



# AVIATION MEDICAL

AviationHealth  
ASSOCIATION

## BULLETIN

Published by aviation health association because  
health and fitness matter to aviators

### HOW YOUR WAIST AFFECTS YOUR HEALTH

2

It's an easy measuring  
stick for good health.

### BASIC FACTS ABOUT BUILDING MUSCLE

4

When it comes  
to building muscle.....

### BINGEING AT NIGHT?

6

Find yourself eating too  
much after supper.

## LIFE EXPECTANCY

After declining over the previous four years, life expectancy of Americans rose by a small amount in 2018, according to the most recent data released by the National Center for Health Statistics. Between 2014 and 2017, life expectancy fell 3.6 months in total (2.4 months for females, 4.8 months for males), but between 2017 and 2018 it increased 1.2 months for both sexes attributed primarily to fewer deaths from cancer and drug overdoses. That translates into a life expectancy for a female born in 2018 of 81.2 years and for a male, 76.2 years.

Still, life expectancy is lower than at its peak time—of 81.3 years for females and 76.5 years for males born in 2014—and represents a return to levels seen in 2013 for women and 2010 for men. And, the U.S. still ranks lower than most other developed nations, including Japan, Canada, and nearly all Western European countries.

## BEST DIET IN 2020

The Mediterranean diet is the “Best Diet Overall” of 2020, according to *U.S. News & World Report*, which for the past 10 years has enlisted a panel of health experts in such fields as nutrition, weight management, diabetes, food psychology, and public health to evaluate popular diet plans (35 this year), judging their nutritional completeness, effectiveness, ease of use, potential risks, and other attributes.

There is no single “Mediterranean diet” across such culinarily diverse countries as Greece, Spain, and Italy. But, the traditional diets in this region are typically rich in whole grains, fruits, vegetables, legumes, herbs, and olive oil (see page 2), with moderate amounts of fish and red wine and some dairy, eggs, and poultry, but infrequent red meat and sweets (thus making it low in saturated fat and added sugars). The diet—which has been linked to a range of health benefits including reduced risk of heart disease, cancer, and diabetes—was deemed to be nutritionally sound, diverse in foods and flavors, and affordable. It was also ranked the #1 Best Plant-Based Diet, Best Diabetes Diet, Best Diet for Healthy Eating (tied with DASH), and Easiest Diet to Follow. For the full list, go to [health.usnews.com/best-diet](https://health.usnews.com/best-diet).

## DYING AT HOME

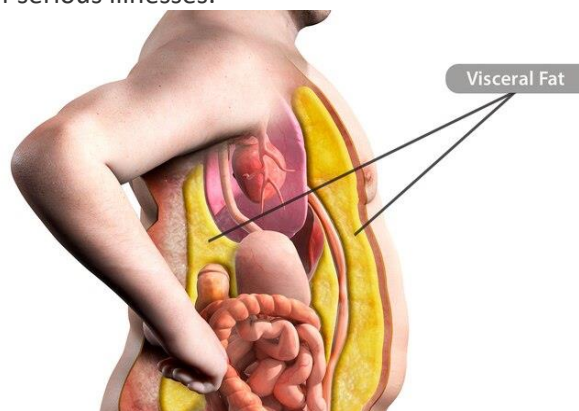
**For the first time since the early 20th century, more Americans are dying at home than in hospitals,** a research letter in the *New England Journal of Medicine* reported.

Of more than 35 million natural deaths in the U.S. from 2003 through 2017, the percentage of hospital deaths fell from 40 percent in 2003 to 30 percent in 2017, while that of home deaths increased from 24 percent to 31 percent. People with cancer had the greatest odds of dying at home; stroke patients had the lowest. As the authors noted, most people prefer to die at home but family members can be unprepared for caring for a terminally ill person often with little outside help.

## HOW YOUR WAIST AFFECTS YOUR HEALTH

### What Your Waist Tells You

It's an easy measuring stick for good health. That's partly because it helps estimate a type of fat called "visceral," which forms deep inside your belly area and around your organs. In general, the larger your waist, the more likely you are to have it. Too much of any body fat is bad, but visceral fat may be worse than others. It makes you more likely to get a number of serious illnesses.



### What's Wrong with Visceral Fat?

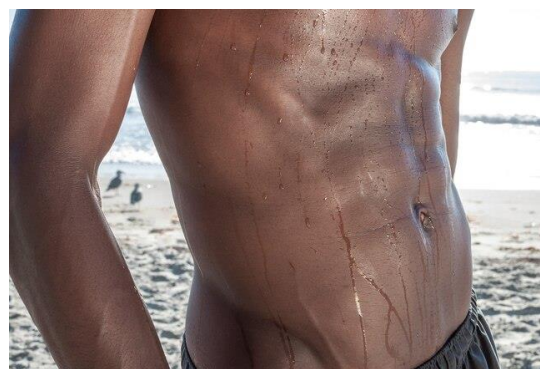
As it breaks down, visceral fat sometimes puts too many fatty acids into your blood, which raises your chances of heart disease, Alzheimer's, and high cholesterol. It could also make your body more resistant to insulin, which can lead to type 2 diabetes or pre-diabetes. Plus, proteins from visceral fat may inflame body tissues and narrow blood vessels, which can raise your blood pressure.

### How Big Is Too Big?

Everyone is different, but there are general guidelines about waistlines. In women, 35 inches or more is typically a sign of visceral fat. In men, it's 40. These numbers may be slightly higher if your body is naturally very large. They're lower for people with Asian backgrounds: 31.5 for women and 35.5 for men. Talk to your doctor to be sure about your waist size.

### Belly Fat vs. Visceral Fat

Belly fat that you see and feel pushing against your jeans is often a sign of visceral fat, but not always. It's possible to have fat just under the skin and very little visceral fat. Sumo wrestlers who train daily, for example, often have very large waists and high BMIs and yet relatively low visceral fat. This can change very quickly, of course, when these athletes stop working out.

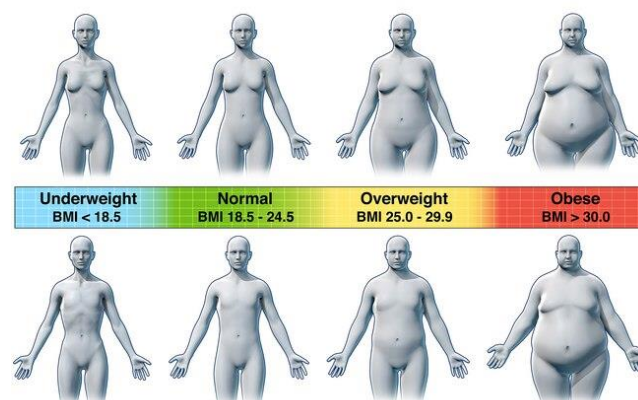


### Is Lean Always OK?

Just as a large waist doesn't always mean too much visceral fat, a slim waist doesn't always mean you're in the clear. Your visceral fat may be too high even if your waist size is in the safe range. Doctors have a term for this: TOFI, which stands for "Thin Outside Fat Inside."

### Metabolic Syndrome

The size of your waist is one of five things that can be a sign of a problem called metabolic syndrome. The other four are high levels of triglycerides, cholesterol, blood pressure, and blood sugar. Any one of these by itself could be a sign of serious illness. When you have three or more of them together, it adds up to metabolic syndrome -- a situation that raises your chances of heart disease, diabetes, and stroke.





## BMI

Body mass index (BMI) is another measure of visceral fat that collects around your middle. Online tools will calculate the number for you if you plug in your height and weight. The normal range is from 18.5 on the thinner side to 24.5 on the heavier side. Researchers say Asian Americans should see their doctor if they have a BMI of 23 or higher, since they may have too much visceral fat at that lower BMI range.



## Measure Your Waist the Right Way

Accuracy is important. Stand up with your measuring tape. Make sure the tape stays straight as you measure around your waist and above your hip bones -- about in line with your belly button. And sorry, you can't suck in your gut to get a lower number! You should be relaxed and take the measurement just after you breathe out, not after you breathe in.



## Are You an Apple or a Pear?

An apple-shaped body, more common in men, means you tend to store fat around your stomach, while your lower body stays thin. That often means more visceral fat and so more health problems. A "pear shape" means your body stores fat in the hip and thigh area. It's more common among women and might be part of why women typically live longer than men.

## Exercise

Even if you don't lose weight, exercise can burn visceral fat and build muscle. It doesn't take much. Take the dog for a brisk walk or go for a bike ride. Thirty minutes of physical activity on most days of the week will do the trick. Throw in some muscle-building exercise with weights, push-ups, or yoga to increase your fat-burning at rest. Check with your doctor first if you haven't been active much, are older, or have health problems.

## What You Eat

More calcium seems to help women lose visceral fat. Look for it in leafy greens, dairy, and fatty fish like sardines. Trans fats and fructose-sweetened foods, on the other hand, seem to encourage belly fat. Read the nutrition label, and try to avoid the bad stuff. And, eat a variety of vegetables, fruits, whole grains like oatmeal and quinoa, and lean protein like skinless chicken, fish, eggs, beans, and low-fat dairy.

## SHOULD YOU PUT YOUR TONGUE ON A DIET?

Obesity is a major risk factor for obstructive sleep apnea (OSA), which is characterized by frequent stopping of breathing during sleep (from a few seconds to 20 seconds or more) and, besides loud snoring, is associated with hypertension, heart disease, diabetes, depression, osteoporosis, and increased mortality, among other adverse consequences. And, it's long been recognized that weight loss is effective in reducing symptoms. A new study has elucidated a possible answer. ***It might have to do with tongue fat.***

New research on obese people with this sleep disorder revealed that those who had the greatest reductions in tongue fat (but not abdominal fat) had the most improvement in OSA. Losing tongue fat "should improve muscle function [of the tongue] and could prevent collapsibility during sleep," the researchers wrote.

## IT'S NOT JUST MEDICINE

If you are starting drug therapy to control high blood pressure or high cholesterol, don't let that be an excuse to forgo heart-healthy behaviors. Exercising, maintaining a healthy weight, and not smoking are among the key lifestyle modifications recommended for prevention of cardiovascular disease regardless of whether medication is prescribed.

But, a new study found that these healthy habits often fall by the wayside when people go on statins or antihypertensive drugs. Of more than 41,000 middle-aged people who were initially free of cardiovascular disease, those who started taking these medications between 2000 and 2013 were more likely to reduce their physical activity and gain weight than those who were not prescribed the drugs during this time period.

In fact, the initiation of drug therapy was associated with a near-doubling in the risk of obesity, compared to not initiating therapy. A step in the right direction: among the smokers in the study population, those who started drug therapy were more likely to reduce or quit smoking.

### **BASIC FACTS ABOUT BUILDING MUSCLE**

When it comes to building muscle, there are numerous theories, methods, and preferences. Whether the goal is improved health, aesthetics, performance, or a combination of all three, there is no shortage of advice to help you get there. So much so that it can sometimes become overly complicated, and you forget about the basic facts. But it's simpler than it seems.

Getting stronger isn't just about what takes place in the gym, though that's a key component. How you tackle the rest of your day and night, including sleep, goes a long way to determining how or if you build muscle.

Here are the most basic facts about muscle building from how to eat, train, live, and more:

#### **It takes protein**

Protein is vital to have with every meal because it builds and maintains muscles. Aim for one gram of protein per pound of body weight a day — less active people need less — and that should be spread out over five or six small meals.

#### **It takes carbs**

Protein will only be used to build muscle, if you consume enough carbohydrate calories to provide your body with energy. Otherwise, your body will tap into the protein for that fuel. Carbs provide energy for muscle function and act as the fuel for the brain. Go with minimally processed carbs such as veggies, steel-cut oats, and quinoa.

#### **It requires frequent eating**

Eating five or six small meals a day keeps your body's metabolism firing. If you don't eat often, the most readily available substance for the body to consume is muscle—not fat. The body is resistant to fat loss and will turn to attacking lean muscle first. Keep plenty of fuel in the tank so muscle is not consumed.

#### **Sleep is key**

It's difficult to build muscle without adequate sleep—seven hours a night, preferably eight. Sleep is when most of your hormones, such as growth hormone and testosterone, are released, allowing your body to recover and grow. Without adequate sleep, you're sabotaging your efforts to build muscle.

### **The foundation is important**

Beach muscles and Olympic lifts draw more attention. But, the many little stabilizer muscles around your shoulders, hips, and midsection — collectively the core — provide a strong foundation. Challenging the stability and mobility of these key muscles with medicine balls, physioballs, mini-bands, and rotational movements (lifting, chopping) pays huge dividends.

### **Routine is the enemy**

Training at a consistent time of day is a great thing. But, having a routine workout is not, because the body quickly adapts. Constantly challenge yourself by adding different movements. When you do turn to a familiar exercise, aim for a personal best.

### **It's about the rear view**

Our sedentary, technology-based culture has produced a population of hunched over people with tight hips and bad backs from too much sitting. Building muscle effectively is difficult without a properly functioning set of glutes. By learning to move through the hips and activate and fire your glutes, you'll be well on your way to moving properly and building muscle efficiently and with less risk of injury.

### **Women won't get too bulky**

Contrary to popular belief, women won't get overly muscular unless they take steroids or other harmful supplements. Women lack the testosterone needed to put on that type of muscle.

### **Timing is important**

At the end of your workout, your body is screaming for nutrients. The sooner you refuel the tank, the quicker your body will recover and your muscles will grow. One simple strategy is to place in your gym bag a post-workout recovery mix and a shaker bottle that you can mix immediately following the workout.

### **So is getting wet**

Water sports such as swimming, surfing, and stand-up paddle boarding are great ways to build muscle. But, however you train, drinking sufficient water is essential to building muscle. Drinking enough water before, during, and after exercise can increase performance up to 25 percent. Drink ½ to one ounce of water per pound of body weight per day to maintain hydration.

### **It's not just about lifting**

You can build muscle from carrying logs, flipping tires, hauling jugs of water, paddling, navigating monkey bars and countless other ways. The best muscle-building exercises are those that mimic everyday movements.

**It takes intensity**

Smart phones produce dumb workouts. Don't be the person in the gym playing with the phone for two minutes between sets. You'll lose the focus and intensity required to build muscle. Better yet, don't rest between sets. Superset with a pushing exercise, like a set of pushups followed immediately with a pulling exercise like a dumbbell row. You'll produce better performance since the non-working muscles recover faster while their opposing muscles work.

**It takes (active) rest**

The body recovers and muscles grow on off days. Rest is a good strategy but active rest promotes recovery. Rolling on a foam roller provides deep compression to roll out muscle spasms that develop over time. This allows the muscles to relax and loosen, gets the blood flowing, and helps the body recover more quickly.

**It's never too late**

We tend to lose muscle mass as we age, starting in our thirties and especially as we hit our fifties. That doesn't mean we can't slow down the process and retain what we have. Strength training is an effective way to retain mobility and independence into the latter years.

**REASSURING NEWS ABOUT EGGS**

Eating an egg a day was not associated with a higher risk of cardiovascular disease (CVD), early death, or elevated blood cholesterol levels, even in people with a history of CVD or diabetes, according to an analysis of data from about 177,000 people in 50 countries. Eggs were once seen as coronary landmines because of their high content of dietary cholesterol, but research in recent years has largely exonerated them since it turns out that saturated fat in food, rather than dietary cholesterol, has by far the greater effect on blood cholesterol and the related risk of heart attacks and strokes.

**COVID-19: HOW MUCH PROTECTION DO FACE MASKS OFFER?**

Can face masks help prevent the spread of coronavirus disease 2019 (COVID-19)? Yes, face masks combined with other preventive measures, such as frequent hand-washing and social distancing, help slow the spread of the disease.

So why weren't face masks recommended at the start of the pandemic? At that time, experts didn't yet know the extent to which people with COVID-19 could spread the virus before symptoms appeared. Nor was it known that some people have COVID-19 but don't have any symptoms. Both groups can unknowingly spread the virus to others.

These discoveries led the CDC to do an about-face on face masks. The CDC updated its guidance to recommend widespread use of simple cloth face coverings to help prevent transmission of COVID-19 by people who have the virus but don't know it.

Some public health groups argue that masks should be reserved for health care providers and point to the critical shortage of surgical masks and N95 masks. The CDC acknowledged this concern when it recommended cloth masks for the public and not the surgical and N95 masks needed by health care providers.

**How do the different types of masks work?****Surgical masks**

Also called a medical mask, a surgical mask is a loose-fitting disposable mask that protects the wearer's nose and mouth from contact with droplets, splashes and sprays that may contain germs. A surgical mask also filters out large particles in the air. Surgical masks may protect others by reducing exposure to the saliva and respiratory secretions of the mask wearer.

At this time, the U.S. Food and Drug Administration has not approved any type of surgical mask specifically for protection against the COVID-19 virus, but these masks may provide some protection when N95 masks are not available.

**N95 masks**

Actually, a type of respirator, an N95 mask offers more protection than a surgical mask does because it can filter out both large and small particles. The name indicates that the mask is designed to block 95% of very small particles. Like surgical masks, N95 masks are intended to be disposable. However, researchers are testing ways to disinfect N95 masks so they can be reused.

**Cloth masks**

While surgical and N95 masks are in short supply, cloth masks are more accessible and reusable. Although cloth masks and N95 masks have different purposes, both are intended to slow the spread of COVID-19. A cloth mask is worn to help protect others in case the wearer has the virus. An N95 mask helps protect the wearer from getting the virus from others.

Common sense also suggests that some protection is better than none. But wearing a cloth face mask will lose any value unless it's combined with frequent hand-washing and social distancing.



## BATTING .500

About half of adults said they are getting the recommended amount of exercise, a rate that has not changed much since 2009. Although physical activity is important for weight maintenance and has other health benefits, food and diet are playing a bigger part in driving the obesity epidemic.

## EATING WHILE DRIVING

Eating behind the wheel is a growing cause of automobile accidents. Interestingly, it isn't the eating per se, so much as trying to clean up the spill. Mustard seeps out of a hamburger and you try to keep it off your clothes or the seat of the car. Here are the 10 foods that insurance companies have found to be the most likely to cause problems:

- |                       |                        |
|-----------------------|------------------------|
| 1. Coffee             | 6. Barbeque            |
| 2. Hot soup           | 7. Fried chicken       |
| 3. Tacos              | 8. Jelly-filled donuts |
| 4. Chili-covered food | 9. Soft drinks         |
| 5. Juicy hamburgers   | 10. Chocolate          |

## TOP FOODS TO AVOID WITH HIGH BLOOD PRESSURE

With high blood pressure you want to have a diet low in sodium and fat, so here are the top foods you should really avoid.

**Pickles** - Pickles are low calorie, which is great, but they are loaded with sodium. One medium pickle (about 5 inches long) can have around 570 mg of sodium. That's over 1/3 of your sodium limit (2300 mg) for the day!

**Canned Chicken Noodle Soup** - Chicken noodle soup is often considered a comfort food, but it is not so comforting to know that there can be up to 880 mg of sodium in a one cup serving.

**Sauerkraut** - It's low calorie and a great way to add vegetables to a bratwurst, right? Nope. A half cup may only have about 13 calories, but it also has over 460 mg of sodium.

**Fast Food French Fries** - While many fast food chains are now frying their fries in trans-fat free oil, not all of them are. Regardless, French fries still provide a large dose of fat and sodium. A medium serving of fries has about 19 grams of fat and 270 mg of sodium.

**Bacon** - Bacon is mostly fat. Three slices have 4.5 grams of fat and about 270 mg of sodium. Opt for lower sodium varieties and try turkey bacon instead of pork. Even with these switches bacon should remain a "special treat" not an everyday indulgence.

**Whole Milk** - Dairy is a great source of calcium, but high fat dairy sources, like whole milk, provide more fat than you need. A one-cup serving of whole milk provides 8 grams of fat, 5 of which are saturated. Saturated fats are worse for you than other types and have been linked to heart disease. Try using 2% milk, or even better - 1% or skim.

**Alcohol** - Alcohol consumption actively causes the blood pressure to elevate. It also damages the walls of the blood vessels, while simultaneously increasing risks of further complications.

**Red Meat** - A healthy eating plan should include only a small amount (if any) of saturated or trans-fats. Fatty foods are bad for both the heart and blood vessels. Avoid red meat and fast food along with other fats that include hydrogenated oils

## QUITTING SMOKING AND WEIGHT GAIN

Most women believe that if they stop smoking, they will gain weight. A recent study by the University of Minnesota indicates that is not true. Fully two-thirds of women who quit did not gain any weight; the one-third who did only gained a few pounds and lost it quickly.

## SUSTAINABLE ACTIVITIES

Few of us play team sports such as baseball, soccer, football, basketball, or hockey after graduation. But, students who participate in activities such as tennis, golf, jogging, cycling, and swimming tend to continue such activities throughout life. A recent study suggests that school and college PE programs should emphasize sustainable activities.

## COULD STATINS HELP FIGHT CANCER?

Some cancer patients who take cholesterol-lowering statins may live longer than those not on these heart medications.

While it did not prove a cause-and-effect connection, the study of nearly 1 million cancer patients found that those taking statin drugs such as Lipitor and Crestor appeared to have:

- ✓ a 22 percent lower risk of dying from lung cancer
- ✓ a 43 percent lower risk of dying from breast cancer
- ✓ a 47 percent lower risk of dying from prostate cancer
- ✓ and a 30 percent lower risk of dying from colon cancer

Researchers need to further investigate the reasons for patients with high cholesterol having improved mortality in four of the most common cancers.

At this time, people without high cholesterol should not be taking statins in the hope of warding off cancer or living longer with cancer, he said.

People with high cholesterol should be taking statins to lower their cholesterol and reduce their cardiovascular risk. Doctors cannot, however, recommend statins for cancer prevention without a positive clinical trial.

### **LACK OF FITNESS IS SECOND ONLY TO SMOKING AS PREDICTOR OF EARLY DEATH**

Poor physical fitness ranks right behind smoking as leading risk factors for an early death, new long-term research suggests.

Analyzing men starting at midlife, scientists also found that each measurable increase in fitness levels translated into a 21 percent lower risk of death - over 45 years of follow-up. People with low fitness levels are associated with an increased mortality risk throughout life.

Smoking was the risk factor that was [most strongly] associated with mortality. Researchers were surprised that the effect of aerobic capacity was even more pronounced than that of high cholesterol and high blood pressure.

### **EYE DOCS: WHO'S WHO?**

There are three kinds of eye-care professionals:

**Ophthalmologist.** An M.D. who specializes in eye care and has several years of residency training beyond medical school. Ophthalmologists diagnose and correct refractive errors, treat eye disorders, screen for glaucoma, perform surgery, and prescribe medicine.

**Optometrist.** A doctor of optometry has four years of graduate training at an optometric school. Optometrists diagnose and correct refractive errors, screen for glaucoma, and identify other eye disorders. In some states they are licensed to treat certain diseases of the eye, including glaucoma.

**Optician.** A practitioner licensed to fit and sell corrective lenses as prescribed by an optometrist or ophthalmologist.

### **DID YOU KNOW...**

...If you're a pack-a-day cigarette smoker, you'll ingest 400 milligrams of nicotine in a week. If ingested all at once, it would be lethal.

...That it is impossible to catch a cold or flu outdoors in winter at the North Pole. The temperatures are so cold that the disease-causing viruses can't live there.

### **BINGEING AT NIGHT?**

Find yourself eating too much after supper. Here are some tips that might help:

- Don't skip meals. Eat breakfast, lunch and dinner.
- If you eat after supper, do it in the kitchen, while sitting down at the table.
- Eat without engaging in any other activity (TV- watching, reading, sitting at the computer).
- Try unsweetened raspberry tea to keep your taste buds occupied.

### **OLDER MUSCLES**

The leg muscles of men aged 60 to 75 years became 50% to 85% stronger after they completed a twice-a-week, 16-week resistance training program. If you're out of shape, it's never too late to start exercising.

### **WHAT'S SATURATED? BAD FAT**

Here's a good "rule of thumb" list to let you know where saturated fat in your diet comes from:

|                   |             |
|-------------------|-------------|
| Fatty red meats   | Lard        |
| Chicken skin      | Butter      |
| Whole milk        | Beef fat    |
| 2% milk           | Chicken fat |
| Cream             | Cheese      |
| Ice cream         |             |
| Animal Shortening |             |
| Tropical oils*    |             |

\*Coconut oil, palm oil and/or palm kernel oil – found in many baked goods and processed foods.

# 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.

**Harvey W. Watt & Co. • P.O. Box 20787 • Atlanta, GA 30320**  
**[www.harveywatt.com](http://www.harveywatt.com) • (800) 241-6103**