A diagnosis of food allergy adversely affects one’s ability to join or remain in the military. Inadequate knowledge or misconceptions of current military-specific standards regarding food allergy and how these apply to enlistment, induction, and retention in the US military can lead potentially to inaccurate counseling because each military service has specific regulations that affect the evaluation and decision-making process. Recognizing this knowledge gap, the American Academy of Allergy, Asthma & Immunology’s Military Allergy and Immunology Assembly established a work group that reviewed and summarized all aspects of military instructions, policies, and regulations regarding IgE-mediated food allergy. A flowchart was developed outlining each step of the military entry process for an applicant with a history of food allergy. Furthermore, summary tables were made to provide improved “fluency” regarding each service’s medical regulations, whereas key considerations were outlined for the allergist who is evaluating a subject who is seeking military entry or retention. Both civilian and military allergists play an essential role in the evaluation, counseling, and management of patients with a food allergy history. Understanding the service-specific language and regulations regarding food allergy will improve the allergist’s awareness, counseling, and management of these individuals. (J Allergy Clin Immunol 2018;142:54-9.)

Key words: Food allergy, military, enlistment, retention, waiver

IgE-mediated food allergy is one of the most commonly identified atopic disorders, affecting approximately 8% of children and 4% of adults. There is also an increased incidence of food allergy persisting into adolescence and adulthood. Despite successful avoidance, patients with an IgE-mediated food allergy often have significant quality-of-life deficits and face an increased economic burden of illness. Specifically, having a diagnosis of food allergy adversely affects one’s ability to join the military. At present, food allergy can affect between 1 in 13 and 1 in 25 persons who might desire to join military service, posing an unforeseen constraint in the country’s ability to recruit and maintain
an effective and deployable fighting force. In 2017, approximately 4.2 million persons reached military age, and approximately 2.6 million persons served in the military. With the unique military requirements that persons be able to function in austere locations with limited food choices and varied medical support, a significant number of persons who desire to serve can be affected by current Department of Defense medical accession and retention standards. A query of the American Academy of Allergy, Asthma & Immunology (AAAAI)’s “Ask the Expert” for “military and food allergy” had only a single general scenario and response, but there are many service-specific standards and requirements regarding food allergy in the military that are not well known or not understood by many civilian and military health care providers and specialists. Furthermore, there are no allergist-specific publications that outline and summarize military-specific aspects regarding food allergy and how these standards apply to enlistment, induction, and retention in the US military. Inadequate knowledge or inaccurate counseling might lead to misconceptions because each military service (ie, Army, Navy, and Air Force) has specific regulations that can affect the evaluation and decision-making process.

Recognizing this knowledge gap, the 2017 AAAAI’s Military Allergy and Immunology Assembly (MAIA) hosted a session entitled “Panel discussion: Service-unique strategies for evaluation and management of food allergy: entry and retention.” During this session, the service-specific allergy consultants for the Army (K.W.), Navy (R.L.), and Air Force (C.C.) reviewed current service-specific policies and standards, presented “real-life” cases, and discussed the importance of the civilian-military allergist relationship. It was clear to the triservice panel and the audience that a work group should be formed to review and summarize all aspects of military instructions, policies, and regulations regarding IgE-mediated food allergy, which could aid both civilian and military allergists.

In addition, providing both an algorithm for initial enlistment and accession and service-specific resources would fill a knowledge gap acknowledged by both civilian and military allergists. Because each person’s specific food allergy history, military branch, and occupation is unique, this document should be considered a guide that can be applied differently depending on the time of evaluation (ie, enlistment vs retention) and the service branch (ie, Army, Air Force, Navy).

**MEDICAL CONSIDERATIONS FOR ACCESSION INTO THE US ARMED FORCES**

The US Armed Forces consist of the Army, Air Force, Navy, Marine Corps, and Coast Guard. Reserve forces include the same branches as active duty forces, whereas the Army and Air Force also have National Guard units. Prospective service members are often recruited from high school or college, typically between the ages of 18 and 27 years. Adolescents who are 17 years of age can enter with parental consent, and the maximum age to join is 39 years for some branches and occupations. The standards for military entry are uniform, regardless of the applicant’s path of entry (eg, local recruiting office, Reserve Officer Training Corps, Service Academy, and Officer Candidate School) or desired service branch. The initial medical screening and examination occurs at a Military Entrance Processing Station to determine whether the person meets all medical standards.

The guidance contained in the US Department of Defense Instruction (DoDI) 6130.03, entitled “Medical standards for appointment, enlistment, or induction in the military services,” is to ensure that the person meets 5 main criteria:

1. The person under consideration is free of contagious disease that will probably endanger the health of other personnel.
2. The person is free of medical conditions that require excessive time lost from duty for necessary treatment or hospitalization.
3. The person is medically capable of satisfactorily completing required training.
4. The person is medically adaptable to the military environment without the necessity of geographic limitations.
5. The person is medically capable of performing duties without aggravation of existing medical conditions.

However, the 52-page DoDI contains specific medical standards for every organ system and medical condition that does not meet medical standards for entry. As stated in part 24e of this document, a “History of systemic allergic reaction to food or food additives” is disqualifying. A *systemic allergic reaction* is defined as a temporally related, often multisystem reaction to a specific food. Food-specific IgE antibody without a correlated clinical history does meet the standard for entry. This latter standard is interpreted by the work group as a person who is “sensitized” but reports no clinical symptoms after ingestion of the implicated food or foods and therefore is not allergic to that food.

Although eosinophilic esophagitis (EoE) can occur independently of specific IgE-mediated food triggers and does not result in an epinephrine autoinjector prescription, it is a disqualifying condition, and waivers are generally not recommended for EoE because of the chronic and often significant aspects of this diagnosis. Retention for a patient with EoE is handled on a case-by-case basis, and decisions are highly dependent on specific military occupation, food avoidance requirements, frequency and severity of symptoms, and requirements for appropriate disease control. Finally, although oral allergy syndrome (ie, typical cross-reactive foods with reactions limited to the mouth and throat without other systemic features) is listed as a disqualifying condition in the current DoDI, these patients are typically granted a waiver by the initial examiner or service-specific allergist consultant.

Persons with a history of food allergy can apply for military service, but there is a sequence of steps in which the applicant’s food allergy history is assessed (Fig 1, Boxes 1-7). Furthermore, each service has its own specific regulations regarding food allergy for initial assessment or induction (Table 1).

**US ARMY: ENLISTMENT, APPOINTMENT, INDUCTION, AND RETENTION**

Along with DoDI 6130.03, Army Regulation (AR) 40-501 is the "Standards for medical fitness for the United States Army."
Chapter 2 of AR 40-501 outlines the causes for rejection during initial enlistment, accession, or induction. This chapter is also used to assess those who are already in the Army but are pursuing more specialized training (e.g., Airborne School, Ranger School, or Special Operations). The causes for rejection are written in 2 sections: chapter 2-35 covers a “reliable history of a moderate to severe reaction to common foods, spices, or food additives,” whereas chapter 2-37 covers miscellaneous situations in which “Any condition that in the opinion of the examining medical officer will significantly interfere with the successful performance of military duty or training.”

Chapter 3 of AR 40-501 is entitled “Medical fitness standards for retention and separation, including retirement.” It contains 2 relevant sections for food allergy that could result in a medical evaluation board (MEB). An MEB is the military’s process to assess whether the person who is already in the military is fit to remain in the military. The MEB is made up of 3 individuals who make a decision whether retaining the person on active duty would be in the best interests of that service branch. A person who is found “fit for duty” will remain on active duty status but might have specific deployment or occupation limitations. Persons not found fit for duty will go through the Disability Evaluation System for likely separation from military service. Situations that would require a referral to the MEB include chapter 3-29, “Esophagitis, severe and persistent),” and chapter 3-41e, “Conditions and defects not mentioned elsewhere . . . ,” if 1 or more of the following 3 stipulations are met:

As observed during the AAAAI MAIA symposium, many allergists might be unwilling to perform an oral challenge if there is a “positive” food-specific skin or blood test response. Thus they are unable to update the relevancy of the food-specific skin test or serum IgE level or change the recommendation for an epinephrine autoinjector. In these instances the Military Entrance Processing Station medical screener will likely determine the applicant “does not meet standard,” and the applicant is disqualified. Box 3. If the applicant is found to “not meet” the standard, they have the option to apply for a waiver, which requires the applicant to go back to his or her recruiter to determine the next administrative step. On the other hand, applicants who have been awarded a Reserve Officer Training Corps scholarship or who have been determined by a Service Academy (e.g., West Point or Naval Academy) to likely be “offered appointment” will have a waiver request automatically sent on their behalf. Box 4. Waivers for a history of food allergy are sent to the service-specific allergy consultant for review and recommendation. Many cases are straightforward, with all the necessary information to make a waiver determination, whereas other cases require more information from the applicant’s civilian allergist. Boxes 5 and 6. When additional information is required, a Request for Information (RFI) will be initiated by the service-specific military allergy consultant. If the applicant was provided a letter from his or her civilian allergist, the administrative office of the waiver authority will forward the RFI request generated by the consultant back to the civilian allergist. The RFI might include a request for IgE testing or whether the civilian allergist would consider an oral food challenge. If the applicant does not have an allergist, the Department of Defense might cover the cost of the applicant seeing a military or civilian allergist for any recommended assessment or assessments. Once all documents have been received by the allergy consultant, their recommendation to approve or disapprove a waiver is forwarded to the waiver authority. Box 7. The final waiver decision rests with the waiver authority, which is the Commander of the US Army Recruiting Command for the Army or specific authorities for the Air Force (Table II) or the Navy (Table III). The US Merchant Marine Academy uses the Navy’s authority to render waiver decisions, whereas the Coast Guard Academy determines waivers for their own applicants. Finally, even if the Department of Defense Medical Evaluation and Review Board determines an applicant does not meet medical accession standards, the DoD permits the Service Secretaries (e.g., Secretary of the Army) to authorize waivers in specific cases.

**FIG 1. Food allergy assessment for initial military entry.** Box 1. A Department of Defense (DD) 2807-2 form must be completed before the applicant’s initial Military Entrance Processing Station appointment. If the applicant marks “yes” to any medical condition, a medical evaluation is required. An answer of “yes” to question 105, “Allergy to common foods (milk, eggs, fish, meat, etc.),” would require further supporting documentation. For application to a military service academy (e.g., West Point or the Naval Academy), a Reserve Officer Training Corps scholarship, or the Uniformed Services University of Health Sciences medical school, a DD 2492 form is completed. An answer of yes to question 13 of DD 2492 (“have any allergies”) would also prompt further required discussion and medical evaluation and level of expertise regarding food allergy. Furthermore, because each service has slightly different instruction regarding food allergy, the medical examiner must interpret the applicant’s clinical history and documentation in context of the service that the applicant is seeking (Table I). As noted previously, a “history of” food allergy or anaphylaxis is disqualifying; therefore it is important that both the applicant and the medical examiner determine the current status of the reported food allergy. Although results of prior food-specific IgE testing can be concerning, the food allergy might no longer exist (e.g., the applicant’s food allergy has resolved). On the other hand, the subject might have successfully avoided the food without accidental or purposeful ingestion and/or has been prescribed self-injectable epinephrine with continued avoidance counseling. Furthermore, the reaction history or previous medical record documentation might not meet the definition of anaphylaxis but there has not been any accidental or purposeful ingestion that can determine the present allergy status. In these instances reassessment by an allergist is critical.
TABLE I. Service-specific regulations regarding food allergy

<table>
<thead>
<tr>
<th>Initial entry screening tool</th>
<th>Army</th>
<th>Air force</th>
<th>Navy/Marine Corps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service-specific manual</td>
<td>DoDI 6130.03</td>
<td>AR 40-501 Standards for Medical Fitness</td>
<td>Directory AFI 48-123</td>
</tr>
<tr>
<td>Action taken for current members of the military</td>
<td>MEB and/or profile only if impairing</td>
<td>Automatic MEB and C-code determination</td>
<td>MEB and/or waiver only if impairing</td>
</tr>
</tbody>
</table>

AFL. Air Force Instruction.
*US Coast Guard Instruction is COMDTINST M6000.1F.

TABLE II. Waiver authority for Air Force personnel with food-induced anaphylaxis who desire to remain on active duty

<table>
<thead>
<tr>
<th>Flying class</th>
<th>Waiver potential</th>
<th>Waiver authority</th>
<th>ACS review and evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I/IA</td>
<td>No</td>
<td>AETC</td>
<td>No</td>
</tr>
<tr>
<td>II/III or RPA pilot</td>
<td>Maybe</td>
<td>MAJCOM</td>
<td>Yes</td>
</tr>
<tr>
<td>ATC/GBC</td>
<td>Yes</td>
<td>MAJCOM</td>
<td>At discretion of waiver authority</td>
</tr>
<tr>
<td>MOD</td>
<td>Yes</td>
<td>AFGSC</td>
<td>At the discretion of waiver authority</td>
</tr>
</tbody>
</table>

ACS. Aeromedical Consultation Service; AETC. Air Education and Training Command; AFGSC. Air Force Global Strike Command; ATC. air traffic controller; GBC. ground-based controller; MAJCOM. Major Command; MOD. missile operations duty; RPA. remotely piloted aircraft.

1. The condition or conditions result in interference with satisfactory performance of duty as substantiated by the person’s commander or supervisor.
2. The person’s health or well-being would be compromised if he or she were to remain in military service.
3. In the view of the soldier’s condition, his or her retention in military service would prejudice the best interests of the government.

Unlike other services, there is not specific mention of food allergy in chapter 3, and therefore 3-41e is typically used to address food allergy and retention. Future versions of AR40-501 will likely have more specific language addressing when a history of food allergy would warrant an MEB.

Chapter 6 of AR 40-501 is specific for soldiers on flight status, but there are no current Army Aviation Aeromedical Policy Letters that are specific for either an epinephrine autoinjector or food allergy. These decisions are made on a case-by-case basis between the soldier on flight status and his or her primary care manager, called a flight surgeon.

US AIR FORCE: ENLISTMENT, APPOINTMENT, INDUCTION, AND RETENTION

The Air Force’s initial induction, enlistment, or appointment standards in Air Force Instruction 48-123 parallel those of the Army, which classify “a reliable history of generalized reaction with anaphylaxis to common foods, spices, or food additives” as a disqualifying condition (Table I). One distinct difference is the Army uses “moderate to severe reaction,” whereas the Air Force uses “anaphylaxis.” Also, the Air Force specifically states that an Air Force member will automatically undergo an MEB if they have an allergic reaction to one of 8 foods: milk, egg, wheat, soy, peanut, tree nut, fish, or shellfish. As part of the mandatory MEB, an airman also receives a C-code. A C-code is a specific designation to determine what, if any, limitations should be placed on the member because of their underlying medical condition. In general, Air Force members with food allergy can deploy but require a deployment waiver, a physical profile that specifies any limitations, and must carry epinephrine autoinjectors.

Further, the waiver authority for a food allergy is dependent on the person’s flying class (Table II). When evaluating a member of the Air Force, it is paramount to communicate that although retention is almost ensured, if the member is on flying status, they will require a waiver from the appropriate waiver authority to continue flying duties. The waiver application process begins after the MEB is complete.

US NAVY AND US MARINE CORPS: ENLISTMENT, APPOINTMENT, INDUCTION AND RETENTION

The Manual of the Medical Department (MANMED) is the guidance for “Physical examinations and standards for enlistment, commission and special duty” in the US Navy and US Marine Corps. Under section 13 of Article 15-55, a “History of anaphylaxis, including but not limited to … foods or food additives … is disqualifying.” Similar to the Air Force, there are specific military jobs (eg, flight, undersea/nuclear medicine, or special operators) that, despite initial guidance from DoDI 6130.03, have more restrictive requirements that will dictate the process for entry, waivers, and retention (Table III). The Naval Aerospace Medical Institute (NAMI) is the component of the Navy that guides medical requirements for all aviators, whereas the “Aeromedical reference and waiver guide” delineates the medical and physical standards as a supplement to the MANMED. Under miscellaneous conditions section 17, 17.9 is labeled “Urticaria, angioedema and anaphylaxis.” Although food allergies are considered disqualifying, a waiver is typically recommended if the food allergen is easily avoidable, limited to skin reactions, and does not interfere with wearing oxygen masks. Thus a detailed food allergy history and accompanying medical summary with these aspects is paramount to ensure an appropriate recommendation. Special Operations Duty and Submarine Duty have a special section in the MANMED, articles 15-105 and 15-106, which state that a “history of severe allergic reaction or anaphylaxis to environmental substances or foods is disqualifying.” A food challenge has been typically required to obtain a waiver. However, if the person has no history of severe reactions and has been successfully avoiding the food, a waiver might be
TABLE III. US Navy and Marine Corps Policies for medical waiver

<table>
<thead>
<tr>
<th>Communities/occupations</th>
<th>Waiver guideline and instruction</th>
<th>Waiver authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pilots and aviators</td>
<td>Aeromedical Reference and Waiver Guide</td>
<td>NAMI</td>
</tr>
<tr>
<td>Submariners, divers, and nuclear field duty</td>
<td>MANMED</td>
<td>NUMI</td>
</tr>
<tr>
<td>Special operators (eg, Navy SEALS)</td>
<td>MANMED</td>
<td>NSOMI</td>
</tr>
</tbody>
</table>

ACS, Aerospace Medicine Consultation; NAMI, Naval Aeromedical Institute; NSOMI, Naval Special Operations Medical Institute; NUMI, Naval Undersea Medicine Institute.

recommending without pursuing a food challenge. The ultimate waiver authority is the service member’s line commander, who is in direct command of that service member. Although the commander is not a medical provider, he or she usually follows the medical provider’s recommendations.

Although waiver and retention decisions for the Marine Corps and the US Merchant Marine Academy are handled by Navy health care providers and authorities, waivers for the US Coast Guard Academy determine waivers for their own applicants. With the exception of the Air Force, service members already in the Army, Navy, and Marine Corps do not undergo an MEB for a food allergy unless there are severe or recurrent reactions.

DISCUSSION

Persons who wish to serve in the US Armed Forces undergo a very specific and detailed screening process. With an increased incidence of food allergy, there are likely more adolescents and adults who desire to serve in the military but might not meet current medical standards secondary to a history of food allergy. Furthermore, food allergy can present in adulthood in some persons, thus occurring after that person has already joined. Although most active duty service members are located near a military base, not all military treatment facilities are staffed with a military allergist. In fact, in 2017, there are only 62 active duty military allergists located worldwide in 28 distinct facilities (14 Army, 8 Air Force, and 6 Navy) in a military health care system comprised of approximately 50 hospitals and 300 clinics. In addition, the 1.2 million service members in the National Guard or Reserves are less likely than the active duty component to be located near a military facility. Thus most persons entering the military or who require evaluation will be assessed by a civilian allergist. The MAIA Expert Panel and subsequent work group recognized that the civilian allergist would appropriately assess the food allergy history based on current practice parameters but might not understand how a medical summary letter will affect that person’s ability to enter or remain in the military. As observed during the 2017 AAAAI MAIA Session #001, the outcome depended on the service branch, whether the person was seeking entry or was already in the military, and the person’s specific occupation (eg, pilot, submariner, or special operations).

An applicant with a history of a food allergy should either see an allergist for an initial assessment or a reassessment before the time of military application or evaluation. If the recommendation is for the person to carry an epinephrine autoinjector or the allergist or applicant is unable or unwilling to perform a food challenge based on real or perceived reaction risk, the service-specific allergy consultant is unlikely to recommend a waiver for that person. However, if the applicant is able to pass an oral food challenge without reaction, then the food allergy is considered resolved, and a waiver is recommended despite a previous reaction history, including anaphylaxis.

A recent review discussed a number of factors that might influence the allergist’s decision to support a food challenge. Regarding military entry, it will be the applicant’s desire or the military unique situation that will likely influence the pursuit of an oral food challenge. The work group also noted that many written summaries, which accompany an applicant’s pursuit of a waiver, might not address the needs of the waiver authority. For example, a written assessment of “mild allergic reaction to peanuts” does not clarify whether epinephrine is recommended or the reaction is based on an accidental ingestion of a small amount of the implicated food rather than the result of an age-appropriate food challenge. Inherent to the military are also numerous “cofactors,” such as physical exertion and fatigue, which can decrease the threshold for anaphylaxis, although how these factors play into a planned food challenge remain unknown. Furthermore, military personnel are often deployed to austere or international locations at which food allergy identification might be more difficult. Finally, the majority of the military is comprised of young male subjects who represent a group known to have increased food allergy-related risk-taking behaviors. Although the prevalence of food allergy in the military is not well known, military members are required to have an engraved medical warning identification tag (ie, “dog tag”) listing any food, medication, or insect allergy and carry an epinephrine autoinjector when indicated.

Outside of DoDI 6130.03, each service has outlined its individual enlistment and retention policies and regulations. These differences are not only rooted in the organization’s history but also reflect the individuality of the service’s occupations (eg, pilot, submariner, or infantry). At present, military allergy consultants are able to collaborate, use best practice guidelines, and influence language contained within the DoDI, which undergoes periodic review and revision, but at present have less influence to consolidate all service regulations into a single document that would uniformly apply to all services. Finally, current and emerging food allergy strategies (eg, oral or epicutaneous immunotherapy) can potentially offer a state of sustained unresponsiveness or a higher reaction threshold; however, it is currently unknown how these can affect future decisions regarding enlistment, accession, or retention. Regardless of service branch, maintaining and preserving the “readiness” and worldwide “deployability” of the fighting force is the military’s number one priority.

We are unaware of any previously published reports that provide an allergist-focused framework regarding specific processes and proponents for induction, accession, and retention for persons with a current food allergy or history of food allergy. The intent of this document is to outline service-specific guidance and regulations, thus providing both civilian and military allergists improved fluency when providing either written or verbal communication on the applicant’s or service member’s behalf. Although the scope of this report is limited to food allergy, the reader can use it as a framework, coupled with...
specific language in DoDI 6130.03, to apply to other allergic conditions (eg, atopic dermatitis, asthma, urticaria, or drug allergy).³

Although all military allergists maintain their certification and educational requirements in the same way as to their civilian colleagues, each service member’s unique occupation and potential for worldwide deployment requires the allergist to complete a service-specific evaluation while minimizing, through education and counseling, the person’s chances that he or she will become a casualty of their underlying medical condition.

WORK FORCE REPORT CONSIDERATIONS

1. Ensure a food-specific allergy assessment is conducted at the time of initial enlistment, induction, or accession by using service-specific regulations.

2. Understand that an applicant’s desire to enter the military will increase the likelihood for the applicant requesting an oral food challenge.

3. Be aware that, intrinsic to the military, cofactors and other unique aspects can place a patient with food allergy at both increased reaction risk and reaction severity, and hence stricter standards are applied to initial enlistment, assessment, or induction.

4. Applicants with a history of food allergy who fail, or choose not to pursue an oral challenge, are unlikely to be recommended for a medical waiver.

5. Persons whose civilian or military allergist recommends an epinephrine autoinjector as part of a treatment plan are unlikely to receive a waiver for entry into the military; however, they are typically retained in the military.

6. Despite a history of food allergy, applicants who pass a food challenge (ie, are no longer considered allergic to that food) are very likely to receive a waiver and will enter the military with no food-related restrictions or limitations and no recommendation to carry epinephrine.

7. Service members who have severe or recurrent food reactions might require a MEB to make a “fitness for duty” and/or “ability to deploy” determination.

The work group would like to thank Mrs Elisea Avalos-Reyes for her review of this manuscript.

REFERENCES


