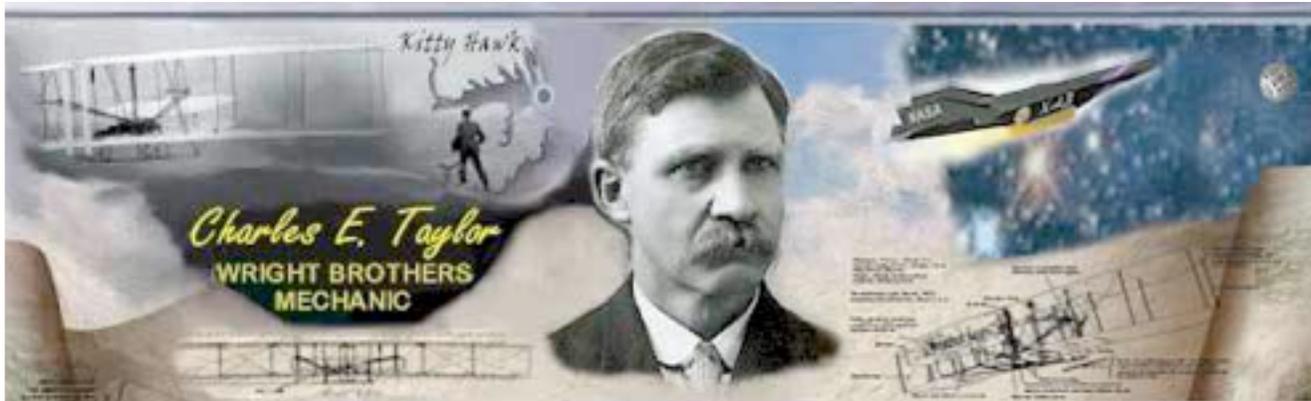


Aviation Human Factors Industry News

Volume V. Issue 05, March 02, 2009



From the sands of Kitty Hawk, the tradition lives on.

Hello all,

In this weeks edition of *Aviation Human Factors Industry News* you will read the following stories:

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- ★ Timco Error at Root of United Airlines Runway Excursion
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ANZ highlights evidence of sensor failure on crashed A320

Air New Zealand is stressing that, despite releasing initial findings, French have yet to determine the cause of last November's Airbus A320 accident off Perpignan.

In particular, the carrier **cites evidence of a failure of two stall-warning devices** on the aircraft apparent in flight-data recorder traces which accompany a preliminary 53-page report from the Bureau d'Enquetes et d'Analyses.

The BEA does not highlight the recordings in its report, which details the dynamics of the aircraft's behavior as the crew attempted to perform a low-speed flight test even though the aircraft was at low altitude and preparing to conduct an approach to Perpignan Airport.

Air New Zealand says the report "only partially outlines certain aspects" of occurrences during the flight and does not identify the cause of the crash, which killed all seven people on board the jet.

Chief executive Rob Fyfe points out that the BEA "provides a small insight" into the apparent failure of two stall-warning vanes.

On the flight-data recorder trace, the BEA simply states that the local **angle-of-attack values became "frozen"** as the aircraft cruised at 32,000 ft, some 20min after take-off.

The aircraft had undergone painting in Perpignan and, in January, **Airbus warned operators to take care to protect aerodynamic sensors during painting and maintenance work.**

Fyfe also cautions that the report gives "selected information" about cockpit activity, and adds: "We expect the full report, which may not be completed for some time, **to have detailed analysis of all factors that contributed** to this tragic accident, so that any lessons learned can be shared across the industry."

The jet was being operated by an XL Airways crew on a test flight ahead of being delivered off-lease back to Air New Zealand on 27 November.

In addition to the two XL pilots, a pilot and three engineers from Air New Zealand were on board, plus a New Zealand civil aviation authority representative.

"None of what occurred during this pre-delivery acceptance flight gives us any concern for the normal commercial operation of the A320 fleet, which is an integral part of our operations," says Fyfe.

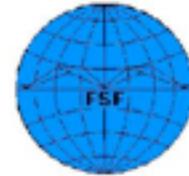


Flight Safety Foundation News Release

[http://www.magnetmail1.net/lis.cfm?
r=75213183&sid=5978425&m=673536&u=FSF_Web&s=http://
www.flightsafety.org/news/nr09-04.pdf](http://www.magnetmail1.net/lis.cfm?r=75213183&sid=5978425&m=673536&u=FSF_Web&s=http://www.flightsafety.org/news/nr09-04.pdf)



The Flight Safety Foundation sharply criticized the interference of prosecutors in aviation accident investigations in Italy and France, warning that such **interference hampers efforts to improve aviation safety** and prevent similar accidents in the future.



**Flight Safety
Foundation**

Foundation
Flight Safety

Mechanic's errors cited in fatal crash

But head of helicopter tour firm blames the aircraft's manufacturer

The head of Heli USA Airways is disputing National Transportation Safety Board findings that **fault the company's mechanics** for a March 8, 2007, tour helicopter crash on Kaua'i that killed four people and seriously injured three others.

Heli USA president and CEO Nigel Turner said yesterday **the root cause** of the tragedy can be traced to problems with the hydraulic system on Aerospatiale/Eurocopter AS350 helicopters manufactured by Eurocopter.



"My concern is there are a lot of problems with the hydraulic system on the helicopter, and what the NTSB should be doing is looking at how we can make this **safer instead of blaming** mechanics," Turner said.

An NTSB report released yesterday said **improper tightening** of a bolt connecting the servo, a flight control device, as well as the installation of a severely worn lock washer allowed the servo to disengage from its mount, leading to a complete loss of control as the A Star helicopter was moments from landing at Princeville Airport

The agency cited as **a contributing factor** the company's failure to make sure its **maintenance program** complied with federal regulations.

Pilot Joseph Sulak, 59, was killed, along with passengers John O'Donnell, 45, of East Rockaway, N.Y., Margriet Inglebrecht, 19, of Santa Maria, Calif., and Teri McCarty, 47, of Cabot, Ark.

The NTSB said the manufacturer issued a bulletin recommending a lower torque value, or level of tightening, for an upper clevis locking nut securing the servo to prevent cracking in the servo body. A Heli USA mechanic **mistakenly used the reduced torque value to tighten a lower bolt instead of a higher value prescribed by the manufacturer**, the report said.

Turner said the company mechanic **shouldn't be faulted** because the manufacturer has since issued a new directive that the same reduced torque value be used for both bolts.

"What's ironic is that since the accident, the manufacturer actually reduced it to the same torque value as the top bolt. Even though our mechanic was incorrect at the time of the installation of the servo, it's irrelevant because they have reduced the lower bolt value to 169 inch-pounds," same as for the upper bolt, Turner said.

The NTSB also reported that none of the Heli USA mechanics at the Kaua'i **station had received factory training, and that their maintenance manuals were out of date**.

"The NTSB is incorrect about lack of factory training. Our chief of maintenance in Hawai'i did receive factory training on the A Star. He, in turn, trained other mechanics at the base. This is normal practice and conforms to (Federal Aviation Administration) requirements," Turner said. "The mechanic who worked on the servo has **about 20 years** working on the A Star helicopter, was current for all FAA requirements, and had done this job on the servo many times and was well qualified to do this."

After the Princeville crash and five other incidents involving the same type of aircraft, the NTSB last year recommended additional inspections of Eurocopter AS350 hydraulic system components.

BA Ground Workers Charged In A321 Hit-And-Run

Two Workers Free On Bail, But Suspended.

Two now-suspended British Airways ground workers are free on bail after **being arrested for hitting a parked jet with a baggage truck** at London Heathrow Airport, then **leaving without reporting** the incident.

London's Daily Mail reports the men, ages 49 and 54, were operating an electric vehicle used to move baggage when they hit the side of an Airbus A321.

The resulting damage wasn't noticed until it was spotted by ground crew near the airport's Terminal 5, after the plane had already taken on 80 passengers and was waiting to taxi for departure to Aberdeen about 8:30 p.m.. The passengers were taken off the plane, which was taken out of service for repairs.

A report in The Mirror stated the **men have jeopardized careers** which total 40 years between them.

Damage to the hull of an airliner is much more than a cosmetic nuisance. In the US in 2007, a Northwest Airlines DC-9 and an Alaska Airlines MD-80 **both suffered rapid depressurization** incidents, at 19,000 and 26,000 feet respectively, when their fuselages ruptured at spots damaged by ground vehicle strikes which had gone unreported.

Both men in the Heathrow incident have court dates in about six weeks. British Airways declined to discuss further details with reporters.



Timco error at root of United Airlines runway excursion

Misrouted and reversed antiskid wiring by US-based Timco Aviation technicians to the runway excursion of a United Air Lines A320 after landing at the Chicago O'Hare International Airport the night of 9 October 2007, according to a final report issued by the US National Transportation Safety Board (NTSB).

Timco performs **heavy maintenance** on United's A320s at its Lake City, Florida facility.



The incident, which damaged engine nacelles on the aircraft but did not injure any of the 125 passengers and crew onboard, **appears closely related** to a 25 February event in which another United A320 departed the right side of the runway after landing at the Jackson Hole Airport in Wyoming.

In both cases, wheel speed tachometers for the inboard and outboard wheels on the left main landing gear brake system had been **cross-connected**, causing both aircraft to exit the right side of the runway on landing.

"Such a configuration would be likely to cause the antiskid system to use the inboard wheel speed to control the outboard braking, and vice versa," the NTSB writes in its preliminary report of the Jackson Hole incident, which remains under investigation. "In such a situation, it would be likely that when the inboard tire began to skid, the antiskid system would release the pressure on the outboard brake instead of the inboard brake."

The NTSB's final report on the Chicago incident lists as a **contributing factor** that the Timco technicians **did "not understand the entire maintenance procedures in the dual tachometer replacement"**. Maintenance on the landing gear system was prompted by a May 2007 FAA airworthiness directive (AD) on A320 shock absorbers.

Timco, in its own investigation, found that the **tachometers had been mislabeled when removed** and that **technicians thought a certain post-maintenance test** would have revealed the cross-wiring when in fact the test was not designed to do so.

The report also blames United's **"unclear" maintenance practices as a contributing factor**. Upon clarifying the maintenance documents following the incident, the carrier sent a letter to the FAA in December 2007 saying that it had performed functional checks on the tachometers of 45 Airbus A320s and had **found only two instances of cross-wiring** - the incident aircraft and one other.

NTSB blames 747 flight crew for 2005 nose gear accident

The crew of Northwest Flight 74 **failed to follow the landing gear checklist and failed to verify that the plane's landing gear was extended**, " led to a landing with the nose gear retracted," according to the National Transportation Safety Board.

The flight from Japan landed at the Guam airport with it nose gear up Aug. 19, 2005. Two passengers were slightly injured during the accident and the plane was damaged beyond repair.



According to a probable cause report by the NTSB, the plane's flight crew **failed to confirm** there were five green landing gear indicator lights, as stated in the checklist. The crew instead **made general comments** about the lights, such as "got em all," the report states.

A factual report released by the NTSB last month states the flight crew was aware of a potential landing gear problem, believed it had corrected the problem, and was given clearance to land.

The probable cause report notes that, had the airport been made aware of the specific problem, the **controller could have visually confirmed** whether the landing gear was extended.

11 FEB 2009 RNF Iceland: fatigue factor in B 737-800 runway excursion at Keflavik

The Icelandic Aircraft Accident Investigation Board (RNF) released their final investigation report regarding the serious incident involving a Boeing 737-800 at Keflavík, Iceland. The airplane operated a subcharter flight from Antalya, Turkey to Iceland. The flight crew made an unscheduled fuel stop in Edinburgh before continuing on the last leg to Keflavik. An approach was set up for runway 02 at Keflavik International Airport. The aircraft contacted the runway and then bounced up into the air again before full runway contact was made with the main landing gear tires followed by the nose landing gear tire.



The aircraft was not decelerated enough when nearing the runway end so the pilot flying attempted to turn the aircraft onto taxiway November at the end of the runway. The aircraft skidded off the taxiway and came to rest parallel to the taxiway with the nose landing gear and the right main landing gear off the paved surface.

It was amongst others concluded that the **flight crew was likely fatigued and this had a degrading effect on their performance**. The rest facilities and cockpit environments **were less than optimal for sleep** and decreased the likelihood that rest periods would help to reduce the risk of fatigue related errors.

On approach, the information on the runway and taxiway conditions the pilot flying received led him to expect that no extra precautions would be necessary during the landing. Upon landing there was absence or very little flare before touchdown which resulted in a hard bounced landing. The pilot flying did not use reverse thrust and braking to its maximum effectiveness and applied brake pressure late. (RNF)

Airline sues Grumman over seaplane crash

An airline that flew between Florida and the Bahamas has sued the maker of a 58-year-old seaplane that crashed in 2005.

In legal papers, Chalk's Ocean Airways claims the Grumman Turbo Mallard was "not adequately designed for its intended purpose," the Miami Herald reports. The crash off Miami Beach in December 2005 killed 18 passengers and two crewmembers.



The National Transportation Safety Board in a 2007 report said the right wing came off. The agency also blamed the airline for **not finding** fatigue cracks and the Federal Aviation Administration for not finding problems with Chalk's maintenance.

"Chalk's lost everything," said John Eversole, the company's lawyer, said. "They were put out of business by the defective nature of this airplane. It is as simple as that, and to be wrongly blamed by the NTSB is even worse for your reputation."

The company was the last to use the plane, which has not been manufactured since 1951, on scheduled flights. The lawsuit names Grumman, now Northrop Grumman, and Frakes Aviation of Cleburne, Tex-Mexas, which designed and tested the plane.

Chalk's insurer, AIG, which paid out \$50 million in claims has filed a separate lawsuit against the companies.

Plane crash deaths down in 2008

According to the Aviation Safety Network, **in 2008**, 577 people were killed in 32 civil aviation accidents. That is less than in 2007, then 750 people were killed in 26 plane crashes. ASN is a Dutch organization which monitors airline safety statistics. Three of the 32 accidents involved airplanes banned by the European Union. The EU has a black list banning a number of airlines with poor safety records from landing inside the Union.



Most of the accidents took place in Africa accounting for 28 percent of the total number of accidents. Only 3 percent of planes actually take off from the African continent.

<http://www.radionetherlands.nl/news/international/6118001/Plane-crash-deaths-down-in-2008>



EASA to publish scientific data on flight-time limitation

Medical and scientific data from the European Aviation Safety Agency (EASA) is to be released this week, identifying areas for improvement to European **flight-time limitation law**. Pilots have considered **scientific input vital to the revision of flight-time regulations**, but obtaining the data has been a difficult task.

A spokeswoman for EASA confirms that a study will be published in the second half of this week, but declines to reveal any recommendations contained in it.

European Cockpit Association (ECA) representatives are welcoming the move, which the organization says is required under the new EU-OPS regulation.

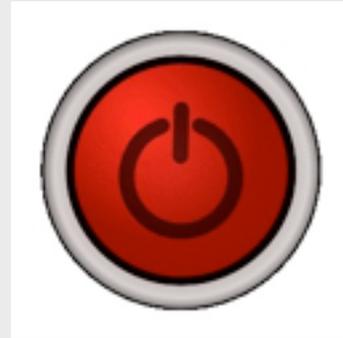
"This regulation also mandates the European Commission to 'draw up and submit proposals without delay to amend the relevant technical provisions on the basis of this evaluation'," says an ECA statement.

It adds that the 38,000 pilots it represents **"await with interest"** the publication of EASA's medical and scientific evaluation and the plans to implement results **"without delay"**.



FAA order shuts down of AAR landing gear station

Wood Dale-based AAR Corp. disclosed Wednesday that the Federal Aviation Administration has issued an **"Emergency Order of Suspension"** that effectively shuts down operations at the company's landing-gear services maintenance station in Miami. AAR, which provides a host of aircraft-maintenance services for commercial airlines and other aviation-sector customers, said the Miami site generates 6 percent of the company's overall revenues.



Beyond saying that officials are committed to resolving the FAA's concerns "as expeditiously as possible," the company didn't say when it expects the station to recover its FAA operating certificate.

The Miami operation's problems with the FAA date back at least to April, when the aviation-safety regulatory agency declared that the Miami site had **outfitted hundreds of Boeing-made jetliners over a number of years with components that had been painted in an "unapproved" fashion.** At the time, the FAA contended that the components "were **not maintained in accordance with the manufacturer's maintenance manuals** and, in some cases, violated an FAA airworthiness directive issued in 2001."

AAR maintained at the time that its use of an enamel paint on the surface of the component was approved by Boeing maintenance guidance.

On Wednesday, the company said that the FAA had in mid-July issued a written notice of alleged discrepancies at the Miami site, "to which the company responded with corrective actions on July 29."

In early November, the company said, officials met with FAA representatives to further discuss its corrective actions, and as recently as Jan. 30, the company received a follow-up letter in which the FAA identified what the company said were "items that required further attention."

The company "was in the process of responding to that request when it received the order of suspension," AAR continued. It didn't identify the areas that the FAA wants corrected.

As airlines continue to outsource maintenance work once handled by in-house mechanics and technicians, the **FAA has stepped up oversight of third-party services providers** such as AAR.

American Airlines checks rear emergency slides

American Airlines Inc. hurriedly inspected its fleet of 272 MD-80s last week to make sure the emergency slides that release from the aircraft tail cones work properly.

Even in MD-80s that showed wear of the rear emergency slide, American found that the slides worked. The inspections were prompted by an American mechanic who filed a safety report noting that the airline wasn't using the manufacturer-recommended tool to repack the slides, which deploy in an emergency to let passengers and crew exit the plane.

The MD-80 is the only plane in American's fleet with that rear-deploying slide – and the slides are generally not even used during emergencies.

The inspections were completed faster than American projected and didn't delay or cancel any flights, the Fort Worth-based carrier said. American also said the problem had no impact on passenger safety.

However, the issue puts American's maintenance operations back in the spotlight less than a year after the carrier had run-ins with the Federal Aviation Administration over certain practices.

That earlier episode differed because it involved how the airline followed – or didn't follow – an FAA airworthiness directive. American reported the slide concern itself to the FAA as part of its air safety awareness program.

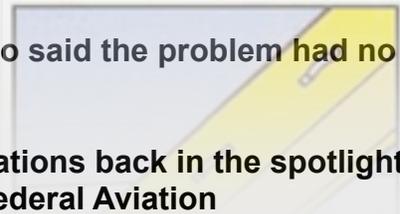
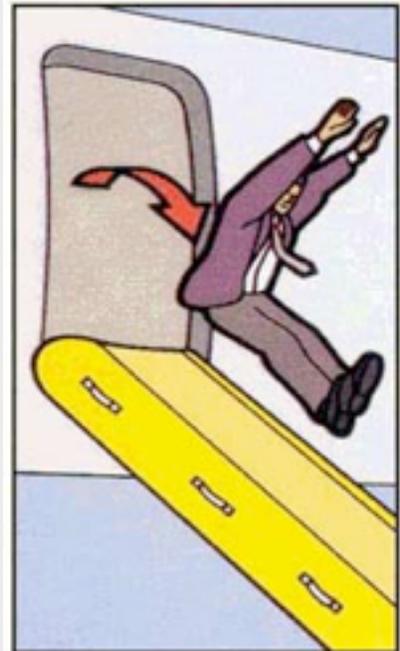
FAA spokesman Les Dorr said he couldn't comment on whether the disclosure was serious enough to warrant further investigation.

'Moving quickly'

"The bottom line here is that American has told us they're going to inspect and repack the slides using the proper tool within 30 days," he said Monday. "It's fair to say American is moving very quickly on this."

American declined to comment on whether it could face investigation by the FAA.

The self-reporting program is used by a variety of airlines, and it typically protects the employee who files the report from punishment



"It's not a get-out-of-jail-free card for the airline," said maintenance consultant Douglas Clark of Expert Aviation Consulting LLC in Indianapolis. The FAA may still take action against carriers that self-report, depending on the problem's severity.

The FAA has faced intense criticism from Congress after revelations last spring that its inspectors had allowed Dallas-based Southwest Airlines Co. to fly planes without required inspections and after American canceled 2,500 flights to repair wiring – twice in some cases – on its MD-80s.

Downtime checks

Unlike those inspections, the latest checks took place over Wednesday and Thursday night in routine night operations when the planes weren't flying, the airline said Monday.

The latest inspections were first reported by the The Wall Street Journal.

Of the planes inspected, 11 showed evidence of hose cracks or other wear and tear on the mechanism that helps inflate and deploy the slides.

American said it deployed the slides of those 11 planes, and they all worked.

The airline **will use the manufacturer's tool to repack the slides in the tail cones**, a spokesman said Monday. The special tool allows the repacking to occur **without** damaging the hosing.

Typically, the slides are checked every 18 to 36 months, depending on how old the aircraft is.

The MD-80s are among American's oldest planes, and the carrier is buying Boeing 737s to gradually replace them.



The “Dirty Dozen” in ASRS Maintenance Reporting

A CASE OF AN INCOMPLETE COMMUNICATION

Narrative

ONE OF OUR 200 SERIES DASH 8'S FERRIED TO OUR BASE FOR AN ENG CHANGE, PROP CHANGE, AND SHEET METAL REPAIRS. OUR BASE HERE IN ZZZ NORMALLY ONLY WORKS ON 100 SERIES DASH 8'S. A CREW REMOVED AND REPLACED THE PW123 ENG BUT DID NOT INSTALL THE PROP NOR DID THEY RIG THE ENG CTLS. ANOTHER MECH AND I WERE TOLD BY OUR SUPVR TO INSTALL THE PROP AND TO GET THE ACFT READY FOR AN XX00 DEP. THE PROP INSTALLATION AND ENG RIGGING WAS COMPLIED WITH AND INSPECTED IN ACCORDANCE WITH THE MAINT MANUALS. THE EVENT WAS CAUSED BY THE NACELLE MOUNTED CTL RODS BEING INSTALLED ON THE WRONG SIDE OF THE LEVERS AT THE ENG'S FUEL CTLR. THE CORRECT SIDE WAS OPPOSITE OF WHAT WAS IN THE MANUAL. THE MAIN CONTRIBUTING FACTORS WERE THAT THE MANUALS WERE INCORRECT AND NOT SPECIFIC, LACK OF TRAINING, AND A POOR TURNOVER FROM THE CREW THAT REMOVED AND REPLACED THE ENG. THE SIT WAS DISCOVERED DURING A REVENUE FLT ON THE NEXT DAY WHEN THE CREW RPTD THAT THE PWR AND CONDITION LEVERS FOR THAT ENG BOUND UP. THE CREW WAS ABLE TO FREE THE LEVERS AND CONTINUED AND COMPLETED THEIR FLT.



Synopsis

A DH8-200 RPTED ENG CTLS BINDING ON A RECENTLY REPLACED ENG. FOUND MAINT MANUAL FOR ENG FUEL CTL RIG FOR MODEL 200 INCORRECT.



PREFLIGHT SAFETY SPEECH

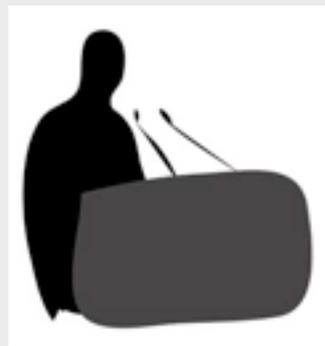
Maybe you will listen next time.

ICANHASCHEEZBURGER.COM BY 🍔 🍷 🍔

FACT CHECK

While you make a 10-minute safety speech, **two people will be killed and about 498 will suffer a disability injury.**

Source: National Safety Council, "Injury Facts," 2008



BITFLIP Offers Eight Screwdriver Tips

Wiha Quality Tools of Monticello, Minn., has released its BitFlip magnetic screwdriver with storage for eight quarter-inch bits in the handle. The bit drawer flips out and rotates the bits towards the user. Three options, which all incorporate the company's CushionGrip handle, are available: with slotted, Phillips and square bits, with slotted, Phillips and TORX bits, or with just TORX bits. Wiha Quality Tools, 800-494-6104 or visit

www.wihatools.com



Breakfast — Don't Leave Home Without It

Eating a nutritious breakfast is a great way to jump-start the day, yet a tasty might not be finding its way onto your kitchen table. Rushed morning routines, trying to lose weight, and lack of appetite early in the morning are all reasons people skip breakfast. Nevertheless, mounting evidence supports the idea that **breakfast may indeed be the most important meal of the day.** **Breakfast** benefits

Studies examining eating habits suggest that the regular consumption of breakfast can:

- * Reduce risk of obesity and high cholesterol
- * Decrease insulin resistance (a condition that increases risk of type 2 diabetes and heart disease)
 - * Improve performance on memory-related tasks
 - * Minimize impulsive snacking and overeating at other meals
 - * Increase intake of essential nutrients that are rarely replenished by other meals of the day
 - * Enhance school performance in children and young adults



Although it would seem to make sense that skipping breakfast would save calories, data suggest otherwise.

In a study of nearly 3,000 adults who lost and kept off at least 30 pounds for longer than one year, close to 90 percent reported eating breakfast on most days of the week. Interestingly, the breakfast eaters and breakfast skippers consumed

almost the same total daily calories; the breakfast skippers made up the missed breakfast calories throughout the day.

In addition, researchers at the University of Massachusetts Medical School found that **breakfast skippers are 4.5 times more likely to be obese than are breakfast eaters.**

Quality counts

Before reaching for that doughnut or pastry, keep in mind that what you choose for breakfast is just as important as eating breakfast. Think of breakfast as the perfect opportunity to start accumulating the **minimum five servings of fruits and vegetables and three servings of whole grains recommended for optimal health.** Furthermore, the National Academy of Sciences recommends that adults consume 21 to 38 grams of fiber per day. This presents quite a challenge for those choosing low-fiber breakfast options or for those skipping breakfast altogether. Whole grains, fruits, vegetables, beans, nuts, and seeds are the best sources of dietary fiber. High-fiber foods have the added benefit of warding off mid-morning snack attacks by creating a feeling of fullness. Likewise, adding some protein such as seafood, low-fat dairy products, skinless poultry, egg, or egg substitute can also aid in suppressing hunger.

Beating the breakfast blues

Breakfast can be one of the most monotonous meals of the day, but with a little creativity, the first meal of the day can be one of the best. Variety can beat breakfast boredom, so don't be afraid to include some unorthodox breakfast foods for a change of pace. Additionally, if you have abandoned breakfast due to a busy lifestyle, some of these breakfast ideas can be packed up and taken along for a delicious grab-and-go breakfast treat.

Tips and ideas

No Time for Breakfast?

- * Wrap a whole-grain tortilla around peanut butter and a banana and serve with low-fat milk or soy milk.
- * Stuff a whole-wheat pita with low-fat cream cheese or low-fat cottage cheese and canned sliced peaches.
- * Plan ahead and place whole-grain cereal (at least 3 to 4 grams of fiber per serving) with dried fruit and nuts in a sealed bag. Grab in the morning along with a carton of low-fat yogurt or low-fat milk.
- * Try some whole-grain crackers, string cheese, and grapes.
- * Mix instant plain oatmeal with dried fruit, nuts, and a dash of cinnamon.
- * Spread peanut butter and jam on whole-grain bread and have with a piece of fruit and low-fat milk or soy milk.
- * Munch on a handful of unsalted mixed nuts served with an individual portion of low-sodium vegetable juice.

*** Top a whole-wheat English muffin with soy sausage patty and a slice of low-fat cheese.**

*** Take along a piece of fruit, low-fat milk or soy milk, and a homemade muffin made on the weekend and stored in the freezer. (Substitute at least half the flour in recipes with whole-grain flour and supplement the batter with vegetables, nuts, and/or fruit.)**

Not interested in traditional breakfast foods?

*** Choose whole-grain varieties (check ingredient list for the words "whole" or "whole grain" in the first ingredient) of breads, tortillas, crackers, bagels, or pita breads and top or stuff with any of the following:**

o Salmon spread made with low-fat cream cheese, canned salmon, and your favorite herbs

o Hummus with grated carrots and raisins

o Leftover skinless chicken or turkey with light mayonnaise and cranberry chutney

o Bean spread with lettuce, tomato, and cucumber slices

o Avocado, baby greens, roasted red pepper, and a few chopped sun-dried tomatoes

o Low-fat feta cheese with walnuts and dates

o Scrambled egg substitute or eggs with salsa

*** Freezer pops made from a mixture of low-fat yogurt, low-fat milk, or soy milk mixed with 100-percent juice and fruit slices**

*** Baked tortilla chips with salsa and cut-up vegetables**

*** Grilled cheese sandwich made with whole-grain bread and low-fat cheese or soy cheese served with fruit. (For variety, stuff with grilled or sautéed vegetables made on the weekend and frozen as individual servings.)**

*** Celery and sliced apple with peanut butter**

*** Vegetables with low-fat dip and a hard-boiled egg**

*** Soy hot dog or veggie burger in a whole-grain bun with lettuce, tomato, your favorite condiments, and a side of baby carrots**

*** Pizza made with whole-grain pita bread, spaghetti sauce, and low-fat cheese served with fruit**

*** A bowl of vegetable soup and whole-grain crackers. (Try low-fat pureed soups in a travel mug if eating on the run.)**

No appetite in the morning?

A lack of appetite in the morning may be the result of a large meal or snack consumed the night before. Perk up your morning appetite by eating lighter and earlier in the evenings. If a large breakfast is still not appealing, perhaps a breakfast smoothie may be the answer. Try blending a mixture of either low-fat milk, low-fat yogurt, or soy milk with fruit, 100-percent fruit juice, and your favorite spices or flavor extract. Oat bran, wheat germ, or ground flax seed can be added for extra fiber.

So start your day the healthy way by fueling up with a nutritious breakfast!

Picture This!

A trip to the seaside usually prompts vacationers to snap scenic photos, The person who snap this photograph, whose job is heavily involved with fall protection issues, was so alarmed he sent his photos to that state's OSHA agency. "I hope some workers will live to enjoy retirement because I spoke up," he says.

