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Physical activity and nutritional status
of adolescents on Guam

Abs7act: The 1999 Safe & Drug Free Schools and Communities Youth Risk Behavior Study collected data from representative samples of both high school (n=590) and middle school students (n=643) on Guam in May, I 999. Results showed that the dietary and exercise habits of Cuam's adolescents were sub-optimal. Out of the 643 middle school students surveyed, 26% consumed atleast3mealsperweekatafastfoodrestaurantand53.3%consumedatleast2cansofsweetenedsodaperday. Guamadolescents had avery low intake of fruits and vegetables. As many as75.3% of hiqh school students reported consuming fruits and vegetables less than once a day. Students who practiced unsafe weight loss practices were significantly more likely to smoke cigarettes, and use illegal drugs. In addition, 26.9% of adolescentsurveyed were considered 'overweight' similar to the prevalence of overweight reported among U.S. Mainland adolescents. Finally, data from survey showed that adolescents on Cuam spent more time watching television and less time performing various physical activities than adolescents in the u.S. mainland. These sub optimal practices put Cuam's adolescents at increased risk for immediate and long-term health problems.

Overweight and obesity is a major health concern for
Pacific lslanders because it extends into adulthood. In the
United States, if adolescents do not lose the excess
weight by the beginning of adulthood, the odds against
them losing the excess weight by the beginning of
adulthood are 28 to I (Brownell & Kaye, .l982). lf obesity
extends into adulthood, it puts individuals at risk for diseases and conditions that are all highly prevalent on Cuam, such as type 2 diabetes, atherosclerosis, cardio-vascular disease, hypertension, gallbladder disease, gout, arthritis, and certain cancers (Must et. al., I 992).

Some of the immediate health risl<s found in overweight and obese adolescents include increased blood pressure, increased total cholesterol, abnormal lipoprotein ratios (elevated serum LDL'cholesterol and triglycerides, and

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Introduction

Obesity is a major health problem among adults, but weight and dietary problems usually start when people are children or adolescents. There has been a steady increase in the prevalence of overweight since the mid-1960's, and the increase is particularly notable in recent years. The U.S. National
Health and Nutrition Exami-
nation Surveys were con-
ducted between I 976 I 980
(NHANES ll) and again be
tween 1988-1994 (NHANES

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lowered HDL-cholesterol), and
hyperinsulinemia (Berg, I 995)
putting the obese adoles-
cent at risk for develoPing
type 2 diabetes. This is of
great concern since the Preva

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lll). The prevalence of overweight among adolescents went from being only 5.7o/,' Io 12% of adolescents being overweight (CDC, I997). Data collected from the I 999 Youth Risk Behavior Survey reported that 25.9% of stu-dents surveyed in the U.S. are overweight (CDC, 2000). In less than two decades, the prevalence of overweight in adolescents has doubled.

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lence of type 2 diabetes on Cuam is high (Youngberg et al, 1997) possibly higher than in the U.S. Mainland.

There are several eating patterns developed during childhood and adolescence that can have an immediate imoact on overall health as well as the noted long-term consequences, such as type 2 diabetes. High consump-tion of fast food (Heald, 1992) may contribute to the elevated fat intake, which has been reported in adoles-cents (CSFll, 1995, and McDowell et. al., 1994' and Devanev et. al., I 995). A high consumption of soft drinks
and juices (CSFIl, -l996)

may contribute to an imbalance
between intake and expenditure due to a reduced effect on satiety as compared to solid foods. Other dietary patterns, which may be associated with increased risk of obesity in adolescents, include skipping breakfast and a low intake of fruits and vegetables (CSFll, I 996). Moreo-ver, research indicates that unhealthy dietary patterns

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