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Postgraduate Certificate in Expedition Cooking

# Fundamentals of Expedition Cuisine

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## Expedition Cuisine: Key Terms and Vocabulary

### 1. MRE (Meal, Ready-to-Eat)

MREs are self-contained, individual meals that are prepared and packaged for military use. They have a long shelf life and can be eaten straight from the package, making them ideal for expeditions in remote areas. MREs typically include an entree, side dish, crackers or bread, spread, dessert, and accessory pack containing condiments, utensils, and a flameless ration heater.

### 2. Freeze-Dried Food

Freeze-drying is a process that removes water from food through a series of sublimation and desorption stages under vacuum conditions. This results in food that retains its nutritional value, color, and texture but is significantly lighter and has a longer shelf life than fresh or frozen food. Freeze-dried food is often used in expeditions due to its convenience and long shelf life.

Dehydrated food, on the other hand, is food that has been preserved by removing its water content through heat. Dehydrated food can be prepared by soaking in water and then cooking, or it can be added directly to boiling water to rehydrate and cook.

### 3. Backcountry Cooking

Backcountry cooking refers to the preparation of meals in remote, wilderness areas where access to modern kitchen facilities is limited or non-existent. This typically involves using lightweight, portable cooking equipment such as stoves, pots, and utensils. Backcountry cooking requires careful planning, resource management, and an understanding of food safety principles to ensure that meals are prepared and stored safely and efficiently.

### 4. Leave No Trace

Leave No Trace is a set of principles designed to minimize the impact of human activities on the natural environment. These principles include planning ahead and preparing, traveling and camping on durable surfaces, disposing of waste properly, leaving what you find, minimizing campfire impact, and respecting wildlife. In the context of expedition cuisine, Leave No Trace principles can be applied by choosing lightweight, non-perishable food items, using minimal packaging, and practicing good hygiene and waste management.

### 5. Food Safety

Food safety is a critical consideration in expedition cuisine, as foodborne illness can have serious consequences in remote, wilderness areas where access to medical care is limited. Food safety principles include proper handling, storage, and preparation of food, as well as the use of clean water and sanitation practices. In addition, food safety considerations should take into account the specific challenges of the expedition environment, such as extreme temperatures, limited storage space, and the potential for cross-

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contamination.

## 6. Menu Planning

Menu planning is the process of selecting and organizing meals for an expedition. Menu planning should take into account factors such as the duration and location of the expedition, the nutritional needs of the participants, and the available cooking equipment and supplies. Menu planning should also consider the potential for dietary restrictions or preferences among the participants, as well as the need for variety and balance in the diet.

## 7. Rationing

Rationing is the process of allocating food and other resources for an expedition. Rationing should take into account the nutritional needs of the participants, the duration of the expedition, and the available supplies. Rationing can help ensure that food supplies last for the duration of the expedition and that participants have access to sufficient nutrients to maintain their energy and health.

## 8. Lightweight Cooking Equipment

Lightweight cooking equipment is essential for backcountry cooking, as it reduces the overall weight and bulk of the gear that needs to be carried. Lightweight cooking equipment includes stoves, pots, pans, utensils, and fuel. When selecting cooking equipment, it is important to consider factors such as weight, durability, versatility, and ease of use.

## 9. Fuel Types

There are several types of fuel that can be used for backcountry cooking, including canister fuel, liquid fuel, and solid fuel. Canister fuel is typically the most convenient and easy to use, but can be more expensive and less efficient than other fuel types. Liquid fuel, such as white gas or kerosene, is more versatile and can be used in a wider range of stoves, but requires more maintenance and can be more difficult to transport. Solid fuel, such as Esbit tablets, is lightweight and compact, but can be less efficient and produce more smoke than other fuel types.

## 10. Water Purification

Water purification is an essential consideration in expedition cuisine, as access to clean water is critical for both cooking and hydration. Water can be purified through a variety of methods, including boiling, chemical treatment, and filtration. When selecting a water purification method, it is important to consider factors such as the quality of the water source, the size and weight of the purification system, and the time and effort required to purify the water.

## 11. Food Storage

Food storage is an important consideration in expedition cuisine, as proper storage can help prevent foodborne illness and ensure that food supplies last for the duration of the expedition. Food storage methods include bear canisters, Ursacks, and hard-sided coolers. When selecting a food storage method, it is important to consider factors such as the size and weight of the storage system, the potential for animal intrusion, and the need for ventilation.

## 12. Food Hygiene

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Food hygiene is a critical consideration in expedition cuisine, as poor hygiene practices can lead to foodborne illness and other health issues. Food hygiene practices include proper handwashing, separating raw and cooked foods, cooking food to the proper temperature, and storing food at the proper temperature. In addition, food hygiene practices should take into account the specific challenges of the expedition environment, such as limited water supplies and the potential for cross-contamination.

### 13. Cooking Techniques

There are several cooking techniques that can be used in expedition cuisine, including boiling, simmering, frying, and baking. When selecting a cooking technique, it is important to consider factors such as the available cooking equipment, the type of food being cooked, and the nutritional needs of the participants.

### 14. Food Allergies and Intolerances

Food allergies and intolerances are common among the general population, and can pose a significant challenge in expedition cuisine. When planning meals for an expedition, it is important to consider the potential for food allergies and intolerances among the participants, and to provide alternative meal options when necessary.

### 15. Vegetarian and Vegan Diets

Vegetarian and vegan diets are becoming increasingly popular, and can be accommodated in expedition cuisine with careful menu planning and ingredient selection. When planning meals for vegetarian or vegan participants, it is important to consider the nutritional needs of the participants and to provide a variety of protein sources, such as beans, nuts, and tofu.

### 16. Gluten-Free Diets

Gluten-free diets are necessary for individuals with celiac disease or gluten intolerance, and can be accommodated in expedition cuisine with careful menu planning and ingredient selection. When planning meals for gluten-free participants, it is important to avoid foods that contain gluten, such as wheat, barley, and rye, and to provide gluten-free alternatives when necessary.

### 17. Cultural and Religious Dietary Restrictions

Cultural and religious dietary restrictions can pose a challenge in expedition cuisine, as they may require the exclusion of certain foods or ingredients. When planning meals for participants with cultural or religious dietary restrictions, it is important to research and understand the specific restrictions and to provide appropriate alternatives when necessary.

### 18. Meal Planning for Extreme Environments

Meal planning for extreme environments, such as high altitude or polar regions, requires careful consideration of the unique challenges and limitations of these environments. Meals for extreme environments should be high in energy and nutrients, and should be designed to prevent dehydration and other health issues. In addition, meals for extreme environments should be easy to prepare and consume, and should be stored in a way that protects them from freezing or other environmental factors.

### 19. Emergency Rations

Emergency rations are essential for expeditions in remote, wilderness areas where access to food supplies

may be limited or unavailable. Emergency rations should be high in energy and nutrients, and should be designed to last for an extended period of time. Examples of emergency rations include energy bars, trail mix, and dehydrated meals.

#### 20. Food Waste Management

Food waste management is an important consideration in expedition cuisine, as waste can have a significant impact on the natural environment. Food waste management practices include proper storage and disposal of food waste, as well as the use of composting or other waste reduction strategies. When planning for food waste management, it is important to consider factors such as the duration and location of the expedition, the available resources, and the potential for environmental impact.

In conclusion,