



AviationHealth ASSOCIATION

AVIATION MEDICAL BULLETIN™

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Below are the top causes of death in the United States		Myth: It's OK to get drunk every once in a while		Air bags and antilock brakes get all the glory:	

WHAT WE SAY WE ARE EATING

Ask people what they ate yesterday, or even today, and the odds are that they'll underestimate the amount. This discrepancy has been called the "eye-mouth gap."

One study found that some obese people actually ate twice as much as they reported. Research has shown that perhaps 80% of us - even lean and athletic people - underestimate our food intake. One national survey found that adults underestimate their daily diet, on average, by about 800 calories.

People also tend to think that their diet is healthier than it is, according to a survey released in 2000. They overestimate their intake of fruit and dairy products, for instance, but underestimate the amount of sweets, refined grains, oils, and other fats they eat.

Misreporting is seldom a deliberate deception, researchers believe. More likely, it's unconsciously done, perhaps in

response to social and familial pressure combined with wishful thinking.

In addition, people don't know how much food they put on their plates. If you're trying to lose weight or improve your diet, don't trust your eyes. Weigh or measure the food you eat to get a sense of what you're eating.

YOUR BLUEPRINT FOR HEALTH AND WELLNESS

Good health is everything. Without it, it's extremely difficult to live your life to the fullest. Yet, if you're like many Americans, you're not placing health and well-being at the top of your list. Family obligations, a busy work and social life and a lack of time make it hard to dedicate time and resources to a healthy lifestyle. Fortunately, it's not as hard as it may seem. With a few adjustments, you can make health and wellness the top priority it needs to be.

Start with one or two things you can change.

Don't make the mistake of trying to drastically overhaul your life. Sometimes the more you try to do, the less you're able to achieve, and that can be discouraging. Think about one or two things you'd like to focus on and that you can start realistically tackling today. Maybe that's adding more fruits and veggies to your meals or walking 10 more minutes a day.

Make a commitment, not a resolution.

Making health a priority in your life is a life-long commitment—not a short-term resolution: to lose a few pounds, for example. Focus on the habits you want to create, and try not to place too much attention on the results. For example, if you do want to lose weight, focus on the habits of better eating and more activity—try not to get tied up on what the scale says every day.



DID YOU KNOW
 Brushing your teeth, even for 4 minutes, only removes 60% of the harmful bacteria in your mouth. Flossing and mouthwash are needed to take care of the rest.

Think about how you can be healthy as soon as you wake up.

It's a small, easy change that can have a big impact. As soon as you wake up, think about what you're going to do that day to be healthy. Start the day off with a promise: "Today I'm going to eat a healthy breakfast, get a lot of movement and focus on my breathing." You'll find that simply visualizing being healthy will help you make it a reality.

Adjust your surroundings. If you want to eat more fruits and veggies, throw out your junk food (or try to minimize it) and start placing ready-to-eat fruits and veggies front and center in your fridge. You need to make modifications to your surroundings to help ensure you stick to your desired behavior.

Lastly, there will be times when you slip and go back to old ways. That's totally normal and you shouldn't let that discourage you. If you get off track, try to bring yourself back to the small changes and strategies above until you're back into your healthy groove.

TOP CAUSES OF DEATH IN THE U.S.

Below are the top causes of death in the United States, according to the Centers for Disease Control and Prevention. Several of the causes (heart disease, cancer, diabetes and stroke) can be prevented with healthier lifestyle habits like exercise, a healthy diet and not smoking.

- ✓ Heart disease
- ✓ Cancer
- ✓ Chronic lower respiratory diseases
- ✓ Accidents (unintentional injuries)
- ✓ Alzheimer's disease
- ✓ Diabetes
- ✓ Influenza and pneumonia
- ✓ Nephritis, nephrotic syndrome, and nephrosis
- ✓ Intentional self-harm (suicide)

TEST YOUR STAY WELL SMARTS

1. Regular soap kills just as many germs as antibacterial. **True/False**
2. If you wash your hands regularly, those alcohol-based hand sanitizers won't offer any extra protection. **True/False**
3. The most effective way to clean your hands is to scrub under hot water for at least 30 seconds. **True/False**
4. Antiviral tissues can keep your spouse's cold at bay. **True/False**
5. If I use antibacterial products, I'll develop a resistance to all bacteria. **True/False**

1. Regular soap kills just as many germs as antibacterial.
The correct answer is True. Columbia University researchers found that plain soap eliminated bugs equally well. And families who washed dishes with antibacterial liquids caught the same number of colds on average as those using regular soap.

If you wash your hands regularly, those alcohol-based hand sanitizers won't offer any extra protection.

The correct answer is False. In research from Harvard, families who employed the sanitizers in addition to hand washing were 59 percent less likely to get a stomach bug than those who didn't.

3. The most effective way to clean your hands is to scrub under hot water for at least 30 seconds.

The correct answer is False. Hot water won't kill germs any better than warm-but it will dry out your hands faster. The CDC recommends washing with warm water for about 20 seconds.

4. Antiviral tissues can keep your spouse's cold at bay.

The correct answer is True. One study found that the tissues reduced the spread of colds and respiratory infections by 10 percent.

5. If I use antibacterial products, I'll develop a resistance to all bacteria.

The correct answer is False. Data from recent lab studies suggest using antibacterial products can lead to resistance of antibiotics. But, so far this has only been found to occur in residue-producing antibacterial agents (Triclosan is most common), which leave a long-acting residue on surfaces for continuous disinfecting. Bottom line: Continue using your antibacterial hand gel, but don't let it replace good ol' soap and water.

ALCOHOL FACTS AND MYTHS

Alcohol has wide-ranging effects in the body. Once it enters your system, it triggers immediate physiological changes in the brain, heart, and liver, among other organs. Over time, these changes can lead to long-term health complications, if you're drinking too much.

30 facts about alcohol

1. The "alcohol" in alcoholic beverages such as wine, beer, and spirits is actually ethanol, or ethyl alcohol. It's the only type of alcohol that you can drink without causing serious damage to your body.
2. Alcohol is a depressant. This means that it slows down activity in the brain.
3. According to the National Survey on Drug Use and Health (NSDUH), 86.4 percent of adults reported having drunk alcohol at some point in their lifetime.
4. The NSDUH also found that 70.1 percent of American adults have had a drink in the previous year, and 56.0 percent have had one in the previous month.
5. Alcohol has a wide variety of effects. In the brain, it triggers the release of dopamine, a neurotransmitter that's associated with pleasure and satisfaction.
6. Stress relief is another side effect of drinking alcohol. This is caused by an increase in the uptake of another neurotransmitter, called GABA.
7. Alcohol is among the most commonly misused addictive substances. About 12.7 percent of American adults meet the criteria for alcohol use disorder (AUD). That's 1 in 8 adults.
8. According to a study, light-eyed Americans of European descent consume more alcohol than dark-eyed Americans of European descent.
9. The same study found that blue-eyed Americans of European descent had the highest levels of alcohol misuse, suggesting a genetic link that makes them more susceptible to AUD.
10. Alcohol is processed in the liver, where enzymes help break down ethanol into acetaldehyde and acetate.
11. The effects associated with drinking occur when ethanol enters your bloodstream and passes through the membranes of cells in your brain, heart, and other organs.
12. Research suggests that rates of alcohol use and high-risk use increased between 2001 and 2016.
13. AUD has a genetic component. Researchers estimate that genes account for approximately half of the risk.
14. Men are more likely to use alcohol than women.
15. Alcohol has different health consequences for men and women. Long-term drinking is more likely to have negative health effects for women compared to men, even if the woman drinks less for a shorter period of time.
16. Women who are dependent on alcohol are 50 to 100 percent more likely to die from alcohol-related causes than men who are dependent on alcohol.
17. Alcohol-attributable deaths are the third-leading preventable cause of death in America. According to the CDC, 88,424 people die from alcohol-related causes each year in the United States.
18. Alcohol may be nearly as old as civilization. Residues from an alcoholic beverage that dates back to 7,000 to 6,600 B.C. have been found in China.
19. Archaeologists have also found evidence suggesting that the workers who built the Great Pyramids of Giza were paid in beer.
20. Binge drinking is a pattern of alcohol consumption that involves drinking a lot in a short period of time. For women, four or more drinks in two hours is considered binge drinking. For men, it's five or more drinks in two hours.
21. Teens who start drinking before the age of 15 are more likely to develop alcohol dependence later on in life.
22. Symptoms of acute alcohol withdrawal syndrome (AWS) include hallucinations, seizures, and, in severe cases, even death. People who are dependent on alcohol should seek medical assistance to stop drinking.

23. Culture has a significant influence on how people consume alcohol. A study that explored family drinking in Italy found that Italians who drank at family meals while growing up were less likely to develop unhealthy drinking habits later on in life.

24. Alcohol use is a significant risk factor for dementia.

25. Drinking red wine in moderation is believed to be good for the heart. Red wine contains resveratrol, a substance which helps control cholesterol, prevent blood vessel damage, and stop blood clots

26. Binge drinking can lead to a hangover the following morning. Hangovers are caused by chemical byproducts created during alcohol processing.

27. Hormonal changes lead to unpleasant hangover symptoms. For instance, hormonal changes cause you to urinate more, which can lead to dehydration.

28. Dark liquors, such as red wine or whiskey, are more likely to result in severe hangovers. White or clear liquors are less likely to result in a hangover.

29. Around the world, minimum legal drinking ages range from 10 to 21 years.

30. Muscles absorb alcohol faster than fat. As a result, people who have more muscles and less body fat have higher alcohol tolerance.

5 myths about alcohol

1. Myth: It's OK to get drunk every once in a while.

The truth: Binge drinking is associated with serious health problems, including unintentional injuries, cancer, and heart disease. It doesn't matter how infrequently you do it. If you have four or more drinks (women) or five or more drinks (men) in a single sitting, you're risking your health.

2. Myth: Drinking is always safe in moderation.

The truth: Moderate alcohol consumption may have some health benefits. However, that doesn't mean it's risk-free. For some people, the risks might outweigh the possible benefits. These include people who:

- ✓ are pregnant or trying to get pregnant
- ✓ take prescription medications that interact with alcohol
- ✓ plan to drive or operate machinery
- ✓ have heart failure or a weak heart
- ✓ have had a stroke
- ✓ have liver or pancreatic disease
- ✓ have AUD, alcohol dependence, or a family history of either

3. Myth: Wine or beer won't make you as drunk as hard liquor.

The truth: All types of alcohol contain the same active ingredient. All standard drinks contain the same amount of alcohol. A standard drink includes:

- 12 ounces (oz.) of beer (5 percent alcohol)
- 8 to 9 oz. of malt beer (7 percent alcohol)
- 5 oz. of wine (12 percent alcohol)
- 1.5 oz. of distilled spirits (40 percent alcohol)

4. Myth: Drinking isn't a problem as long as you can hold your liquor.

The truth: Being able to drink without feeling the effects could be a sign that you're developing alcohol tolerance. Over time, regular alcohol use can put you at risk for AUD.

5. Myth: You can sober up quickly with a cup of coffee.

The truth: Coffee contains caffeine, a stimulant which can make you feel more alert and awake. It doesn't help your body process alcohol faster. If you've been drinking, giving your body time to break down the alcohol in your system is the only way to sober up.

ONE SIMPLE THING

Want to prolong your life? Put some pep in your step.

Walking at an average pace was linked to a 20% reduction in the risk of mortality compared with walking at a slow pace, while walking at a brisk or fast pace was associated with a risk reduction of 24%, according to a new study. A similar result was found for risk of dying from cardiovascular disease.

It's not too late to start. In fact, the benefits were far more dramatic for older walkers. Average pace walkers aged 60 years or over experienced a 46% reduction in risk of death from cardiovascular causes, and fast pace walkers a 53% risk reduction, the study found.

A fast pace is generally three to five miles per hour, but it really depends on a walker's fitness levels. To increase your heart rate: Walk at a pace that makes you slightly out of breath or sweaty when sustained.

BAD CHOICES - NOT AGING - TO BLAME FOR WEIGHT GAIN

It's not merely getting older that accounts for the nearly 1 pound a year that US adults gain as they age. A new Harvard study blames instead bad lifestyle and diet choices, such as eating too many potato chips.

In fact, about half the average 3.35 pounds a healthy, non-obese American gains over 4 years can be traced to potato chips, researchers found. Other leading culprits in weight gain were non-chip potatoes, sugar-sweetened beverages, red meat and processed meats.

Lifestyle factors linked to weight gain included alcohol use, smoking cessation and TV watching (over 4 years, nearly a third of a pound per hour per day).

LIFE SPAN

On average, men who smoke cut their lives short by 13.2 years. Women lose 14.5 years.

SALT FROM SHAKERS

Who is more likely to salt food more - the one who prepares it or the person who eats it?

The cook usually puts five times more salt in the food being prepared than the person who salts to taste. That's because salt added to cooked food has a stronger taste.

So, if you're trying to wean yourself away from the salt, but the flavor is hard to give up, ask that none be added during cooking. Then when you sprinkle it on to taste, you'll be cutting back by 80%.

PRESCRIPTION REFILL TIMING

During the first few days of each month, deaths from medication errors spike by some 25 percent. That may be due in part to the increase in pharmacy workloads early in the month, when ill, older, and low-income Americans typically receive their government assistance payments. Try to fill prescriptions at a less busy time. Always check that you've gotten the right pills, and don't hesitate to ask the pharmacist if something looks amiss.

EXPIRATION DATES

Milk isn't Cinderella; it won't turn into sour curds at midnight on the container's expiration date. Rather than signaling the moment food will go bad, dates stamped on packages define when it's at peak quality.

Fact is, no laws even require manufacturers to date-stamp foods, with two exceptions: infant formula and some varieties of baby food.

Here's what the most common date codes mean.

Best If Used By and Use By. Foods will stay fresh and taste and look their best until these dates. (Don't buy or use baby formula or baby food after its Use By date.)

Expiration. Food probably isn't edible after this date, so to be safe, throw it out.

Sell By or Pull By. Stores should remove products by this date; they may be edible for up to a week afterward.

Guaranteed Fresh. Used for baked goods; buy before this date for ideal freshness.

CUT A SERVING DOWN TO SIZE

Value-size. Super-size. Biggie. Big portions = big people.

Adults take in about 13 percent more calories than they did three decades ago, according to the Centers for Disease Control and Prevention.

Twenty years ago, a serving of French fries was about a third the size served now. Spaghetti? Half the size. From the innocuous turkey sandwich to jumbo sweetened coffee drinks and bagels on steroids, so many foods have gotten bigger. So have our waistlines.

The culprit? Portion distortion. Normal sizes look puny; super-size looks about right. And when given more food, most people eat more, rather than stopping when they feel full. What is a normal portion?

NUTRITION BUZZWORDS

"Good source of," "fat-free," "light." Think that label lingo is as ambiguous as "new and improved"? If so, you need to know that the following terms can appear only if they accurately describe what's inside the package:

Free. Contains too few calories and too little fat, saturated fat, cholesterol, sodium, or sugar to have any effect on your diet.

Low. Contains a small amount of calories, fat, saturated fat, cholesterol, sodium, or sugar. Example: 40 or fewer calories per serving.

(Continued)

Reduced. Has at least 25 percent fewer calories and 25 percent less fat, saturated fat, cholesterol, sodium, or sugar than does the standard version of the same food.

Light. Has 33 percent fewer calories or 50 percent less fat than does the standard version; also appears on foods that have 50 percent less sodium and are "low-calorie" or "low-fat."

High. Contains at least 20 percent of the daily value for protein, vitamins, minerals, fiber, or potassium. Synonyms: "rich in," "excellent source of."

Good source of. Contains 10 to 19 percent of the daily value for protein, vitamins, minerals, fiber, or potassium. Synonyms: "contains," "provides."

More. Has 10 percent or more of the daily value for protein, vitamins, minerals, fiber, or potassium. Synonyms: "added," "extra," "plus."

EXERCISE MADE EASY

The new U.S. Department of Health and Human Services **daily** requirements for exercise break down as follows:

30 minutes MINIMUM reduces risk for heart disease, diabetes, and some cancers

60 minutes SUGGESTED prevents weight gain in adults

60 – 90 minutes OPTIMUM to lose weight and keep it off (along with restricting calories)

3 REASONS TO AVOID SODA (EVEN DIET)

That innocent-looking can of soda no matter what it's sweetened with-may be taking a toll on your immunity. Here's why:

1. People who drink sodas instead of healthy beverages (think low-fat milk and pure fruit juice) are less likely to get adequate vitamin A, calcium, and magnesium. What's more, soda contains phosphoric acid that depletes calcium and magnesium. These two nutrients help keep your immunity operating at peak efficiency.
2. Sodas containing high-fructose corn syrup also contain high levels of free radicals linked to tissue damage, the development of diabetes, and diabetic complications.

3. Diet soda actually contributes to weight gain. A study of 1,550 people concluded that people who drink diet soda have a 41 percent increased risk of being overweight or obese-for every can or bottle they drink per day! Turns out, any sweet taste signals body cells to store fat and carbohydrates, which makes you hungrier. Sweet tastes also promote insulin release, which blocks your body's ability to burn fat. The hard truth: No published study has ever proven that drinking diet soda will help you lose weight.

TIMING YOUR EXERCISE

If you're looking to lose inches, start watching the clock.

Three 10-minute bouts of aerobic exercise may equal one 30-minute session in terms of cardio benefits, but not when it comes to how much fat you'll burn.

Exercisers who walked for half an hour, five days a week, significantly decreased their body fat after eight weeks, while those who did a trio of 10-minute stints throughout the day saw no marked body-fat dip. It makes sense to squeeze in whatever exercise you can, but schedule two or three longer sessions during the week to see fat-melting results.

IT'S A CINCH

Air bags and antilock brakes get all the glory, but seat belts have saved more lives than any other car-safety feature, according to the National Highway Traffic Safety Administration in Washington, D.C.

No matter where you sit or how short the ride, strap in every time: Fatal crashes occur three times more often on local roads than on interstates.

SEVEN HEALTHY INDULGENT FOODS

While eating these foods may seem to be indulging, they are actually quite nutritious.

- **Avocado.** Use instead of mayo. High in vitamin E.
- **Caviar.** Protein-dense, mostly unsaturated fat.
- **Chocolate.** Disease-fighting antioxidants.
- **Lobster.** Calcium, zinc, B vitamins.
- **Milkshake.** Use low-fat milk.
- **Shrimp.** Good protein source.
- **Wine.** Red has most antioxidants.



A MATTER OF TIMING

On average, patients get very little time to tell the doctor what's on their minds.

19 minutes: spent waiting to see the doctor.

16 minutes: spent face-to-face with a primary-care doctor.

90 seconds: it takes patients to describe symptoms if uninterrupted.

23 seconds: patients get to speak before doctor interrupts.

POLLUTION PLAYS SIGNIFICANT ROLE IN DIABETES

Air pollution caused one in seven new cases of diabetes in 2016, according to a new study, which found even low levels raised the chances of developing the chronic disease.

Diabetes has primarily been associated with lifestyle factors like diet and a sedentary lifestyle, but new research shows pollution also plays a major role.

The study estimated that pollution contributed to 3.2 million new diabetes cases globally in 2016 -- or around 14 percent of all new diabetes cases globally that year. Pollution is thought to reduce the body's insulin production, preventing the body from converting blood glucose into energy that the body needs to maintain health.

5 HEART HEALTH APPS

610,000 people die of heart disease in the United States every year.

If you're worried about heart disease, you might be looking for a way to monitor your health while you're on the go. Luckily, there are mobile health apps that make it easy for you to do everything from check your heart rate to record information about your blood pressure. And, you can save all of this information to share with your doctor later.

Just type "heart health" into Apple's App Store, and you'll find a wide range of mobile apps out there.

But, these apps can't help you unless you're motivated enough to input data on a regular basis to keep track of your health on a long-term basis.

Along with being motivated and diligent, it's important to find an app that integrates a number of things related to health: including fitness, diet, and blood pressure.

What to Look for in a Heart Health App

The interest in heart health apps is understandable. Heart disease is the No. 1 killer in the United States, leading to one in every four deaths, annually, according to the [CDC](#).

Here are five free apps that you could download today for both Apple and Android devices:

1. My Cardiac Coach

My Cardiac Coach, from the American Heart Association, is one of the apps that best integrates variables like fitness and blood pressure. Beyond featuring useful information from the AHA, the app is billed as a “personalized recovery toolkit” that “you carry in your smartphone.” The app offers progress-trackers that people can use to monitor their weight and blood pressure, and also has the ability to log physical activity and keep track of the medication they are taking. It also offers the “Support Network,” where people can connect with others dealing with heart disease.

2. Instant Heart Rate

This app can measure your pulse through your phone’s camera. How does it work? The app can record and measure your pulse by capturing color changes in your finger when you hold it up to the camera. The process is fast — you can receive your heart rate reading in less than 10 seconds. It also compiles “progress reports” that you can share with your doctor.

3. PulsePoint

This app can connect people who might be experiencing a cardiac event with CPR services close to them. The app shows what services are nearby on a map of your vicinity. If you find yourself in an emergency, you can alert CPR-trained bystanders who are also using the app that you need help.

4. Smart Blood Pressure (SmartBP)

This app can sync your data from blood pressure measurement devices through either the Apple HealthKit or Microsoft HealthVault. You can record your blood pressure and weight, for instance, to figure out important stats, like your BMI or pulse pressure. As with the other apps, you can easily share this data with your doctor to properly assess your heart health.

5. iCardio

This could be good for the fitness enthusiast. It can record your distance and speed if you go for a run, for instance, and uses simple color coding to show you what your heart rate is as you exert more energy. If you have a fitness device like a Fitbit, you can easily sync its data with this app.

LOSING WEIGHT BY RUNNING

1. On average, you will burn about 100 calories per mile run. To be more specific, figure about 70% of your body weight: e.g., if you weigh 150 pounds, you will burn approximately

$$150 \times 0.70 = 105 \text{ calories.}$$

Running faster will increase that number by about 10 calories per minute per mile. Example, if a 10-minute mile will burn 100 calories, a 9 minute mile will burn 110, an 8-minute mile will burn 120, a 7-minute mile will burn 130, etc.

2. After a run, your body continues to burn calories. The harder the run, the more energy you’ll burn post-exercise. Some studies have indicated that a high-energy exercise session boosted by the “afterburn” may more than double the calories burned compared with a low-effort session.

3. High-intensity effort also puts a damper on appetite. The theory is that high-intensity workouts raise body heat which affects the temperature-sensitive appetite controls in the central nervous system.

DUMB AND DUMBER

Secondhand smoke is even worse for kids than researchers first thought. Known for leading to asthma and behavioral trouble, it also appears to depress children’s scores on math, reading, and problem solving tests. Put another way, smoke seems to decrease young people’s IQ from 2 to 5 points, according to a Cincinnati Children’s Hospital Medical Center Study. Experts suspect that nicotine damages brain cells. The real shame: as many as 25% of children still inhale smoke at home.

What's the difference?

We are often asked, "If we have Long Term Disability (LTD) coverage for our pilots, why do we/they need Loss of License (LOL) coverage?" The answer lies in an explanation of the difference between LTD and LOL.

Traditional LTD carriers don't recognize what we call the licensing risk. That's the risk of an FAA licensing grounding that can extend well beyond the resolution of the health issue/problem that initially triggers a disability benefit. Further, they generally don't recognize at all, those health related licensing safety issues that cause a pilot's loss of income, but never trigger an LTD benefit. Below is an example:

A pilot has to have a stent. After 45 days, his cardiologist releases him to go back to work. The LTD carrier reasons that his health problem has been solved, and his doctor released him, so they deny or cease further payment of benefits.

Here's the problem: The FAA won't even consider letting him fly until at least six months has elapsed between the event and his request to go back on flight status. And, it's incumbent on the *pilot* to prove to the FAA that he/she is fit to fly after the six month mark. So, he has to know the FAA requirements, have extensive testing, and have his case presented to the FAA Cardiac Review Board for a "Special Issuance". (And, by the way, the board only meets every other month.) So, in the real world of aviation, it can be seven to twelve months before this pilot can fly again even though the LTD carrier stopped benefits after 45 days. A LOL contract would continue to pay him long after the LTD plan stopped.

The bottom line is that traditional disability insurance will not typically consider a pilot disabled once your treating doctor or the insurance company's doctor say "he's good to go." Hence the reason Loss of License Insurance was created and our experience shows it pays nearly 1 in 20 covered pilots every year.

With 65 years' experience, Harvey Watt & Co provides the *only* US pilot disability plans for individuals and small groups we know with a FAA Medical Licensing definition of disability for commercial pilots.

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