

VOLUME 2. ISSUE 4

JUNE 2012

Upcoming Events within the county

- June 2-3 5th Annual Forest Ranch Mountain Music Festival
 - June 9 Co. 25 BBQ Fundraiser Clear Creek Crossing Store
- 10—2 pm June 9-10 Country Faire and Threshing Bee Patrick Ranch, South Chico
- June 16 Cool "May" Mornings Durham Park

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Worst Fire Season Ever

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While we all joke about the annual predictions made about the potential severity of the upcoming fire seasons, this year is shaping up to be a po-

Acres b

Hot Spots



tentially busy one. If you have only been doing this for a few years, then the above statement could hold true for you as we have all been exposed to below average fire seasons for several concurrent years now, and if that is all you know then you might be in for a surprise

"Worst Fire Season Ever" - The Usual Prediction

on the fireline. So why the change? A pretty dry winter with a late season wetting kept the higher elevations dryer than usual but helped build the annual grass crop in the

lower elevations. Unless you

By: Mike Waters, Unit Safety Officer

have been living in a hole recently, you have noticed the number of vegetation fires are steadily rising, the resource augmentations are increasing, as are the acreage on some of these fires. Recent ERC's and LFM's also correlate

Reno Firefighters battling a wildland fire in January of this year.

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13 "NEW" SUPERFOODS

Overhyped? Sure. Essential for good health? Absolutely. Discover the powers of a range of superfoods

Heart Protectors

OLIVE OIL

Pour on the olive oil. The FDA says that consuming 2 tablespoons a day, in place of saturated fat, might reduce your risk of heart disease.

ALMONDS

Pile on the crunch: The monounsaturated fats in nuts may play a role in reducing your risk of death from coronary heart disease, according to a Loma Linda University study review.

SALMON

Fatty fish species such as salmon are well worth the price: A diet rich in fish oils could protect your ticker by reducing the buildup of fat in your blood.

FARRO

Chew on this: People who ate a diet rich in whole grains like farro cut their risk of heart disease by about 20 percent compared with those who ate them rarely, according to a review in Nutrition, Metabolism & Cardiovascu lar Disease.

CHICKPEAS

Pass the hummus: Chickpeas are a good source of polyphenols, which may slow the buildup of plaque in vour arteries and boost vour HDL (good) cholesterol.

Age Erasers

By Jeffery Lindenmuth

CASHEWS

Talk about a smart snack. Cashews help prevent magnesium deficiencies, which may promote cell aging and age-related disease, say researchers from the University of California at Berkeley.

CURRY POWDER

Spices can boost brainpower as well as food's flavor. This Indian blend is rich in turmeric, a spice linked to the prevention of Alzheimer's disease in a study review pub-

Roasted Salmon with Chickpea Salad

What You'll Need:

3/4 cup farro
1 salmon fillet (12 oz, preferably wild), skin on
3 Tbsp extra-virgin olive oil
Salt and freshly ground pepper
2 Tbsp red-wine vinegar
1/2 Tbsp Dijon mustard
3/4 cup drained canned chick-peas
1/4 cup whole almonds, toasted and chopped
1 Tbsp thinly sliced mint leaves
1 scallion, thinly sliced
Lemon wedges

How to Make It:

1. Preheat the oven to 325°F. In a medium saucepan, bring 4 cups of water to a boil and add the farro. Reduce to a simmer and cook until the farro is tender, about 25 minutes. Drain the farro and set aside to cool.

2. Meanwhile, place the salmon skin side down on a lightly oiled baking sheet. Drizzle on 1 Tbsp of oil, and season with salt and pepper. Bake until white spots appear on the salmon, about 20 minutes.

3. In a large bowl, whisk the remaining 2 Tbsp of oil with the vinegar and mustard; season with salt and pepper. Stir in the farro along with the chickpeas, almonds, mint, and scallion. Season to taste with salt and pepper. Serve the salmon with the farro salad and lemon wedges to squeeze onto the fish. *Makes 2 or 3 servings*

Every day it seems another superfood is trumpeted as the latest nutritional hero. "If the concept leads you to seek out generous helpings of a broad variety of fruits, vegetables, and whole grains with the most healthpromoting nutrients, then go for it!"



Worst Season Ever(cont. from Pg 1)

these concerns. Most of our seasonals will have to hit the ground running and won't have the luxury of getting back into shape gradually. Last year I included several articles on the NWCG FireFit program, which detailed a comprehensive in season and out of season fitness program for all employees This spring, it was a pleasant site to come across several firefighters out hiking the areas that I like to do my PT hikes and also getting ready for the season, prior to getting hired. I certainly applaud those efforts. Last year I challenged all the stations to invite me out for their best PT hikes, in order to rank them, and I had a great time doing it. This year I would like to keep that

sort of tradition alive because not only does it foster some esprit de corps but it also helps me improve my physical conditioning (which isn't easy sometimes in a staff position). This year I would like to see what all the stations are doing for their overall PT programs. While our department provides a lot of training resources for PT and physical fitness, most of the effort is really left on the individual or sometimes the company officer. What I would like to see is not the ability to kill your firefighters upon their return to duty, but rather what each station/battalions are doing for an overall comprehensive program that

includes warming up, strength and aerobic training, cooling down, and if any are including fitness assessments and tracking overall changes. If your station/battalion is open for a little outside scrutiny then please feel free to call me or email me. My overall goal is to recognize the best program with some sort of reward and to try to emulate that to others that

might want or need some additional guidance.

Lets all be safe this summer and continue to do a great job!





said Greenwald. "That's when we have to be aggressive, that's when we have to go after these people." Dall said the lipid tests cost

RENO (CBS 5) – The United States will spend roughly \$2.5 trillion this year on health care. Almost three-quarters of that is spent treating chronic diseases like diabetes and heart disease. But now, just across state line in Reno, there is a new approach: the city is putting its money on prevention.

There is an especially good reason for Reno's new approach; Under Nevada law, the so-called "Heart-Lung Bill," if a police officer or firefighter has a cardiovascular event after they have been employed for five years, it's considered to be work related. A single workers comp claim for such an event can easily cost the city \$1.5 million. In an attempt to reduce such claims and improve the health of city employees, Specialty Health, the worker's compensation company that takes care of Reno's injured police and firefighters, has developed a program to assess risk.

"We look at Body Mass Index, blood pressure, smoking history. We look at a basic lipid panel. We look at sugars. We do a metabolic syndrome calculation," said Dr. James Greenwald, with Specialty Health. If there is a suggestion of increased risk, Greenwald said, physicians look further with something called "advanced lipid testing." Dr. Tara Dall, a Wisconsin-based lipidologist who is work-

ing on the Reno project, said it is very important to test for the right things. Many at-risk individuals are missed because of improper tests, she said.

"Half of all people who have cardiovascular events have normal cholesterol levels," said Dall, who recommends checking lipoproteins, the particles in blood that carry cholesterol and triglycerides. She said it's not the passengers (the cholesterol), it's the cars (the particle number) that is most important.

"It's the (lipoproteins) that really define risk," said Dall, adding that lipids give a window into diabetes because they began to change long before sugar levels get elevated. The screening has paid off in spades – they are finding young, healthy-looking police officers and firefighters who are actually insulin resistant and therefore at high risk for diabetes.

"We know now that we can see Type 2 diabetes coming, in the form of insulin resistance, 15 or 20 years in advance," roughly S100. That is money well spent if it identifies insulin resistance and changes the course of so many diseases that have insulin resistance at the root cause: diabetes, heart disease, stroke, sleep apnea, even certain cancers. It is especially money well spent in the context of giant work-related health claims. Finding insulin resistance is only the first step. The

next is reversing it – something Specialty Health hopes



Reno (cont. on Pg 5)

Superfoods (cont. from Pg 1)

lished in the Annals of Indian Academy of Neurology.

MUSTARD GREENS

Save face: These robust greens boast plenty of vitamin C, which supports the collagen in your skin, according to a study in the *American Journal of Clinical Nutrition*.

CARROTS

Crunch on carrots to protect your eyes. Carrots are rich in lutein, a nutrient that can help prevent age-related macular degeneration, a Chinese study review found.

<u>Muscle Builders</u>

BLACK BEANS

Want to go harder at the gym? Then load up on these leg-

Exposure:

2

umes, which help prevent a magnesium deficiency that can reduce exercise performance and endurance, a review in Magnesium Research reports.

BEEF

Sure, beef is a great source of muscle-building protein. But it's also one of the best sources of carnitine, an amino-acid derivative that helps your mitochondria burn fat for energy.

CHILIES

Want to reveal those muscles? Then you also need to pare away fat. A Japanese study found that capsaicin, the chemical that gives chilies their spicy heat, helps your body burn more fat as fuel during exercise.



PLANTAINS

IAPS Data from I	March—May 2012	"SAFETY CORNER"
Reportable Injuries: Record Only Injuries: Injury by Activity: PT Incident: Training: Station Duties: Injury by Body Part: Head: Torso/Back: Extremities: Heat Illness:	7 3 2 5 1 2 1 5 2 0	05/24/12 - Interagency Safety Communication 12-2 - Aerial Supervision 05/22/12 - Safety Communication 2012-2 - Use of Mobile Video Devices 05/19/12 - TGST - Chocking vehicle fires 05/17/12 - TGST - Driving Smartly 05/15/12 - MEU H&S Newsletter - Tick & Lyme's Disease Awareness 4/27/12 - Green Sheet CARRU041726 - Structure Fire w/ Explosion 4/17/12 - Green Sheet CAHUU001927 - Inmate Table Saw Accident 3/16/12 - TGST - Arrive Alive



An impressive sight recently at AMU, with a majority of the fixed wing fleet on the ground and either just finished with their annual maintenance or as in our own Tanker 93's case, almost finished.



Why do we do ladder testing? To find ladders like this one above and to remove them from service, before someone gets hurt from it failing on the fireground.



Structure fire in Nord.





Structure fire in Magalia, where 33's crew made a good stop.





Good times at the MHEM course, though some of the people didn't always enjoy it.

Reno (cont. from Pg 3)

to do using a 4-pronged approach based on diet, exercise, weight loss and medication.

"These problems are complex. They're nutrition and lifestyle driven, and so there need to be nutrition and lifestyle solutions to address the problem," said Robb Wolf, author of a book The Paleo Solution. Wolf, who lives in Reno, has also teamed up with the Specialty Health program.

The first behavioral change is diet. Specialty Health prescribes a "Paleo" low-carb diet - with basic foods and nothing processed.

"Certain foods make you sick," said science journalist Gary Taubes. "If you don't eat them you won't be sick, you won't be fat, you won't be pre-diabetic, or diabetic, you won't get heart disease."

Exercise is another important consideration when treating insulin resistance. Exercise raises the HDL (good) cholesterol and promotes insulin sensitivity in muscle. Weight loss, even just 5% of body weight, can have a significant impact on metabolism - especially dangerous belly fat.

And in some cases, Specialty Health prescribes medication, such as Metformin, which promotes insulin sensitivity and fights the progression of insulin resistance and/or the development of Type 2 diabetes. Taubes is excited by developments in Reno. "When

people realize how it works and how well it works, that will begin to change the public health approach, the clinical approach to this obesity epidemic." So far, the approach seems to be working for Reno Police and Fire, and now casinos are interested in adopting it for their employees.

Bruce MacKay, who is with Eldorado Hotel and Casino, says it helps business if healthy people work with customers. MacKay said that over the last 10 or 15 years his business had seen a gradual increase in the number of employees with diabetes and obesity. So now the casino is implementing the prevention program.

"If we can stop even one heart attack, it's going to pay for the program," said MacKay.

For more information,

visit http://www.liposcience.com/about/

Mike's comments: While our department doesn't offer this comprehensive of testing for routine physicals, there is nothing that says that you can't go see your own physician for an annual screening and request these tests yourself and all for the low cost of your co-pay. The National Fallen Firefighters Foundation through their 16 Life Safety Initiatives has a list of recommended tests that every firefighter should be getting tested for on an annual basis once you hit age 40, which includes the following tests: • Blood pressure • Cholesterol • C-reactive protein • Homocysteine • Triglycerides.

The whole report is available at the following NFFF website:

http://www.everyonegoeshome.com/ resources/20minutes.pdf

The whole report actually has several quick tests you can take to rate your overall habits and health.



CAL FIRE Hydration Logistical Planning Pocket Card

Typical bottle of water = 16.9 ounces				
32 ounces = 1 quart				
Number of water bottles need	led per person/per hour = 2			
Typical case of water $= 24$ bo	ottles			
Typical pallet of water $= 50$ c	ases / 1200 bottles			
Water to electrolyte enhanced drink ratio = 2 to 1				
Resource needs based on a 24	hour shift:			
Resource	Number of Bottles	Number of Cases		
Individual	48	2		
3.0 staffed Engine	144	6		
21 person Engine Strike Tean	n 1,008	42		
18 Person Hand Crew	864	36		
37 Person Crew Strike Team	1,776	74		

		Based o	n 16 oz b	ottles		
Resource	Person	nnel <u>1 Hr</u>	3 Hr	6 Hr	12 Hr	24 Hr
Type	Total					
Engine	4	8	24	48	96	192
Engine S/T	21	42	126	252	504	1008
Crew	18	36	108	216	432	864
Crew S/T	36	72	144	288	576	1152
Dozer	1	2	6	12	24	48
Overhead	1	2	6	12	24	48
Helitack Crew	10	20	60	120	240	480

	Based on 24 bott	Based on 24 bottles per Case		
	Cases for 3 Hr	Cases for 24 Hr		
Engine	1	8		
Engine S/T	5.25	42		
Crew	4.5	36		
Crew S/T	6	48		
Dozer	.25	2		
Overhead	.25	2		
Helitack Crew	3	20		

Our French guests touring Mather Field



For Suggestions or Comments:

CAL FIRE / Butte County FD

"Let No Man's Ghost Say His Training Let Him Down!" - Unknown Author