization within the active-duty population remains low; between 2018 and 2022, only 0.44% of eligible active-duty service members had utilized FDA-approved OMs through the MHS.¹⁰⁹ In their 2024 study, Neuman et al. posit several explanations for this, including a “confusing and administratively burdensome” prior authorization/step therapy process.¹¹⁰ The study also notes that service-specific policies governing the use of OMs are inconsistent, unclear, and largely outdated, leading to uncertainty among service members about whether they are permitted to use these medications.¹¹¹

Varying Service-Level Policies on Weight-Loss Medication

Department of the Army

Medical, Dental, and Veterinary Care
(Army Regulation 40-3), 2013.



“Any medication used solely for its anorexic activity is prohibited from use in Army MTFs.” (pp. 39)

Department of the Navy

Manual of the Medical Department,
NAVMED P-117, 2023.



Retracts rule that: “MTF pharmacies will not fill prescription written by civilian, non-federal providers for any medication used exclusively for its anorexiant or weight loss effect. This includes AD members holding otherwise valid prescriptions.” (pp. 1)

Department of the Air Force

Medical Care Management (Air Force
Instruction 44-102), 2015.



“Weight control medication is not approved for routine use in overweight active duty members...Short term use...may be considered in carefully selected obese patients with a Body Mass Index (BMI) \geq 30 kg/m², or in those with a BMI \geq 27 with significant comorbid risk factors.” (pp. 35)

See endnote 111 for full citation.

Lack of Education on RWLPs

Due to widespread misinformation and lack of education on RWLPs, most people are unaware of the downsides and health risks of these products. According to a survey by the Partnership for Safe Medicines, although most Americans are unfamiliar with compounded medications, 75% assume they are safe.¹¹² In 2012, researchers found that over two-thirds of Army personnel believed dietary supplements are safe to consume and work as advertised.¹¹³ A study conducted nearly a decade later indicates that these misconceptions remain pervasive; roughly one-third of Army personnel incorrectly believed that the government “verifies the safety” of dietary supplements and nearly 40% were “extremely to very confident” that supplement manufacturers’ claims are accurate.¹¹⁴

Educational resources on RWLPs are available for service members through DoD platforms such as Operation Supplement Safety and the Army’s Holistic Health and Fitness program,¹¹⁵ but funding to expand these resources’ reach remains limited. Without increased education on the potential costs of RWLPs, the regulatory gaps surrounding them, and the lack of evidence supporting their effectiveness, service members are unable to make fully informed decisions on RWLP usage and face serious health implications.

Lack of Data

Reliable data on RWLPs in military settings is scarce, limiting the Armed Forces’ ability to track their usage and mitigate the consequences. Most research on military supplement use does not isolate weight-loss supplements as an independent category, instead including them in the wider group of “combination products.” As a result, up-to-date, specific data on the use of weight-loss supplements and their adverse effects within military populations is limited.

This problem is even worse for compounded or counterfeit GLP-1 drugs, as it is virtually impossible to monitor usage of these substances among service members. The DoD cannot track purchases of unapproved GLP-1s from medical spas, telehealth platforms, online vendors, or other external sources, placing the onus upon military personnel to disclose their usage of these substances. Service members are required to inform their primary care provider if they are taking medication or undergoing treatment outside of the MHS, but they may be reticent to share this information due to fear of stigma or administrative penalties. This lack of data undercuts the DoD’s ability to implement targeted educational initiatives and discourage RWLP use in vulnerable populations.

Recommendations

The military's intensifying focus on body composition standards, pervasive weight bias, and barriers to accessing overweight and obesity treatment are key factors driving service members toward RWLPs and other dangerous, unproven weight management solutions. The DoD should work to mitigate these risk factors using the policy approaches outlined below.

Mitigate Obesogenic Factors in Military Environments

To reduce demand for RWLPs and other unsafe weight management tools, the Department of Defense must address systemic drivers of rising rates of military obesity.¹¹⁶ This requires continuous identification and mitigation of environmental risk factors for obesity in military environments, starting with physical activity and nutrition. The DoD has already begun expanding physical fitness and training requirements for service members and should use this momentum to accelerate nutrition reform across military installations.¹¹⁷ Each military service should undertake a comprehensive review of on-base food environments and conduct quantitative evaluations of ongoing nutrition initiatives. These evaluations should inform targeted improvements that maximize the efficacy and cost-effectiveness of existing and planned nutrition programs.

Expand Research on RWLP Use in Military Populations

The DoD should fund research investigating the extent of RWLP use among service members and the impact of these substances on military health and readiness. This effort should prioritize data on the number of RWLP users, frequency of use, types and sources of RWLP, drivers of use, and frequency and nature of any adverse events. Future research on RWLPs should produce more specific data by evaluating weight-loss supplements as an individual category rather than classifying these substances as "combination products." Additionally, research on the use of unapproved GLP-1 drugs should leverage data sources such as anonymous surveys distributed through the MHS. This data should be publicized and shared with policymakers to increase transparency.

Increase Education on Safe Weight Management Strategies and Risks of RWLPs

The DoD should launch educational initiatives on the most up-to-date science of body composition and weight loss, emphasizing sustainable weight management strategies that prioritize long-term health, maintain or enhance performance, and prevent injury. To supplement these initiatives, the DoD should implement programs educating service members on the risks of RWLPs and other dangerous weight-control strategies, such as crash dieting, overexercise, and abuse of laxatives and diuretics. The Department should also designate funding for existing educational platforms, such as Operation Supplement Safety, to expand their reach within the military community. Particularly given the DoD's focus on improving physical fitness across the Armed Forces, commanders should receive briefings from credentialed health professionals on how to safely and effectively address body composition issues within their units.

Preempt Harm to At-Risk Individuals

The services should develop a system to identify individuals at risk of developing dangerous weight management behaviors, including RWLP use, and offer these individuals streamlined access to various credentialed health professionals; this should include, at a minimum, a dietitian, exercise coach, and provider experienced in obesity medicine. This system should target personnel facing compressed timelines for weight loss, such as those in remedial body composition programs, and individuals close to exceeding body composition standards. Early interventions

should be designed to direct at-risk individuals to safe and effective weight-loss resources and reduce the risk of short- and long-term harm from unhealthy or disordered weight-control behaviors.

Improve MHS Obesity Education and Treatment

The MHS should continue working to break siloes within its care delivery model, enabling cross-disciplinary medical professionals to provide comprehensive, integrated obesity treatment to service members. As part of this effort, the DoD should implement a program to track and oversee adoption of the 2025 VA/DoD Clinical Practice Guideline for management of adult overweight and obesity across military treatment facilities.¹¹⁸ The DoD should also designate funding for expanded, formal obesity medicine training and education among MHS providers. Finally, the services should support treatment access by updating and clarifying their policies on the use of OMs among service members.

Conclusion

Unapproved weight-loss substances are not a new challenge for the military, and policies have continuously adapted as new risks emerge. The deaths of 30 service members between 1997 and 2001 led to a military ban on ephedra,¹¹⁹ commonly used in dietary supplements for weight loss and enhanced physical performance, years before the ingredient was banned by the FDA.¹²⁰ Today, as RWLPs proliferate in various new forms, military policy must continue to evolve to preempt harm to U.S. service members. To develop this policy, the DoD must seek a greater understanding of the nature and severity of the RWLP threat to military personnel.

However, RWLP use is a symptom of a wider problem, and policy alone cannot protect military personnel from the allure of risky, unproven weight management strategies. To create a stronger, more lethal fighting force, the DoD must correct a decades-old culture of shame and stigma and adjust policies that reinforce these beliefs. When service members feel empowered to seek evidence-based treatment to manage overweight and obesity, the military will begin to see declining rates of eating disorders, obesity, and unhealthy weight-control behaviors—and enhanced readiness across the ranks.

“To create a stronger, more lethal fighting force, the DoD must correct a decades-old culture of shame and stigma.”

Endnotes

- ¹ Office of the Under Secretary of Defense for Personnel and Readiness, “Additional Guidance on Military Fitness Standards,” U.S. Department of Defense, December 18, 2025, <https://media.defense.gov/2026/Jan/12/2003855613/-1/-1/1/ADDITIONAL-GUIDANCE-ON-MILITARY-FITNESS-STANDARDS.PDF>.
- ² Courtney Manning, “Combating Military Obesity: Stigma’s Persistent Impact on Operational Readiness,” American Security Project, October 11, 2023, <https://www.americansecurityproject.org/white-paper-combating-military-obesity>.
- ³ Hubertus Himmerich et al., “Eating- and Weight-Related Disorders in the Armed Forces,” *Metabolites* 14, no. 12 (November 2024): 667, <https://doi.org/10.3390/metabo14120667>.
- ⁴ See Office of Dietary Supplements, “Dietary Supplements for Weight Loss,” National Institutes of Health, accessed March 9, 2026, <https://ods.od.nih.gov/factsheets/WeightLoss-Consumer/>, and Morten Hach et al., “Impact of Manufacturing Process and Compounding on Properties and Quality of Follow-On GLP-1 Polypeptide Drugs,” *Pharmaceutical Research* 41 (October 2024): 1991-2014, <https://doi.org/10.1007/s11095-024-03771-6>.
- ⁵ Daniel Gilbert, “Inside the Gold Rush to Sell Cheaper Imitations of Ozempic,” *Washington Post*, September 19, 2023, <https://www.washingtonpost.com/business/2023/09/19/ozempic-semaglutide-compounding-pharmacies/>.
- ⁶ Dani Blum, “The Weight Loss Hacks That Claim to Work Like Ozempic,” *New York Times*, September 17, 2024, <https://www.nytimes.com/2024/09/17/well/ozempic-dupes-weight-loss.html>.
- ⁷ Marta E. Wosińska, “The Wild East of Semaglutide,” Brookings Institution, April 21, 2025, <https://www.brookings.edu/articles/the-wild-east-of-semaglutide/>.
- ⁸ “Injectable Weight Loss Drugs: How Illegal Online Drug Sellers Are Taking Advantage of Patients,” National Association of Boards of Pharmacy, April 24, 2024, <https://nabp.pharmacy/wp-content/uploads/2024/04/RogueRx-Activity-Report-Injectable-Weight-Loss-Drugs-2024.pdf>; Tom Hanson et al., “Counterfeit Weight Loss Drugs Sold Online, Feeding Demand for Cheaper Options,” CBS News, November 8, 2024, <https://www.cbsnews.com/news/fake-weight-loss-drugs-ozempic-wegovy-online/>.
- ⁹ Christina Deehl, “Army Undermines Holistic Health Program With Poor Nutrition,” *Army Times*, September 4, 2025, <https://www.armytimes.com/opinion/2025/09/04/army-undermines-holistic-health-program-with-poor-nutrition/>.
- ¹⁰ Joseph J. Knapik et al., “Prevalence of and Factors Associated with Dietary Supplement Use in a Stratified, Random Sample of US Military Personnel: The US Military Dietary Supplement Use Study,” *The Journal of Nutrition* 151, no. 11 (November 2021): 3495-3506, <https://doi.org/10.1093/jn/nxab239>.
- ¹¹ “TRICARE Coverage of Weight Loss Medications: What to Know,” TRICARE Newsroom, August 5, 2025, <https://newsroom.tricare.mil/News/TRICARE-News/Article/4266447/tricare-coverage-of-weight-loss-medications-what-to-know>.
- ¹² Manning, “Combating Military Obesity: Stigma’s Persistent Impact on Operational Readiness.”
- ¹³ “Update: Diagnoses of Mental Health Disorders Among Active Component U.S. Armed Forces, 2019–2023,” *Medical Surveillance Monthly Report* 31, no. 12 (December 2024): 2-11, <https://health.mil/News/Articles/2024/12/01/MSMR-Mental-Health-Update-2024>.
- ¹⁴ Himmerich et al., “Eating- and Weight-Related Disorders in the Armed Forces;” Jeannette Gaudry Haynie et al., “Impacts of Marine Corps Body Composition and Military Appearance Program (BCMAP) Standards on Individual Outcomes and Talent Management,” RAND Corporation, March 28, 2022, pp. viii, 41, https://www.rand.org/pubs/research_reports/RR1189-1.html; Knapik et al., “Prevalence of and Factors Associated with Dietary Supplement Use in a Stratified, Random Sample of US Military Personnel: The US Military Dietary Supplement Use Study.”
- ¹⁵ This paper uses the terms “Department of Defense” and “Secretary of Defense,” as these remain the legal terms for this department and role at the time of writing.
- ¹⁶ The FDA generally does not review or approve any dietary supplement (not just those intended for weight loss) prior to marketing. See “Questions and Answers on Dietary Supplements,” U.S. Food and Drug Administration, February 21, 2024, <https://www.fda.gov/food/information-consumers-using-dietary-supplements/questions-and-answers-dietary-supplements>.
- ¹⁷ “Dietary Supplements for Weight Loss,” National Institutes of Health; “Weight-loss dietary supplements: What you should know,” Operation Supplement Safety, February 21, 2019, <https://www.opss.org/article/weight-loss-dietary-supplements-what-you-should-know>.
- ¹⁸ The most recent VA/DoD Clinical Practice Guideline for overweight and obesity states: “We suggest against using dietary supplements or nutraceuticals for clinically meaningful weight management... There is insufficient evidence demonstrating clinically significant short-term weight loss or supporting long-term weight management or maintenance through nutraceutical or dietary supplements;” see “VA/DOD Clinical Practice Guideline for the Management of Adult Overweight and Obesity (Version 4.0 – 2025),” U.S. Department of Veterans Affairs and U.S. Department of Defense, September 2025, pp. 80, https://www.healthquality.va.gov/HEALTHQUALITY/guidelines/CD/obesity/OBE-CPG_2025-Guideline_final_20251105.pdf. A statement from the U.S. General Accounting Office notes that: “In summary, little is known about whether weight loss supplements are effective, but some supplements have been associated with the potential for physical harm;” see Janet Heinrich, “Dietary Supplements for Weight Loss: Limited Federal Oversight Has Focused More on Marketing than on Safety,” U.S. General Accounting Office, July 31, 2002, pp. 2, <https://www.gao.gov/assets/gao-02-985t.pdf>.
- ¹⁹ Knapik et al., “Prevalence of and Factors Associated with Dietary Supplement Use in a Stratified, Random Sample of US Military Personnel: The US Military Dietary Supplement Use Study.” This study defines combination products as dietary supplements “with mixtures of ingredients from any of the above categories [vitamins, minerals, amino acids, herbal ingredients, etc.], including ≥ 2 categories

and multiple ingredients. Includes products marketed as weight loss, pre- or postworkout supplements, and muscle/body-building products.”

²⁰ Ibid.

²¹ Asma S. Bukhari et al., “Dietary Supplement Use in US Army Personnel: A Mixed-Methods, Survey and Focus-Group Study Examining Decision Making and Factors Associated With Use,” *Journal of the American Academy of Nutrition and Dietetics* 121, no. 6 (June 2021): 1049-1063, <https://doi.org/10.1016/j.jand.2021.01.011>.

²² Knapik et al., “Prevalence of and Factors Associated with Dietary Supplement Use in a Stratified, Random Sample of US Military Personnel: The US Military Dietary Supplement Use Study.”

²³ Blum, “The Weight Loss Hacks That Claim to Work Like Ozempic.”

²⁴ Patricia A. Deuster et al., “Uncovering the World of Dietary Supplements and Performance-Enhancing Substances in the Military,” *Journal of Special Operations Medicine* 24, no. 4 (December 2024): 113-119, <https://doi.org/10.55460/a580-yj5a>; “Dietary Supplements for Weight Loss,” National Institutes of Health.

²⁵ Knapik et al., “Prevalence of and Factors Associated with Dietary Supplement Use.”

²⁶ “Human Drug Compounding,” U.S. Food and Drug Administration, February 13, 2026, <https://www.fda.gov/drugs/guidance-compliance-regulatory-information/human-drug-compounding>. For more information, see Marta E. Wosińska, Kalah Auchincloss, and Ilisa Bernstein, “FDA oversight of drug manufacturing and compounding: A comparison,” Brookings Institution, December 19, 2024, <https://www.brookings.edu/articles/fda-oversight-of-drug-manufacturing-and-compounding-a-comparison/>.

²⁷ Wosińska, “The Wild East of Semaglutide.”

²⁸ Ibid.

²⁹ “FDA Clarifies Policies for Compounders as National GLP-1 Supply Begins to Stabilize,” U.S. Food and Drug Administration, accessed March 9, 2026, <https://www.fda.gov/drugs/drug-safety-and-availability/fda-clarifies-policies-compounders-national-glp-1-supply-begins-stabilize>; “FDA Intends to Take Action Against Non-FDA-Approved GLP-1 Drugs,” U.S. Food and Drug Administration, February 6, 2026, <https://www.fda.gov/news-events/press-announcements/fda-intends-take-action-against-non-fda-approved-glp-1-drugs>; David Mills, “Compounding Pharmacies to Stop Making Ozempic, Zepbound Knockoffs: What to Know,” Healthline, March 25, 2025, <https://www.healthline.com/health-news/compounded-weight-loss-drug-ban-ozempic-zepbound>.

³⁰ Ross Wollen and Joseph Bennington-Castro, “Are Compounded GLP-1 Drugs Banned?” *Everyday Health*, accessed March 9, 2026, <https://www.everydayhealth.com/weight-management/are-compounded-glp-1-drugs-banned/>; Center for Drug Evaluation and Research, Office of Unapproved Drugs and Labeling Compliance, “Compounded Drug Products That Are Essentially Copies of a Commercially Available Drug Product Under Section 503A of the Federal Food, Drug, and Cosmetic Act: Guidance for Industry,” U.S. Food and Drug Administration, January 2018, <https://www.fda.gov/files/drugs/published/Compounded-Drug-Products-That-Are-Essentially-Copies-of-a-Commercially-Available-Drug-Product-Under-Section-503A-of-the-Federal-Food--Drug--and-Cosmetic-Act-Guidance-for-Industry.pdf>.

³¹ “Compounded Drug Products That Are Essentially Copies of a Commercially Available Drug Product Under Section 503A of the Federal Food, Drug, and Cosmetic Act: Guidance for Industry,” U.S. Food and Drug Administration.

³² “Compounding and the FDA: Questions and Answers,” U.S. Food and Drug Administration, September 16, 2025, <https://www.fda.gov/drugs/human-drug-compounding/compounding-and-fda-questions-and-answers>.

³³ Wosińska, “The Wild East of Semaglutide.”

³⁴ “Lilly Warns Patients About Counterfeit and Compounded Medicines Releases Open Letter and Takes Further Legal Action Against Counterfeit, Fake, Unsafe, and Untested Products,” Eli Lilly and Company, June 20, 2024, <https://investor.lilly.com/news-releases/news-release-details/lilly-warns-patients-about-counterfeit-and-compounded-medicines>; “Novo Nordisk Escalates Legal Actions to Safeguard Patients from Potentially Harmful Compounded ‘Semaglutide’ Drugs,” Novo Nordisk, May 30, 2024, <https://www.novonordisk-us.com/media/news-archive/news-details.html?id=168519>.

³⁵ “Lilly Warns Patients About Counterfeit and Compounded Medicines Releases Open Letter and Takes Further Legal Action Against Counterfeit, Fake, Unsafe, and Untested Products,” Eli Lilly and Company.

³⁶ Federal Food, Drug, and Cosmetic Act, 21 U.S.C. § 331.

³⁷ “FDA Warns Consumers Not to Use Counterfeit Ozempic (Semaglutide) Found in U.S. Drug Supply Chain,” U.S. Food and Drug Administration, December 5, 2025, <https://www.fda.gov/drugs/drug-safety-and-availability/fda-warns-consumers-not-use-counterfeit-ozempic-semaglutide-found-us-drug-supply-chain>.

³⁸ Abdur Rehman and Abdulqadir J. Nashwan, “The Rising Threat of Counterfeit GLP-1 Receptor Agonists: Implications for Public Health,” *Journal of Medicine, Surgery, and Public Health* 3 (August 2024): 100136, <https://doi.org/10.1016/j.gjmedi.2024.100136>.

³⁹ Rolfe Winkler and Sara Ashley O’Brien, “How Dozens of Websites Sell Knock-Off Drugs, No Prescription Required,” *Wall Street Journal*, August 16, 2023, <https://www.wsj.com/health/healthcare/ozempic-mounjaro-no-prescription-websites-726b3928>; Amy Eichner, Andrea T. Lindsey, and John Coyles, “Growing Trend of Novel or Experimental Substances Not Approved for Human Use Sold as Consumer Products Poses Threat to Athletes, Service Members, and Public Health,” *Drug Testing and Analysis* 17, no. 10 (May 2025): 1971-1973, <https://doi.org/10.1002/dta.3907>.

⁴⁰ Katherine Eban, “Why Counterfeit Ozempic Is a Global-Growth Industry,” *Vanity Fair*, June 4, 2024, <https://www.vanityfair.com/news/story/counterfeit-ozempic-global-growth-industry>.

⁴¹ Deuster et al., “Uncovering the World of Dietary Supplements and Performance-Enhancing Substances in the Military.”

⁴² Cindy Crawford et al., “Label Accuracy and Quality of Select Weight-Loss Dietary Supplements Sold on or near US Military Bases,” *Nutrients* 16, no. 24 (December 2024): 4369, <https://doi.org/10.3390/nu16244369>.

- ⁴³ “Weight Loss Product Notifications,” U.S. Food and Drug Administration, accessed March 10, 2026, <https://www.fda.gov/drugs/medication-health-fraud-notifications/weight-loss-product-notifications>. See also: “Questions and Answers about FDA’s Initiative Against Contaminated Weight Loss Products,” U.S. Food and Drug Administration, accessed March 9, 2026, <https://www.fda.gov/drugs/frequently-asked-questions-popular-topics/questions-and-answers-about-fdas-initiative-against-contaminated-weight-loss-products>.
- ⁴⁴ Crawford et al., “Label Accuracy and Quality of Select Weight-Loss Dietary Supplements Sold on or near US Military Bases.”
- ⁴⁵ Ibid.; Cindy Crawford et al., “Label Accuracy of Weight Loss Dietary Supplements Marketed Online With Military Discounts,” *JAMA Network Open* 7, no. 5 (May 2024): e249131, <https://doi.org/10.1001/jamanetworkopen.2024.9131>.
- ⁴⁶ Joseph J. Knapik et al., “Adverse Effects Associated with Use of Specific Dietary Supplements: The US Military Dietary Supplement Use Study,” *Food and Chemical Toxicology* 161 (March 2022): 112840, <https://doi.org/10.1016/j.fct.2022.112840>.
- ⁴⁷ Ibid.
- ⁴⁸ National Defense Authorization Act for Fiscal Year 2026, Pub. L. 119-60, 139 Stat. 718, <https://www.congress.gov/bill/119th-congress/senate-bill/1071/text>.
- ⁴⁹ “FDA’s Concerns with Unapproved GLP-1 Drugs Used for Weight Loss,” U.S. Food and Drug Administration, accessed March 9, 2026, <https://www.fda.gov/drugs/postmarket-drug-safety-information-patients-and-providers/fdas-concerns-unapproved-glp-1-drugs-used-weight-loss>.
- ⁵⁰ “NAM: Compounded Drugs Threaten Patient Safety,” National Association of Manufacturers, August 1, 2025, <https://nam.org/nam-compounded-drugs-threaten-patient-safety-34515/>.
- ⁵¹ Eban, “Why Counterfeit Ozempic Is a Global-Growth Industry.”
- ⁵² “FDA’s Concerns with Unapproved GLP-1 Drugs Used for Weight Loss,” U.S. Food and Drug Administration.
- ⁵³ Kenneth L. McCall et al., “Safety Analysis of Compounded GLP-1 Receptor Agonists: A Pharmacovigilance Study Using the FDA Adverse Event Reporting System,” *Expert Opinion on Drug Safety* 25, no. 3 (April 2025): 581-588, <https://doi.org/10.1080/14740338.2025.2499670>.
- ⁵⁴ Ibid.
- ⁵⁵ Courtney Manning, “Costs and Consequences: Obesity’s Compounding Impact on the Military Health System,” American Security Project, September 4, 2024, <https://www.americansecurityproject.org/costs-and-consequences-of-military-obesity/>.
- ⁵⁶ Michele M.A. Yuen, “Health Complications of Obesity: 224 Obesity-Associated Comorbidities from a Mechanistic Perspective,” *Gastroenterology Clinics of North America* 52, no. 2 (June 2023): 363-380, <https://doi.org/10.1016/j.gtc.2023.03.006>.
- ⁵⁷ David Whaley, Jillian E. Sylvester, and Patricia A. Deuster, “A Threat to Military Combat Power: Dietary Supplements,” *The American Journal of Medicine* 134, no. 12 (December 2021): 1560-1563, <https://doi.org/10.1016/j.amjmed.2021.07.026>.
- ⁵⁸ Hanghang Liu et al., “Weight Loss Induced Bone Loss: Mechanism of Action and Clinical Implications,” *Bone Research* 13, no. 99 (December 2025), <https://doi.org/10.1038/s41413-025-00483-4>; Daniel McCarthy and Aloys Beg, “Weight Loss Strategies and the Risk of Skeletal Muscle Mass Loss,” *Nutrients* 13, no. 7 (July 2021): 2473, <https://doi.org/10.3390/nu13072473>.
- ⁵⁹ Simon Birk Kjør Jensen et al., “Bone Health After Exercise Alone, GLP-1 Receptor Agonist Treatment, or Combination Treatment: A Secondary Analysis of a Randomized Clinical Trial,” *JAMA Network Open* 7, no. 6 (June 2024): e2416775, <https://doi.org/10.1001/jamanetworkopen.2024.16775>; Grant M. Tinsley and Spencer Nadolsky, “Preservation of Lean Soft Tissue during Weight Loss Induced by GLP-1 and GLP-1/GIP Receptor Agonists: A Case Series,” *SAGE Open Medical Case Reports* 13 (October 2025), <https://doi.org/10.1177/2050313X251388724>; “Preserving Lean Body Mass in Patients Taking GLP-1 for Weight Loss,” *Advances in Motion*, June 6, 2025, <https://advances.massgeneral.org/endocrinology/article.aspx?id=1601>.
- ⁶⁰ Numerous studies have positively associated lean mass with performance in military settings. See Anthony M. Acevedo and Zachary Zeigler, “Lean Muscle Mass in Special Operations Forces: Implications for Performance, Selection, and Injury Reduction A Narrative Review,” *Military Medicine* usaf597 (December 2025), <https://doi.org/10.1093/milmed/usaf597>, and Nathan D. Dicks et al., “The Impact of Critical Speed and Lean Body Mass on Load Carriage Performance for Army Reserve Officers’ Training Corps Cadets,” *Military Medicine* 190, no. 9-10 (September/October 2025): e1799-e1805, <https://doi.org/10.1093/milmed/usae568>.
- ⁶¹ Jaime P. Almandoz et al., “Nutritional Considerations with Antiobesity Medications,” *Obesity* 32, no. 9 (June 2024): 1613-1631, <https://doi.org/10.1002/oby.24067>.
- ⁶² Office of the Under Secretary of Defense for Personnel and Readiness, “DoD Instruction 6130.06: Use of Dietary Supplements in the DoD,” U.S. Department of Defense, March 9, 2022, <https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/613006p.PDF>.
- ⁶³ Crawford et al., “Label Accuracy of Weight Loss Dietary Supplements Marketed Online with Military Discounts.”
- ⁶⁴ Ibid.
- ⁶⁵ Ibid.
- ⁶⁶ Wosińska, “The Wild East of Semaglutide;” “What is a 503B Outsourcing Facility, and Why are So Many of Them Uninspected by FDA?” Partnership for Safe Medicines, accessed March 23, 2026, <https://www.safemedicines.org/2025/07/503b-fda-inspections.html>; Shabbir Imber Safdar and George Karavetsos, “Knockoff Weight Loss Drugs from Illegal Foreign Sources,” Partnership for Safe Medicines, February 20, 2025, <https://www.safemedicines.org/wp-content/uploads/2019/09/PSM-White-Paper-v1-PUBLIC-VERSION.pdf>; “Warning Letter: ProRx, LLC,” U.S. Food and Drug Administration, March 4, 2025, <https://www.fda.gov/inspections-compliance-enforcement-and-criminal-investigations/warning-letters/prorx-llc-696742-03042025>.

⁶⁷ Bulk drug substances, or active pharmaceutical ingredients, are often used in compounded medications. See “Bulk Drug Substances Used in Compounding,” U.S. Food and Drug Administration, January 7, 2025, <https://www.fda.gov/drugs/human-drug-compounding/bulk-drug-substances-used-compounding>.

⁶⁸ See Wosińska, “The Wild East of Semaglutide:” “Less than a quarter of Chinese facilities marketing semaglutide bulk have been inspected since they began marketing the product. But this low number is not due to the lack of FDA effort—FDA has inspected five of the first seven semaglutide bulk NDCs in this sample but simply cannot catch up with the onslaught of new NDC filers;” <https://www.brookings.edu/articles/the-wild-east-of-semaglutide/>. See Safdar and Karavetsos, “Knockoff Weight Loss Drugs from Illegal Foreign Sources,” pp. 3: “We note that FDA-registration is merely one aspect of the regulatory process, and that many registered foreign API manufacturers have not been inspected by FDA.”

⁶⁹ Safdar and Karavetsos, “Knockoff Weight Loss Drugs from Illegal Foreign Sources,” pp. 7; Wosińska, “The Wild East of Semaglutide.”

⁷⁰ Wosińska, “The Wild East of Semaglutide.”

⁷¹ See Wosińska, “The Wild East of Semaglutide:” “Of the 11 firms, three Chinese firms responsible for 20% of reported imported volume have never been inspected as of September 2024. Three additional Chinese firms, responsible for 44.5% of reported imported volume, were cited during their latest FDA [inspection] for CGMP violations.”

⁷² “E&C Republicans Press FDA over Inadequate Inspection of Drug Manufacturing in India and China,” U.S. House of Representatives Energy and Commerce Committee, July 18, 2023, <https://energycommerce.house.gov/posts/e-and-c-republicans-press-fda-over-inadequate-inspection-of-drug-manufacturing-in-india-and-china>; Melanie Lee and Ben Hirschler, “Drug Ingredients Made in China Entering Market with Little Oversight,” NBC News, August 28, 2012, <https://www.nbcnews.com/health/health-news/drug-ingredients-made-china-entering-market-little-oversight-flna968328>.

⁷³ “The Frightening Heparin Case,” *New York Times*, April 28, 2008, <https://www.nytimes.com/2008/04/28/opinion/28mon2.html>.

⁷⁴ Safdar and Karavetsos, “Knockoff Weight Loss Drugs from Illegal Foreign Sources,” pp. 11.

⁷⁵ Id., pp. 18; “FDA to Compounders: Know Your Bulks and Excipients Suppliers,” Food and Drug Administration, February 4, 2026, <https://www.fda.gov/drugs/human-drug-compounding/fda-compounders-know-your-bulks-and-excipients-suppliers>.

⁷⁶ “FDA Launches Green List to Protect Americans from Illegal Imported GLP-1 Drug Ingredients,” U.S. Food and Drug Administration, September 5, 2025, <https://www.fda.gov/news-events/press-announcements/fda-launches-green-list-protect-americans-illegal-imported-glp-1-drug-ingredients/>.

⁷⁷ Office of the Under Secretary of Defense for Personnel and Readiness, “DoD Instruction 1308.03: DoD Physical Fitness/Body Composition Program,” U.S. Department of Defense, March 10, 2022, <https://www.esd.whs.mil/portals/54/documents/dd/issuances/dodi/130803p.pdf>.

⁷⁸ “Additional Guidance on Military Fitness Standards,” U.S. Department of Defense; Kristy N. Kamarck, “Defense Primer: Military Physical Fitness Testing and Body Composition Program,” Congressional Research Service, https://www.congress.gov/crs_external_products/IF/PDF/IF12192/IF12192.2.pdf; Secretary of the Army, “Army Regulation 600-9: The Army Body Composition Program,” U.S. Department of the Army, July 16, 2019, pp. 6, https://armypubs.army.mil/epubs/DR_pubs/DR_a/ARN43120-AR_600-9-001-WEB-3.pdf.

⁷⁹ Himmerich et al., “Eating- and Weight-Related Disorders in the Armed Forces,” pp. 33.

⁸⁰ Pete Hegseth (@PeteHegseth), “Our troops will be fit — not fat. Our troops will look sharp — not sloppy. We seek only quality — not quotas. BOTTOM LINE: our @DeptofDefense will make standards HIGH & GREAT again — across the entire force,” X, March 12, 2025, <https://x.com/PeteHegseth/status/1899994315423699018?lang=en>; Pete Hegseth (@PeteHegseth), “Well done @USArmy. Merit-based & Fit NOT Fat,” X, February 5, 2026, <https://x.com/PeteHegseth/status/2019496320809992411>; Secretary of War Pete Hegseth (@SecWar), “Not any more. REAL fitness & weight standards are here. We will be FIT, not FAT,” X, April 26, 2025, <https://x.com/SecWar/status/1916241477753032787>.

⁸¹ “Secretary of War Pete Hegseth Addresses General and Flag Officers at Quantico, Virginia,” U.S. Department of Defense, September 30, 2025, <https://www.war.gov/News/Transcripts/Transcript/Article/4318689/secretary-of-war-pete-hegseth-addresses-general-and-flag-officers-at-quantico-v/>.

⁸² Ibid.

⁸³ Luis Martinez and Mary Kekatos, “How Hegseth's Newly Proposed Military Fitness Standards Compare to Existing Tests,” *ABC News*, October 1, 2025, <https://abcnews.go.com/Health/hegseths-newly-proposed-military-fitness-standards-compare-existing/story?id=126110550>; “Additional Guidance on Military Fitness Standards,” U.S. Department of Defense.

⁸⁴ Prior to September 2025, Army Regulation 600-9 stated that “a Soldier enrolled in the [Army Body Composition Program (ABCP)] is considered to be failing the program if...after 6 months in the ABCP, Soldier still exceeds body fat standards, and exhibits less than satisfactory progress for three or more (nonconsecutive) monthly ABCP assessments.” “Satisfactory progress” is defined as “a monthly weight loss of either 3 to 8 pounds or 1 percent body fat,” which is considered by the Army to be “safely attainable goals.” Army Directive 2025-18 amends this paragraph to read, simply, “In the absence of a diagnosis of an underlying medical condition, if the Soldier continues to exceed body fat standards after 6 months in the ABCP, the commander will initiate separation action.” See Secretary of the Army, “Army Regulation 600-9: The Army Body Composition Program,” Department of the Army, July 16, 2019, pp. 18-19, https://armypubs.army.mil/epubs/DR_pubs/DR_a/ARN43120-AR_600-9-001-WEB-3.pdf, and Secretary of the Army, “Army Directive 2025-18 (Appearance, Grooming, and Army Body Composition Program Standards),” Department of the Army, September 12, 2025, pp. 6, https://armypubs.army.mil/epubs/DR_pubs/DR_a/ARN45095-ARMY_DIR_2025-18-000-WEB-1.pdf.

⁸⁵ In “Impacts of Marine Corps Body Composition and Military Appearance Program (BCMAP) Standards on Individual Outcomes and Talent Management,” Haynie et al. note that: “Research suggests that the increased relevance of weight and body-composition

- measurements, the way these standards are tied to career progression and self-image, and the immersion in a culture that embraces peak fitness and appearance all combine to place service members at high risk of developing disordered eating behavior” (pp. 45). See also: Lindsay Bodell et al., “Consequences of Making Weight: A Review of Eating Disorder Symptoms and Diagnoses in the United States Military,” *Clinical Psychology: Science and Practice* 21, no. 4 (2014): 398–409, <https://doi.org/10.1111/cpsp.12082>.
- ⁸⁶ Manning, “Combating Military Obesity: Stigma’s Persistent Impact on Operational Readiness,” pp. 8.
- ⁸⁷ “Army Regulation 600-9: The Army Weight Control Program,” U.S. Department of the Army, November 27, 2006, pp. 1, https://www.in.gov/indiana-national-guard/files/AR_600-9.pdf.
- ⁸⁸ Anita H. McCowen, “The Impact of Fitness on Senior Leadership,” U.S. Army War College, April 7, 2003, <https://apps.dtic.mil/sti/tr/pdf/ADA415718.pdf>; Andrew Christian, Bina Parekh, and Gilly Koritzky, “Bias and Discrimination Against Men with Overweight in the Military,” *Health Psychology Open* 7, no. 2 (July 2020), <https://doi.org/10.1177/2055102920985374>.
- ⁸⁹ Natasha A. Schvey et al., “Weight Stigma Among Active Duty U.S. Military Personnel With Overweight and Obesity,” *Stigma and Health* 2, no. 4 (2017): 281-291, <https://psycnet.apa.org/doi/10.1037/sah0000057>. For similar results, see Lisa M. Shank et al., “The Relationship Between Weight Stigma, Weight Bias Internalization, and Physical Health in Military Personnel with or at High-Risk of Overweight/Obesity,” *Body Image* 28 (March 2019): 25-33, <https://doi.org/10.1016/j.bodyim.2018.11.003>: “Almost half (42.8%) of participants reported they had been told their shape/weight did not meet military standards, while almost one-quarter of participants endorsed receiving disciplinary action as a result of body shape/weight as well as coworkers/friends asking intrusive or personal questions about weight. About 1 in 6 participants endorsed events such as being passed up for promotion/award due to weight or physical appearance and receiving negative weight or appearance-related feedback on performance reports” (pp. 30).
- ⁹⁰ Schvey et al., “Weight Stigma Among Active Duty U.S. Military Personnel With Overweight and Obesity.”
- ⁹¹ Institute of Medicine, *Weight Management: State of the Science and Opportunities for Military Programs* (National Academies Press, 2003), pp. 41, <https://pubmed.ncbi.nlm.nih.gov/25057674/>.
- ⁹² Mohammad Reza Naghii, “The Importance of Body Weight and Weight Management for Military Personnel,” *Military Medicine* 171, no. 6 (June 2006): 550-555, <https://doi.org/10.7205/MILMED.171.6.550>.
- ⁹³ See Shank et al., “The Relationship Between Weight Stigma, Weight Bias Internalization, and Physical Health in Military Personnel with or at High-Risk of Overweight/Obesity;” Robert D. McGuigan and Jenny M. Wilkinson, “Obesity and Healthcare Avoidance: A Systematic Review,” *AIMS Public Health* 2, no. 1 (January 2015): 56-63, <https://www.aimspress.com/article/doi/10.3934/publichealth.2015.1.56>; Janell L. Mensinger, Tracy L. Tylka, and Margaret E. Calamari, “Mechanisms Underlying Weight Status and Healthcare Avoidance in Women: A Study of Weight Stigma, Body-Related Shame and Guilt, and Healthcare Stress,” *Body Image* 25 (June 2018): 139-147, <https://doi.org/10.1016/j.bodyim.2018.03.001>; Christine Aramburu Alegria Drury and Margaret Louis, “Exploring the Association Between Body Weight, Stigma of Obesity, and Health Care Avoidance,” *Journal of the American Academy of Nurse Practitioners* 14, no. 12 (May 2005): 554-561, <https://doi.org/10.1111/j.1745-7599.2002.tb00089.x>.
- ⁹⁴ Taylor Neuman et al., “Utilization of Antiobesity Medications within the Military Health System,” *Obesity* 32, no. 10 (August 2024): 1825-1832, <https://doi.org/10.1002/oby.24097>.
- ⁹⁵ Kate Knibbs, “It’s Shockingly Easy to Buy Off-Brand Ozempic Online, Even if You Don’t Need It,” *Wired*, July 12, 2024, <https://www.wired.com/story/glp1-ozempic-wegovy-semaglutide-compounding-pharmacies-hims-reflexmd-alan-meds-henry-ro-getthinmd/>.
- ⁹⁶ Crawford et al., “Label Accuracy of Weight Loss Dietary Supplements Marketed Online With Military Discounts.”
- ⁹⁷ “Hims & Hers to Offer Access to Compounded GLP-1 Injections for as Low as \$99/Month to U.S. Military, Veterans, Teachers, Nurses and First Responders,” Hims and Hers, September 18, 2024, <https://investors.hims.com/news/news-details/2024/Hims--Hers-to-Offer-Access-to-Compounded-GLP-1-Injections-for-as-Low-as-99Month-to-U.S.-Military-Veterans-Teachers-Nurses-and-First-Responders/default.aspx>.
- ⁹⁸ Institute of Medicine, *Weight Management: State of the Science and Opportunities for Military Programs*, pp. 39.
- ⁹⁹ See Katherine Yusko, “Ready the Reserve: Obesity’s Impacts on National Guard and Reserve Readiness,” American Security Project, April 2025, pp. 7, <https://www.americansecurityproject.org/white-paper-ready-the-reserve-obesitys-impacts-on-national-guard-and-reserve-readiness/>: “Specialized obesity care is limited, as only around 9,400 (less than 1%) of the estimated one million physicians in the United States are certified by the American Board of Obesity Medicine.”
- ¹⁰⁰ Neuman et al., “Utilization of Antiobesity Medications within the Military Health System.” See Marissa R. Mastrocola et al., “Obesity Education in Medical Schools, Residencies, and Fellowships Throughout the World: A Systematic Review,” *International Journal of Obesity* 44 (2020): 269-279, <https://doi.org/10.1038/s41366-019-0453-6>, and W. Scott Butsch et al., “Low Priority of Obesity Education Leads to Lack of Medical Students’ Preparedness to Effectively Treat Patients with Obesity: Results from the U.S. Medical School Obesity Education Curriculum Benchmark Study,” *BMC Medical Education* 20, no. 23 (January 2020), <https://doi.org/10.1186/s12909-020-1925-z>.
- ¹⁰¹ See Neuman et al., “Utilization of Antiobesity Medications within the Military Health System.” “For the estimated 41.9% of adults in the United States with obesity, less than 1% of physicians in the United States are board-certified in obesity medicine as of 2023, and few noncertified providers feel comfortable prescribing AOMs...With few physicians receiving training during undergraduate or graduate medical education about how to effectively prescribe and treat obesity with AOMs, it is possible that a lack of medical education is contributing to low AOM utilization rates nationwide and within the MHS.”
- ¹⁰² Lydia Alexander et al., “Joint TOS/OMA/OAC Expert Guidance Statement on the Pharmacological Management of United States Adults with Overweight or Obesity Using the GRADE Approach,” *Obesity Pillars* 18 (2026): 100254, <https://doi.org/10.1016/j.obpill.2026.100254>.

- ¹⁰³ Asma S. Bukhari et al., “Evidence-Based Strategies to Enhance Weight Management Programs for Adult Military Beneficiaries: A Narrative Review,” *Military Medicine* 188, no. Supplement_6 (November/December 2023): 215-224, <https://doi.org/10.1093/milmed/usad092>.
- ¹⁰⁴ “VA/DOD Clinical Practice Guideline for the Management of Adult Overweight and Obesity (Version 4.0 – 2025),” U.S. Department of Veterans Affairs and U.S. Department of Defense, pp. 32.
- ¹⁰⁵ Katie M. Kirkpatrick et al., “Food-Away-From-Home Options in Local Military Nutrition Environments,” *AJPM Focus* 4, no. 1 (February 2025): 100293, <https://doi.org/10.1016/j.focus.2024.100293>; Deehl, “Army Undermines Holistic Health Program With Poor Nutrition.”
- ¹⁰⁶ Also often referred to as “anti-obesity medications” (AOMs).
- ¹⁰⁷ “Bariatric Surgery,” TRICARE, September 16, 2024, <https://tricare.mil/CoveredServices/IsItCovered/BariatricSurgery>.
- ¹⁰⁸ “TRICARE Coverage of Weight Loss Medications: What To Know,” TRICARE Newsroom, August 5, 2025, <https://newsroom.tricare.mil/News/TRICARE-News/Article/4266447/tricare-coverage-of-weight-loss-medications-what-to-know>.
- ¹⁰⁹ Neuman et al., “Utilization of Antiobesity Medications within the Military Health System.”
- ¹¹⁰ Ibid.
- ¹¹¹ Ibid. For service-level policies, see Secretary of the Army, “Army Regulation 40-3: Medical, Dental, and Veterinary Care,” Department of the Army, April 23, 2013, pp. 39, https://armypubs.army.mil/epubs/DR_pubs/DR_a/pdf/web/r40_3.pdf; Secretary of the Navy, “Change 169: Pharmacy Operation and Drug Control,” in *Manual of the Medical Department (MANMED)*, NAVMED P-117, Department of the Navy, April 17, 2023, pp. 1, [https://www.med.navy.mil/Portals/62/Documents/BUMED/Directives/MANMED/MANMED%20Chapter%2021%20-%20Pharmacy%20Operation%20and%20Drug%20Control%20\(Incorporates%20Change%20169%20-%20article%2021-5\).pdf?ver=i1Ujmnvpif5YLalQ0tgIPg%3D%3D](https://www.med.navy.mil/Portals/62/Documents/BUMED/Directives/MANMED/MANMED%20Chapter%2021%20-%20Pharmacy%20Operation%20and%20Drug%20Control%20(Incorporates%20Change%20169%20-%20article%2021-5).pdf?ver=i1Ujmnvpif5YLalQ0tgIPg%3D%3D); Secretary of the Air Force, “Air Force Instruction 44-102: Medical Care Management,” Department of the Air Force, March 17, 2015, pp. 35, https://static.e-publishing.af.mil/production/1/af_sg/publication/afi44-102/afi44-102.pdf.
- ¹¹² “PSM Compounded Weight Loss Drugs Poll,” Partnership for Safe Medicines, September 26, 2024, <https://www.safemedicines.org/2024/09/psm-compounded-weight-loss-drugs-poll.html>.
- ¹¹³ Christina E. Carvey, Emily K. Farina, and Harris R. Lieberman, “Confidence in the Efficacy and Safety of Dietary Supplements Among United States Active Duty Army Personnel,” *BMC Complementary and Alternative Medicine* 12, no. 182 (2012), <https://doi.org/10.1186/1472-6882-12-182>.
- ¹¹⁴ Bukhari et al., “Dietary Supplement Use in US Army Personnel: A Mixed-Methods, Survey and Focus-Group Study Examining Decision Making and Factors Associated With Use.”
- ¹¹⁵ “Weight-Loss Dietary Supplements: What You Should Know,” Operation Supplement Safety; “Semaglutide: Uses and Safety,” Operation Supplement Safety, February 12, 2025, <https://www.opss.org/article/semaglutide-uses-and-safety>; Holistic Health and Fitness (H2F), “Dietary Supplements,” U.S. Army, accessed March 26, 2026, https://h2f.army.mil/Portals/141/Dietary%20Supplements_1.pdf.
- ¹¹⁶ It is important to note that genetics play a significant role in an individual’s risk profile for obesity, making strong military treatment options important even with a robust prevention strategy that limits obesogenic factors within the DoD’s control. See Ruth McPherson, “Genetic Contributors to Obesity,” *The Canadian Journal of Cardiology* 23 (Suppl A) (August 2007): 23A-27A, [https://doi.org/10.1016/S0828-282X\(07\)71002-4](https://doi.org/10.1016/S0828-282X(07)71002-4); “Why People Become Overweight,” Harvard Health Publishing, June 24, 2019, <https://www.health.harvard.edu/staying-healthy/why-people-become-overweight>; “Obesity and Genetics: What is the Connection?” Obesity Medicine Association, October 30, 2023, <https://obesitymedicine.org/blog/obesity-and-genetics/>.
- ¹¹⁷ Martinez and Kekatos, “How Hegseth’s Newly Proposed Military Fitness Standards Compare to Existing Tests.”
- ¹¹⁸ See “VA/DOD Clinical Practice Guideline for the Management of Adult Overweight and Obesity (Version 4.0 – 2025),” U.S. Department of Veterans Affairs and U.S. Department of Defense.
- ¹¹⁹ Fred Charatan, “FDA Urged to Ban Ephedrine from Dietary Supplements,” *British Medical Journal* 325, no. 7370 (October 26, 2002): 924, <https://pmc.ncbi.nlm.nih.gov/articles/PMC1169579/>.
- ¹²⁰ “Small Entity Compliance Guide: Final Rule Declaring Dietary Supplements Containing Ephedrine Alkaloids Adulterated Because They Present an Unreasonable Risk,” U.S. Food and Drug Administration, July 2008, <https://www.fda.gov/regulatory-information/search-fda-guidance-documents/small-entity-compliance-guide-final-rule-declaring-dietary-supplements-containing-ephedrine>.

Graphics

Cover Image: U.S. Army [photo](#) by Staff Sgt. Michelle Woods, 2014.

Figure 1. Recruits participate in a strength assessment: U.S. Department of Defense [photo](#) by Marine Corps Cpl. Sarah Grawcock, 2025.

Figure 2. Combination Product Use by BMI Among Military Personnel. Data from Joseph J. Knapik et al., “Prevalence of and Factors Associated with Dietary Supplement Use in a Stratified, Random Sample of US Military Personnel: The US Military Dietary Supplement Use Study,” *The Journal of Nutrition* 151, no. 11 (November 2021): 3495-3506, <https://doi.org/10.1093/jn/nxab239>.

Figure 3. Compounded GLP-1 Drug Supply Chain. See Shabbir Imber Safdar and George Karavetsos, “Knockoff Weight Loss Drugs from Illegal Foreign Sources,” Partnership for Safe Medicines, February 20, 2025, <https://www.safemedicines.org/wp-content/uploads/2019/09/PSM-White-Paper-v1-PUBLIC-VERSION.pdf>; Marta E. Wosińska, “The Wild East of Semaglutide,” Brookings Institution, April 21, 2025, <https://www.brookings.edu/articles/the-wild-east-of-semaglutide/>; “FDA to Compounders: Know Your Bulks and Excipients Suppliers,” Food and Drug Administration, February 4, 2026, <https://www.fda.gov/drugs/human-drug-compounding/fda-compounders-know-your-bulks-and-excipients-suppliers>.

Figure 4. Adverse Effects of Combination Products Among Military Personnel. Data from Joseph J. Knapik et al., “Prevalence, Adverse Events, and Factors Associated with Dietary Supplement and Nutritional Supplement Use by US Navy and Marine Corps Personnel,” *Journal of the Academy of Nutrition and Dietetics* 116, no. 9 (September 2016): 1423-1442, <https://doi.org/10.1016/j.jand.2016.02.015>.

Figure 5. Origins of Illegal Semaglutide/Tirzepatide Shipments. Data from Shabbir Imber Safdar and George Karavetsos, “Knockoff Weight Loss Drugs from Illegal Foreign Sources,” Partnership for Safe Medicines, February 20, 2025, <https://www.safemedicines.org/wp-content/uploads/2019/09/PSM-White-Paper-v1-PUBLIC-VERSION.pdf>.

Figure 6. A Marine Corps sergeant conducts physical training with future Marines: U.S. Department of Defense [photo](#) by Marine Corps Sgt. Aidan Hekker, 2025.

Figure 7. Varying Service-Level Policies on Weight-Loss Medication: See endnote 111.