“Well, I broke the first rule of hiking—Never end up on the 5 p.m. news.” Just over 12 months ago, a Listserv item reported that an Ellen Coleman of Riverside, California, was missing in a large state park in the Mt. San Jacinto region of California. Readers in the sports nutrition field traded messages of concern that it might be the Ellen Coleman we all knew. Several days later we received the good news that Ellen had been rescued after a hiking trip went seriously pear-shaped, and a short time after that we were treated to her entertaining report of a literally spine-chilling adventure: http://www.mtsanjacinto.info/viewtopic.php?t=663&postdays=0&postorder=asc&start=0. I have often wondered if my sports nutrition knowledge would come in handy for matters more important than PBs and gold medals. In this interview, we give Ellen the opportunity to reflect on her experience and the way that her own knowledge was used in a true situation of life or death.

Ellen, you’ve had a long and successful career as a sports dietitian. Can you give us a quick description of your career path and its highlights?

I became interested in sports nutrition due to a desire to improve my performance as an endurance athlete while in college and graduate school in nutrition and exercise physiology. I tested the practical application of research findings while training for and competing in ultradistance cycling events, marathons, and Ironman triathlons and shared this information through articles and talks to athletes and dietitians. At the time I wrote *Eating for Endurance* (early 1980s), there were few books on sports nutrition and none on nutrition for endurance performance. I directed a cardiac rehab program and worked as a clinical dietitian while writing articles for lay and professional publications, developing continuing education courses, and providing talks for athletes, registered dietitians, and sports science professionals. Over time my avocation became my profession. I am presently the nutrition consultant for the Sport Clinic in Riverside, CA, and have consulted with the Los Angeles Lakers basketball team, Angels baseball team, and Ducks hockey team. In 1994 I was honored with the SCAN Achievement Award (Sports, Cardiovascular, and Wellness Nutrition–Dietetic Practice Group of the American Dietetic Association).
Tell us also about your background in hiking and other wilderness activities.

I loved hiking ever since childhood. At age 12 in Yosemite Valley, I left my family behind on the Mist Falls trail and hiked by myself to the top of the falls. In college, I started backpacking in the Sierra Nevada range with the Outtings club. My favorite bicycle touring trips were through the Sierras. I began hiking regularly again in the early 1990s when I could no longer run or bicycle due to spinal injuries and surgeries. My first day hike of Mt. Whitney (22 miles roundtrip, over 6,000 ft of gain to 14,494 ft) was in 1992. In 2004, I reached the summit of Mt. Kilimanjaro in Tanzania (19,330 ft, one of the Seven Summits). In 2006, I backpacked in the Andes expedition-style and reached high camp (19,330 ft) on Aconcagua in Argentina. In 2007 and 2008, I hiked the Grand Canyon Rim to Rim to Rim (45 miles roundtrip, about 15,000 ft gain) in 2 days. I started using crampons for winter hiking in 2004 and snowshoeing in 2008.

What is the culture and practice of nutrition for hiking? How would most people handle a 1-day hike? A multiday hike? What food and drinks do you normally pack for yourself, and did you do anything different on this particular trip? Did you normally pack with the idea of having contingencies or a Plan B?

The culture of hiking varies quite a bit—some individuals pride themselves on packing very little food and gear (these are generally very fit and fast hikers) while others pack enough to feed several people and spend the night out on a day hike. Water is either carried or obtained from streams and lakes and purified. Most hikers carry only a little more food than needed for a day hike, especially in the summer. On a multiday backpacking trip, more food than needed is packed to account for unplanned rest days or changes in route that lengthen the trip. I take at least 3 liters of Gatorade Endurance on summer hikes and at least 2 liters on winter hikes. I also bring at least four carbohydrate gels (for the climb), a lunch (turkey sandwich or sharp cheddar cheese and baked chips) for the summit, and Smarties candies for fun. On the day of the “event,” I did not plan ahead for any unforeseen events. Needless to say, now I do.

To dive straight into the midst of your challenge, you found yourself at the end of a 1-day hiking trip and your nutrition supplies with a trifecta of bad news. You fell on the side of the mountain and badly injured yourself (fractured fibula and complete disruption of the ankle joint), a storm was approaching, and you had no means of communication. How did you gather your thoughts to make a plan, and what did you do?

Once I realized the extent of the injury, I knew I needed to find shelter and get help to avoid perishing from hypothermia. I crawled back uphill in the icy snow to the summit hoping to locate other snowshoers. When this was unsuccessful, I began looking for the stone hut below the south side of the peak. I had to stay focused and keep moving to stay warm—time did not permit the luxury of panicking.
Interview: Ellen Coleman, Sports Dietitian

Just in case readers have pictured this stone hut as an outreach of the Hyatt with a five-star bar fridge, you can find a photo by following the thread at the discussion board on the Mt. San Jacinto Forum Index. Ellen, describe the hut to us, including the provisions on supply.

It’s a stone hut with a stone floor, wooden roof and door, and contains bunk beds on each side. The back of the hut has a rocky mantle, shelves, and cabinet containing emergency food and medical supplies. There is no place to build a fire and no firewood—fires are prohibited. During my visit, the bottom of the right-hand bunk bed had a sleeping bag and part of a worn egg-crate mattress. Most of the food was freeze-dried. All nonsteroidal anti-inflammatory medicine had been removed from the first aid kits. Fuel canisters were available but no stove. All the water bottles were empty.

Since this incident, the hut now has several sleeping bags, new mattresses, and copious amounts of easy-to-open and -eat foods.

Given that it was freezing and you had no way of knowing how long it would take for help to arrive, what were your principles in using these supplies? How much were you guided by general knowledge, rules of hiking, and your knowledge of sports nutrition?

During my first backpacking trip in the snow, I learned that eating a candy bar before going to bed would help keep me warm. Through sports nutrition education, I learned that eating raises core temperature via dietary-induced thermogenesis. My initial food selection was determined by what I could open and eat as is—sardines, canned condensed cream of chicken soup, club crackers, and trail mix. I started with the sardines Sunday morning and cream of chicken soup Sunday afternoon due to their high energy density. The crackers were high in carbohydrate (a rapid energy source) and also helped me choke down the sardines and soup. I saved the tasty trail mix for the next day.

Play out the first night and next day for us. How did you manage the cold? How did you manage the pain? If you had been your own client, how would you have counseled yourself to act? Did you follow your own advice?

My body automatically responded to the nighttime hypothermia with shivering thermogenesis. I generated additional heat by rolling from side to side due to the ankle pain, shivering, and the uncomfortable bunk bed. I was warmer during the day and focused on eating and drinking to stay alive. My years of experience as an ultraendurance athlete, prayer, and meditation helped me cope with the pain and cold. I followed the advice I’ve given to fellow athletes suffering during endurance events.

What about hydration? What were the special thoughts you had about fluid? How did you manage to look after these needs?

I drank the last of my Gatorade early Sunday morning and there was no water in the hut. When I developed a headache Sunday afternoon, I realized that I was probably dehydrated—I had produced little urine. I estimated that a
handful of snow provided one to two ounces of fluid. I ate a handful of snow every 5 minutes for several hours and consumed club crackers to hopefully counteract the negative effect of eating snow on my body temperature. By evening the headache was gone and I needed to urinate.

As you went into the second night, what were the food options and how did you plan to make best use of these? How was your body coping with the plan so far?

I experienced gastrointestinal distress from both the sardines (cramps and diarrhea) and the cream of chicken soup (cramps and gas). By Sunday evening, I limited my intake to crackers and snow. My intake was successful in maintaining my core temperature until later Sunday night after sunset when the temperature dropped precipitously.

If there had been room service in the stone hut, what would you have ordered? For your head and for your real needs?

I would have ordered a bean and cheese burrito or beef stew (with potatoes, carrots, and other vegetables) and hot chocolate or coffee—savory choices that would also meet my nutritional needs.

How did the rescue occur? How did the rescuers assess your condition, and in what order did they attend to your various needs?

My sister activated search and rescue Saturday night when I didn’t return home. She also contacted a friend, who posted online via the San Jacinto bulletin board that I was missing. On Sunday, a rescue group hiked in but was turned around due to the storm and lateness of the day. On Monday morning, the Riverside Mountain Rescue unit searched the area by a helicopter and saw me waving outside the hut. After they had checked that I was oriented, I told the rescuers about my broken ankle and cold injury to my fingers. They checked my pupils to rule out a head injury, splinted my ankle, and gave me water.

If you had not been rescued on second morning, did you have a new survival plan? What was left in the hut and how would you have used it?

I specifically saved the trail mix for Monday as I knew it would taste good and carry me through until Tuesday. There were several cans of tomato sauce and a brick pack of sweetened, condensed milk that I would have consumed on Tuesday—easy to ingest and higher water content. After that, I could tackle the freeze-dried food. I still had an abundance of snow to meet my fluid needs.

What was the final scorecard when you were assessed in hospital? And what was the first proper meal that you had?!

In addition to the ankle fracture and cold injury to my fingers, I lost a significant amount of blood (about two to three units or pints) due to the ankle fracture, tissue damage from the stress of crawling, and cold exposure. I also had
evidence of considerable muscle breakdown as evidenced by elevated serum creatine phosphokinase and myoglobin levels. While I was in the emergency room, my family brought one of my favorite Mexican meals, called Machaca (shredded beef, onions, green and red peppers, and scrambled eggs), with beans, rice, and flour tortillas.

*Are you still a hiker? Have you changed your nutritional preparation for a hiking trip? If you were writing a nutrition fact sheet for hikers, what would be your key messages?*

I still love hiking and plan to hike the John Muir trail in the Sierras this summer. I have returned (with hiking partners) to the summit of San Jacinto using crampons and snowshoes. I now carry additional food and fluid *for emergency use only* and advise other hikers to do the same. In addition, hikers should know the location of available water sources, be able to treat the water, and be prepared to melt snow for water. On a nonnutrition note, I advise leaving a detailed hiking plan (including clothing worn), contacting someone when back from the hike, and carrying the 10 essentials (http://en.wikipedia.org/wiki/Ten_Essentials).