



Who here wants to fly? What are some of the requirements to be a pilot?

- Responses: Flight training, knowledge tests, practical tests, medical certificate

Medical certificates required for all certified pilots. Why is that?

- Humans are fragile and the flight environment is risky. Flying under normal conditions can stress the body with dehydration, immobility, and jet lag. Flying under extreme conditions can put tremendous strain on the body. Aerial maneuvers in acrobatic or fighter planes can expose pilots to upwards of 12 Gs of force, limiting vision and possibly leading to loss of consciousness. Under the safest, most routine conditions depressurization of an aircraft in an emergency can lead to oxygen deprivation and loss of consciousness.
- Pilots need to be in top physical condition and stay healthy to fly

ELMENDORF AFB, Alaska -- Four F-15C pilots from the 3rd Wing step to their respective jets July 5 for the fini flight of Maj. Andrea "Gunna" Misener, 19th Figher Squadron, pictured far left. To her right are Capt. Jammie "Trix" Jamieson of the 12th Fighter Squadron, Maj. Carey "Mamba" Jones, 19th Fighter Squadron, and Capt. Samantha "Combo" Weeks, 12th Fighter Squadron. When Maj. Misener worked out who would be joining her in her four-ship fini flight, it became apparent there was a probable first in the Eagle community. Despite the growing number of females who have joined the ranks of fighter pilots since the career opened up to women in 1993, an all-female four-ship had not been accomplished in the F-15C before.



Who recognizes that man? C/Tsgts and above will know it's Eddie Rickenbacker, WWI flying ace and namesake of the fourth achievement in the CAP cadet program.

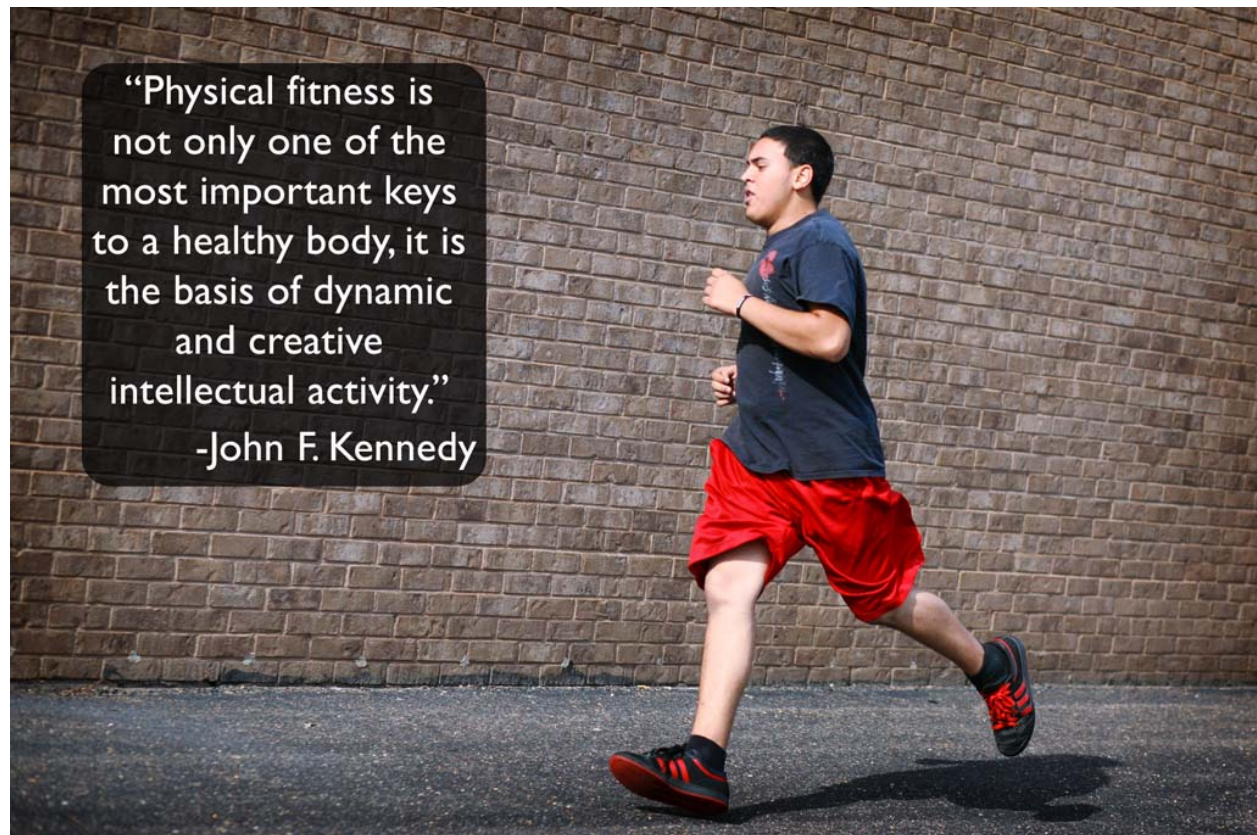
In October 1942 Eddie Rickenbacker was a passenger in a B-17D Flying Fortress traveling the South Pacific. Due to a faulty navigational tool the bomber strayed hundreds of miles off course while on its way to a refueling stop and was forced to ditch in a remote and little-traveled part of the Central Pacific Ocean, close to Japanese-held islands.

For 24 days, Rickenbacker and the rest of the crewmen drifted in life rafts at sea. Rickenbacker and the other crewmen in the B-17 were hurt to varying degrees. The crewmen's food supply ran out after three days. They lived on sporadic rain water that fell and the seagulls and fish they managed to catch.

Rickenbacker assumed leadership, encouraging and browbeating the others to keep their spirits up. One crewman died and was buried at sea. The U.S. patrol planes planned to abandon the search for the lost B-17 crewmen after just over two weeks, but were persuaded to extend it another week. The newspapers and radio broadcasts reported that Rickenbacker was dead.

A US Navy patrol spotted and rescued the survivors on November 13, off the coast of Tuvalu. All were suffering from hyperthermia, sunburn, dehydration, and near-starvation. Rickenbacker completed his assignment and continued to support the war effort until its conclusion.

Eddie Rickenbacker and his fellow survivors were very lucky, but they were also prepared for emergencies. Being in shape doesn't mean that you will survive a disaster like the one Rickenbacker faced, but it does increase your chances.



“Physical fitness is not only one of the most important keys to a healthy body, it is the basis of dynamic and creative intellectual activity.”  
-John F. Kennedy

What is fitness?

- Fitness is the state of being physically healthy and strong.

Fitness markers

- Well-being
- Health
- Energy to participate in a variety of physical activities
- Resist premature health problems and disease
- Ability to meet emergency situations

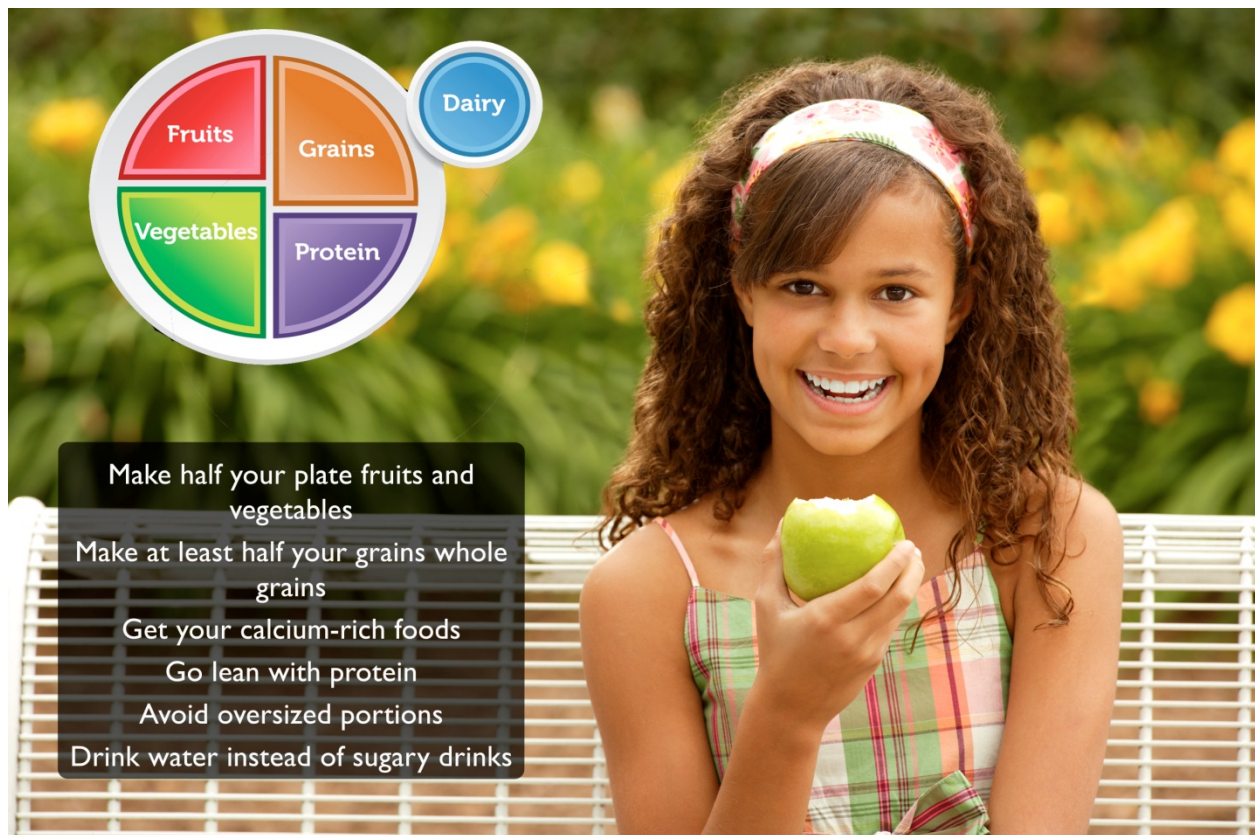
Fitness is generally achieved through correct nutrition, exercise, hygiene and rest.





The President's Council on Fitness, Sports & Nutrition has two mandates for the American people: Be Active & Eat Healthy. Everyone can benefit from eating healthy and being active.

What are some ways you already know to eat healthy or be active?



The Department of Agriculture (USDA) and Department of Health and Human Services (HHS) jointly put out dietary guidelines for Americans. The guidelines encourage Americans to focus on eating a healthful diet – one that focuses on foods and beverages that help achieve and maintain a healthy weight, promote health, and prevent disease.

Everyone's individual dietary needs are unique and there is no one-size-fits-all dietary plan. However, the following guidelines are general rules that apply to most people:

- People who eat more vegetables and fruits as part of an overall healthy diet are likely to have a reduced risk of some chronic diseases. Eating plant foods is important because they provide vitamins and minerals and most are low in calories.
- To eat more whole grains, substitute a whole-grain product for a refined product – such as eating whole- wheat bread instead of white bread or brown rice instead of white rice.
- Milk, yogurt, cheese and fortified soymilk are good sources of calcium, vitamin D, potassium, protein and other nutrients needed for good health throughout life.
- Protein foods include both animal (meat, poultry, seafood, and eggs) and plant (beans, peas, soy products, nuts, and seeds) sources. We all need protein—but most Americans eat enough, and some eat more than they need. How much is enough? Most people, ages 9 and older, should eat 5 to 7 ounces of protein foods each day.
- Use a smaller plate, bowl, and glass. Portion out foods before you eat. When eating out, choose a smaller size option, share a dish, or take home part of your meal.
- Cut calories by drinking water or unsweetened beverages. Soda, energy drinks, and sports drinks are a major source of added sugar, and calories, in American diets.





Who here gets one hour or more of physical activity daily?

- In 2011, only 29% of high school students surveyed had participated in at least 60 minutes per day of physical activity on all 7 days before the survey.

The U.S. Department of Health and Human Services recommends that young people aged 6-17 years participate in at least 60 minutes of physical activity daily.

- **Aerobic:**
  - Most of the 60 or more minutes a day should be either moderate- or vigorous-intensity aerobic physical activity, and should include vigorous-intensity physical activity at least 3 days a week.
  - Aerobic activities are those in which young people rhythmically move their large muscles. Running, hopping, skipping, jumping rope, swimming, dancing, and bicycling are all examples of aerobic activities.
  - Aerobic activities increase cardiorespiratory fitness.
- **Muscle-strengthening:**
  - As part of their 60 or more minutes of daily physical activity, children and adolescents should include muscle-strengthening physical activity on at least 3 days of the week.
  - Muscle-strengthening activities make muscles do more work than usual during activities of daily life. This is called "overload," and it strengthens the muscles.
  - Muscle-strengthening activities can be unstructured and part of play, such as playing on playground equipment, climbing trees, and playing tug-of-war. Or these activities can be structured, such as lifting weights or working with resistance bands.

- **Bone-strengthening:**
  - As part of their 60 or more minutes of daily physical activity, children and adolescents should include bone-strengthening physical activity on at least 3 days of the week.
  - Bone-strengthening activities produce a force on the bones that promotes bone growth and strength. This force is commonly produced by impact with the ground.
  - Running, jumping rope, basketball, tennis, and hopscotch are all examples of bone strengthening activities. As these examples illustrate, bone-strengthening activities can also be aerobic and muscle-strengthening.

It is important to encourage young people to participate in physical activities that are appropriate for their age, that are enjoyable, and that offer variety.



While fitness is important for all people, the high levels of excellence demanded in the military and in aviation are special.

The Air Force has this to say about fitness: Being physically fit allows you to properly support the Air Force mission. Maintaining an active lifestyle increases productivity, optimizes health, and decreases absenteeism while maintaining a higher level of readiness.

There are tests in place to make sure that everyone meets the standards.

- Air Force Basic Military Training Physical Fitness Test
  - Three-event physical performance test used to test your endurance, physical strengths, abilities and cardio-respiratory fitness. Required to graduate from boot camp.
    - One minute of push-ups (male min. 45, female min. 27)
    - One minute of sit-ups (male min. 50, female min. 50)
    - 1.5 mile timed run (male max. 11:57, female max. 13:56)
- Service Academies Candidate Fitness Assessment
  - Six-event test of strength, agility, speed and endurance, designed to determine if the candidate possesses the stamina and movement skills required to successfully complete the physical program at an academy.
    - Basketball throw (male avg. 69', female avg. 41')
    - Pull-ups (male avg. 12, female avg. 3)
      - Flexed arm hang alternative (female avg. 24 sec)
    - Shuttle run (male avg. 8.9 sec, female avg. 9.7 sec)
    - Two minutes of sit-ups (male avg. 81, female avg. 78)
    - Two minutes of push-ups (male avg. 61, female avg. 41)
    - 1 mile timed run (male avg. 6:36, female avg. 7:35)



- Fighter Aircrew Conditioning Test
  - Eight-event test to determine an individual's muscle fitness as it applies to operating high-G aircraft.
    - Strength Test: Individuals must complete a minimum of 50 total repetitions
      - Arm curls @ 35% of body weight (10-15 reps)
      - Bench press @ 80% of body weight (10-15 reps)
      - Lat pulls @ 70% of body weight (10-15 reps)
      - Leg press @ 160% of body weight (10-15 reps)
      - Leg curls @ 50% of body weight (10-15 reps)
    - Muscular Endurance Test: Individuals must complete a minimum of 20 reps to a max of 50 reps
      - One minute of push-ups
      - One minute of sit-ups
      - One minute of leg presses @ body weight
- Air Force Fitness Program
  - Program goal is to motivate Airmen to participate in a year-round physical conditioning program that emphasizes total fitness, to include proper aerobic conditioning, strength and flexibility training, and healthy eating.
  - Fitness assessment is conducted twice yearly and consists of body composition, aerobic and muscular fitness components. Members receive age and gender-specific composite scores and must achieve a minimum of 75 points out of 100.
    - Abdominal circumference (male max. 39", female max 35.5")
    - 1.5 mile timed run (male max. 13:36, female max. 16:22)
    - One minute of sit-ups (male min. 42, female min. 38)
    - One minute of push-ups (male min. 22, female min. 18)
- FAA Medical Certificates
  - Third, Second and First Class
  - Medical certificates do not require a performance tests like those discussed above. They are conducted with a physical examination by a doctor. The doctor examines the following:
    - Medications & Medical History,
    - Vision – distant, near, intermediate & color
    - Hearing
    - Eyes, Ears, Nose & Throat
    - Heart, Pulse & Blood Pressure
    - Neurological & Mental Disorders
    - Substance Dependence & Substance Abuse
    - Disqualifying Conditions

Since many Civil Air Patrol cadets plan on joining the military or becoming professional pilots someday, this should give them a good idea of how important it is to maintain good health throughout their lives. Fitness and good health are critical to a long and successful flying career.



What are some fitness goals that you have?

- Responses: Running a 5k, eating more fruits and vegetables, doing 6 pull-ups, cutting out soda, beating a 7 minute mile, etc...

Setting goals is an important part of fitness, but it can be dangerous to only think about fitness in the short term. It's very common for people to set a goal for themselves and work hard to achieve it, only to fall into a rut afterwards because they never set the next goal.

Sometimes when you're planning for the 10k run in October, you think about your physical training and healthy eating plan as temporary. After race day you've accomplished the goal you worked so hard on, so you give yourself a few days off to reward yourself and recover. The danger is that those few days stretch into weeks and months and your fitness begins to decline.

Goals are great, but only if we keep building on them. Fitness is a lifelong focus whether or not you join the military or fly. It's important to build good habits when you're young to maintain your fitness throughout your life. Eating healthy and being active aren't things to do for a while before you go back to your "normal" routine. They are the foundation for a productive and healthy life.