

NATIONAL MERCHANT MARINER MEDICAL ADVISORY COMMITTEE

(NMEDMAC)

**TASK STATEMENT 21-X4**

RECOMMENDATIONS ON APPROPRIATE DIETS AND WELLNESS FOR MARINERS  
WHILE ONBOARD MERCHANT VESSELS.

**I. TASK TITLE: Recommendations on Appropriate Diets and Wellness for Mariners While Onboard Merchant Vessels.**

**II. PROBLEM STATEMENT:**

The Coast Guard seeks the input of industry, via NMEDMAC, towards the development of guidance for mariners and industry on diet, nutrition and wellness for mariners while onboard merchant vessels.

**III. BACKGROUND:**

In recognition that lifestyle factors, including diet and exercise, may contribute to the development of serious medical conditions in merchant mariners, the Merchant Mariner Medical Advisory Committee (MEDMAC) provided a series of recommendations related to mariner health education, prevention and wellness. Presentations at MEDMAC's 9<sup>th</sup> meeting in Jacksonville, FL highlighted that a balanced diet and exercise can contribute to improved health and well-being and reduce the causes for medical and physical disqualification among merchant mariners. The Committee noted that elements of the shipboard environment might play a significant role in the unhealthy lifestyle choices of those aboard, including the caloric and nutritive content of meals, limited space for exercise, and the statutory requirements for vessels to serve seaman 3100 calories per day, and to provide for tobacco products. Based on this discussion, MEDMAC accepted a task to provide guidance to mariners and industry on diet and wellness for merchant mariners. MEDMAC provided a series of recommendations that were published in a special edition of Proceedings magazine dedicated to mariner health and wellness.

**IV. DESCRIPTION OF TASKS/DELIVERABLES:**

Continue the work of MEDMAC to provide recommendations for guidance to mariners and industry on the following:

1. Diet and nutrition while aboard the vessel.
2. Exercise and wellness while aboard the vessel.
3. Use of tobacco products.

Provide recommendations on the statutory requirements for the provision of 3100 calories/day and provision of tobacco products.

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**V. DUE DATE**

This working group will remain in existence as a standing committee of NMEDMAC.

**VI. COAST GUARD TECHNICAL REPRESENTATIVE**

Adrienne Buggs, M.D., (202) 372-1211, Adrienne.M.Buggs@uscg.mil

**VII. WORKING GROUP CHAIR**

TBD

\_\_\_\_\_

TBD

Chairman

NMEDMAC

\_\_\_\_\_

Ms. Mayte Medina

U.S. Coast Guard

Designated Federal Officer

NMEDMAC

**Enclosures:** Two

[https://www.dco.uscg.mil/Portals/9/DCO%20Documents/Proceedings%20Magazine/Archive/2020/Vol77\\_No2\\_Fall20\\_Proceedings.pdf?ver=-Mytxq63r7KwEbzSlGxy8g%3d%3d](https://www.dco.uscg.mil/Portals/9/DCO%20Documents/Proceedings%20Magazine/Archive/2020/Vol77_No2_Fall20_Proceedings.pdf?ver=-Mytxq63r7KwEbzSlGxy8g%3d%3d)

Accepted: \_\_\_\_\_

Modified: \_\_\_\_\_

Closed: \_\_\_\_\_

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## Merchant Mariner Medical Advisory Committee (MEDMAC)

<b>Date:</b>	19 October 2017	<b>Location:</b>	USCG NMC
<b>Task #:</b>	16-24	<b>Task Title:</b>	Recommendations on Appropriate Diets and Wellness for Mariners While Onboard Merchant Vessels.
<b>Subcommittee Chair:</b>		<b>Accepted Not Accepted Tabled</b>	List reason if not accepted or tabled  Accepted

**Justification (if needed)<sup>1</sup>**

**If handwritten and more space is needed, continue on back**

The following assessments and recommendations are based off and reference the following USC Sections.

Caloric: US Code Title 46 Subtitle II Part G Chapter 103 Paragraph 10303

Tobacco: US Code Title 46 Subtitle II Part G Chapter 111 Paragraph 11103

(Published in August 26, 1983)

\*Note: A vessel of the United States on a voyage from a port in the United States to a foreign port (except to a Canadian port), and a vessel of the United States of at least 75 gross tons as measured under section 14502 of this title, or an alternate tonnage measured under section 14302 of this title as prescribed by the Secretary under section 14104 of this title on a voyage between a port of the United States on the Atlantic Ocean and Pacific Ocean, shall be provided with a medicine chest.

Per the NMC Top 10 Medical Condition that can delay an application or cause and application to be denied:

1. Cardiovascular Conditions
2. Diabetes
3. Psychiatric Disorders
4. Sleep Disorders
5. Chronic Use of Impairing Medications
6. Impaired Hearing
7. Alcohol/Drug Abuse
8. Seizures
9. Vision Requirements
10. Pulmonary Conditions

**1. We recognize that mariners have the primary responsibility for their choices regarding health and wellness. Industry can help support healthy lifestyles.**

- **In support of the recommendation for improving diet, nutrition, exercise, and wellness the MEDMAC Recommends the USCG take the following steps:**
  - o Request the USCG to provide evidence based nutrition guidelines and suggestions of healthy options to be posted in the galley where the statutory text is required to be posted as per US Code Title 46 Subtitle II Part G Chapter 103 Paragraph 10303.
  - o Develop an educational Health & Wellness website for merchant mariners including literature, videos, and resources. Link can be posted on the National Maritime Center page, and footnoted on letters regarding medical certificates and waivers.
  - o Recommend the USCG conduct a “needs assessment” of merchant mariners by developing a Health/Wellness survey. Due to the large amount of merchant mariners – a representative population sample may be used. Questions should be geared toward health/wellness aboard a vessel (diet/nutrition, exercise, use of tobacco). Survey results should influence further health and wellness actions taken by the USCG.
  - o Request the NMC to collect biometric data from submitted USCG 719K physicals. This data should be incorporated into an electronic database suitable for analysis to find determinants of adverse health outcomes and to provide an evidence base for fitness and dietary standards.
  - o Post results of studies and analysis on merchant mariner’s health risks.
  - o Provide testimonials of merchant mariner’s success stories for health and wellness topics.

**2. Diet and nutrition while aboard the vessel.**

Mariner guidance:

- **MEDMAC recommends** adopting the guidelines established in DIETARY GUIDELINES FOR AMERICANS 2015-2020 EIGHTH EDITION (this guideline is updated every 5 years) relative to Diet and Nutrition while aboard vessels. <https://health.gov/dietaryguidelines/2015/>.
  - o USCG and MEDMAC should stay up-to-date on the most current dietary and nutrition research and recommendations.
- Mariners and industry are encouraged to follow caloric recommendations as contained in Appendix 2. Estimated Calorie Needs per Day, by Age, Sex, & Physical Activity Level
  - o This will vary by job positions on the vessel (i.e. deck work vs. wheelhouse).
- Mariners and Industry are encouraged to follow the recommendations contained in the Dietary Guidelines which include topics:
  - o **Follow a healthy eating pattern across the lifespan.** All food and beverage choices matter. Choose a healthy eating pattern at an appropriate calorie level to help achieve and maintain a healthy body weight, support nutrient adequacy, and reduce the risk of chronic disease.
  - o **Focus on variety, nutrient density, and amount.** To meet nutrient needs within calorie limits, choose a variety of nutrient-dense foods across and within all food groups in recommended amounts.
  - o **Limit calories from added sugars and saturated fats and reduce sodium intake.** Consume an eating pattern low in added sugars, saturated fats, and sodium. Cut back on foods and beverages higher in these components to amounts that fit within healthy eating patterns.
  - o **Shift to healthier food and beverage choices.** Choose nutrient-dense foods and beverages across and within all food groups in place of less healthy choices. Consider cultural and personal preferences to make these shifts easier to accomplish and maintain.
  - o **Support healthy eating patterns for all.** Everyone has a role in helping to create and support

healthy eating patterns in multiple settings nationwide, from home to school to work to communities.

Industry guidance:

- Recommend stewards and food handlers have appropriate training food preparation and storage (i.e. Safe Serve Certification) and having time to prepare healthy meals.
- Recommend employers provide healthy snack options and snack stations
- Recommend employers have healthy nutritious food available
- Provide information on how to read nutrition labels and understand components of nutrition (i.e. calories, saturated fats, sodium, etc.)
- Ensure availability of nutritional snacks outside of meal times
- Educate mariners regarding managing appropriate meal times in the context of irregular watch schedules
  - Mariners must have adequate time to prepare and eat a healthy meal.
- Develop, maintain, and endorse food handling standards for individuals tasked with food preparation and storage
- Recommend companies supply healthy cookbooks/recipes to vessel crew, and supply with healthy provisions as ingredients.

### **3. Exercise and wellness while aboard the vessel.**

Mariner guidance:

**MEDMAC recommends** adopting the guidelines established in the current guidelines established in *Physical Activity Guidelines for Americans*. USCG and MEDMAC should stay up-to-date on the most current physical activity recommendations. Additional items to be considered are:

MEDMAC Recommends mariners engage in healthy exercise and lifestyle activities while on board to ensure higher productivity, lower risk for health issues and Not Fit For Duty determinations.

These recommendations include the following

- Appropriate times to work out (i.e. not in rough seas, not right before bedtime, not in the middle of a hot day (due to heat stress/exhaustion).
- Consider medical assessment and approval of exercise/strenuous activity prior to initiating a new workout routine.
- The use of appropriate stretching and warm-up prior to exercise
- Ideas/Recommendations for exercises aboard a vessel: calisthenics (using one's own body weight), confined space activities/exercises, safety.

Industry guidance:

- The maritime industry should encourage mariners to engage in regular exercise and healthy lifestyle activities.
- Inform mariners to consult their health care provider about exercises appropriate to the individual based on medical status/physical capabilities.
- Disseminate information and resources regarding fatigue and stress management techniques and strategies. Provide medical information regarding the risks and impacts of unmanaged/chronic fatigue and stress.
  - Consider utilizing and sharing information from the USCG Crew Endurance Management System
- Provide suggestions to mariners/vessel masters on appropriate exercise equipment and space to be utilized on the vessel. Safety considerations may vary by vessel type, route, and other factors.

-Encourage and incorporate health and wellness programs for merchant mariners – including providing flu vaccines, wellness exams, and access to fitness programs or gyms at a discounted rate.

#### 4. Use of tobacco products.

Since the statute publication in 1983; scientific research as further confirmed the myriad of health risks and complications associated with tobacco use. Tobacco use is a factor in the cause of several the NMC's Top Ten reasons for application delay or denial. Because of this,

**MEDMAC recommends** the removal of USC 46 II Part G Chapter 11103 (a) mandating that vessel owners and masters provide tobacco products. If the mandate to sell cigarettes remains, it is the recommendation of the MEDMAC that smoking cessation aids, acceptable to medical guidelines and onboard safety, be provided in concert with information regarding smoking's documented negative health impacts.

##### Mariner guidance:

- USCG Health & Wellness website – with resource links for mariners
  - o The U.S. Office of Personnel Management is committed to helping Federal agencies integrate prevention strategies into their workplace.
- [www.smokefree.gov](http://www.smokefree.gov) or other federal and state resources

##### Industry guidance:

- Implement policies and procedure regarding designated smoking areas on vessels and/or consider having designated non-smoking vessels.
- provide disposals containers for tobacco waste
- providesmoking cessation counseling and resources to seafarers
  - Consider using individual health plans and/or Assistance Programs.

<sup>1</sup> The Justification block is to be used when added information is needed to provide information that is not evident in the task statement or in the recorded discussions. This box must be completed for recommendations that are not related to a specific task statement

<sup>2</sup> The recommendation should be written in plain English and complete sentences with the intent of communicating the concept to an individual who has not attended the meeting AND is assigned to determine if and how the recommendation can be implemented. Assume that the individual will not be permitted to contact members of the committee for more information. Avoid, if possible, generalities such as “as per industry standards”. Let us know the specific standard (such as ISO 14001).

<sup>3</sup> Multiple recommendations for the same task and meeting can be entered as individually numbered paragraphs.

<sup>4</sup> Sample recommendation –

**MEDMAC recommends** that in accordance with Howard Coble Coast Guard and Maritime Transportation Act of 2014, PL 113-281, Sec 305, regarding maximizing creditability of military training, that the NMC accept alternative assessment methods which include Coast Guard and Navy Performance Qualification System (PQS) and Army Duty Performance Tests (DPT) that substantially meet the requirements of the relevant NVIC.