

CONCLUSION: By using compositional analysis, it was found that age and BMI have an impact of daily PA pattern of middle-age-older American adults. Also, the percentage of participants meeting the PA guide decreased as their age increased.

		50-59			70-79			Eta Sq.
		Sleep	Sedentary	MVPA	Sleep	Sedentary	MVPA	
Male	Normal	6.3 ± 3.3	8.4 ± 4.5	0.85 ± 0.93	5.4 ± 3.8	9.9 ± 4.2	0.6 ± 0.69	0.05
	Obese	5.7 ± 4.2	8.9 ± 4.6	0.77 ± 0.79	4.8 ± 4.2	10 ± 4.4	0.46 ± 0.69	0.07
	Eta Sq.	0.01			0.02			
Female	Normal	5.7 ± 3.8	8.1 ± 4.2	0.7 ± 0.66	6.2 ± 3.8	8.1 ± 4.1	0.47 ± 0.63	0.03
	Obese	5.6 ± 4.2	9 ± 5	0.53 ± 0.59	5.7 ± 4	8.6 ± 4.2	0.25 ± 0.41	0.04
	Eta Sq.	0.004			0.02			

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Monitoring Progress Of Healthy People 2020 Physical Activity Children Objectives: How Did We Do?

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PURPOSE: Regular physical activity (PA) in children and adolescents promotes health and fitness; youth who are regularly active also have a better chance of a healthy adulthood. Strategies to increase physical activity among youth include offering physical education (PE) in schools and replacing sedentary activities (i.e. screen time) with PA whenever possible. Reflecting the importance of PA among children and adolescents, Healthy People 2020 (HP2020) included several objectives on PA guideline compliance, daily PE, and screen time reduction.

METHODS: The Youth Risk Behavior Survey, National Health and Nutrition Examination Survey, and National Survey of Children's Health were used to provide nationally representative data for the 11 HP2020 PA and screen time behavior objectives over the decade.

RESULTS: About 26.1% of high school students were physically active for 60 minutes every day in the past week; 51.1% reported doing muscle strengthening exercises on 3 or more days in the past week; and 20.0% met the guidelines for both aerobic and muscle-strengthening activity in 2017. Males, non-Hispanic whites, and 9th grade students had higher rates of meeting PA aerobic and muscle-strengthening PA guidelines than their counterparts, and about 29.9% of adolescents overall participated in daily school PE. Among children ages 0-2, 40.6% viewed no television or videos on an average weekday. About 76.2% of children ages 2-5 and 78.9% of children 6-14 had no more than 2 hours of screen time a day, and 79.3% of high school students did not exceed 2-hour a day limit. About 93.3% of children ages 6-14 used a computer or played computer games outside of school for no more than 2 hours a day. Use of a computer for non-school work for no more than 2 hours among high school students declined from 75.1% in 2009 to 57.0% in 2017, moving away from the target.

CONCLUSIONS: Of the 11 national HP2020 objectives on PA and screen time behavior for children and adolescents, only 1 objective (adolescent TV time) had met the target. Three objectives showed little or no detectable change, and 3 objectives moved away from their targets. The progress for the remaining objectives was not evaluated; 3 objectives had only baseline data, and 1 measure was informational. Several of these measures will continue to be tracked over the next decade as PA objectives in HP2030.

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Moderate Alcohol Consumption Predicts Tobacco Use And Illicit Drug Abuse: Implications For Health Screening

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The health and harm of alcohol consumption has been long debated. In recent decades, multiple epidemiological analyses have demonstrated a strong correlation between moderate consumption and a reduced risk of myocardial infarction, peripheral vascular disease, and ischemic stroke. While moderation may confer a cardiovascular protective effect, the same cannot be said of alcohol abuse, cigarette smoking, and illicit drug use.

PURPOSE: To test the predictive power of moderate alcohol use on alcohol abuse and the use of cigarettes and illicit drugs.

METHODS: We analyzed the registry of a U.S. hospital in an urban-suburban setting, consisting of 2,306 patients admitted over a 5-year period. At intake, demographic and health data were recorded, including alcohol, tobacco, and illicit drug use, and previous histories thereof. Blood alcohol content (BAC) and toxicology screens were administered to patients suspected of current alcohol or drug use. Logistic regressions tested the effects of alcohol consumption on alcohol abuse, smoking status, and use of illicit drugs.

RESULTS: Patients were 52.1 ± 22.4 years of age, 56.0% were men, 11.8% were currently using alcohol (BAC of 0.05 ± 0.10), 5.7% had a history of alcohol abuse, 25.8% reported regular smoking, 5.0% had a history of illicit drug use, and 27.1% had a positive toxicology screen. Holding potential confounders constant, logistic regression found current alcohol use to predict a 13.5-fold increase in the odds of alcohol abuse ($p < 0.001$; 95% CI of odds ratio: 8.96 to 20.27), a 213% increase in the odds of smoking ($p < 0.001$; 95% CI of odds ratio: 1.63 to 2.79), and a 209% increase in the odds of illicit drug use ($p < 0.001$; 95% CI of odds ratio: 1.34 to 3.27). A history of alcohol abuse predicted a 428% increase in the odds of smoking ($p < 0.001$; 95% CI of odds ratio: 2.95 to 6.22) and a 783% increase in the odds of illicit drug use ($p < 0.001$; 95% CI of odds ratio: 4.82 to 12.72).

CONCLUSIONS: While some cardiovascular benefits correlate with moderate alcohol consumption, there may be a paradoxical effect whereby its association with high-risk behaviors (i.e., smoking and illicit drug use) leads to health detriments in a large subset of drinkers. Accordingly, it might be prudent to consider more than cigarette exposure in pre-exercise health screening practices.

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Distribution And Correlates Of Impaired Renal Function In Retired National Football League Players

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Increased exercise intensity, high dietary protein intake, and frequent use of non-steroidal anti-inflammatory drugs have been described as independent contributors to impaired renal function (IRF) in active athletes. However, information is scant on the prevalence and determinants of IRF in athletes during life after sport.

PURPOSE: Investigation of the prevalence and determinants of IRF in a cohort of retired National Football League (NFL) players.

METHODS: The analysis included 1,199 retired NFL players (aged 52.4 ± 12.9 years, 56.3% African-American) that underwent a comprehensive health screening with the NFL Player Care Foundation. Renal function, as assessed by estimated glomerular filtration rate (eGFR), was computed using the Chronic Kidney Disease Epidemiology Collaboration function. IRF was defined as eGFR < 90 ml/min/1.73 m². Multivariable-adjusted logistic regression was employed to determine the association between traditional cardiometabolic risk factors and IRF.