I. POLICY SUMMARY

In 2014, the University of California launched the Global Food Initiative (GFI). GFI leverages expertise across UC locations to improve food-related issues by developing sustainable and impactful solutions at UC, throughout California, the United States, and the world. The UC Healthy Vending Working Group was established as a GFI project to identify best practices for healthy vending programs, develop a policy for approval and establish a plan for implementation across all UC locations. This systemwide policy and associated procedures are intended to provide minimum requirements for healthier food and beverage choices in all vending machines located on all UC locations. Each UC location is encouraged to go above and beyond these requirements. Several UC campuses have already begun to implement healthy changes to dining and food services.

The standards in this policy were established by the Vending Working Group to:
1. Ensure that food and beverages are available that help our UC community meet the current Dietary Guidelines for Americans.
2. Expand access to healthier food choices.
3. Support the health and well-being of all members within the UC system and serve as a model for other colleges, universities, and institutions across the country and beyond.

TABLE OF CONTENTS

I. POLICY SUMMARY ___________________________________________________________ 1
II. DEFINITIONS _______________________________________________________________ 2
III. POLICY STATEMENT ________________________________________________________ 3
IV. COMPLIANCE / RESPONSIBILITIES ____________________________________________ 3
V. REQUIRED PROCEDURES ______________________________________________________ 4
VI. RELATED INFORMATION ______________________________________________________ 4
VII. FREQUENTLY ASKED QUESTIONS____________________________________________ 4
VIII. REVISION HISTORY _________________________________________________________ 4

II. DEFINITIONS

Added sweeteners: additives that enhance the sweetness of a food or beverage, including added sugar or sugar substitutes. This does not include naturally occurring sugar in fruit, fruit juice and dairy foods.

Caloric sweeteners: substances that provide calories to the diet, such as sucrose (table sugar), lactose, fructose, glucose, honey, molasses, agave, maple syrup, corn syrup, high fructose corn syrup (HFCS), evaporated cane juice, and fruit juice concentrates.

Entrée: the primary food in a meal which contains two or more of the following groups: meat or meat alternatives, grains or bread, vegetables, or fruit. Examples include sandwiches, burritos, pasta, and pizza.

Food: all snacks, entrées, and meals sold in vending machines.

Meal: a complete offering intended for breakfast, lunch, or dinner that includes an entrée with additional components packaged together. A packaged meal typically consists of the main entree, and one or two sides, such as a vegetable or fruit and a snack or dessert.
Non caloric sweeteners: additives that do not provide more than five calories per 12 fluid ounces or other labelled serving. Examples are stevia, aspartame, sucralose, neotame, acesulfame potassium (Ace-K), saccharin, and advantame.

UC locations: any location owned or leased by UC

Vending machine: a machine that dispenses food or beverage items when coins or some other form of payment is inserted.

III. POLICY STATEMENT

This policy applies to each beverage and food vending machine at UC locations operated by the University and/or external vendors under agreements with the University. Each UC location shall develop specific procedures to implement this policy within the given implementation timeline.

Section 1. Implementation Timeline

1. A supplier that operates or maintains a vending machine on UC locations shall do all of the following,
   a. By one year after the effective date of this policy (Benchmark 1),
      i. Healthier Beverages: Offer at least 50 percent of the beverages in a vending machine that meet the nutrition standards (Section 3.1).
      ii. Healthier Snacks and Food: Offer at least 35 percent of the food in a vending machine that meet the healthier snack (Section 3.2), entrée (Section 3.3), and meal (Section 3.4) nutrition standards.
      iii. Meet other standards in Sections 2.1, 2.2, 2.3 and 2.4.
   b. By three years after the effective date of this policy (Benchmark 2),
      i. Healthier Beverages: Offer at least 70 percent of the beverages in a vending machine that meet the nutrition standards (Section 3.1).
      ii. Healthier Snacks and Food: Offer at least 50 percent of the food in a vending machine that meet the healthier snack (Section 3.2), entrée (Section 3.3), and meal (Section 3.4) nutrition standards.
      iii. Continue to meet other standards in Sections 2.1, 2.2, 2.3 and 2.4.

Section 2. General standards

1. Healthier food items (snacks, entrées, and the entrée in a packaged meal) must have a fruit, vegetable, low-fat dairy, protein, or whole grain as its first ingredient.

2. Caloric beverages which do not follow the healthier beverage criteria below (Section 3.1) must not exceed 20 fluid ounces in size.
3. Beverages with added caffeine (i.e., not naturally occurring caffeine) must not contain more than 71 milligrams per 12 fluid ounce serving.

4. Each snack vending machine must have at least one snack containing no more than 100 calories.

Section 3. Nutrition standards

1. Healthier Beverages must meet these nutrition standards:
   a. Water: unflavored, with no added sweeteners (caloric or non-caloric); includes still, carbonated, and mineral waters
   b. Low-calorie beverages: beverages that contain no more than 40 calories per 12 fluid ounces.
   c. Juice: 100% fruit or vegetable juice or juice blends, with no added sweeteners (caloric or non caloric), carbonated or still; vegetable juices with no more than 230 milligrams of sodium
   d. Juice beverages: 100% fruit or vegetable juice or juice blends diluted with water, with no added sweeteners (caloric or non caloric), carbonated or still
   e. Milk: non-fat or low-fat (1%), unflavored, unsweetened
   f. Plant-derived or non-dairy milk (i.e. soy, rice, almond): unsweetened, Vitamin D and calcium fortified
   g. Supplemental nutrition beverage: e.g., protein drink or nutrition shake; no added caloric sweeteners
   h. Tea/Coffee: unsweetened, no added caffeine (only includes naturally occurring caffeine)

2. Healthier Snacks must meet these nutrition standards per package:
   a. No more than 250 calories
   b. No more than 35% of calories from fat and no more than 10 grams of fat
   c. No more than 10% calories from saturated fat and no more than 3 grams of saturated fat
   d. No trans fat
   e. No more than 360 milligrams of sodium
   f. No more than 35% of total weight from sugar, and not more than 20 grams of total sugar
   g. The following are exempt from all requirements except the calorie and sodium requirements, as long as they do not contain added sweeteners or fat: Nuts, nut butters (such as peanut butter), seeds, legumes (beans), eggs, cheese, fruits/vegetables, and combinations of these items (e.g., a fruit and nut mix)

3. Healthier Entrées must meet these nutrition standards per package:
   a. No more than 400 calories
b. No more than 35% of calories from fat and no more than 16 grams of fat
c. No more than 10% calories from saturated fat and no more than 5 grams of saturated fat
d. No trans fat
e. No more than 600 milligrams of sodium
f. No more than 15 grams of total sugar
g. The following are exempt from all requirements: Fresh or non-processed entrees, including entrees that are cooked or prepared on campus or in a commissary kitchen.

4. Healthier Meals must meet these nutrition standards per package:
   a. No more than 700 calories
   b. No more than 35% of calories from fat and no more than 28 grams of fat
   c. No more than 10% calories from saturated fat and no more than 8 grams of saturated fat
d. No trans fat
e. No more than 1000 mg of sodium
f. No more than 35 grams of sugar
g. The following are exempt from all requirements: Fresh or non-processed meals, including meals that are cooked or prepared on campus or in a commissary kitchen.

Section 4. Marketing Standards
Marketing of specific food and beverage products through vending machines must highlight the healthier choices that meet the nutrition standards in this policy. Labeling vending machines with brands and corporate logos under exclusive agreements/contracts with the University is allowed.

IV. COMPLIANCE / RESPONSIBILITIES

Section 1. Roles and responsibilities
At each UC location, the department managing food and beverage vending contracts has primary responsibility for implementation of this policy and for monitoring compliance to the policy.

It is recommended that each UC location form a Policy Advisory Committee (PAC) to provide oversight for policy implementation, monitoring and compliance. The PAC should include at least one representative with health and nutrition expertise. To ensure compliance, collaborations with existing campus resources, such as the campus auditing department or student groups or classes can be formed to carry out vending
machine audits. More detail on forming partnerships and policy compliance monitoring is provided in the UC Healthy Vending Best Practices Toolkit.

Each UC location should work with its suppliers to determine at least one appropriate supplier representative who will help identify which products meet the nutrition standards and respond to issues regarding policy compliance. It is recommended that suppliers also disseminate information and train appropriate staff (e.g., drivers) to help ensure compliance. Suppliers should provide sales data to the UC location at least once a year for purposes of monitoring the impact of this policy. More detail on sales reporting is provided in V. Required Procedures.

**Section 2. Compliance**

Each vending machine must be in compliance with the policy according to the implementation timeline and standards described in III. Policy Statement.

Vending machines on University controlled properties must also comply with the most recent FDA Guidelines for Vending Machine Labeling, currently found here: [http://www.fda.gov/Food/IngredientsPackagingLabeling/LabelingNutrition/ucm217762.htm](http://www.fda.gov/Food/IngredientsPackagingLabeling/LabelingNutrition/ucm217762.htm)

**Section 3. Revisions to the Policy**

The UC President is the approver of this policy and has the authority to approve or delegate the approval of revisions to the policy.

The UC Healthy Vending Policy will be reviewed once a year for three years after this policy’s effective date or until Benchmark 2 requirements are met, and as needed thereafter.

The owner of the UC Healthy Vending Policy may ask the department managing food and beverage vending contracts at each UC location to send a summary of vending sales and compliance to inform the policy review and revision process.

The owner of the UC Healthy Vending Policy may convene a UC systemwide working group, if warranted, to help with policy review and revision. It is recommended that this systemwide working group include students, faculty, staff, administrators, nutrition experts, and others as appropriate.

The following should be considered when revising the policy:

- updating nutrition standards to reflect current dietary recommendations and labeling laws
- new product availability
- impact of the policy on sales
- rates of policy compliance at each UC location
- successes, challenges and barriers experienced during implementation
The owner of the policy and/or the systemwide working group, if convened, may ask representatives from each UC location (possibly the PAC) to provide input on the considerations listed above.

V. REQUIRED PROCEDURES

This policy covers the management and administration of all vending machines and any associated term contracts for such machines at all UC locations.

Section 1. Implementation and Promotion
UC locations will develop local procedures to implement this policy. Promotion of the healthier vending machine options is strongly recommended to help ensure successful implementation. Each UC location may choose to integrate this promotion with existing health and wellness programs or initiatives. Additional implementation and promotion suggestions and resources are included in the UC Healthy Vending Best Practices and Implementation Toolkit.

Section 2. Sales Reporting
1. Suppliers will provide monthly sales data at least annually to the PAC or designated representative for the purpose of evaluating the impact of this policy on vending machine sales.
2. Sales data for each machine will include:
   a. Comprehensive product list
   b. Definitions for units used
   c. Unit price
   d. Number of units sold
   e. Vending machine location
   f. Percentage of sales from items that meet this policy’s nutrition standards
   g. Percentage of sales from items that do not meet this policy’s nutrition standards
3. A sample sales report is available in the UC Healthy Vending Best Practices and Implementation Toolkit.

Section 3. Compliance Auditing
1. UC locations will conduct annual physical audits of at least 25% of vending machines and report noncompliance to the vendor. Audits include whether machines are appropriately stocked, fully operational, and include compliant marketing.
2. Each location may integrate compliance auditing into experiential learning projects with students, work with the campus auditing department, or otherwise utilize existing resources.
3. Examples of auditing materials are available in the UC Healthy Vending Best Practices and Implementation Toolkit.
Section 4. Current and Future Contracts
UC locations must incorporate the requirements of this policy in all contracts for vending machines entered into or renewed after the effective date of this policy. UC locations must provide in the contracts that noncompliance with these requirements is a material breach of such contract. UC locations should work with current suppliers to comply with the policy as much as possible, for those existing contracts that are not yet up for renewal.

VI. RELATED INFORMATION


The standards set forth by this policy are based on:


• County of San Diego. (n.d.) *Healthy Choice Options in vending Machines on County Property*. (Policy Number K-14). San Diego, CA.


**VII. FREQUENTLY ASKED QUESTIONS**

**Why is the University of California implementing a policy for healthier vending machines?**

The University of California is committed to expanding access to healthier food and improving the health of individuals in our community. Vending machines serve as convenient food sources for college communities and other organizations around the world. Despite the convenience of this food source, vending offerings are typically of poor nutritional quality. A great majority of snack options are high in calories, fat, sodium, and added sugars, which contribute to the obesity epidemic and other health issues across the country. Most of the beverages offered are high in calories and sugar,
which, if consumed in excess, can lead to diabetes, heart disease, and liver disease.\(^1\)\(^2\) Recent studies have found that healthier items are not only in growing demand,\(^3\)\(^4\)\(^5\) but that selling them is financially feasible for university vending operations.\(^6\)\(^7\)\(^8\) This policy aims to improve the community's food environment and support lasting changes in health behavior without compromising taste, convenience, or choice.

**How does this policy benefit the health of faculty, staff, students, and visitors?**

A healthy diet can reduce the risk of chronic disease, and has also been shown to be one of the biggest predictors of higher grade point averages (GPA) in university students.\(^9\)\(^10\) When healthy options are always available, it is easier for students and others to choose wisely and support healthier eating.

**Which other educational settings have done this?**

Nationwide, primary and secondary schools have begun to highlight the importance of healthful food service and vending machine policies in recent years.\(^11\) For over a decade, California K-12 schools have been governed by state-legislated competitive food and beverage policies, which cover vending machines.\(^12\) Healthier options will be familiar and accepted by these students when they enter college.

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\(^12\) State property: vending machines, Senate Bill 912, Chapter 571 (2014)
universities nationwide have already begun implementing healthy vending machine policies. These policies have been shown to be well received by college students. By ensuring students, faculty, and staff have easy convenient access to healthier choices in vending machines, the GFI supports and encourages a healthy lifestyle for our community.

How will the implementation of this policy affect revenue? Increasing healthier options in vending machines has been shown to increase sales over time. Many settings such as city parks, office buildings, and hospitals have reported positive feedback and increases in sales after implementation of healthier products. Even though some locations experienced initial dips in sales, revenue returned to previous levels within six months. Furthermore, the transition to healthier vending options proved to be even more successful when coupled with nutrition education, taste tests, promotions and pricing changes.

What is the current status of UC vending machines? The University of California has approximately 530 food vending machines and 780 beverage vending machines. Currently all vending contracts are expected to follow the California Senate Bill 912 regulations which govern vending machines on state property. Some campuses are going beyond SB 912 with their own healthy campus initiatives (e.g., UCSF’s Healthy Beverage Initiative, UCLA’s Healthy Campus Initiative). This policy sets stricter requirements than SB 912 for the percentage of foods and beverages that must meet the nutrition guidelines. It leads by setting an example for colleges, universities, and institutions across the country and beyond.

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13 Viana, Joe. (2014)
Which food and beverage components does this policy address?
This policy establishes nutrition standards for several food and beverage components to help our community better meet the 2015-2020 Dietary Guidelines for Americans.

1) Sodium: The 2015-2020 Dietary Guidelines for Americans recommend that people ages 14 years and older consume no more than 2,300 milligrams of sodium per day, which is equivalent to 1 teaspoon. However, Americans eat more than 3,400 milligrams of sodium each day. High sodium intake is associated with increased risk of heart disease and high blood pressure. More than 75% of the sodium in American diets comes from processed foods and restaurant meals. This policy will ensure low sodium options are available for all students, faculty, staff, and visitors.

2) Fat: While fats are a part of a healthful diet, the type and total amount of fat consumed matters. The 2015-2010 DGA recommends that less than 10% of calories come from saturated fats and suggests that a healthy diet can contain 35% calories from fat. There is evidence that replacing saturated fat with unsaturated fat is associated with reduced risk of heart disease. Choosing lower fat, nutrient-dense foods can also help consumers meet the food group recommendations, without going over their caloric needs.

3) Sugar: The dietary guidelines recommends limiting total daily intake of added sugars to less than 10% of calories per day, explaining that studies show that consuming fewer added sugars is linked to reduced risk of cardiovascular disease, obesity, type 2 diabetes, and some types of cancer. The UC Healthy Vending Policy currently addresses total sugar. Because of the negative effects of added sugar on health, the Food and Drug Administration will require food labels to provide added sugar amounts on food labels starting July 26, 2018. This policy will be revised to address the issue of added sugars as this labeling requirement becomes effective.

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27 Food Labeling: Revision of the Nutrition and Supplement Facts Lables, Department of Health and Human Services, Food and Drug Administration (2016)
4) Caffeine: The safety of caffeine as an additive in energy drinks has been a concern for researchers, clinicians, and public health professionals.\textsuperscript{28} Recent reports have linked highly caffeinated energy drinks with injury, cardiovascular complications, neurological symptoms, and even death. This is concerning as 30 to 50\% of adolescents and young adults consume energy drinks.\textsuperscript{29, 30, 31, 32} Currently, caffeine content in energy drinks varies and is much higher than that of sodas. The FDA approves as safe only the amount of caffeine found in a typical cola-beverage\textsuperscript{33} (71 mg per 12 fl oz serving). The UC Healthy Vending Policy applies the same caffeine standard to energy drinks in University vending machines.

\textbf{VIII. REVISION HISTORY}

This is the first version of this policy.


