

**ASIAN AMERICANS, NATIVE HAWAIIANS & PACIFIC ISLANDERS AND OBESITY**

**OBESITY**

**Obesity** is the second leading cause of preventable death in the U.S.<sup>1</sup> A body mass index (BMI) is a common weight: height ratio measuring the amount of body fat in proportion to lean body mass. Approximately 127 million adults in the U.S. are overweight (BMI>25), 60 million are obese (BMI>30) and 9 million are extremely obese (BMI>40).<sup>2</sup> The World Health Organization (WHO) has declared overweight as one of the top ten risk conditions in the world and of the top five in developed nations.<sup>3</sup> Moreover, the U.S. spends \$177 billion a year on obesity-related healthcare, 83 cents of every healthcare dollar.<sup>4</sup>

The U.S. spends \$177 billion a year on obesity-related healthcare, 83 cents of every healthcare dollar.

**PREVALENCE**

From 1994 to 2003, overweight prevalence increased from 7% to 15% for California AA & NHPI low-income children, more rapidly than for any other ethnic group.

Obesity takes a tremendous toll on all communities in the United States. However, Centers for Disease Control and Prevention (CDC) reports that ethnic minority groups, including Asian Americans, Native Hawaiians and Pacific Islanders (AAs & NHPIs), have worse health outcomes than

do non-Hispanic whites. In California, AA & NHPIs have the fastest rate of increase in overweight and obese youths of all ethnic groups (CDC, 2007). From 1994 to 2003, overweight prevalence increased from 7% to 15% for California AA & NHPI low-income children, more rapidly than for any other ethnic group.<sup>5</sup> The California Center for Public Health Advocacy and Centers for Disease Control and Prevention showed Pacific Islander children as having the highest percentage of children overweight in California at 35.9%.<sup>6</sup>

**Age-Adjusted Overweight and Obesity Rates for AA & NHPI Adults 18 years of Age or Older, 2004-2006\***

POPULATION	OVERWEIGHT	OBESITY
ALL WHITES	34.6	23.6
CHINESE	21.8	4.2
FILIPINO	33.0	14.1
ASIAN INDIAN	34.4	6.0
JAPANESE	25.9	8.7
VIETNAMESE	19.1	5.3
KOREAN	27.3	2.8
OTHER AA & NHPIS	29.2	12.5

\*Centers for Disease Control and Prevention, 2008. Health Characteristics of the Asian Adult Population: United States, 2004-2006.

**OBESITY IN THE PACIFIC ISLANDS**

Pacific Island nations have the most overweight people in the world, according to the most recent estimates by World Health Organization (WHO). The research found that eight out of the ten of the "fattest" countries are in the Pacific, with the top four having 90% of their population defined as overweight.

**Top Ten Overweight Countries, 2007<sup>7</sup>**

1. Nauru (in Micronesia)	94.5%
2. Federated States of Micronesia	91.1%
3. Cook Islands (in Polynesia)	90.9%
4. Tonga	90.8%
5. Niue (in Polynesia)	81.7%
6. Samoa	80.4%
7. Palau	78.4%
8. Kuwait	74.2 %
9. United States	74.1%
10. Kiribati	73.6%

The increased flow of goods, people, and ideas associated with globalization has contributed to an increase in noncommunicable diseases such as obesity, in much of the world, including the Pacific Islands. Imported foods including high fat-content meats, especially corned beef, mutton flaps, and chicken parts and dense simple carbohydrates, such as refined sugar and flour, are increasingly consumed in the Kingdom of Tonga and other microstates in the South Pacific, instead of traditional foods.<sup>8</sup> Another study reveals the effects of Western acculturation and globalization as its findings indicate that Samoans exposed to modern ways of life in American Samoa and Hawai'i are characterized by excessive adipose tissue, high mean BMI, and high prevalence of overweight and severe overweight throughout adulthood, especially for females.<sup>9</sup>

**ASSOCIATED HEALTH CONSEQUENCES**

A large body of evidence indicates that higher levels of body weight and body fat are associated with an increased risk for the development of numerous adverse health consequences, including Type II Diabetes, cardiovascular disease (CVD), stroke, sleep apnea/ pulmonary dysfunction, gallbladder disease, musculoskeletal disease i.e. osteoarthritis, liver disease, and certain cancer types.<sup>10</sup> Overweight and obesity are also associated with increased prevalence of psychological disorders,

Heart disease risk and death rates are higher among Native Hawaiians and some Asian Americans (Asian Indians) partly because of higher rates of obesity, diabetes and high blood pressure.

such as low self-esteem and depression. Risk for stroke is found to be 75% higher in women with a BMI>27 and 137% higher in those with BMI>32, compared with women who had a BMI<21.

- According to the 2003 Hawai'i State Department of Health Behavioral Risk Factor Surveillance Survey (BRFSS)

telephone survey, 32.6% of Hawaiians reported they were overweight and 32.9% reported they were obese. Of Hawaiians, 13.8% reported they had diabetes v. 7.6% prevalence in the general population.<sup>11</sup>

- Heart disease risk and death rates are higher among Native Hawaiians and some Asian Americans (Asian Indians) partly because of higher rates of obesity, diabetes and high blood pressure.<sup>12</sup>

## BARRIERS TO A HEALTHY LIFESTYLE

Likewise, although educational programs have increased awareness about healthy diets and nutritional foods, PIs nonetheless choose to consume less-healthy foods because of cost and availability.<sup>8</sup> Thus, poor diet and conversely, overweight and obesity, is not simply a health or health education issue; it is also economic.

- Research collected from the California Health Interview Survey (CHIS) shows that APIA children ages 2-11 consume the least amount of fruits and vegetables and have the lowest rates of vigorous physical activity when compared to children of other ethnicities.<sup>13</sup>
- According to the same CHIS survey, only 57 percent of Asian Americans between 11 and 17 had vigorous physical activity in a week.
- The per capita income for Native Hawaiians (\$14,199) was the lowest among the state's major ethnic groups—less than half that of non-Hispanic Whites (\$30,1999) and almost 35 percent lower than the statewide figure of \$21,525.<sup>14</sup>
- At the national level, the unadjusted per capita income of the Native Hawaiian population was \$15,554, about \$6,000 less than the national per capita income (\$21,587). Native Hawaiian unadjusted per capita income was roughly \$1,000 greater than that of Black or African American and American Indian and Alaska Native individuals, but more than \$9,000 below the non-Hispanic White unadjusted per capita income.

Only 57% of Asian Americans between 11 and 17 had vigorous physical activity in a week.

## PREVENTION AND INTERVENTION

Obesity is a complex, multi-faceted, and inter-related condition influenced by variety of factors such as migration, language proficiency, urbanization, environment, genetic, behavioral, and socioeconomic status. These factors play a major role in determining health (the prevalence of obesity and its risks) of AA & NHPI populations. More research is required to understand the health status of AAs & NHPIs because inadequate and limited

data collection has systematically been unable to address obesity accurately and has masked the obesity problem of the populations. For example, many studies aggregate data for AAs & NHPIs in adult obesity prevalence rates, which leads one to think that obesity is not prevalent among AAs & NHPIs.

Behavioral and environmental prevention strategies are needed for addressing the prevalence of obesity and diabetes in the AA & NHPI communities. These strategies are:

- Increase rates of physical activity by providing safe, affordable spaces;
- Increase access to healthy foods by promoting the consumption of fruits and vegetables as oppose to high calorie, low nutrient foods; and
- Decrease the strategic marketing of fast food companies in low-income neighborhoods.

In addition, in order to effectively reach AA & NHPI populations, aggressive appropriate advocacy is needed. The following are recommendations to eliminate health disparities and address the health needs of AAs & NHPIs.

- Provide culturally sensitive and linguistically appropriate focused materials to support healthy eating and active living. For example, the Healthy Living in the Pacific Islands initiative seeks to reduce health disparities of Pacific Island communities by utilizing community based approaches by respecting Native Hawaiian & Pacific Islander cultural values.
- Encourage traditional diets and exercise.
- Recruit bilingual, bicultural health educators.
- Establish alliances and coalitions with other AA & NHPI communities to promote and gather compelling and accurate data on obesity. More available research is needed to unmask this problem.
- Advocate research funding to train researchers on obesity within the AA & NHPI communities.

## RESOURCES

For more information on obesity in AA & NHPI communities:

- World Health Organization (WHO), *Obesity and other diet related chronic diseases*  
<http://www.who.int/nutrition/publications/obesity/en/index.html>
- Office of Minority Health, Department of Health and Human Services, <http://www.omhrc.gov>
- Asian American Network for Cancer Awareness, Research, and Training (AANCART)  
(916) 734-1191, <http://www.aancart.org/>
- Weaving an Islander Network for Cancer Awareness, Research and Training (WINCART)  
(714) 278-4592, <http://wincart.fullerton.edu/>
- **Asian & Pacific Islander American Health Forum**  
450 Sutter Street #600, San Francisco, CA 94108  
Tel: (415) 954-9988 Fax: (415) 954-9999  
Email: [CDprogram@apiahf.org](mailto:CDprogram@apiahf.org)  
Website: [www.apiahf.org](http://www.apiahf.org)

## REFERENCES

---

- <sup>1</sup> Mokdad AH, et. al, "Actual Causes of Death in the United States, 2000," *JAMA*, 291 (2004):1238-1245.
- <sup>2</sup> American Obesity Association. AOA Fact Sheets: "Obesity in the U.S." Available at:  
[http://www.obesity.org/subs/fastfacts/obesity\\_US.shtml](http://www.obesity.org/subs/fastfacts/obesity_US.shtml)
- <sup>3</sup> Hill J., Wyatt H., Reed G., Peters, J. "Obesity and the Environment: Where Do We Go from Here?" *Science*. 299 (2003): 853-855.
- <sup>4</sup> Mackay J., Mensah G. *The Atlas of Heart Disease and Stroke* Geneva, Switzerland: World Health Organization, 2004.
- <sup>5</sup> Kim L., Harrison G., Kagawa-Singer M. "Perceptions of Diet and Physical Activity Among California Hmong Adults and Youths," *Prev Chronic Dis* 2007; 4(4). Available at:  
[http://www.cdc.gov/pcd/issues/2007/oct/07\\_0074.htm](http://www.cdc.gov/pcd/issues/2007/oct/07_0074.htm).
- <sup>6</sup> Hall, C.T. Fatter than ever: despite alarms over childhood obesity, California's kids are packing on the pounds. San Francisco Chronicle. 25 August 2005.
- <sup>7</sup> "Pacific Islands 'worse in world for obesity.'" The New Zealand Herald. 21 February 2007. Available at:  
[http://www.nzherald.co.nz/section/6/story.cfm?c\\_id=6&objectid=10425093](http://www.nzherald.co.nz/section/6/story.cfm?c_id=6&objectid=10425093).
- <sup>8</sup> Evans M., Sinclair R., Fusimalohi C, Liava'a V. "Globalization, diet, and health: an example from Tonga." *Bulletin of the World Health Organization*, 79 (2001): 856-862.
- <sup>9</sup> McGarvey S. "Obesity in Samoans and a perspective on its etiology in Polynesians." *Am J Clin Nutr* 53 (1991): 1586S-1594S.
- <sup>10</sup> National Task Force on the Prevention and Treatment of Obesity. "Overweight, Obesity, and Health Risk." *Arch Intern Med* 160 (2000): 898-904.
- <sup>11</sup> Hawaii State Department of Health. *2003 State of Hawaii Behavioral Risk Factor Surveillance System*. Available at:  
[www.hawaii.gov](http://www.hawaii.gov).
- <sup>12</sup> Office of Minority Health, The. "Health Status of Asian American and Pacific Islander Women." U.S. Department of Health and Human Services. 20 April 2007. Available at:  
<http://www.omhrc.gov/templates/content.aspx?ID=3721>.
- <sup>13</sup> Pascua P. "Obesity among Asian Youths a Problem in California." *Philippine News*. 24 April 2008. Available at:  
<http://www.philippinenews.com/article.php?id=2288>.
- <sup>14</sup> Malia Kana'iaupuni S, Malone, N, Ishibashi K. "Income and Poverty Among Native Hawaiians." September 2005. Available at:  
[http://www.ksbe.edu/spi/PDFS/Reports/Demography\\_Well-being/05\\_06\\_5.pdf](http://www.ksbe.edu/spi/PDFS/Reports/Demography_Well-being/05_06_5.pdf).