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# Nutrition in Healthcare Leadership Team

## Healthy Vending in Healthcare

### About Us

The Nutrition in Healthcare Leadership Team (NHLT) is a subcommittee of the San Diego County Childhood Obesity Initiative (Initiative), a project facilitated by Community Health Improvement Partners. The NHLT is comprised of food service, sustainability, community benefits, and government affairs professionals from the healthcare sector representing 22 local hospitals. These healthcare professionals are dedicated to promoting optimal health in San Diego County by serving fresh, healthy, affordable foods and beverages produced in a manner that supports the local economy, environment, and community. Recognizing growing concerns about increased calorie consumption, the NHLT set “making healthy foods the standard [in healthcare]” as one of its key goals.

### Problem Statement

Poor diet is one of the major causes of obesity. On average, Americans consume too much sodium and too many calories from solid fats, added sugars, and refined grains.<sup>1</sup> At the same time, “ERS data suggest that average daily calorie intake increased by 24.5 percent, or about 530 calories, between 1970 and 2000.”<sup>2</sup> The economic costs of poor diet are very serious; in 2010 Duke University researchers estimated that the annual cost of obesity among full-time employees to employers is \$73.1 billion.<sup>3</sup> These costs extend to San Diego County, where healthcare and lost productivity costs related to overweight and obesity were estimated at over \$1.4 billion in 2006.<sup>4</sup> Employers may face significant challenges maintaining a healthy workforce, because overweight and obesity detracts from employee productivity and satisfaction and costs companies significant amounts of money.

Studies show that the vending industry generated nearly \$14 billion in sales in 2006. As Nemours’s “Healthy Vending Guide” notes, “Although vending machines are a popular channel for convenient snack foods and beverages, they are often a source of less-than-healthy products. A great majority of options are high in calories, fat, and added sugars, and low in nutrients.”<sup>5</sup> Vending can thereby contribute to poor employee eating habits and diet, and ultimately, costly health outcomes. In the healthcare setting, healthy vending can help send important messages about lifestyle choices. In the case of hospital employees who work the overnight shift, vending machines may also be their main or only source of meals and/or snacks during their shift. With a large portion of the population facing overweight or obesity, thereby costing employers and the healthcare industry valuable resources, healthcare has a clear interest in improving the diets of the general population and of its employees.

### Solution

Across the country, federal, state, and even institutional policy has begun to promote healthy vending options. In California, SB 19 and SB 12 regulate the nutritional quality of vending in schools and a number of hospitals and healthcare associations have adopted similar policies. In San Diego County, the Initiative and NHLT aim to build on this momentum and make healthy choices more easily accessible through the promotion of healthy vending standards.

The NHLT therefore created a common definition of healthy vending. By collaborating on these standards, the NHLT can identify and model healthy eating practices among employees and the community, communicate hospitals’ preference for healthy foods with vendors more effectively, and leverage hospitals’ purchasing power to increase healthy vending options.

To create its healthy vending definition and standard, the NHLT solicited evidence-based research, journal articles, and best practices from leading academic, public health, and healthcare institutions. The NHLT conducted a scan of local and national healthy vending standards. The final model was largely based on the King County Healthy Vending Guidelines.<sup>6</sup> Each nutrition category was discussed in depth based on the available resources and the following consensus was achieved and formatted into the model of Healthiest, Healthier, and Limited food options that King County has utilized.

	Healthiest	Healthier	Limited
<b>Fat</b>	<ul style="list-style-type: none"> <li>No added fat for vegetables, fruits, nuts and seeds, dairy and meat, beans and eggs.</li> </ul>	<ul style="list-style-type: none"> <li>No more than 10% of calories from saturated fat</li> <li>No trans fat</li> <li>No hydrogenated or partially hydrogenated oil</li> </ul> <p>Exceptions: fruits, legumes, nuts, nut butters, seeds, eggs, non-fried vegetables, cheese packaged for individual sale</p>	Items that do not meet Healthiest or Healthier Guidelines.
<b>Sugar</b>	<ul style="list-style-type: none"> <li>No added sugar for all food groups except grains; no more than 6 grams of sugar per serving of grains</li> </ul>	<ul style="list-style-type: none"> <li>No more than 35% of total weight</li> <li>The use of artificial sugar is strongly discouraged</li> </ul> <p>Exceptions: whole fruits, products with no added sweeteners, dairy products are limited to 30 grams total sugar per 8 oz serving, grain products are limited to 10 grams of sugar per serving</p>	Items that do not meet Healthiest or Healthier Guidelines.
<b>Calories</b>	<ul style="list-style-type: none"> <li>May not exceed 250 calories per item</li> </ul>	<ul style="list-style-type: none"> <li>May not exceed 250 calories per item</li> </ul>	Items that do not meet Healthiest or Healthier Guidelines.
<b>Sodium</b>	<ul style="list-style-type: none"> <li>No more than 150 mg</li> </ul>	<ul style="list-style-type: none"> <li>No more than 360 mg per serving</li> </ul>	Items that do not meet Healthiest or Healthier Guidelines.

## Evidence Base

Fat	Saturated and trans fats are both unhealthy. The human body produces enough saturated fatty acids to meet its own needs and requires no additional intake; trans fats are also unnecessary in the diet. <sup>7</sup> In addition, studies show a positive relationship between increased trans fatty acid intake and cardiovascular disease. <sup>7</sup> Trans fats raise bad LDL and lower good HDL cholesterol levels, increase inflammation, and contribute to insulin resistance and chronic conditions. <sup>8</sup>
Sugar	Added sugars are the primary source of sugar in the American diet. <sup>7</sup> Most added sugar comes from processed and prepared foods. <sup>9</sup> Items containing significant amounts of added sugar often contain empty calories—calories that contribute neither nutrients nor dietary fiber to the diet. <sup>10,11</sup> The Institute of Medicine (IOM) recommends limiting sugars to no more than 35% of total calories. <sup>10,11</sup>
Calories	Estimates of individual calorie needs vary depending on age, gender, and level of physical activity. The IOM recommends that “Adults...get 45 percent to 65 percent of their calories from carbohydrates, 20 percent to 35 percent from fat, and 10 to 35 percent from protein.” <sup>11</sup> The USDA 2010 Dietary Guidelines recommend that Americans manage calorie intake by consuming foods in their nutrient-dense form. <sup>7</sup>
Sodium	The body needs very small amounts of sodium to properly carry out biochemical processes, but too much sodium can increase blood pressure and cause heart disease. <sup>12</sup> The USDA 2010 Dietary Guidelines recommend limiting sodium intake to 1 teaspoon, or 2,300 mg per day. <sup>7</sup> The American Heart Association recommends limiting sodium to 2/3 teaspoon per day for individuals at risk of heart disease. <sup>12</sup>
Whole, Unprocessed Foods	The USDA also recommends “Increas[ing] fruit and vegetable intake.” <sup>7</sup> Evidence suggests that increased fruit and vegetable intake may protect against weight gain, <sup>7</sup> as well as some types of cancer and chronic disease. <sup>13</sup> Evidence exists that the consumption of whole grains may reduce the risk of cardiovascular disease, type 2 diabetes, and high body weight. <sup>7</sup> Whole grains, comprised of the whole grain seed, contain dietary fiber, iron, and many B vitamins not found in refined grains. At least half of recommended total grain intake should be whole grains. <sup>7</sup>

## Citations

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