











## Upcoming events in the North State:

- ♦ 9/7 Co .24 Annual BBQ 1100-1500
- ♦ 9/7 Love on the Rocks Run North Rim
- ♦ 9/14 Mud Blast 5K Run Colusa

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## How to Sleep Right, Tonight

#### By Liesa Goins

#### If you are sleeping with stress and waking up at all the wrong times—here's how to put yourself on snooze control

#### Overview

Finding yourself wide awake after a few hours of sleep, or waking often during the night is called "parasomnia" or "sleep maintenance insomnia," and it's much more common than people think. A 2005 National Sleep Foundation poll found that 75 percent of adults frequently have symptoms of a sleep problem, including waking during the night. Just as the victims in slasher flicks make fatal errors (why are you running up the stairs?), we are often our own worst enemies when it comes to a solid night of sleep. "People think that because they're able to fall asleep they'll stay asleep, even if they've had too much caffeine," says Rubin Naiman, Ph.D., a sleep and dream specialist at Andrew Weil's Program in Integrative Medicine at the University of Arizona.

But for most of us, the culprit's not that ill-conceived espresso at 5 p.m. "The root of most sleep problems is stress," says Jeffrey Thompson, director of the Center for Neuroacoustic Research and creator of an audio sleeping aid called the Delta Sleep System. We're overloaded, over-stimulated, and overwhelming our bodies' ability to relax. "Our nervous system is built for a sprint, but we're living in a stress marathon," he says. "If you go to bed worried you're probably going to wake up in the middle of the night," Dr. Naiman adds. And when that happens, as you probably know, the next day is pretty much shot.

A new generation of sleep scientists are overturning the conventional wisdom about parasomnia. (Counting sheep? Out.) They say: You can do it. With a few simple changes in your routine, a little visualization, a couple of surprisingly counter-intuitive moves and perhaps an attitude adjustment, a peaceful night of slumber can be yours. Here's their best advice. (Need more help on your rest? Head over to our detailed Sleep Center.)

## Throw out your definition of a good night's sleep

Just as three square meals a day has given way to all-day grazing and smaller portions, "what's good for you" has changed here, too. "Thinking it's necessary to stay asleep for 8 hours straight may be unrealistic," says David Neubauer, M.D., associate director of the Johns Hopkins Sleep Disorders Center and author of Understanding Sleeplessness: Perspectives on Insomnia. "Just as we experience a dip in alertness mid-afternoon, the inverse is a dip in sleepiness in the middle of the night. There's strong evidence that there's a kind of awakening that's totally normal." History supports this take, Dr. Naiman says. "Before the industrial revolution, people had their first sleep for 3 to 4 hours, awoke for an hour or two, then slept for another 3 or 4 hours."

Even waking every 60 to 90 minutes can be part of a healthy sleep pattern. The deeper stages of sleep, or REM (rapid eye movement) sleep, occur about every 90 minutes and get longer as the night goes on, so your brain might become more alert between those cycles.

Since we're conditioned to think that waking during the night is a problem, when it happens, we panic. That reaction causes our brains to awaken even further, Dr. Neubauer explains

If you find yourself awake in pre-dawn hours, Dr. Naiman advises first assessing your physical state. Do you have an ache, a cramp, or need to go to the bathroom? If so, take care of it

If you don't have a physical complaint, then chances are you are experiencing a normal stage of the sleep cycle. Knowing this "helps replace worries that you'll be useless without 8 solid hours of sleep with more neutral thoughts," suggests Sat Bir Khalsa, Ph.D., instructor in medicine at Brigham and Women's Hospital at Harvard Medical School. "The useful thought is: 'I can handle the disruption and still feel rested."

#### Get bed-ready

After an action-packed day (or one equally packed with worry), our brains need some time to catch up, to

# Baked Eggs in a Bell (Pepper)

Our bell pepper and zucchini crop runneth over. We have tons of peppers, or maybe more appropriately, we have pecks and pecks and pecks of peppers flooding from our garden! We also have more zucchini than I know what to do with and don't forget our chickens which means we have a daily supply of fresh EGGS!

So, what better thing to do than marry it all together? I took onions, pancetta, our zucchini, and some portobello mushrooms; stuffed some roasted bells with this mixture, added an egg, and baked them in the oven. The result? Beautiful little eggs in a bell pepper nest. Delicious and delightful not to mention fun!

#### **Ingredients**

4 red or yellow bell peppers cut in half lengthwise and seeds removed (leave the green stem intact if desired for a pretty finish)

- 1 cup diced zucchini
- 1 cup diced yellow onion
- 1 cup diced portobello mushrooms
- 2 garlic cloves, minced
- 6 oz. cubed pancetta

Cooking fat of your choice

Sea salt and black pepper to

Optional: cherry tomato's cut in half and fresh basil for garnish

### **Preparation**

- 1. Preheat oven to 375.
- 2. Place bell pepper halves on a baking sheet and roast in the oven for 15 -20 minutes.
- 3. Meanwhile, sauté the pancetta and onions together in the duck fat over medium to medium high heat until the onions start to soften and the pancetta begins to crisp. Add the minced garlic, zucchini and mushrooms and sauté until the zucchini are al dente.
- 4. When the bell peppers are out of the oven, drain any moisture from the inside that appeared after roasting, and stuff each bell pepper half with a large scoop of the sautéed pancetta and veggie mixture.
- 5. If your bell peppers are BIG you can crack 2 eggs per bell pepper half on top of the stuffing. Our bells were small (homegrown babies) so we only used one egg per bell pepper half.
- 6. Place the stuffed bells in a large casserole dish, cover with foil and bake at 375 for 30-40 minutes or until the egg whites are set. Check after 20 minutes because the heat of your oven may be different than mine.
- 7. OPTIONAL top with fresh torn basil leaves and cherry tomato halves.



Recipe courtesy of:

## EverydayPaleo .com

## Fruit should be eaten, not drunk

A study published by the BMJ this week affirms one piece of conventional wisdom — that eating fruit is highly beneficial to your health while refuting another — that fruit juice is just as good as the unprocessed stuff. Analyzing the dietary habits of 187,382 subjects over multiple decades, the research team concluded that "greater consumption of specific whole fruits ... was significantly associated with a lower risk of type 2 diabetes, whereas greater fruit juice consumption was associated with a higher risk."

A steady diet of whole fruit may help you avoid diabetes

Type 2 is the more prevalent kind of diabetes and, unlike type 1, can be actively prevented through a balanced diet. The new data from the BMJ identifies blueberries, grapes, apples, and pears as among the most significant reducers of diabetes risk, which echoes findings published in The American Journal of Clinical Nutrition last year. Where the new research goes further, however, is in looking at the effects of drinking fruit juice, which you might expect to be equivalent to eating whole fruit, but turns out to slightly increase your chances of developing diabetes.

In juicing the fruit's flesh away, you remove the dietary fiber and other nutrients that may be contained in the peel, while increasing the glycemic index by making its sugar easier to digest. Diabetes is a disorder of the body's ability to regulate blood glucose levels, which is why you might want to reconsider that glass of orange juice in the morning.

"Fruit juices lead to more rapid and larger changes in serum levels of glucose and insulin."

As usual with epidemiological studies of this kind, there are a number of limitations to the findings. The participants were self-reporting their fruit intake, some fruits (like apples and pears) were grouped together due to their nutritional similarities, and others weren't included at all.

Consequently, the associations found can be considered informative, but the study's authors themselves point out that further research will be reguired to confirm their results and "to further elucidate underlying mechanisms."



make order of things, and to slow their frenetic firing before we're ready to sleep. Pure bodily exhaustion can probably get you at least that first hour of dozing, but then worries will rise to the surface and cause you to stir. How can you get your mind to chill?

"We need to learn to apply the brakes before the car is in the garage," Dr. Naiman says. "Clearing your head is key to a good night of sleep." Simply taking 15 minutes to sit quietly, meditate, pray, or do rhythmic breathing can allow your mind to slow down enough to sleep through the night. Establishing any ritual that you do before bed—anything but checking your e-mail!—will do more than relax you right then and there. The repetition also conditions your brain and body for sleep, Thompson explains.

While you're transitioning to Z-mode the same way night after night, you're also creating a Pavlovian response to your ritual. So simply sitting in the spot where you do your breathing or turning on the shower water signals your mind that it will be sleeping soon, Thompson says.

Another way to condition yourself sleepward is by playing off the body's internal clock. Dr. Naiman suggests simulating dusk about an hour before you plan to go to bed and dimming the lights significantly. This triggers natural circadian rhythms that help us prepare for sleep.

#### Make the breath-brain connection

Dr. Khalsa recently supervised a small Harvard study using specific breathing techniques to treat insomnia, and all subjects reported an improvement in the quality and quantity of sleep. "There is evidence that long, slow abdominal breathing will reduce anxiety and arousal," Dr. Khalsa explains.

Dr. Naiman recommends one breathing exercise (similar to those Dr. Khalsa used) called the 4-7-8 breath exercise. With your tongue resting on the roof of your mouth, just behind your upper teeth, exhale completely. Close your mouth and inhale through your nose for four counts. Hold your breath for seven counts. Then, exhale while mentally counting to eight. Repeat the cycle three more times. Both are important for restful sleep.

#### Take a pose to the doze

"There's a feedback loop between the muscles and the brain," Dr. Naiman explains. "When you stretch and release tension, the brain relaxes too."



The deepest meditative state is known as "sleepless sleep."

To get to a sleepful state, Dr. Khalsa finds the yoga Bridge pose especially useful. Lie on your back with knees bent at a 90-degree angle and your heels parallel, close to your butt. Lift your hips and arch up onto your shoulders. Lace your palms together underneath your body and press your arms into the floor or mat. Hold the posture while taking 10 to 15 long, slow breaths.

#### When you wake up anyway

Despite all your best efforts, here you are, awake at an hour even a fisherman would call ungodly. What do you do now? First, here's a big don't: "If you open your eyes and see the clock, that's it for many stressed people," Dr. Walsleben says. "Seeing the time can trigger them to become fully awake." Keep your eyes closed, roll over, or move the clock so the display isn't visible. If you're still far from dreamland try a mantra. Silently repeat any word that's soothing or pleasant to you, or simply think "inhale" as you inhale

Silently repeat any word that's soothing or pleasant to you, or simply think "inhale" as you inhale "exhale" as you release your breath. Thinking the words over and over focuses and relaxes you, but requires less energy and attention than counting sheep, which can actually be too engaging to work the way it's supposed to.

#### "Get out, get out!"

After 15 minutes of lying awake in bed, you need a change of venue. "When someone can't sleep, the bedroom can become a torture chamber," Dr. Khalsa says. "Staying there is counter-

productive." And you risk associating the bed with your trouble sleeping, which will exacerbate the problem in nights to come.

Go to go to another room. You don't want to become too alert, so make sure you have a nightlight in your hallway and won't need to turn on brighter lights. Occupy yourself with something calming like listening to chill music on your iPod or even performing your presleep ritual again. Only when you feel drowsy, Dr. Khalsa says, should you go back to bed. In a very short while, you should be the picture of blissful sleep.

#### Getting your nap on

It's not just for toddlers. Napping makes great sense for adults, whether or not it puts you in touch with your inner child. When adults napped between 2 and 4 p.m., one recent study showed, they performed better on tests and had no problems falling asleep at night.

NASA found that military pilots and astronauts who took a 40-minute nap improved alertness by 100 percent and performance by 34 percent, and recent Harvard University research also revealed that college students who napped between tasks performed better than those who stayed awake.

How does napping work its brain magic? "It may protect brain circuits from overuse until those neurons can consolidate what's been learned about a procedure," says Robert Stickgold, Ph.D., coauthor of the Harvard study.

Unless you know the correct way to conduct a daytime doze, however, you could snooze and lose. "Napping can steal the drive for nighttime sleep, so you need to be cautious," says David Neubauer, M.D., associate director of the Johns Hopkins Sleep Disorders Center. "The key is to nap early and short.

By early he means daylight hours, at least five hours before you plan on going to sleep that night (between 2 and 4 p.m. is prime). Any later and your circadian rhythms will kick in, possibly making you feel disoriented upon waking and likely preventing you from conking out come your regular bedtime. As for short, keep your naps to less than an hour; 20 to 30 minutes is enough for most people to get the benefits.

To help stick to this nap-plan, stay out of the sack—likely not a problem at the office—since you associate your bed with long periods of rest. Find a quiet couch or carpeted floor where you can lie down. Even shutting your eyes in your office chair for 20 minutes will relax and refresh you. (That's if you can stifle your phone; if not, find an unused conference room.)

Home or work, you'll find that—just like in kindergarten—after a nice restorative nap, you'll play much better with others.

## IAPS Data from August 2013

Reportable Injuries: 8
Record Only Injuries: 9
Injury by Activity:

PT: 3 Incident: 12 Training:

Station Duties: 2 Injury by Body Part:

Head:

Torso/Back: 5
Extremities: 5
Heat Illness:
Exposure: 7
Internal:

## "SAFETY CORNER"

8/9/13, Green Sheet, CAMMU00975, Ill FF from Copter 406

8/12/13, Blue Sheet, CARRU080373, Dozer fire

8/14/13, Blue Sheet, CASTF002613, Helitack crew and boulder incident

8/15/13, Green Sheet, CARRU080373, Dozer fire 8/19/13, Wildland shroud inspection requirement

8/19/13, Green Sheet, CACSR000064, Helitack crew and near miss

8/23/13, Blue Sheet, CALMU003684, Vehicle accident

8/30/13, CNR monthly safety message—Stress awareness

8/31/13, Green Sheet, CASHU007320, FF burn injuries

## **EMS Response To Sexual Assault**

#### A Guest Post By: Jimmy Futrelle

The EMT Spot would like to welcome Jimmy Futrelle to our guest post roster. Jimmy's a Paramedic hailing from Scurry County Texas. Jimmy has been responding on calls long enough to remember the Lifepack 5 and using D50 as a diagnostic tool. His unique background working for private and public EMS as well as for local law enforcement makes him uniquely qualified to teach on the subject of sexual assault.

#### Introduction

Sexual assault is possibly the most devastating form of assault perpetrated on another human being. The legal definition of sexual assault is "any genital, anal or oral penetration by a part of the accused's body or by an object, using force or without the victim's consent."

The U.S. Department of Justice's National Crime Victimization Survey reports that over 500,000 women and approximately 49,000 men report being sexually assaulted each year. It is estimated that 1 in 5 women will be victims of rape by the time they are 21 years of age. 61% of reported rape victims are less than 18 years old. 1 in 7 women will be raped by their partners. Only 16% of rapes are ever reported to the police.

Let us not confuse sexual assault with sexual abuse. Sexual abuse is repeated instances of sexual assault occurring over a period of time, generally by a person familiar to the victim. Whereas this crime is no less devastating, we are going to focus on the act of sexual assault.

#### Assessment and Treatment

When dealing with sexual assault victims, as with any assault, we must assess the physical and mental status of the patient. The psychological trauma of rape can be more severe that the physical injuries sustained. Since intimidation can be a more predominant factor in female assault, physical injuries may be more subtle. On the other hand, in male patients, we tend to see more severe physical injuries. Attempts to assault men are more frequently initiated with a severe physical assault. We, as health care providers, must be aware of these differences and treat the patient appropriately.

There are two assessments we must perform the physical assessment and the psychological assessment. Each is done congruently and treated accordingly.

Your priority is to the patient's physical status. The ABC's apply here as they would to any other acutely injured patient. We assess airway, breathing and circulation. Then briefly assess for any problems such as respiratory distress, shock, or any internal or external injury or hemorrhage that may require immediate treatment.

Common injuries seen with sexual assault are as follows:

1.) Abrasions and bruises on the upper limbs head



and neck.

- 2.) Forcible signs of restraint–rope burns on wrist or ankles, mouth injuries sustained during gagaing.
- 3.) Petechiae of the face and conjunctiva, secondary to choking.
- 4.) Broken teeth, swollen jaw or cheekbone, torn frenulum of the lip or under the tongue, eye injuries from being punched or slapped in the face.
- 5.) Muscle soreness or stiffness in the shoulders, neck, knee, hip or back from restraint in postures that allow sexual penetration. Pain or bleeding from vagina or rectum, indicating possible tears in the delicate tissue in these areas.

Each or these injuries must be treated appropriately. Oxygenation, control of bleeding, stabilization of fractures, and fluid replacement, where necessary.

Our next priority is to create a safe environment for the patient. Remember that sexual assault is about control, and the victims currently feel as if they no longer have control over anything. It is imperative that no further assessment or treatment be given, without informed consent. The only exception to this rule is if the patient has an altered level of consciousness and/or a life threatening injury is present and implied consent is called for. Be very familiar with the guidelines of implied consent in your system.

Privacy is a big issue here. Move the patient into the ambulance or into a private area for the remainder of the exam. Some considerations for performing a physical exam:

- 1.) Explain all of your actions to the patient.
- 2.) Explain what a secondary survey is and why it is necessary.
- 3.) Avoid whispering things to others such as police, family or other medical professionals, in the presence of the patient. This can lead to feelings of paranoia.
- 4.) Do not perform procedures (setting up oxygen, or an IV) outside of the patient's view, without explaining them first.
- 5.) If the patient wishes to have someone present for emotional support, make the arrangements.



#### http://theemtspot.com

6.) To open up a dialogue with the patient and establish a rapport of trust, begin with questions regarding the patients current use of medications, allergies and past medical history.

Avoid questions about the specific assault, unless the patient chooses to provide you with details. Only ask questions if the answers are necessary for medical treatment of the patient. "Sexual assault is a circumstance of such magnitude that it does not respond during the acute phase to emotional release or catharsis."

#### Pertinent questions can include:

- 1.) Did the patient take any drugs (prescription or otherwise) or consume any alcohol before or after the assault.
- 2.) Did the patient urinate, defecate, or attempt to clean themselves following the assault.
- 3.) Did the patient bath, wash their hands or face, brush their teeth, gargle, or change their clothes following the assault.
- 4.) Has the patient smoked, drunk any fluids, or eaten anything since the assault.

If possible, do not allow the patient to perform any of the above actions. Inform the patient that it could effect the collection of evidence later at the hospital.

If medical treatment is necessary, explain all procedures and insure that the patient understands. The patient's physical condition is paramount, but we must guide our treatment with some common sense.

If the need for oxygen arises, then try using a nasal cannula if possible. A mask may give the feeling if being suffocated. Avoid invasive procedures when possible, such as IV's or blood draws. These are painful procedures and should wait till the patient arrives at the hospital. This way, medical and evidence samples of blood can be taken at the same time. These priorities should never jeopardize the patient's condition.

Transport the patient to a medical facility capable of performing evidence collection. Not all emergency departments can perform this function, so be aware of the standards in your area. If the patient wishes to go to a hospital not capable of evidence collection, advise the patient of this. Offer an alternative facility. Transport the patient quietly and gently. Avoid use of lights or siren when at all possible.

#### Evidence Preservation

Preserving evidence is vital if criminal charges are pursued. Take necessary steps to preserve evidence in all sexual assault cases. Medical stabilization must be balanced with the need to protect rapidly decaying

#### Sexual Assault (cont. from Pg. 4)

physical evidence. Emotional support from a friend, family member or rape crisis counselor is preferred, but excessive delays should be avoided. It's helpful to be familiar with the evidence collection procedures in your area. Patients will quite often ask you about what will be done with them when they arrive at the hospital. Be as informative as you can. Let them know that nothing will be done without their consent. If you do not know the answer to a question, be honest. Do not give false expectations.

Sexual assault is a crime and the location the assault occurred is a crime scene. Be careful what you touch and where you walk. If the police are present, have an officer escort you and be with you while you are inside the crime scene. This gives you a witness to your actions, and helps to secure you from moving or disrupting any evidence vital to the police investigation. If medical treatment is provided to the patient on scene, do not leave any treatment materials on the scene. Keep all wrappers and containers together. The officer in their investigation must explain anything you leave behind.

Wear your gloves. It reduces the chance of you leaving fingerprints, which must be explained later by the police. If an officer is not present when you enter the scene, then let them know what you did, where you walked and what you touched or moved, prior to there arrival. Document these movements in your report. Do not delay treatment or transport to await police. The police can obtain information from you and the victim, just as effectively at the hospital, as they can at the scene.

If any clothing or jewelry is removed from the patient, have the patient place each piece in a separate bag. At the hospital, place your linen and gloves in bags. Particle evidence may have fallen onto the linen or come off on your gloves. Place evidence in paper bags rather than plastic, to avoid moisture build up. Label the bags with time, date, contents and name of person who collected it. Turn all evidence over to the receiving physician or the investigating police officer. It is crucial that the chain of evidence not be broken.

#### Reporting and Documentation

It is a requirement in all U.S. states to report the sexual assault of a child, or adolescent under the age of 17 or an elderly person above the age of 60. It is not a requirement in all states to report sexual assault in person's aged 17 through 59. This is the case in the state of Texas. Doing so without the patient's consent, can be a violation of the patient's right to privacy and a breech of patient confidentiality.

Where does our obligation to the patient's right to privacy start and end? This is a question in which the answer varies from state to state, district to district, system to system. You must be familiar with the laws of your state and the requirements of the system in which you operate. Let the patient know up front the requirements placed on you, before initiating a secondary assessment. This gives the patient the right to disclose only the information they wish.

How and what do we document? Everything but our opinions. If criminal charges are pursued, then our documentation of the patient's condition becomes a vital piece of evidence. We must document a detailed and

chronological report of our assessment, findings, treatment and any information obtained about the assault. Detail must be given specifically to the physical exam.

Note any injuries and/or markings in meticulous detail. Describe the size, shape and location of each injury. (e.g., "Five red bruises are noted on the patient's upper right arm. They are oval shaped and approximately one inch in diameter. Four are located on the lateral side of the arm and one is located on the medial side of the arm"). Document the patient's mental status, and quote the patient wherever necessary. Do not make judgments or assumptions. Note if any evidence was collected and document the names of the persons receiving the medical report and the evidence.

#### Summarv

We should take care to treat victims of sexual assault with the utmost compassion. We are tasked to preserve, protect, treat and comfort, all in a very short period of time. It is important that we allow patients to give informed consent to any and all treatment and assessments we perform. We must provide a safe and comfortable environment for them without distraction. We must preserve all evidence, no matter how insignificant it may seem. We must document all findings, procedures and assessments in meticulous detail. Most of all, we must be as honest with our patient's as we can. Remember, were the victims first impression of medical assistance. We set the pace. We make the patient's transition to the sterile hospital setting an easy one or a difficult one.

#### References

Strategies for the Treatment and Prevention of Sexual Assault Guide, American Medical Association

H.D. Grant, R.H. Murry, Jr, J.D. Bergeron, Emergency Care, 4th Edition.

# What is the Role of the Company Officer in Addressing Firefighter Cancer?

The company officer, as the leader of the most operational working group in the fire

service, is the single most influential person concerning the team's attitude, operations and willingness to change. In this key role, the company officer must lead by example and set clear expectations concerning cancer awareness, prevention, tracking of exposure and the essential operational changes necessary to minimize exposure to carcinogens and other toxins.

## What is the Role of the Battalion Chief in Addressing Firefighter

#### Cancer?

As a second set of eyes, the next level of supervision and the person in charge of multiunit operations, the Battalion Chief (BC) has the responsibility of overall command and situational awareness. This key position allows the BC to provide reinforcement of SOPs,

SOGs and other operational practices concerning cancer exposure reduction.

Cancer does not discriminate between firefighters. Volunteers routinely transport bunker gear in their vehicles, wear clothing contaminated after a fire into their homes and expose their families to these carcinogens. This is a terrible problem that requires our full attention and immediate action."

— Tim Wall, VCOS

# **Taking Action Against Cancer in the Fire Service**

#### Recently published white paper on cancer in the fire service



Some key points from this recent white paper are as follows:

Multiple studies, including the soon-to-be-released NIOSH cancer study, have repeatedly demonstrated credible evidence and biologic creditability for statistically higher rates of multiple types of cancers in firefighters compared to the

general American population including:

- Testicular cancer (2.02 times greater risk)
- Multiple myeloma (1.53 times greater risk)
- Non-Hodgkin's lymphoma (1.51 times greater risk)
- Skin cancer (1.39 times greater risk)
- Prostate cancer (1.28 times greater risk)
- Malignant melanoma (1.31 times great risk)
- Brain cancer (1.31 times greater risk)
- Colon cancer (1.21 times great risk)
- Leukemia (1.14 times greater risk)
- Breast cancer in women (preliminary study results from the San Francisco Fire Department)

We are just beginning to understand the horrific magnitude of the problem, the depth of our naiveté, the challenges involved and the changes required in education, training, operations, medical screenings and personal accountability to effectively address cancer in the fire service.

The signs of firefighters' exposure to carcinogens are everywhere:

- Photos appear every day of firefighters working in active and overhaul fire environments with SCBA on their backs but not masks on their faces.
- Firefighters still proudly wear dirty and contaminated turnout gear and helmets.
- Some fire instructors wear their carcinogen-loaded helmets and bunker gear as symbols of their firefighting experience.
- Diesel exhaust, a recognized carcinogen, still contaminates many fire stations
- apparatus bays as well as living, sleeping and eating quarters.
- Many firefighters only have one set of gear which means they are continually re-contaminated from previous fires.
- $\blacksquare$  Some diesel exhaust systems even when installed are not used, are used incorrectly or are poorly maintained.
- Bunker gear still is stored in apparatus bays where it is bathed in diesel exhaust.
- Bunker gear goes unwashed for months at a time, even after significant fires
- Many volunteers carry their contaminated gear in the trunks of their personal vehicles resulting in superheating and enhanced off-gassing of contaminants into the passenger compartment and sometimes even into their homes.
- Firefighters put their contaminated gear into the cabs of their apparatus both before and after fires.
- Some firefighters still take their contaminated bunker pants and boots into sleeping quarters.
- The interiors of apparatus cabs are rarely decontaminated.
- Many firefighters do not take showers immediately following fires.

#### What Can I Do To Protect Myself?

- Use SCBA from initial attack to finish of overhaul.
- Do gross field decon of PPE.
- Use wet naps or baby wipes to clean head, neck, throat, underarms, and hands while still on scene.
- Change your clothes and wash them right after a fire.
- Shower thoroughly after a fire.
- Clean your PPE right after a fire.
- Don't take contaminated clothes or PPE home or store in your vehicle.
- Decon fire apparatus interiors after a fire.

400%
Increase in absorption

for every 5° increase

in skin temperature

# 5 Basics of Balanced Eating

## Balance your diet—and your body—with these yogic rules for eating

By Thérèse Baran

Keep your body balanced with foods that promote better digestion. Follow these 5 rules of Ayurveda—the ancient system of health and wellness—for the most balanced diet.

#### Don't Mix Cooked And Raw Foods

Don't put cooked and raw foods in the same dish. The hot and cold combination can lead to stomach cramps and discomfort.



#### **Top Your Salad Right**

Top cool salads with little bit of goat cheese or sunflower seeds instead of hot chicken. Though cheese is typically not recommended for kapha types, unsalted goat cheese is acceptable in moderation.

#### Use Oil, Not Vinegar

Try cooled, cooked bean salads dressed with oil, not vinegar. Though some sour foods can get your digestive juices flowing, foods like vinegar, that taste sour as a result of fermentation, should be avoided. These foods are believed to bring toxicity to the blood and ama to the body's tissues.

#### **Avoid Ice-Cold Beverages**

Drink warm or room temperature beverages with your meal rather than ice-cold ones, which inhibit agni.

#### **Eat Ripe Fruits**

Eat raw, ripe fruit separately from other foods; have it in the morning or as a snack. It shouldn't be under or overly ripe—at peak ripeness, it requires the least amount of processing from your body.



CE Answer Sheet: EMS Response to Sexual Assault  Complete this answer sheet from the previous CE article and forward it to the Training Office for grading and credit. (1 CE hour Credit for successful completion)		it to the Training Office	"Holding The Road"
1. Psychological injuries are just as important to address as physical injuries.  True False  2. The patient must consent to treatment, even if emotionally distraught.  True False  3. Privacy is not as important as a thorough examination.  True False  4. The patient should be included in all decision making processes.  True False  5. The patients actions after the assault should be inquired about and documented as well.  True False  True False  Comments:	6. There is generally no need to save the worn or removed clothing.  True False 7. All responders should wear full BSI.  True False 8. Always document and tell law enforcement personnel if anything was moved prior to their arrival. Yes No 9. Do we have a requirement to report sexual assault to a victim between the age of 18—59? Yes No 10. Compassion is an important trait in dealing with a sexual assault victim. True False	Name: Station:	For Suggestions or Comments:  CAL FIRE / Butte County FD  176 Nelson Ave Phone: 530-966-8682 Fax: 530-879-3433 E-mail: Mike.Waters@Fire.Ca.Gov
			"Let No Man's Ghost Say His Training Let Him Down!" -Unknown Author