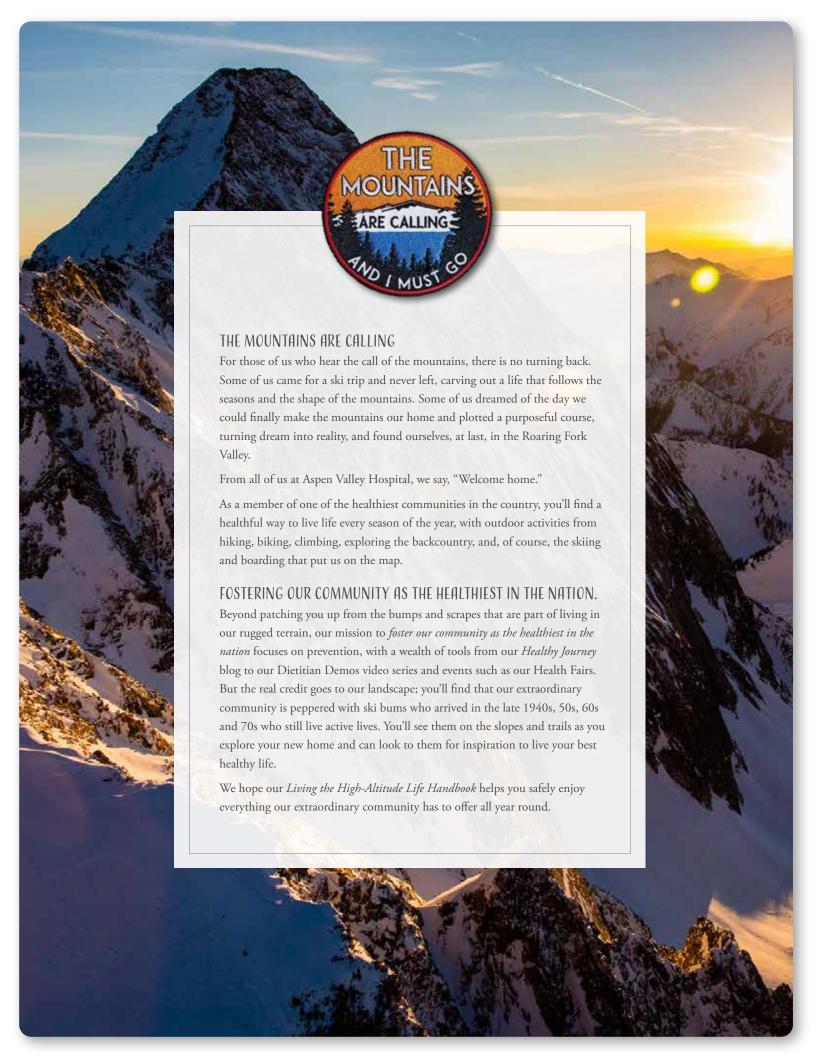
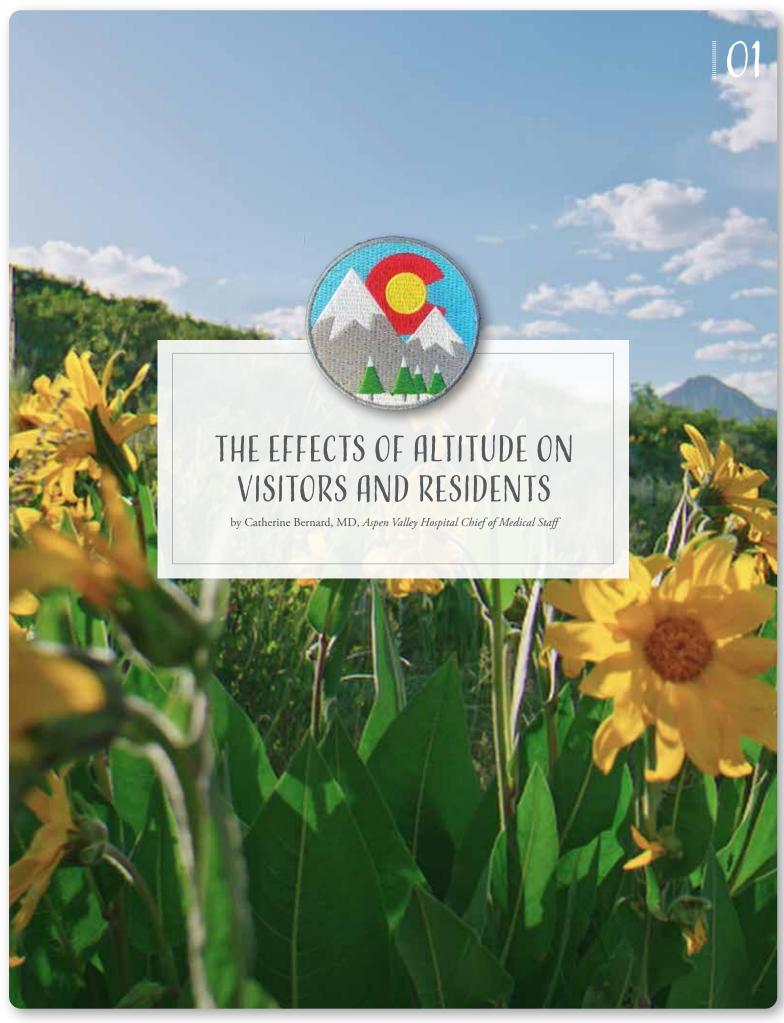


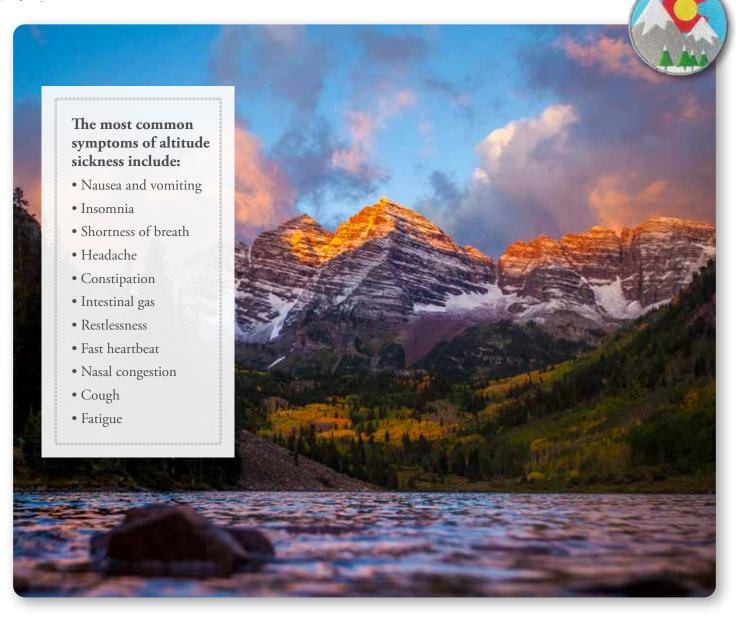
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The whole of the Roaring Fork Valley lies in what is considered a high-altitude to very high-altitude zone. The Roaring Fork Valley starts at 5,761 feet in Glenwood Springs and climbs to 7,908 feet in the city of Aspen, with the summits of Aspen Mountain, Aspen Highlands, Snowmass Mountain and Independence Pass averaging just over 12,000 feet. Once you've lived here for a while you will acclimate. After this transition, as you discover more places to explore, your excursions may take you to higher altitudes where you may experience some of the symptoms of altitude sickness, particularly if you are not native to high-altitude regions.

eep in mind that several of the symptoms listed may also be caused by heart disease or underlying infection. If you are unsure what may be causing your symptoms, seek the advice of a physician. More serious symptoms of altitude sickness – such as worsening shortness of breath, increased cough and fluid in the lungs – can also occur and require medical attention.

Tip 1: Hydrate Like a Local

You will notice most locals are sipping on water throughout the day. They know that if they wait to get thirsty their performance suffers, and it is much harder to get caught up on their hydration when they fall behind. Buy a refillable water bottle and take sips every 15-20 minutes. Consider adding some electrolytes to the water for bigger workouts, such as a day of skiing or hiking. You will be breathing harder to take in more oxygen. Look for low-sugar or sugar-free sports drink options as too much sugar can aggravate your symptoms. In the pages ahead you will hear more on the importance of hydration including deliciously hydrating recipes.

Tip 2: You're in the Mountains So Pack for the Beach

With around 250 days of sunshine and less UV ray filtering ozone, it is easy to get sunburned. Wear and apply sunscreen often. Don't wait to get outside for that first application and be sure that all the little places like your earlobes and under your nose are covered when you hit the slopes. There's nothing more annoying than a sunburned septum. The same goes for your eyes; wear appropriate UV filtering sunglasses or goggles to protect your eyes from the intensity of the sun. See Chapter 4 to learn more about the effects of the sun at altitude and how to sunblock like a pro.

Tip 3: Rest and Relaxation

So, you've just arrived, and the mountains are calling. By all means, heed their call, but take it easy the first couple of days and build up gradually. Get plenty of sleep. Overexertion and lack of sleep can result in more severe and persistent altitude symptoms.

Tip 4: Dial Back Your Alcohol Consumption

At higher altitudes, you will find less alcohol does the trick. Either eliminate alcohol for the first couple of days, or if you do drink, pace yourself to see how alcohol affects you. Always match your alcohol intake with water.

Tip 5: Watch What You Eat

Avoid heavy meals and red meat for your first couple of days. Eat smaller but more frequent meals. Your body will be working harder with less oxygen. Make sure you are getting your calories in and look for nutrient-dense options like dried fruit and nuts for snacking. Again, avoid or limit alcohol and sugar until you've had a chance to acclimate.

Tip 6: Don't Forget About Your Pets

We are a dog-friendly community, just remember that your pets need a chance to acclimate, too. Let them rest and always make sure they have access to fresh water and treats to keep them hydrated and fueled up. If you are out and about and have forgotten to pack water for your pup, many merchants have water bowls outside their doors, and restaurants are always happy to oblige.

Above all else: **Listen to your body.** The symptoms listed are a warning to decrease your activity and protect yourself. If your symptoms persist or worry you, visit Aspen Valley Hospital in Aspen, the Snowmass Clinic in Snowmass Base Village, or After-Hours Medical Care in Basalt. If you are on the mountain, call the ski patrol for assistance.



When not tending to patients in the emergency department, you'll find Catherine in her garden, playing her harp or exploring the wilderness with her family and faithful dog Champ. Seen here on the Rim Trail in Snowmass.





Living in the mountains is an amazing experience. Playing in the mountains with kids is an adventure. As the father of twin boys raised in the mountains, we've certainly experienced more than our share of bumps, bruises and trips to the ER. For a while I was looking for a frequent customer punch card at the Aspen Valley Hospital ER! I'm pretty sure there's a suture room with my name on it by now.

As a paramedic and a parent, I've learned a thing or two about keeping my family safe in the mountains.

he one item that should be included in every first aid kit is *prevention*.

Many injuries that we encounter on the ambulance or in the hospital can be avoided by simple prevention strategies.

- Helmets: Whether skiing, biking, climbing or kayaking, a helmet can afford protection that is truly lifesaving. The days of hot, heavy and downright ugly helmets are gone. "Helmet hair" is a sign of a true local.
- Sunglasses: As the saying goes, "It's all fun and games until someone loses an eye." Mountain biking or hiking through the beautiful White River Forest or fishing on the Roaring Fork River can be an experience remembered for a lifetime. Apart from the benefits of protecting your eyes from the intensity of the sun at high altitudes, sunglasses will defend your eyes from a tree branch or a fishing hook. There are many great options for sunglasses for kids and adults alike.
- First Aid Class: There are quite a few options for learning first aid. Online courses are available, as well as in-person classes. If you have the opportunity to take an in-person course, I recommend it, as it allows you to actually use the items in your kit in a non-stressful training environment.
- CPR/Automated External Defibrillator (AED) Course:
 Everyone should take a CPR course, including adolescents. We regularly teach courses to those as young as 12 years old. The new methods of CPR are safer for you and could potentially be lifesaving for someone else. Anyone can learn to save a life.

What to bring with you on your adventure:

• First Aid Kits: Small, light and easy to tuck into a backpack, a first aid kit is a simple insurance against blisters, cuts and other common occurrences that may spoil a day in the mountains. Kits can be assembled yourself with individual items or bought pre-stocked and packaged. You might need a couple that fit each activity. I generally keep one in the car for access to and from the trailhead. I keep another that I can easily stuff in a daypack. I also have a larger, more comprehensive kit that I bring on extended raft trips and multi-day adventures. Know what's in your kit and how to use it. Most items in a first aid kit will last for a few years without replacement; however, I

would recommend inspecting the contents of the kit every so often to assure that water, dust, dirt or snow haven't damaged any items.

There are a few items to add to your kit:

Tweezers: Nothing ruins a day faster than a pesky splinter or cactus spine stuck in a finger or foot. Tweezers allow a safe method to remove the offending splinter with ease.

After-Bite Wipes: Bug bites are itchy and annoying. Take away the itch with "after-bite" wipes. Especially recommended if you're overnighting in a tent with kids; getting your child to sleep is much easier if they're not scratching bug bites all night.

Burn Care: What better than a night around a campfire with s'mores? Unfortunately, burns are all too common. Who hasn't dodged a flaming marshmallow at one time or another? Treat burns by removing the source of the burn and then wrapping in a clean, dry gauze dressing. A burn gel may be used. Pain can be treated with acetaminophen (Tylenol) or ibuprofen.

Moleskin: Blisters on the feet are common when hiking in the mountains. The up and down nature of hiking trails can cause blisters to develop in even the most comfortable shoes. Moleskin is cheap and easy to apply. Cut the moleskin in a shape a little larger than the blister and apply. Pro tip: don't wait for a blister to develop before applying, as soon as you notice a "hot spot," stop hiking and stick on some moleskin. Your feet will thank you.

Duct Tape: What "life saving" list would be complete without duct tape? Wrap a few feet of duct tape around your water bottle or a pencil for ease of carriage. You don't need the whole roll. Duct tape works well to hold gauze bandages in place, splint a broken finger, fix a broken backpack or keep blisters at bay. Resist the urge to use on unruly toddlers!

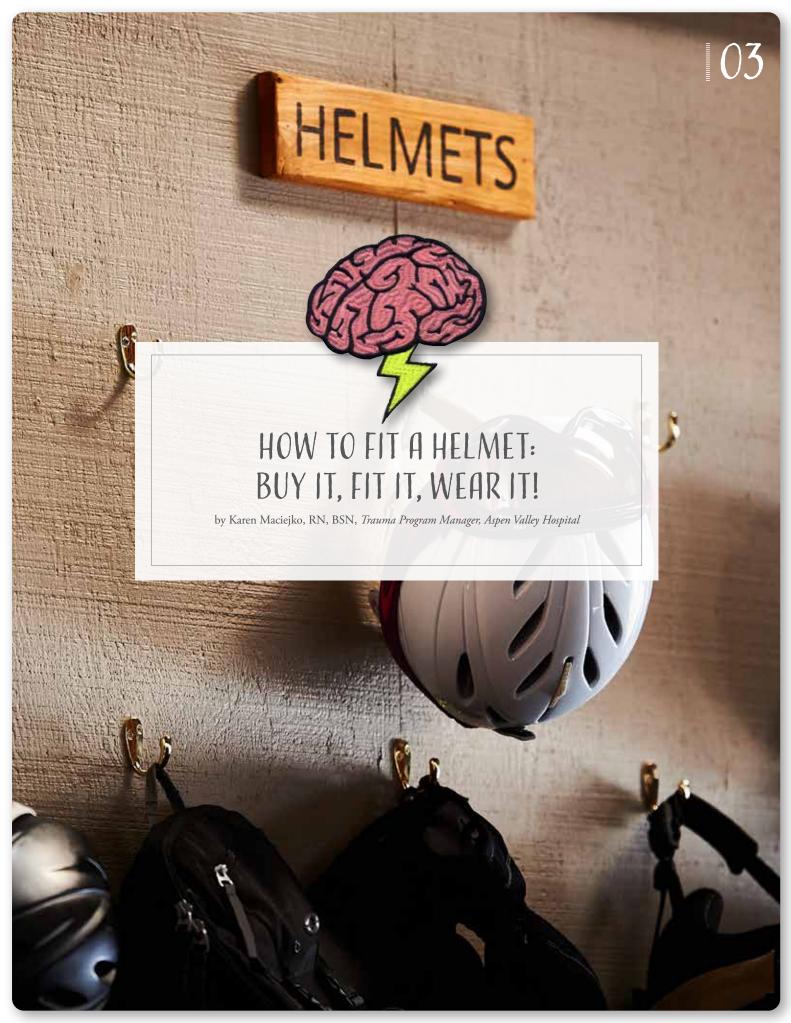
• Personal Medications: We commonly see individuals that have inhalers or EpiPens prescribed to them. Make sure that you carry them with you and that others in your party know where they are in your first aid kit or on your person. Many individuals, if they haven't had to use them in a while, forget their medications at home. Hiking in the forest or even skiing the resorts, well away from help, is not the time to forget your EpiPen or inhaler.

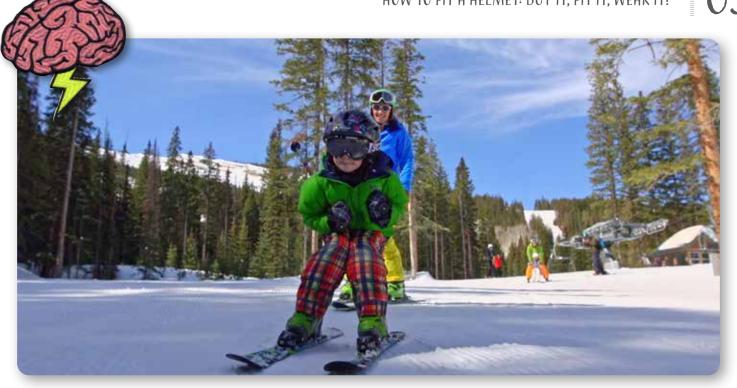
- Hydration: Without a doubt, I can tell you that everyone playing in the mountains is dehydrated. Altitude and dry air contribute to constant dehydration and children are not immune. Hydration packs are a great idea to allow kids to carry their own water and as a constant reminder to keep drinking. Sugar-free flavored drink mixes are also a good incentive. Try to stay away from soft drinks and sports drinks, as they tend to have excessive sugar. Hydration is so important in our climate that we have a chapter dedicated to it.
- **Backcountry Safety:** Be sure to read *Chapter 8, Backcountry Safety,* if you are venturing off the beaten path.

With a healthy respect for our rugged terrain and your fitness and skill level, you can enjoy the mountains with confidence. If you are new to the area, there are plenty of group hikes for all ages and abilities. One of my favorite groups is Roaring Fork Outdoor Volunteers. Visit their website at **rfov.org** to register for one of their many events throughout the valley to help restore hiking trails. It is one of the most scenic ways to get plugged into your community.



When not at Aspen Ambulance Gabe enjoys exploring all aspects of the Valley with his family.





Buy it. Fit it. Wear it!

The most important thing you can do to prevent brain trauma is to always wear a helmet when you are skiing, snowboarding, riding a road or mountain bike, or any other sport where helmets are recommended.

roper Helmet Fit
Like hats, helmets come in various sizes, and size can vary
from manufacturer to manufacturer. Ensuring the proper
fit is essential to letting the helmet do its work for you if you have an
accident. Here are the steps to fit both ski and bike helmets for kids
and adults. It may take a bit of time to get it just right, so stick with it.
Having someone else adjust the straps or looking in the mirror usually
makes things easier.



Step 1 – Find Your Size

Start by measuring your head to find your size, then try on helmets in your size until one feels right. Place the helmet level on your head and adjust the sizing as needed until the helmet is snug. Some helmets have a dial at the back and others have a self-adjusting tension strap.





Step 2 – Helmet Position

The helmet should sit level on your head and low on your forehead – no more than two finger-widths should be visible above your eyebrow. If you are helping someone else, be sure to use their fingers.

Step 3 – Side Straps

The straps should form a "V" shape under, and slightly in front of, the ears. Some helmets have a fixed connection and others have an adjustable slider to lock the straps in this position.





Step 4 - Buckles

On most helmets, the straps can be pulled from the back of the helmet to lengthen or shorten the chin straps. Adjust to center the left buckle under the chin. It's easier if you take the helmet off to make these adjustments.

Step 5 – Chin Strap

Once you have adjusted the side straps, it's time to buckle your chin strap. Tighten the strap until it is snug, so that no more than one or two fingers fit under the strap. You should be able to chew gum comfortably.

Step 6 – Check Your Work

Check these three points to ensure you have a proper fit.

- 1. Open your mouth wide, like taking a big yawn. Your helmet should pull down on your head. If not, go back and tighten the chin strap.
- 2. Does your helmet slide back more than two fingers above your eyebrows? If so, unbuckle and shorten the front strap by moving the slider forward. Buckle and retighten the chin strap, and test again.
- 3. Does your helmet slide forward into your eyes? If so, unbuckle and re-tighten the back strap by moving the slider back toward the ear. Buckle and retighten the chin strap, and test again.



Helmet fitting model, Tobias Andrade, was born at Aspen Valley Hospital.

Now You're Ready to Roll!

When to Replace a Helmet

If you have been in a crash while riding your bike, you need to replace it right away; damage is not always visible, and a damaged helmet will not offer you sufficient protection. For snow helmets, if you fall and the helmet is impacted, you should have the helmet inspected or replace the

helmet immediately, even if no damage is visible. Check the guidelines in your owner's manual for further information. Parents, check in with your kids and ask them to let you know if they need a new helmet.

Buy For Now

Parents, buy a helmet that fits your child's head now, not a helmet they will "grow into."

Comfort and Style

If you buy a helmet that you find comfortable and attractive, you are more likely to wear it. Check your helmet fit before each ride and adjust as necessary to ensure the helmet fits properly. Like shoes or gloves, the straps can stretch a bit with wear.

Be a Role Model for Safe Behavior

Everyone – adult and child – should wear a helmet each time they ride, ski or engage in an activity where helmets are recommended. Wearing a helmet each time can encourage the same smart behavior in others.

Helmet Certification

Bicycle and ski helmets sold in the U.S. must meet the standards issued by the U.S. Consumer Product Safety Commission (CPSC). Look for the certification label inside the helmet.

Helmet Program

As part of Aspen Valley Hospital's mission to *foster our community as* the healthiest in the nation, we provide ski and bike helmet fittings by appointment at the Hospital and at local community events. We also provide helmets at no cost to community members who need them. If you need a helmet or already have a helmet and are unsure about your or your child's fit, please contact me to schedule an appointment.

Karen Maciejko, RN, BSN kmaciejko@aspenhospital.org 970.544.1576



As Aspen Valley Hospital's Trauma Program Manager, Karen has fit bike and snow helmets on every age, size and shape of head at the Hospital and at community events throughout the Roaring Fork Valley, where she is an advocate for trauma prevention. In her free time, Karen explores the mountains with her dog, Asa.





Why is it so easy to get sunburned in the mountains?

At higher altitudes, the sun's rays have less ultraviolet (UV) light filtering atmosphere to blaze through, and the higher you climb, the thinner the atmosphere. For roughly every 1,000 feet above sea-level, the sun's UV rays intensify by 8-10 percent, so no matter where you are in the Roaring Fork Valley, the effects of the sun are 50-140 percent more potent.

ere in the Valley we are bathed in about 250 sunny days a year, and on top of that, socializing and recreation often happen outdoors, every day and every season of the year. If we are skiing, rafting, fly fishing or rock climbing, we are on more reflective surfaces, so we are getting double exposure to the UV rays bouncing off these surfaces.

If you're new to town, the Roaring Fork Valley is a very dry climate, what is considered an Alpine desert. When you first arrive or have been visiting more humid environments, there is usually a period where your skin is adjusting to our local climate. You may find that you need extra applications of skin moisturizers to avoid developing or exacerbating extreme dry skin conditions. Equally, if not more important, is making the daily use of sunscreen and sunblocks a part of your essential grooming routine, just like brushing your teeth before you leave the house.

Here are some of the frequently asked questions that I receive from our employees:

1. How does sunscreen and sunblock actually work to protect people who use it?

Sunscreen and sunblock are two different things, which is important to clarify. Sunscreen is a chemical that screens the sun's rays – some get in and some are blocked out. Sunscreen actually absorbs the harmful UV radiation before it penetrates the skin. Sunblock sits on top of the skin and reflects the sun and UV rays.

Sunblocks like zinc oxide and titanium dioxide are the most effective in blocking ultraviolet radiation, because they truly don't let any rays in. Both zinc- and titanium-based sunblock have been determined to be safe and effective by the FDA.

The term "broad spectrum" means that the product is targeted to minimize exposure to both types of ultraviolet radiation, UVA and UVB. UVA is a type of radiation that causes aging. UVA radiation breaks down layers deep in our skin and causes us to wrinkle. UVB radiation is the type that causes skin cancer.

2. What's the difference between SPF 30 and SPF 50 and SPF 80?

"SPF" stands for Sun Protection Factor. It indicates protection against UVB, the burning rays. A higher SPF technically means you can be in the sun for longer periods of time. Using a sunscreen that's SPF 30 theoretically means it would take you 30 times longer to burn than if you weren't using sunscreen at all. That's not how it really works, but is how it was originally defined.

A higher SPF is going to protect you for longer in the sun, but it's really a micro-difference between SPF 30 and SPF 50 in terms of the percentage of rays that come through. Under ideal conditions, you would want to use a higher SPF to be in the sun longer, with the caveat that we're all supposed to be reapplying sunscreen, no matter its strength, every two hours, and more frequently if you're swimming or sweating.

3. Is there a minimum level in terms of getting real protection from the sun?

At our elevation, use an SPF 30. Anything less than that is more of a tanning lotion versus a sunscreen. I recommend that people don't go above SPF 50, because all you're buying is more chemicals for what really is a minuscule gain in terms of percentage of protection.

4. What should people think about when choosing a sunscreen to purchase?

I would say the number one question people should ask themselves is: Are they going to use it? The best sunscreen you can have is the one you're going to use. If you have sensitive skin, you want to look for something that doesn't harm sensitive skin. If you don't like the white appearance of a zinc or titanium dioxide sunblock, then I recommend using a high SPF sunscreen.

In particular, you want to avoid sunscreens with oxybenzone. It is believed to be quite carcinogenic and has been banned for years in Europe, where its possible effects as an endocrine disrupter are being studied. It is still used in the United States in some sunscreens. Sunscreens that have been labeled "reef safe" are probably also the most "human safe."

I prefer a combination sunblock and sunscreen, which you can find. That way you're getting the UV block with things like titanium

and zinc, but you're also getting UV reflection that comes with the sunscreens, so you're using everything possible in your toolkit.

The other thing is if people are going to the beach or lakes, you want to look for "reef-safe" sunscreen, because some of the chemicals in sunscreens are detrimental to the water we swim in - fish species and coral can be badly affected. Oxybenzone, which I mentioned before, is one of the chemicals that harm coral reefs.

I generally look for that label, because if it's not safe for the reefs, I don't want it on my body either. Most reef-safe sunscreens are chemically safer for us as well.

5. What are the best practices with sunscreen – if you're outside all day, or swimming at a pool or the beach?

It's recommended you apply sunscreen 20 minutes before you go out. Reapply every two hours, and more frequently if you're swimming or sweating a lot.

Be sure and apply sunscreen or sunblock on cloudy days, which is something people don't always think about. The UV rays can still penetrate on cloudy days, so people think they are not getting any sun when in fact they are, particularly the UVA rays that cause aging and skin damage over time.

Also, people typically apply too little sunscreen. It's recommended you use one ounce for your whole body, which is equal to a shot glass. If you think about a shot glass full, that's a lot of lotion!

Don't forget your lips! A lot of people will go out and bike or hike all day long and forget that their lips are exposed skin as well. Lip cancers are not uncommon here in the Roaring Fork Valley. Same rules apply: use a high-quality SPF 30-or-above sunscreen or sunblock lip balm.

6. What are some of the most common concerns people express, and how much should they really worry?

Some people say that sunscreen is worse for you than exposure to the sun. That is an absolute myth. Here at elevation, Pitkin and Eagle counties have some of the highest rates of skin cancer in Colorado, in part because we're closer to the sun. We also tend to recreate more outside, which over time can be detrimental to our skin's health, so it's important to protect yourself.

Our skin is our largest organ, so if you smear something all over your body, you're probably going to absorb some of it. Some of the chemicals in sunscreens can be dangerous, so it's important to be aware. But the bigger danger to our health is the significant risk of skin cancer at our elevation!

7. What are the recommendations for people who have had skin cancer in the past?

People should protect themselves as much as they can. They definitely want to avoid the peak sun between 10 a.m. and 2 p.m.

I am a huge fan of SPF clothing. There's so much available now compared to what there used to be. You can buy shirts and hats that are SPF 30 or SPF 50. The difference between regular clothing and SPF clothing is the tighter weave of the fabric. So, there is much less penetration of UV rays through to the skin with SPF shirts and hats than with other clothing.

I personally wear SPF shirts as much as possible when I'm outside, because I don't like being slimed with sunscreen all day. Plus, you don't have to reapply.

8. Can I sunburn my eyes?

Your eyes need sunscreen, too. Enough cannot be said about the intensity of the sun at high altitudes. In winter this intensity is compounded by the UV reflections off the snow. When your eyes are exposed to too much intense UV light, your retinas can burn, which leads to snow blindness. Look for glasses with a UV rating. Goggles, wraparound sunglasses or glacier glasses will give you protection by reducing direct and reflected UV radiation and glare reaching the eyes. Many people are not aware that melanoma can occur in the eyes too. Your eyes will thank you.

If you have any concerns about your skin, our physicians at Aspen Valley Primary Care are experienced in treating many common skin conditions related to our high-altitude climate.



An Aspen native, Amy has been with the Hospital since 1996. When away from work, Amy enjoys everything under the Colorado sun.



HYDRATION TIPS TO FUEL PERFORMANCE

by Lauren Mitchell, MS, RDN, CSSD, Nutrition Services





Lauren on the Aspen side of West Maroon Pass Trail. Photo by Kelsey McCormick.

Previous page: Lauren on an early summit of Mt. Elbert.

Whether people consider themselves athletes or not, I find that living in the Roaring Fork Valley makes an athlete out of everyone. Whether you are "getting your steps in" or training for a race, staying hydrated in our Alpine desert climate takes awareness. Here are some tips for the athlete in everyone to stay healthy and hydrated.

Proper hydration is essential to have dialed in for your performance and to practice throughout your training program. Rehydration is simply replacing the water lost in your body which occurs daily from sweating, respiration, gastrointestinal and renal losses. Replacing the fluid lost can be done through consuming water, fluids with added electrolytes and foods with a highwater content. Here are four hydration tips to help you stay hydrated all year round.

now When You are Dehydrated Feeling thirsty during the day is the first sign of dehydration. Clinically, dehydration can be defined as losing 2-3% of your body weight after exercise. Signs and symptoms of mild dehydration include feeling dizzy, lightheaded, reduced cognitive function and performance, and feeling thirsty. Severe dehydration is losing 6-10% of your body weight, which can result in more drastic and alarming symptoms such as a decrease in cardiac output and sweat rate, low blood pressure, dark amber urine, dry mouth, confusion, and in serious cases even death. Taking a detailed look at your own urine before and after exercising is an easy way to assess your own hydration. Aim for a pale, lemonade color. Another useful strategy is to weigh yourself after voiding before and after exercise to understand your own sweat loss and potential weight loss. Rehydration can be obtained with a strategy of 1.25 to 1.5 liters for every 1 kilogram of body weight loss. This should be consumed throughout the day and not in one sitting when working to rehydrate your body.

Consider Factors That Affect Your Hydration

Your body's hydration is influenced by various factors such as your own body's sweat rate, environmental stress, sweat sodium concentration, activity level and age. Sweat rate was discussed above, but it is also important to remember, especially for triathletes, that you should determine your sweat rate before and after your swim, bike and run training sessions, as sweat rate will likely be different for the three sports. Similarly, knowing if you are more of a saltier sweater when exercising can help support your hydration and supplemental electrolyte strategies. This can be done either with a simple sweat sodium concentration test at Aspen Valley Hospital, or informally by checking your face, body or clothing for white residue after training. The environment is another factor to consider that affects your hydration. The environment in which you are training, hot, humid or at altitude, can also play a significant factor in your hydration and electrolyte plan. Here in the high altitude of the Roaring Fork Valley the climate is very dry. Lastly, don't forget that as you get older, there is a greater risk for dehydration due to decreased body water. Taking the time to frequently assess your own sweat rate in different environments and seasons can help enhance your performance and training through proper hydration. If you are able to have a sweat sodium concentration test done, even better, as you will have more information relative to your individual needs.

Create a Hydration Strategy During Training

A proper hydration strategy should be unique to each athlete's activity level, sweat rate and racing and training environment. Get into the habit of weighing yourself before and after training throughout the summer, as the environmental conditions differ. Pre-exercise hydration strategies include consuming 5 to 10 mL per kilogram of body weight about 2 to 4 hours before exercise. During exercise, maintain fluid consumption at a rate of 0.4 - 0.8 liters of water per hour. Athletes with high sweat rates

should consider adding electrolytes to their hydration strategy as this can help prevent dehydration and muscle cramps.

Understand Symptoms of Hyperhydration

Hyperhydration can lead to hyponatremia, or low blood sodium. Clinical hyponatremia is defined when the body's sodium level falls below a sodium concentration of 130 mEq/L. This can easily occur through consuming too much fluid during a training session or during one sitting. Symptoms of hyponatremia include weight gain, bloating, nausea, vomiting, headache, confusion, respiratory distress and even death if left untreated. Your body works tirelessly to ensure homeostasis and autoregulation of the body's temperature through sweating. Having a personalized hydration strategy for your specific training and racing environment can help prevent hyperhydration and hyponatremia.

Crafting a unique hydration strategy can power your performance and training. A good starting point of how much water athletes should consume per day is roughly half your body weight in fluid ounces of water. This is, of course, a generalization and needs to be specific to the athlete, activity level, age and environment. Remember hydration starts before exercise begins and there are many factors that can affect your own hydration throughout the day.

For a taste of how to incorporate hydrating foods into your everyday diet, see Chapter 14: High Altitude Eats. I have also included my Chocolate Pumpkin Pancake recipe, which is not necessarily hydrating, but I'm pancake obsessed, and this one is my current favorite.



An elite athlete and a Board-Certified Specialist in Sports Dietetics, CSSD, Lauren has used her own knowledge of sports nutrition to fuel her performance goals. In addition to working with patients with special dietary needs, she provides nutritional coaching for athletes of all ages and abilities to help give them an edge. Lauren is a six-time Boston Marathon qualifier, an Ultra-marathoner and recently ran the Leadville Silver Rush 50-mile race and Crested Butte Ultra. In her free time, you'll find Lauren training for her next event. Photo by Daniel Bayer, Aspen Valley Hospital creative partner.





Fat bike express to the gondola. Photo by Aspen Valley Hospital creative partner Matt Hobbs of Vital Films.

Preventing Injuries on the Slopes

Preparation is everything. The more you prepare, the less likely you are to get injured. Here are some tips to help prevent on-mountain injuries to keep you on the slopes all season long.

My number one safety tip is: wear a properly fitted helmet. See *Chapter 3, How to Fit A Helmet*. Helmets can eliminate or reduce the severity of head injuries.

Ski Conditioning

Mountain sports are physically demanding, and getting in shape before the season starts is critical to lowering your chance of injury. Exercises that train your body and core muscles can help you avoid injury, but you should always follow your doctor's advice. If you encounter any pain while exercising, stop and seek medical help. See *Chapter 11, Ski Season Fitness*, for tips from our Rehabilitation Services team.

Warming Up and Cooling Down

Take time to stretch your muscles and limber up before you head up the mountain. It's a good idea to do a warm-up run before you take on more challenging terrain. Ski injuries are more likely to happen at the end of the day when you are tired, so just as you started the day, treat your legs

to a warm-down run. When you get home, spend some time stretching your muscles to help relieve any soreness the next day.

Stay Hydrated

Dehydration can affect your performance and make you feel tired, so make sure you're properly hydrated throughout the day. Check out *Chapter 5, Hydration Tips to Fuel Performance*, to learn more about hydration for the athlete, which is pretty much everyone on the slopes.

Protective Gear

In addition to a helmet, items such as wrist guards and pads for the elbows and knees can help protect your joints and reduce your risk of injury, particularly if you are in the terrain park.

Ski or Ride to Your Level

Whether you're a seasoned skier or not, know your limits. Work on gaining the skills you need to take on more advanced terrain.

Ski & Board Lessons

If you're new to the sport, professional ski or board lessons are a must. Lessons help even the most seasoned skiers. They may help you gain confidence and improve your technique, as well as educate you on how to fall properly to limit the danger of harm, how to put your skis on in deep powder and how to arrest yourself if you fall in the steeps. The Aspen Skiing Company offers locals clinics to season pass holders for beginning to advanced skiers, snowboarders and telemarkers.



Colorado Skier Responsibility Code.

The Code is a list of seven key tenets that outline the main steps to enjoying a safe day on the slopes. In fact, the Code is incorporated into Colorado's Ski Safety Act. It's up to you – and your friends and loved ones – to know and follow the code!

Seven Points to Your Responsibility Code

- 1. Always stay in control and be able to stop or avoid other people or objects.
- People ahead of you have the right of way. It is your responsibility to avoid them.
- 3. You must not stop where you obstruct a trail or are not visible from above.
- Whenever starting downhill or merging into a trail, look uphill and yield to others.
- 5. Always use devices to help prevent runaway equipment.
- Observe all posted signs and warnings. Keep off closed trails and out of closed areas.
- Prior to using any lift, you must have the knowledge and ability to load, ride and unload safely.

Don't Ski Impaired

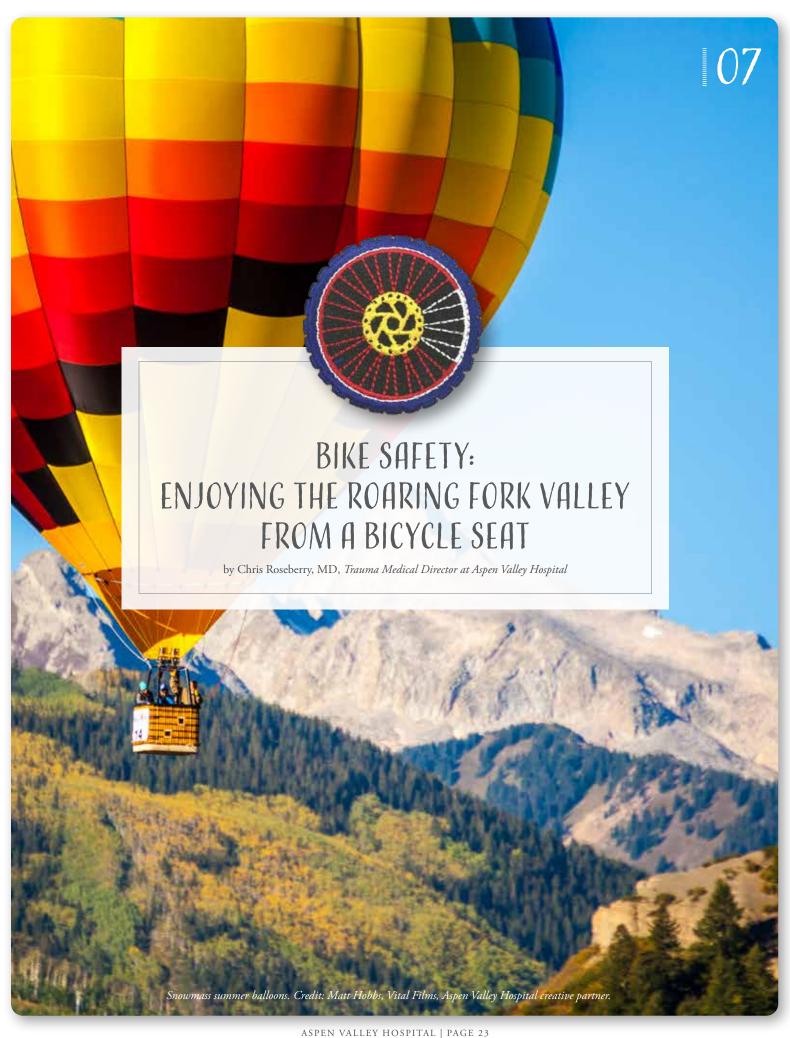
First of all, it is illegal for a reason. Impaired skiers and boarders are more likely to have or cause an accident. Skiing impaired carries a large penalty and can get you permanently banned from the mountain.

Observe Warning Signs

Stay off of closed runs and slow down in high-traffic areas, such as catwalks and areas close to the lifts, and know the Colorado Skier Responsibility Code.



Joshua Seymour, MD – In addition to serving as the medical director and a physician at After-Hours Medical Care, Dr. Seymour is a volunteer firefighter with the Roaring Fork Fire District. When not at the after-hours clinic, you can find him with his family on the slopes and trails in Aspen and the Roaring Fork Valley, or chasing new adventures in the Utah







I am keenly aware of the numerous bicycling injuries that come in the ER, especially as I am an avid mountain biker myself. To give you an idea, Aspen Valley Hospital's emergency department treats 300 or more people each year for serious injuries suffered in bicycling accidents, and many more are treated at the Snowmass Clinic and After-Hours Medical Care in Basalt. To me, that's a serious problem. If you are planning on getting out on your bike, here are some tips to help you avoid injury so you can enjoy the roads and trails all year round.

pecial Risks in Our Mountain Towns

Cyclists can get in trouble coming down from the Maroon Bells, Ashcroft or other windy, steep mountain roads. Problems can get gnarly very quickly if the roads are wet and riders come into curves too fast. Many people here are also on bikes that are unfamiliar to them, such as rental bikes. In that case, they should take a ride somewhere slow and easy before going out on a big ride. And remember: Heavier e-bikes take longer to stop, so brake early.

Helmets

Bicycle helmets are of the utmost importance and should be worn at all times and on all types of bikes. Wearing one can turn a potentially major head injury into a minor head injury, and they can turn a potentially minor head injury into no injury. They don't prevent all head injuries, but they make them less severe. In addition, a full-face helmet is recommended for mountain bikers on significant downhill rides. Facial injuries can be severe and expensive to treat, and it's not uncommon to go face-first over the bike in an accident. If you have never worn a helmet before, or want to know if your helmet is properly fitted, Read *Chapter 3, How to Fit a Helmet* to get started.

Safety Equipment for Cyclists

Elbow and knee pads are also recommended for mountain bikers. If you're taking the big jumps at Snowmass or Crown Mountain Park in El Jebel, a back protector is important. Many downhill mountain bike racers use them, as well as a cervical collar that prevents the head from hyperextending, which can cause spinal injuries.

Safety Rule to Keep in Mind

I ride my bike almost daily, and I always check the tire pressure, brakes and gears before going out. In the rain, I ride slower than usual or just take the day off. Rain is the biggest condition that can affect your ride because it affects braking distance. That's especially true with road bikes, since the rim brakes on most road bikes are much less effective in wet conditions. When mountain biking, I ride with a buddy so I have help if something goes wrong.

Head over Handlebars

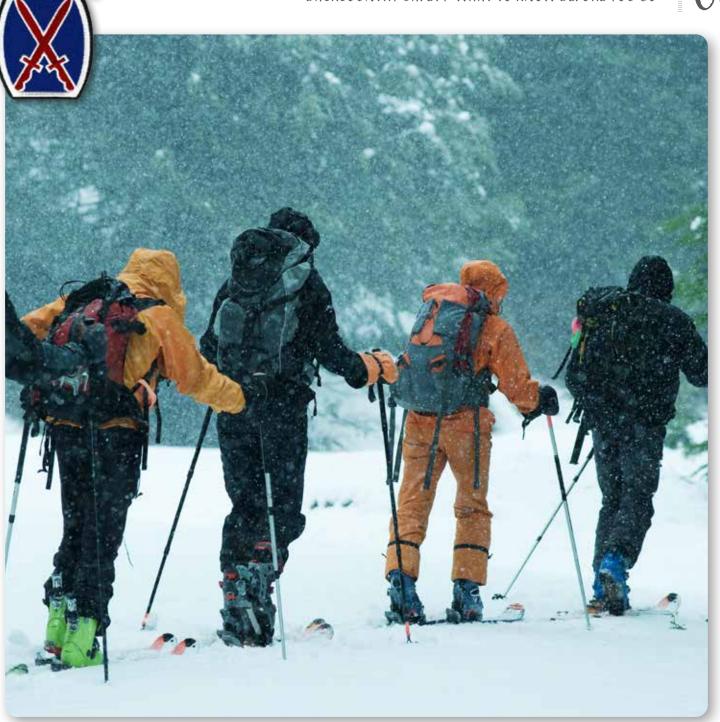
Going head over handlebars while riding downhill happens because people sit forward and then, when they hit the brakes, it pops them over the handlebars. Shifting your weight back is a key tenet for going downhill on a mountain bike. Also, always look where you want to go. Don't look at the ground or the side of the trail; those are places you don't want to go. Look forward, and your bike will tend to go where you're looking.

Wearing a bike helmet can turn a potentially major head injury into a minor head injury, and they can turn a potentially minor head injury into no injury.



Chris and his active family follow his advice on the slopes, trails and streets of the Roaring Fork Valley and in the "steep and deeps" of the Dolomites, where they enjoy on-mountain Italian gourmet meals for ten buck a plate!





If you're planning to uphill on the resort or venture into the backcountry for the first time this winter, here are a few tips to help keep you safe and ensure you have fun.

on't go alone

Ski area services like ski patrol and avalanche mitigation aren't available beyond the resort boundaries and aren't available on the resort outside of daytime operating hours. You'll need to be self-sufficient or rely on the group you're with in case of emergency. A reliable partner (or two) is a requirement for backcountry skiing and can also make a trek up the ski hill a bit more enjoyable.

Be prepared

Even for short trips, pack a first aid kit and know how to use it. A small number of supplies can help you control bleeding, splint a broken arm or sling a dislocated shoulder to get back to town on your own. More significant injuries may require external resources, so whether you're on the resort or deep in the woods, bring a communication device to summon help. For areas without cell phone coverage, consider bringing along a satellite communicator.

Take care of yourself

Don't underestimate the temperature drop and wind chill as you gain elevation or the sun begins to set. Weather forecast apps like OpenSnow, local webcams and remote weather station data are great resources to get an idea of what to expect. At a minimum, pack a wind shell, a warm insulated jacket, dry gloves and a hat. For longer outings, include plenty of snacks and water. A warm drink in an insulated thermos will make you look like a pro. If you are traveling in the backcountry, be sure to bring avalanche rescue equipment, including a transceiver, shovel and probe.

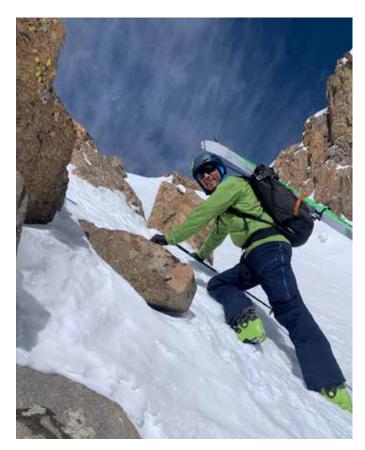
Plan ahead

If you're heading up the resort, research the policies including designated uphill routes, time restrictions and dog policies. Remember that uphilling access in Aspen and Snowmass now requires a pass. Keep in mind these resorts are designed for downhillers; make yourself visible at all times, wear lights at night so the groomers can see you and stay out of closed areas where the ski patrol may be conducting avalanche control.

If you're exploring the backcountry, you'll need to do a bit more preparation. Check the local avalanche forecast to help determine appropriate options. Plan your route on a map paying particular

attention to slope angles, slope aspect and elevation. If you aren't sure what those terms mean and why they're important, then take an avalanche education class.

For more information and to help you get started, visit a local retailer. Ute Mountaineer in Aspen has been outfitting locals and visitors for over four decades, and Bristlecone Mountain Sports in Basalt and Cripple Creek Backcountry in Carbondale both have highly knowledgeable and experienced staff. If it is your first time into the backcountry, consider hiring a local Alpine guide who can give you a lasting foundation to enjoy the many seasons to come. Enjoy the winter!



As one of approximately 150 elite Alpine Guides in the US who is certified by the International Federation of Mountain Guides and the American Mountain Guides Associations, Mark is passionate about exploring and introducing people to the backcountry. Seen here heading up Mount Sneffels in the San Juan Mountains in southern Colorado. Photo credit: Max Taam.





High Alpine, Snowmass by Chris Maciag, Informatics Analyst at Aspen Valley Hospital Previous page: Winter Bridge - Independence Pass, by Alizée Hebert, Patient Screening Coordinator at Aspen Valley Primary Care

Unlike many other places in the country, winter months in the Roaring Fork Valley offer endless hours of outdoor activities, from skiing and boarding, hiking and fat biking the Rio Grande trail, to hut trips in the backcountry. With so many outdoor options all year round, it's important to take certain precautions to insulate yourself from the elements so you maximize your enjoyment. As an emergency medicine physician at Aspen Valley Hospital and the Coroner for Pitkin County, I would much rather meet you on the slopes and trails throughout the Roaring Fork Valley than at work!

inter temperatures in the Roaring Fork Valley often plunge below zero degrees rapidly and are not always predictable. Even in the summer months, freezing temperatures, sometimes with snow or sleet, may be encountered at higher elevations. Being prepared for the elements is essential to preventing injuries. Once you are in the backcountry and at higher altitudes, it becomes more challenging to correct the onset of frostbite and hypothermia.

As you adjust to your new surroundings and settle into mountain living, you will no doubt accumulate the knowledge and more than enough gear to help keep you safe, warm and hydrated all year long.

What is Frostbite?

Frostbite occurs when your skin and underlying tissues, and in the most severe cases, your tendons, muscles and bones, freeze. The most common areas we see frostbite, and the earliest areas to be affected, are on the hands, feet, nose and ears. While exposure and not having the right protective gear are the main culprits, at altitude less oxygen in the air we breathe means our bodies must work harder to supply oxygen to our organs, including our largest organ, our skin. That's why it is important to know the warning signs and symptoms of frostbite so you can avoid causing lasting damage to your tissues and/or bones.

The degrees of frostbite are

described for information

only. Do not try to figure

seek medical help.

this out on your own; if you

think you have any frostbite

Stages of Frostbite and What to Look For

Mild Frostbite: Called frostbite or frostnip, the skin will be irritated and red, and there will be a sensation of "pins and needles" as the skin is warming up. Usually, these symptoms clear up on their own and there is no tissue damage.

First Degree Frostbite: The skin will begin to turn from a reddish color to a pale waxy color and have a hard or frozen feeling to the touch.

Often this is accompanied by swelling and a feeling of burning or stinging. A fluid-filled blister may form within 24 hours after warming. There may be no permanent damage, and the symptoms may take a few weeks to clear up.

Second Degree Frostbite: This will manifest as blisters with clear or milky fluid and surrounding swelling and redness.

Third Degree Frostbite: When the freezing goes just below the skin and symptoms manifest as purple or bloody blisters.

Fourth Degree Frostbite: While increasingly rare due to the advances in technical gear and backcountry technology, including avalanche transceivers and satellite phones, we do see cases of advanced frostbite, where the skin, underlying tissues, muscles, tendons and bones are frozen due to long periods of exposure. Fourth-stage frostbite requires months of treatment. It causes permanent damage and can lead to amputations. It may take several months to appreciate the full extent of the damage.

Prevention

- Check weather forecast and dress in layers.
- Cover your hands with insulated mittens or gloves.
- Wear hats that cover your ears.
- Use scarves and neck gators, ski masks and sunglasses, or ski masks to protect your face.
- Choose waterproof and windproof outer garments.
- If your clothes become wet, change out of them as soon as possible.
- Take warming breaks and check your feet, hands, nose, lips and ears for signs of frostbite.
- Stay hydrated. This is especially important at altitude. Read *Chapter 5*, *Hydration Tips to Fuel Performance*. Avoid alcohol as it can accelerate the loss of body heat.
- Pay attention to frostnip, it is a precursor to frostbite.

- If you plan to head to the backcountry, read *Chapter 2, Backcountry Safety* before heading out.
- Parents: Mountain kids can spend the whole day outside in winter, building snowmen, sledding and tobogganing. Bring your children in for warming breaks with hot drinks and snacks, and check for signs of frostbite.
- Smokers and people with conditions that affect blood flow, such as
 - diabetes, peripheral neuropathy, peripheral arterial disease (PAD) or Raynaud's Syndrome, may be more vulnerable to frostbite.
 - Previous areas of frostbite are more susceptible to cold injury in the future.

If you or someone you know has frostbite, seek medical attention. NEVER rewarm the tissue unless you can be 100% certain there is no chance of the tissue getting cold again

before reaching medical care. Those who do extensive backcountry exploring or trips should have advanced wilderness medical training. At the time of assessment, it may be difficult to classify the seriousness of frostbite as symptoms may take days to manifest. An experienced medical professional can diagnose the injury and provide treatment guidance. Keep in mind frostbite is often accompanied by hypothermia and dehydration.

What is Hypothermia?

Hypothermia occurs when your body loses heat faster than is produced and your temperature drops below 95°F or 35°C. Although hypothermia is most likely to occur at very cold temperatures, it can also occur at cool temperatures if a person has been exposed to rain, sweat or submersion in water. In the mountain environment, hypothermia is mostly seen with exposure when cold and wet, underdressed for conditions, stuck in the mountains overnight, or cold-water immersion. It can occur even in tropical waters where the water temperature is lower than the body.

Low body temperatures affect the brain, impairing the person's ability to think clearly or move well. Hypothermia is especially dangerous because a person may not realize it is occurring and may not be able to do anything about it.

While hypothermia may seem easy to avoid with proper clothing, once you are up in the high country, it becomes harder to treat if you are not properly prepared. Hypothermia combined with altitude-related hypoxia (low blood oxygen levels) can cause confusion, making the simplest task difficult.

HOW TO AVOID FROSTBITE AND HYPOTHERMIA IN THE HIGH COUNTRY

What to Look For

Hypothermia is characterized by pale or blue lips, uncontrollable shivering and then a complete cessation of shivering.

Hypothermia is a medical emergency. If you notice any of the above signs, take the person's temperature. If it is below 95° F, get medical attention immediately.

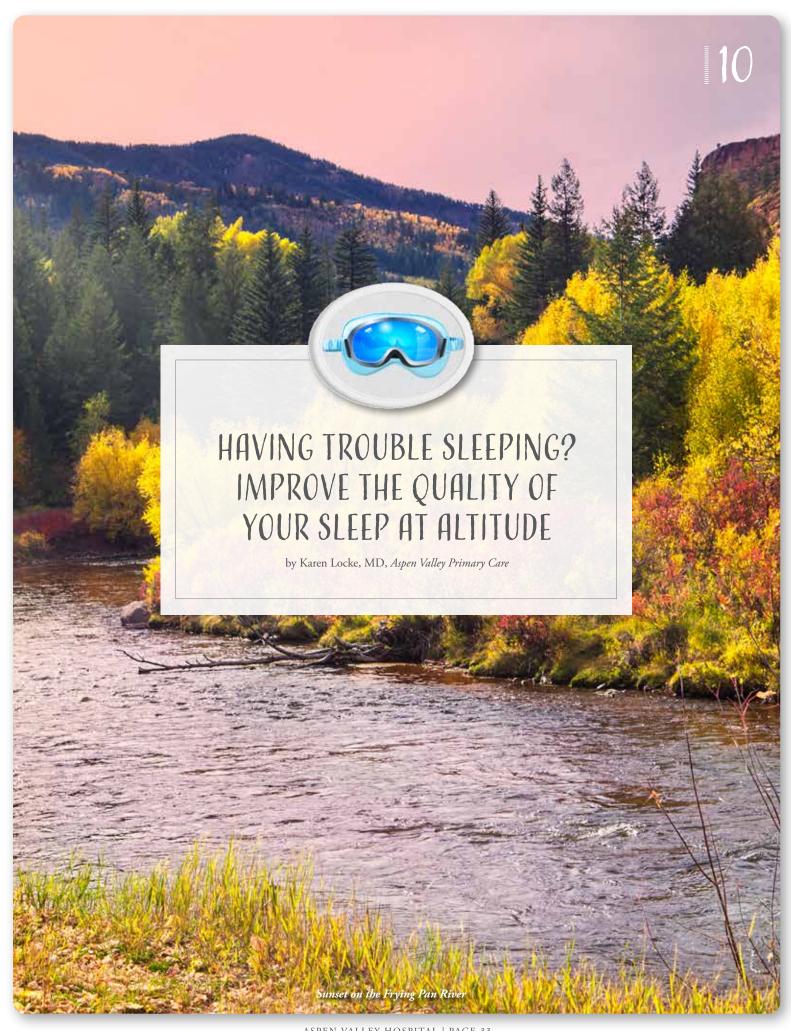
If you are not able to get medical help right away, try to warm the person up.

- First, seek a dry, sheltered place.
- Remove any wet or damp clothing.
- Concentrate on warming the core of the body chest, neck, head and groin.
- If conscious, administer warm liquids to help increase body temperature. Avoid alcohol as it can lower body temperature. Do not try to administer any liquids if the person is unconscious.
- If you have an electric blanket or heated vest or coat, place next to
 the skin and insulate with loose, dry layers of sleeping bags, blankets,
 towels or clothing whatever you can find. Or use skin-to-skin
 contact under loose dry layers.
- After body temperature has increased, keep the person dry and wrapped in a warm blanket that covers the head and neck.
- Seek medical attention as soon as possible.

A healthy respect for our weather, altitude and dry climate makes for more enjoyable excursions.



Since 1986, Steve has treated thousands of patients in the emergency department at Aspen Valley Hospital as well as on the many medical mission trips that have taken him and his wife, Jenny, to Bolivia, Haiti and the Amazon River Basin where they find purpose in offering their talents and compassion to remote communities. When not at the Hospital Dr. Ayers enjoys time with Jenny and their children.





Summer Sunset in the Highcountry

We all know how important sleep is for a variety of aspects of our lives. On the other hand, getting a proper, high-quality eight hours every night is a task that eludes many of us. Consider sleeping your body's way of cleaning out the cobwebs, tidying up your brain function and recharging your vital health functions every night. Organic sleep without the aid of substances will improve your mood, boost your immune system and contribute to your overall health. Here are the tips that we offer our patients at Aspen Valley Primary Care that will help you achieve better sleeping habits and fix your sleep schedule.

ixing Your Sleep Schedule

If you're having trouble sleeping through the night, a good first step is to fix or adjust your sleep schedule. Our sleep schedules and patterns can get off track quickly, especially with the temptations of streaming services, binge watching, endless scrolling through social channels and other influences such as crossing time zones and unrestricted work-from-home schedules. To reset your sleep schedule, try the following steps:

• Slowly adjust your bedtime. Be patient with this step – it can take a while. Be incremental and slowly start going to bed early, even if it's five minutes every night, until you reach your desired bedtime. Patients often ask me how much sleep they should be getting every night. I encourage adults to get between eight and 10 hours of sleep, with the caveat that if you can't do that, seven is the bare minimum to maintain a healthy sleep schedule.

- Meditate for sleep. Meditation for sleep can help calm your mind and
 focus your energy on the task at hand getting some quality zzzz's.
 Your meditation style is up to you. There are a variety of apps available
 to help guide meditation before bed, or simply queue up spa-style,
 calming music at low volume, set to turn off within an hour or two of
 going to bed.
- Don't nap! The mid-day short snooze can be tempting, but taking a
 nap, even a very short one, during the day can prolong your ability to
 drift off at night.
- Avoid exposure to light before sleep. Turn off or dim household lights in the hours before bed.

These tips for a more reliable and attainable sleep schedule are elemental in establishing long-term sleep hygiene.

Tips for Improving Your Sleep

I really can't overstate the importance of proper sleep at every age. Some of the benefits of sleep include, but certainly aren't limited to, improved concentration and productivity, a stronger immune system, heart health benefits, healthy body weight management and lower stress levels. Here are some tips for improved sleep:

- Allow yourself ample time between exercise and bedtime.
 For obvious reasons, exercise gives us a great burst of energy and endorphins, and to that end, it can keep us awake. Aim to finish any exercise at least two to three hours before your head hits the pillow.
 One exception to this is mind-calming, relaxing exercise such as mild yoga poses and stretching, which can help prepare your body for rest.
- Turn off the tube. And for that matter, hide your phone. Limiting
 exposure to screens and stimulating technology in the hours before
 bed is an easy way to begin preparing the mind and body to turn off
 and check out.
- Avoid sleep-altering foods and beverages. Foods to avoid before bed for better sleep include:

Heavy foods, such as fatty, fried foods that can cause indigestion. Save the cheeseburgers and fries for lunch, and opt for lighter, plant-based fare for dinner.

Alcohol. While a few glasses of wine, a couple of beers, or your favorite nightcap can help you fall asleep, alcohol can ultimately lead to sleep disruption and/or sleep apnea in the middle of the night as your liver enzymes metabolize it and your blood alcohol level increases. Try avoiding alcohol four hours before you head to bed.

Caffeine, coffee, soda and caffeinated teas are known sleep disruption culprits. Cut them out several hours (preferable no later than 2:00 p.m.) before sleep to contribute to a healthy sleep schedule.

• Choose foods and drinks that can aid sleep.

Chamomile tea is a bedtime classic and for good reason. The calming herb can help boost your immune system, reduce anxiety and depression, and even help improve the quality of your skin. Swap coffee (even decaf) for chamomile as bedtime approaches.

Almonds are rich in the sleep-enhancing mineral, magnesium, as well as a source for the sleep-regulating hormone, melatonin.

Bananas contain the sleep-enhancing amino acid tryptophan which acts as a precursor to both melatonin and serotonin. They are a modest source of magnesium.

Plain Greek yogurt is high in the sleep-enhancing amino acid tryptophan.

Tart cherry juice has high amounts of serotonin.

 Improve your breathing. One simple technique that can calm your body and reduce your heart rate while you're counting sheep is the 4-7-8 technique. Simply breathe in for four seconds, hold your breath for seven seconds and then exhale for eight seconds. If this is too much to start, begin 4-4-4-4 or square breathing – inhale for four seconds, hold your breath for four seconds, exhale for four seconds, and then hold your breath for another four seconds before starting the cycle again.

• Talk to your healthcare provider about melatonin supplements.

Melatonin is a hormone that naturally occurs in the body and aids in sleep cycles. If you're struggling to establish a healthy sleep routine on your own, talk with your provider about bolstering your body's natural melatonin production with a supplement.

Improving Sleep at Altitude

If you're making your way to Aspen, Snowmass, Buttermilk or Highlands for some skiing, snowboarding or hiking, you might experience some altitude-induced sleep disruption. Make sure you make the most of your time in the Roaring Fork Valley with these tips for better sleep at altitude:

- Prepare your body before you go. When it comes to a visit to a
 higher altitude, especially if that visit includes strenuous physical
 activity, it's best not to wing it. Aspen Valley Hospital Physical
 Therapist Katie McManus suggests adding some strength training to
 build muscles before you go.
- **Drink plenty of water.** Proper hydration will make you a happier camper during the day and at night. Dehydration can quickly lead to sleep disruption.
- Once again, skip the alcohol. Or at least opt to have that glass of
 wine, beer or après cocktail early enough in the day that your body has
 plenty of time to metabolize it before bed (at least four hours).

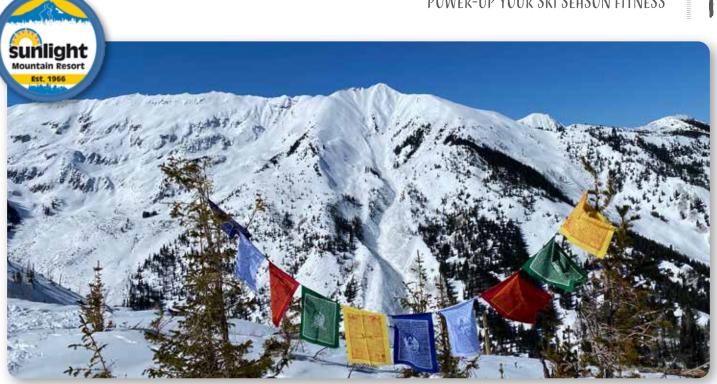
Talk With Your Doctor

Healthy sleep is an elemental part of our overall wellbeing. Achieving it can be difficult for some, which is why it's important to talk to your healthcare provider about ways you can improve your sleep schedule, maintain a healthy lifestyle and incorporate habits that improve your daily rest.



Karen has been practicing medicine in the Roaring Fork Valley with her husband, Dr. Kelly Locke, since 1999. In 2019, the Lockes partnered with Aspen Valley Hospital to start Aspen Valley Primary Care. The Lockes feel fortunate to have raised their family in the Roaring Fork Valley where they can enjoy the mountains, the seasons and the people who call this place home.





Garrett Peak by Jack Michael

If you are new to the Roaring Fork Valley, you may be wondering what you can do to make those first few turns of the season a safer and more enjoyable experience. The first rule of thumb is, it's never too early or too late to add ski conditioning training to your routine. In fact, one of the highlights of closing day at Aspen Highlands, apart from the mountain-wide costume party, is the official declaration of how many more days until Thanksgiving when the lifts reopen. With ski and snowboard season always on our minds, these exercises will get you into shape and keep you there all year round.

Here are some definite steps you can take to both avoid injuries and make your on-hill experience as enjoyable as possible.

for ski and snowboard season? First and foremost, being in better shape reduces your risk of injury especially as the day goes on where fatigue would normally set in. Additionally, you will experience less soreness and pain after a day on the slopes, which is significant, as well as being able to ski all day and

hy is it important for people to get in shape

When the lifts are open and people are already on the hill, what do you recommend for someone who has not done any pre-season training?

keep up with your friends and family.

If the ski season has approached a little quicker for you than expected and you did not spend the proper amount of time conditioning in the fall, there are a few things to consider. Since you are already on the mountain, it is important to spend the first three or four days on mostly groomed runs at a difficulty level you are very comfortable with. Shortening the ski day is also important to consider, as your body will not be ready for a full day on the slopes, and conditions in early season tend to deteriorate more quickly as the day goes on. Additionally, I recommend avoiding tree skiing the first few days you are back on the snow, and depending on conditions it may be safest to stay out of the trees altogether, regardless of your fitness level.

A lot of people, especially locals, say they will "ski into shape." Is there additional conditioning you recommend for folks who like to ski or ride their snowboards into shape?

We all "ski into shape" somewhat, because there are certain muscles that most people use only when skiing or riding. Spending time focused on getting ready before ski season or at the beginning of the season will ensure a quicker return to skiing or riding in top form with less risk of injury. You will also be able to ski or ride longer and at a higher intensity earlier in the season.

A healthy respect for our weather, altitude and dry climate makes for more enjoyable excursions.

Are there exercises people can utilize in the early season to quickly improve their experience on the hill?

Completing a few focused exercises over the first several weeks of the season can supplement your strength and lower your risk of injury.

Our goal is to focus on strengthening legs, glutes and core so you can move on the mountain more efficiently, recover from off-balance events, and have more endurance while on the slopes.

I recommend completing the following exercises on your off days to improve your skiing and snowboarding experience. Shoot for three sets of each exercise on days you work out.

Walking lunge: Stand upright with your feet shoulder-width apart and your hands on your hips. Step forward with your right leg, placing your foot down as if you were setting up a static lunge, flexing your knees (90°), and dropping your hips. Lower your left knee toward the ground. Just before the left knee makes contact with the floor, drive up and forward through your right leg, stepping into a lunge on your other side.





Reverse lunge: The starting position is exactly the same as a walking lunge: Keeping a neutral spine, take a step backward – the same width as you would take moving forward in a walking lunge – with your right leg. Once your knee almost touches the floor, push back up and forward to your starting position, trying to maintain level hip alignment throughout and keep your weight on your back leg. The big difference here is you're using your front leg to stabilize your body.

Clock lunge: Imagine you're standing in the middle of a clock with the numbers 1-12 around the outside. Face forward so your chest points toward 12 o'clock; you're going to have your chest and front, stabilizer foot facing noon for the entirety of the exercise. You want to be moving in a lateral plane of motion each time you push back to the start position. Your goal is to hit every clock number.

- 1. Start with your right foot, using your left leg as a stabilizer, and lunge forward to 12.
- 2. Return to standing position and then lunge forward and slightly right to 1, and then step back.
- 3. Continue lunging to each number on the clock, until you're stepping straight back to 6.
- 4. Then, switch feet and finish the other numbers with your left foot, using your right leg as the stabilizer.
- 5. A key here is to have the back foot and knee pointing toward the front foot whenever the lunging leg is behind the stabilizing leg. That will help keep you in alignment.









Single Leg Romanian Deadlift:

- 1. Stand with your feet shoulder-width apart and knees slightly bent and raise one leg off the floor. Flex the knee on your standing/support leg about 15-20% to activate the glutes.
- Without changing the bend in your knee, keep your back naturally arched, bend (hinge) at your hips, and lower your torso until it's almost parallel to the floor.
- Briefly pause at the bottom, then squeeze your glutes, thrust your hips forward and raise your torso back to the starting position.





Repeat these exercises until you complete the prescribed number of repetitions and sets you set for yourself. I recommend 10-15 reps with light or no weight and 6-8 with moderate to heavy weight, with 3 sets on each leg. And remember, if you experience any pain or something doesn't feel right, adjust the exercise or stop what you're doing right away.

Certainly, leg strength is important for skiing. What else is important in terms of training for someone who wants to be in shape for the ski season?

Core strength, static and dynamic standing balance, and cardiovascular endurance all are important for skiing and riding safely. Leg, arm, back and neck flexibility and conditioning are also important for seeing what's going on around you, dealing with the changing terrain, and when you fall. When people try to save a fall, they sometimes get hurt because they don't have enough flexibility.

Muscle fatigue in your core, upper body and legs can alter the skiing stance as well and change how the body parts work together on the snow. There is strong evidence that fatigue and lack of knee stability causes the most injuries in skiing, and specifically ACL injuries top the list.

What are your recommendations for visitors coming from lower altitudes who may not ski more than a few weeks per year?

Cardiovascular and strength training before your trip can help quite a bit. Arriving in Aspen and allowing a few days to acclimate to the altitude before hitting the slopes is not always realistic, so I recommend increasing water intake and sleep, and avoiding alcohol the first few days of your trip. The Hospital's physical therapy department sees a high volume of injuries in people due to limited preseason training as well as not being acclimated to the altitude and elements. That's especially true for visitors who only ski a week or two a year.

Please remember that any preseason conditioning is better than none and will reduce risk of injury and make your ski season a much more enjoyable experience.

Is there a training regimen or program you can recommend for someone looking to get in shape for their ski trip or the season?

Winter sports focused conditioning three or four days per week for the 4-6 weeks prior to your first day on the snow is ideal, whether you're a visitor here for a one-week trip with your family or a local getting ready for the season. But as I said above, any preseason conditioning will help your skiing or snowboarding.

Begin with a warm-up before any workout: a stationary bike, walking, elliptical or some other activity that gets your heart rate up and your muscles in motion.

The best leg-strength focus for ski and snowboard training is single-leg

movement focusing on the eccentric or lowering portion of a motion. (See exercises above!) The down phase of a squat or lowering from a step, for instance. A high repetition of the various exercises you're doing is important, as skiing and snowboarding involve quick and repetitive turns. Some of our summer and shoulder season sports including hiking, biking and climbing are excellent cross-training for skiing. If something is hurting, it's important to modify the exercise or skip it completely.

I recommend 30 minutes of cardio activity 3-4 times a week. Pick something you enjoy, walking, swimming, running, biking or jumping jacks. The best cardio workout is one you are willing to do. Also, you can reduce "delayed onset muscle soreness" (DOMS) by finishing an exercise routine with a stretch, foam roll or Theragun use.

What about local gyms and their ski conditioning programs?

Local CrossFit gyms offer training. Jean Robert's Gym in Aspen, TAC Fitness in Basalt, the Aspen and Snowmass Rec Centers' conditioning coaches, or classes at the Red Brick in Aspen are some great examples of the many places you can go for conditioning.

As a physical therapist, do you see many injuries that might have been avoided with a good conditioning program?

As a physical therapist and ski patroller, every ski season it is common to see lower extremity injuries (knee, hip, ankle) due to poor stability, impaired balance, decreased strength and low endurance. This can turn what should be a small muscle strain into a devastating ligament tear or broken bone. Although skiing will always have some risk of injury, we can significantly reduce that risk by putting some preseason work in.

Finally, if you are having any pain or are recovering from an injury, I highly recommend coming for skilled physical therapy at one of our locations in Aspen, Snowmass Village or Basalt. You may be able to receive treatment without a physician's referral, depending on your insurance coverage, so it's worth checking out.

If you have any questions, please call me at the physical therapy department at Aspen Valley Hospital: 970.544.1177.



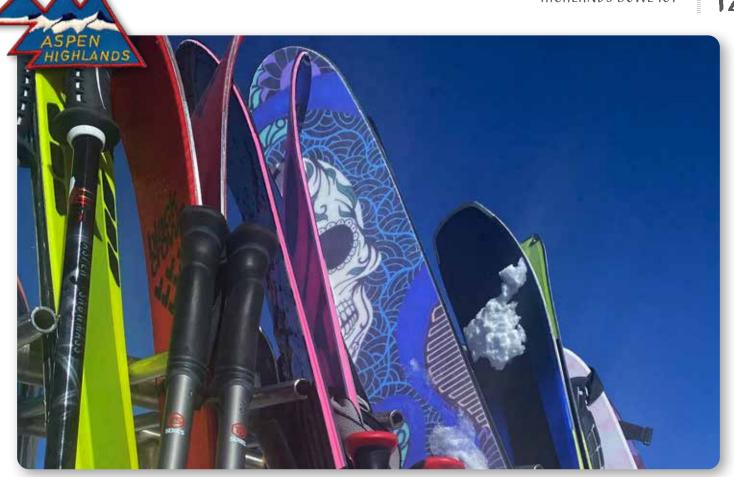
Jack, left, and his brother Matthew have been full-time physical therapists at Aspen Valley Hospital since December 2020. They grew up in Wisconsin skiing and racing. Jack also serves as a volunteer ski patroller at Sunlight Mountain Resort in Glenwood Springs.



HIGHLANDS BOWL 101

By Justin Vassar, RN, Clinical Resources Coordinator, Whitcomb Terrace Assisted Living





Sundeck Skis by Ana Huidobro, Marketing Specialist Previous page: Highlands Bowl by Tara Richardson, MS, CEP, Cardiopulmonary Rehabilitation

Ascending nearly 800 feet to the top of Highlands Bowl at 12,392 feet can be a daunting task. If you are nervous about your first hike up and ski down the Highlands Bowl, don't worry, that's normal for many people – myself included. With preparation and some determination, you will be rewarded with incredible views and unforgettable skiing. After many years and countless laps up and down the bowl, I'm here to give you some tips to make your adventure in the bowl enjoyable and memorable.

ow do I prepare to hike the Bowl?

Even on a sunny bluebird day the winds may be howling.

Check the weather and dress appropriately. Keep in mind, however, you're going to sweat A LOT. Unzip any ventilation pockets on your pants or jacket, or simply remove layers before hiking. I like to swap my goggles for sunglasses and to have a neck gaiter to pull up or down depending on how cold or windy it is. I'll also trade my helmet for a beanie for the hike.

A backpack is not necessary, but it does make it easier to store water, a snack, extra layers and other gear. For the minimalist approach you can simply carry your skis on your shoulder; however, I find it easier to have both hands free for better balance. You may also pick up a bowl strap from the Ski Patrol headquarters at the base of Highlands Bowl. This is a long piece of webbing that allows you to carry your skis on your back. Loosen up your ski boots or put them in "walk mode" to make the hike a little more comfortable for your feet and ankles.

Be sure to stop by the Patrol headquarters and get to know the knowledgeable patrollers who can recommend which route to ski down. It's also a good idea to store the Highlands Patrol phone number on your phone for the unexpected: 970.544.3052.

I'm an intermediate skier. Can I ski the bowl?

All the runs are pitched between 35-48 degrees – that's steep! You should be comfortable skiing all terrain and in all types of snow conditions. You should also know how to self-arrest if you fall, and how to put on both your skis in deep snow and on a steep slope. If you are attempting to hike and ski the bowl for the first time, do it with a friend or consider hiring a ski instructor. Don't go alone.

Expect the hike to take anywhere from 30 to 60 minutes depending on your level of fitness. Pace yourself and stay hydrated. The hike along the ridge is narrow in some places with just a single-file boot track to follow. Practice good hiking etiquette and move off to the side to rest and let others pass when space is allowable.

When you reach the top relax in the old chairlift seat and enjoy the spectacular views. Be sure to take some pictures to document your achievement, then put on your helmet and any other layers you took off before you plan your rewarding ski descent.

Which run should I ski down?

I can't share all the secrets! From the summit you can ski down the main face on Full Curl, Ozone or Be One. These are the steepest runs and generally free of trees or other hazards. You can also drop down to the right from the summit and ski the G-zones for a longer run through the trees. If you're not feeling up for hiking all the way to the summit you can always drop in earlier and ski a run such as Filip's Leap or Ballroom. Even Mushroom is a great run to explore.

All the runs will funnel into the main basin and will take you back to the Deep Temerity chairlift. Expect the ride from the top of the bowl to the bottom of the lift to take 10-20 minutes. Ride up the lift and hike the bowl for another lap.



Justin is an elite athlete; he regularly "podiums" in triathlons and Ironman races across the country and seeks out endurance pursuits locally and abroad, including the Power of Four ski mountaineering race and a "runcation" to Peru where he summited Machu Picchu and Rainbow Mountain at 16,7000 feet. Having summited all of Colorado's 14ers, Justin is a favorite among Whitcomb Terrace's retirees who enjoy reliving their skiing and mountaineering memories through his explorations of the high country. Photo credit: Ryan Koster.





Whatever age you are, if you are living in the Roaring Fork Valley, you're in the right place for healthy aging. In addition to our unmatched natural setting and unending athletic pursuits, the community enjoys a variety of health tools and support systems that empower population health. Community members can benefit from a wide swath of wellness topics through Aspen Valley Hospital's Healthy Journey blog or attend health fair events, where seniors make up a significant number of the attendees. Of course, the environment in which we live matters just as much as personal dedication to a healthy lifestyle, and our area's seniors are shining examples of how staying active, eating well and managing chronic illnesses pay dividends into their quality of life as they age.

he Roaring Fork Valley also has access to exceptional primary care, making it easy for community members of all ages to stay on top of their wellbeing.

All of these tools likely contribute to Pitkin County consistently ranking in the top 7% of population health by *U.S. News & World Report* which measures health and wellness across the U.S. using 84 different metrics. While the recognition is important, Aspen Valley Hospital's commitment to fostering its community as the healthiest in the nation is an ongoing one. Community members can sign up for customized content that caters to their specific health and wellness goals, ensuring a collective effort toward the healthiest future possible.

As the Director of Whitcomb Terrace since 2001, I've had the pleasure of learning about healthy aging from many of our local Aspen icons, fondly known in our community as our 'old-timers.' These residents consistently experience longevity and fulfillment due to years of maintaining a healthy and active lifestyle. As they transition to our senior living environment, they are interested in continuing their activities, which our staff strives to facilitate and encourage. We offer a variety of programs to support residents on their quest to maintain a sense of engagement within the community, as well as preserve their sense of purpose.

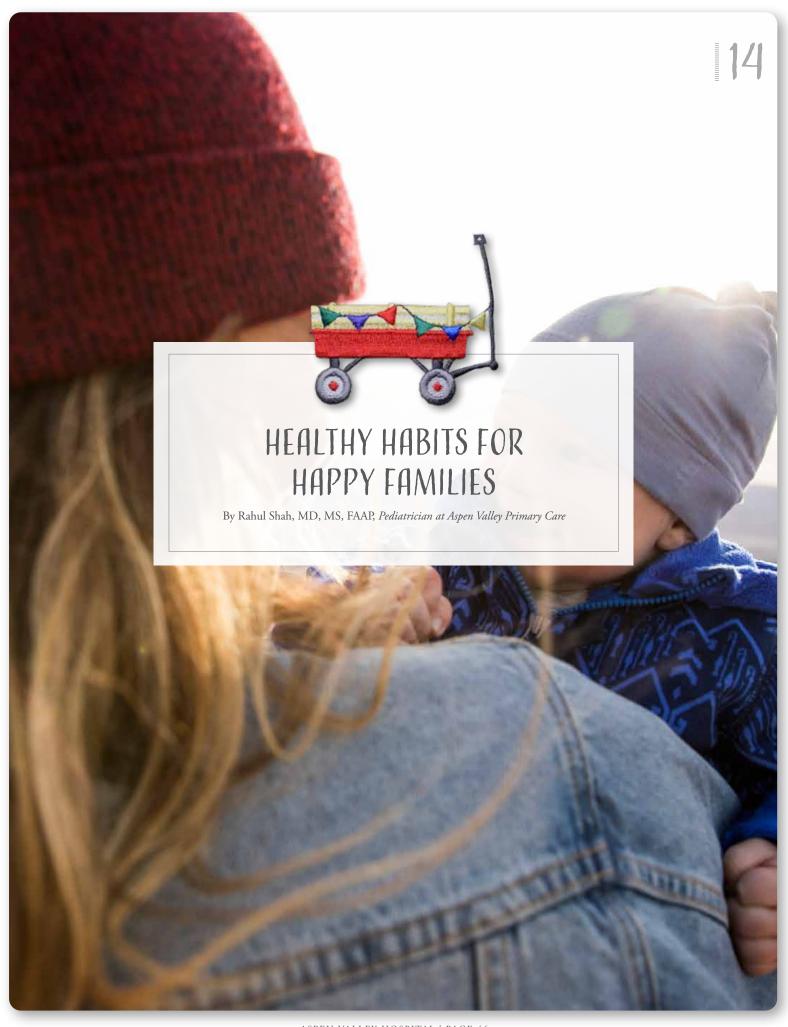
Our residents remain vital and dynamic at Whitcomb Terrace by staying involved in the community. We visit art galleries, music and theatre productions, and explore our natural surroundings on walks around town and on the trails. We are also fortunate to experience the generosity of our community by partnering with numerous entities who share their time and talent with us, offering interesting and stimulating programs, such as storytelling, art, music and numerous intergenerational activities. These experiences may look different for our population in their 80s than when they were in their 20s, however, remaining engaged mentally and physically is vital to aging well. Our residents may not still be teaching skiing, going on hut trips or climbing Colorado's 14ers; however, they find great satisfaction and fulfillment in sharing their stories with the younger generations. Keeping the connection with one's past, staying curious and engaged with friends and hobbies and learning new things all provide ways to continue thriving within Walter and Pussy Paepcke's ideal vision for Aspen, where the whole person, mind, body and spirit, are nurtured.

Whitcomb Terrace was conceived as a place where healthy aging could be nurtured in our community. Small in size, Whitcomb Terrace displays a personal and intimate atmosphere where residents are cared for like family. Our staff is dedicated to delivering individualized care in an environment where compassion, dignity and trust are paramount. Residents have more time to interact with loved ones and add healthy and meaningful activities to their lives as many chores are fulfilled by staff. Meals prepared by our fantastic chefs, laundry service and management of medications are just some of the amenities provided, allowing our residents greater opportunity to focus on living and aging well. Moreover, with Aspen Valley Hospital's Network of Care literally steps away, residents and their loved ones can be reassured that healthcare needs are being met.

Wherever you are in your life journey, there is an opportunity to experience optimum health, to live well and to age well, as the two really go hand in hand. The secret is to continue doing what inspires and excites you, no matter your age, and to maintain a sense of curiosity to keep learning new things. This is achieved through mindfulness and intention and, if you prioritize finding your purpose, you'll find fulfillment at any age. Aging well really is just that simple.



Maggie began her career assisting older adults with the support of her physician father who encouraged her to become a junior candy striper at their local hospital. Throughout high school and college, Maggie sought out opportunities to volunteer with various elder caregiving organizations where she thrived in these intergenerational settings, and what started as an avocation became a career of enriching the lives of seniors. When not at Whitcomb Terrace, Maggie is a wife and "sports mom" to her two boys and sneaks in a little hiking, skiing and yoga whenever she can.





A family float through Glenwood Canyon.

As parents we are always thinking about our children's wellbeing and what tools we can add to our parenting skillset to raise healthy, confident kids. By adding structure and routine to common sense, you can offer your kids a strong foundation that supports them as they take on the ever-changing challenges of growing up!

ere are some Key Areas of Focus for Childhood Nutrition and Healthy Living Practices

1. Help Your Child Manage Stress

Whether your child is learning to walk, just starting preschool or returning to a full-time in-classroom learning environment, the change in gears can be stressful. Talk to your child about their feelings and compassionately address early childhood emotions. I recommend reminding kids of the positive aspects of a new environment while also acknowledging the challenges of it. Also, spending time outside is paramount to children's health and wellbeing. Ditch the screen and spend some quality time outdoors taking in the delights of each season.

2. Establish Healthy Eating Habits Early in Life

Strive to work as a family to maintain those healthy eating habits. Incorporating plant-based meals and snacks is a great way to ensure children are getting plenty of fruits and vegetables and developing a love for them.

3. Remember to Hydrate

The importance of staying hydrated at our altitude and in our dry climate cannot be overstated. Encourage your child to drink water throughout the day. Buy a reusable water bottle and put it in their backpacks.

4. Teach Children How to Avoid Illness

While the past few years have made this more prevalent in everyday life, it's still important to teach kids easy tips for avoiding common illnesses like colds, flu and RSV. Here are some helpful guidelines:

- Wash hands frequently and say your ABCs while you do to make sure you wash for an effective amount of time (20 - 30 seconds). For infants and toddlers, help them at the sink and sing a favorite song to make it something they enjoy.
- Teaching kids to cough into the crook of their elbow helps prevent the spread of airborne illnesses.
- Once again, eat a well-balanced diet and drink plenty of water.
- If your child doesn't feel well, it's important to stay home from childcare or school to help keep friends and teachers healthy.

5. Maintain Healthy Living at Altitude

Yes, this one is unique to our high Alpine climate in the Roaring Fork Valley, but it can create opportunities and challenges not found in lower elevations. Know the signs of altitude sickness and make sure your child is prepared to head into the high country.

Whatever season of the year it is, there is always a fun way to be outdoors. We hope you and your children are maximizing time outside. If you have questions or want to learn more about establishing your child's plan for long-term healthy living, contact your Aspen Valley Hospital pediatrician or primary care doctor.



The writing of this chapter was interrupted by the joyful arrival of Rahul and Alana's first child. Dr. Alana Shah is also a physician at Aspen Valley Hospital. As first-time parents, the Shahs are following their own advice and embracing the adventure of parenthood one day at a time.



ASPEN VALLEY HOSPITAL | PAGE 49



If you have relocated from lower parts of the country, particularly anywhere that is below 3,500 feet, you'll find that the effects of high altitude wreaks havoc on your culinary prowess. Indeed, that crisp-on-the-outside-moist-on-the-inside cookie that you're famous for or your ability to grill every steak to a juicy, medium-rare perfection may prove to be elusive. Even something as simple as timing a hardboiled egg may feel beyond grasp. With less air pressure as you increase in altitude, the fundamentals of chemistry, like water boiling at about 187°F instead of 212°F, are upended at altitude. This is why many store-bought mixes come with special "high altitude" directions, and because cooking generally takes longer, foods tend to dry out faster. If you are a baker of the "from scratch" variety, you'll find that doughs rise faster and liquids in batters evaporate faster. But not to worry, here are some of my kitchen hacks that will help you get your culinary mojo back.

Here are the elevations in the Roaring Fork Valley to fast-track your cooking and baking adjustments: ASPEN - 7,908 FEET | BASALT - 6,611 FEET | CARBONDALE - 6,171 FEET | GLENWOOD SPRINGS - 5,761 FEET

BAKING AND COOKING CONVERSION CHART

OUGH TO LIBERATURE	Increase oven temp by 15-25°F to help baked goods set up a bit faster as liquids
OVEN TEMPERATURE	evaporate more quickly at altitude.
BAKING TIME	Decrease cook time by 20-30% to compensate for the increased oven temperature.
FLOUR	Increase by 1 tablespoon at 3,500 feet, and by 1 tablespoon per 1,500 feet after that to regulate the rise and add structure to baked goods as they rise during cooking.
SUGAR	As the liquids in your recipes evaporate faster at altitude, the concentration of sugar increases. To keep your baked goods from collapsing, decrease by 1 tablespoon per cup of sugar called for in the recipe.
LIQUIDS	At elevations above 3,500 feet, compensate for faster evaporation by increasing liquids such as milk, eggs, water or oil by 1 to 2 tablespoons and then $1\frac{1}{2}$ teaspoons for every additional 1,000 feet. This will prevent baked goods from drying out and crisping up before they rise.
BAKING POWDER AND BAKING SODA	To help baked goods rise more gradually at higher elevations, decrease your leavening by 20% above 3,500 feet, by 50% above 5,000 feet, and by 75% above 6,500 feet.
YEAST	Yeasted baked goods will rise faster at altitude because of increased pressure. Decrease yeast by 25% above 3,500 feet to account for the shorter rising time. This also prevents breads from collapsing in on themselves.
RICE	For stovetop, add about 15-20% more water or broth and cook a few extra minutes. Or you can cook in a tightly covered dish in the oven to reduce rate of evaporation.
GRILLING	Remember, a lower boiling point means the juices in meats will evaporate faster before the food is cooked. Use a lower temperature and keep the food farther away from the heat source so they don't dry out, and you will have to increase cooking time to compensate. Basting meat and vegetables in the last 5-10 minutes will help retain moisture. Use a meat thermometer to check for doneness.
BOILED EGGS	For the best result, plan ahead and use eggs that have been in the fridge for several days, as they will be easier to peel once boiled.
	1. Set the eggs out for 15-20 minutes before boiling so they come to room temperature. This will help prevent cracking during boiling.
	Choose a saucepan large enough to allow the eggs to be completely covered with water in a single layer, do no stack the eggs.
	3. Bring water to a rolling boil.
	 Using a large spoon or tongs, slowly and gently lower eggs into the water, do not cover and keep the rolling boil going.
	5. Set a timer for 15 minutes. When the timer sounds, remove saucepan from the burner and let sit for 3 minutes.
	6. Drain the water and rinse in cold water for 1-2 minutes. Then let eggs cool another 30 minutes before storing in the refrigerator.

BAKING AND COOKING AT ALTITUDE

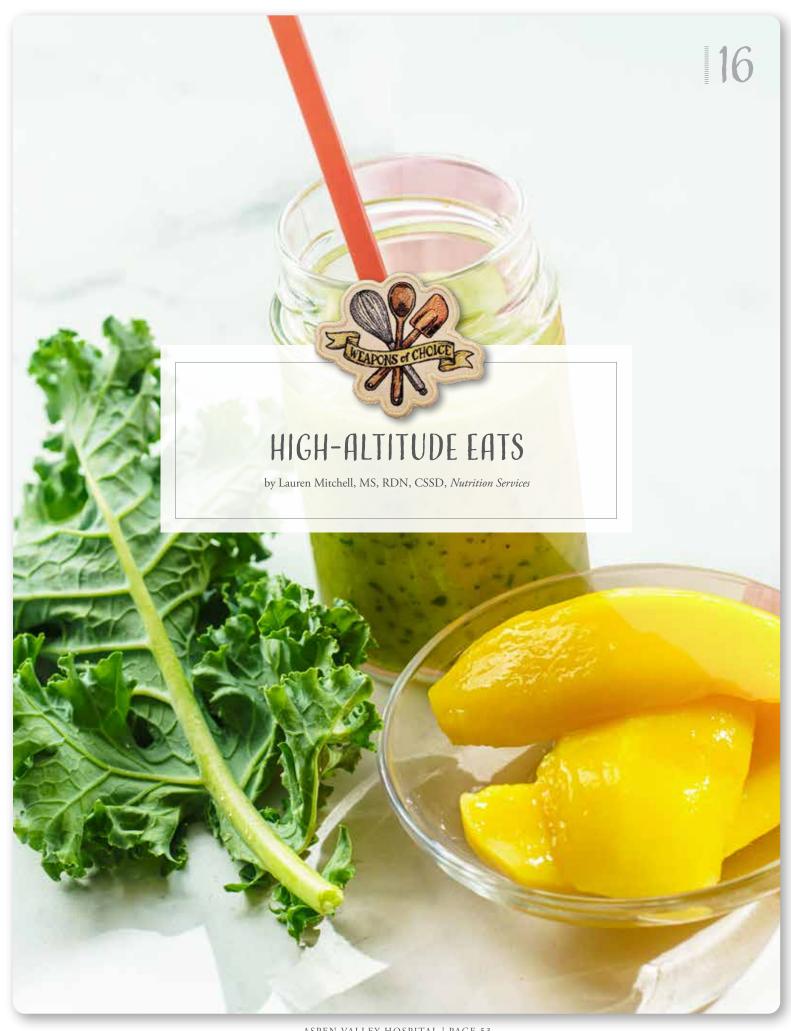
ou will have to experiment with these adjustments to get the results you want with your favorite recipes, but with persistence you will enjoy the delicious journey to perfection. Try joining local Facebook groups like the Roaring Fork Swap to get additional pointers and advice from local cooks.

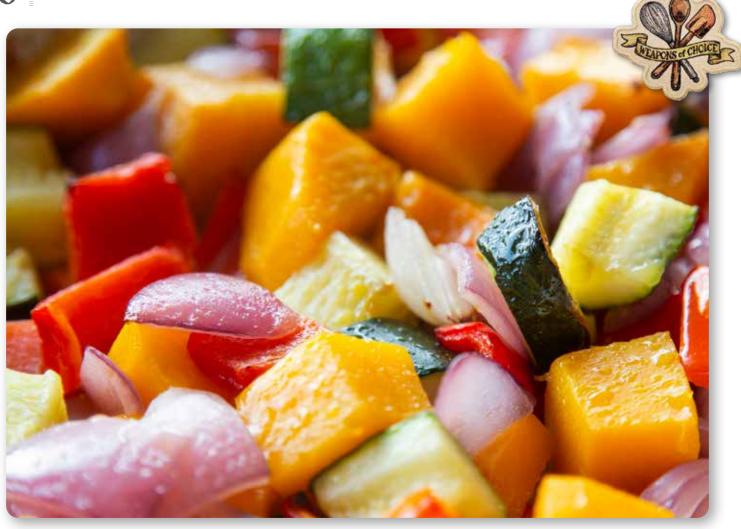
Whether you are training for a marathon, considering a plant-based diet or trying to make a few healthy changes, check out our Dietitian Demos video series archive, with 25 episodes and counting, to empower you with knowledge, information and inspiration to fuel your healthy journey.



Kristy is pleased to be able to combine her passion for medical nutrition therapy with culinary arts and management. She enjoys working with fellow dietitians, Lauren Mitchell and Laurie Osier, in the clinical realm along with her talented team in the Castle Creek Café. She strives to revolutionize what is "hospital food" with her passion for recipe development and knowledge of nutritional pathophysiology.

On her days away from the Hospital, Kristy enjoys exploring the many rivers and mountains under the Colorado sunshine with her dogs Roxy and Lola. Photo Credit: Will McDonald.





Staying hydrated is an uphill challenge we all face the moment we wake up in the morning. In addition to my chapter on hydration for the athlete, hydration is mentioned in nearly every chapter in this book. I recommend getting a refillable water bottle to keep waste out of the landfill. Plus, you can decorate your vessel with any number of stickers to fly your colors. In addition to sipping water all day and replacing electrolytes as needed, eating lots of veggies with every meal helps keep you hydrated from meal to meal. Here are a few of my go-to hydrating recipes as well as some nutrient-dense snacks to take with you as you head out for your next adventure.

n the meantime, I hope you will join me in the local pastime of sipping water throughout the day and packing your diet with my healthful and hydrating recipes below.

Replenish Your Insides with Smoothies

Smoothies with a proper balance of ingredients and nutrients – including protein, fiber from vegetables, and fruits and a healthy fat source – can create a filling and satisfying hydration boost, whether for a meal or a snack on the go.

Use These Steps to Build a More Nutrient-dense Smoothie:

Start by choosing a base for your smoothie such as cow's milk, water or unsweetened nut milks instead of using fruit juices. Low-fat cow's milk can add calcium, vitamin D and protein to your smoothie. Unsweetened nut milks are fortified with calcium and can be a lower calorie base for your smoothie. Water is an easy way to add additional fluid to your smoothie, but a less "creamy" option than using cow's milk or unsweetened nut milks.

Secondly, choose your fruit for the recipe. This can be fresh, frozen or canned. If you use canned fruit, make sure it is packed in its own fruit juices rather than a sugar syrup. I recommend using about 1/2 - 1 cup of fruit per smoothie.

Third, choose vegetables such as kale, spinach, cauliflower, pumpkin, beets, etc. This will add additional nutrients such as fiber, vitamins, minerals and antioxidants to your smoothie. Also, this is an easy way to sneak vegetables into your daily intake and your children's daily food intake.

Lastly, add a protein and a healthy fat. Protein and fat help us to feel fuller for longer, so by adding these to your smoothie you will be more satiated. Protein can come from yogurt, cow's milk, nuts, seeds, nut butters and/or even protein powder.

A balanced smoothie can be a great on-the-go meal or snack and can help hydrate you along the way! You can even add spices to your smoothie for extra nutrients and flavor, such as cinnamon, nutmeg, ginger, cloves, etc. – whatever you like!

MANGO GINGER KALE PROTEIN SMOOTHIE

Rich in vitamin C, potassium and a kick of warming ginger, this smoothie is packed with nutrients to start the day or for a healthy snack.

Makes 1 Smoothie

Ingredients

- ½ frozen banana
- 1 cup frozen mango
- 1 tablespoon fresh minced ginger, outer skin removed
- 2 tablespoons ground flax seed
- 1 cup kale, stems removed
- 1-2 tablespoons lemon juice
- 1 ½ cups unsweetened vanilla nut milk or other fluid choice
- 1 serving protein powder

Instructions

- 1. Chop and remove stems from kale.
- 2. Add frozen fruit, ground flax, ginger, kale, lemon juice, protein powder and fluid of choice to blender.
- 3. Blend until all ingredients are combined and enjoy.

SNICKERDOODLE CHICKPEA SMOOTHIE

Chickpeas add the smooth and creamy texture to this rich and guilt-free delight as well as packing in 7 grams of rich plant-based protein and 5 grams of dietary fiber. I like to add a frozen overripe banana to create a creamier texture to satisfy my sweet tooth.

Makes 1 Smoothie

Ingredients

- 1 cup unsweetened vanilla almond milk
- 1 large overripe banana, fresh or frozen
- 1/4 cup chickpeas, drained and rinsed
- 1 teaspoon cinnamon
- 1 teaspoon ground flaxseed or chia seed
- 1 tablespoon nut butter
- Handful of spinach
- Optional protein powder of choice

Instructions

Place all ingredients in a blender and blend until smooth and enjoy.

FORK AND KNIFE SALADS

These substantial salads are great as a side dish, but also stand up as a whole meal on their own with the addition of legumes and grains. Equally, they can be served warm as a healthy comfort dish or chilled the next day, giving you two distinct flavor profiles with one effort!

APRICOT BROCCOLI SALAD

Apricots add a subtle sweetness to this nutrient-packed and savory salad. It is delicious served warm over wilted spinach or cold the next day over crisp spinach.

Makes about 3-4 servings

Ingredients

For the Salad

- 1 head of broccoli, chopped into florets
- 2 yellow summer squash, diced
- 2 cups of spinach
- 1/4 cup chopped, dried apricots
- 1/4 teaspoon ginger, ground
- 1/4 teaspoon garlic, ground

For the Dressing

- 2 tablespoons olive oil
- 1 tablespoon lime juice
- 1 teaspoon Dijon mustard
- 1 teaspoon honey

Instructions

- 1. Preheat oven to 350°F. Toss broccoli and squash on baking sheet with $1\!\!/4$ teaspoon ginger and $1\!\!/2$ teaspoon ground garlic.
- 2. Bake broccoli florets and diced summer squash at 350°F for about 20 minutes, until fork tender.
- 3. In a small bowl, whisk together all dressing ingredients.
- 4. Combine spinach, broccoli, squash, apricots and dressing in a bowl and enjoy!

CURRIED BRUSSEL SPROUTS SALAD

Medjool dates and raisins add just the right amount of sweetness to the savory notes of curry and toasted walnuts. This is another one of my versatile salads that is delicious served warm or chilled the next day.

Makes 4-6 servings

Ingredients

For the Salad

- 6 cups Brussels sprouts, sliced into halves or thirds
- 1 tablespoon olive oil
- ½ cup chopped walnuts

• Handful of raisins, if desired

For the Dressing

- ½ cup water
- 1/4 cup raw almonds
- 1 tablespoon apple cider vinegar
- 2 pitted Medjool dates
- 1 teaspoon fresh ginger
- ½ teaspoon Dijon mustard
- 1 teaspoon curry powder
- 1/4 teaspoon turmeric
- ½ teaspoon salt

Instructions

- 1. Preheat oven to 400°F.
- 2. Slice ends off Brussels sprouts and then slice in halves or thirds. Place in an even layer on a lined baking sheet or two, if needed. Roast for 20-25 minutes, or until browned.
- 3. Meanwhile, combine all dressing ingredients in a blender. Blend until completely smooth and creamy.
- 4. In a large bowl, combine roasted Brussels sprouts and walnuts. Drizzle with the dressing and toss to combine.

SPRING SQUASH SALAD

While squash is available all year round, there is something extra delicious about selecting these vegetables from one of our many local farmers markets in the summer and early fall.

Ingredients

- 2 zucchinis, diced
- 2 yellow squashes, diced
- 1 16 oz. can chickpeas
- 1 tomato, diced
- 1 teaspoon ground basil or 2 tablespoons fresh chopped basil
- Salt and pepper to taste
- 1 fresh lime

Instructions

- 1. Preheat oven to 350°F.
- 2. Dice zucchini and squash and place on a baking sheet, add $\frac{1}{2}$ teaspoon of dried basil leaves to the squash and toss until evenly coated.
- 3. Drain and rinse the chickpeas with water (removes a third of the sodium) and place on a baking sheet. Add ½ teaspoon remaining dried basil leaves and toss until evenly coated.
- 4. Bake the chickpeas and squash for 20 minutes, or until chickpeas are golden brown and toasted. Squash should be "fork tender".
- 5. In a bowl, combine the chickpeas, squash and tomatoes.
- 6. Squeeze fresh lime juice on top to enhance freshness.

SUMMERTIME SALAD

The Palisade peaches are a summer harvest highlight that we wait for all year long. While you can use any variety of peach to make this salad, the most important thing is to have juicy and ripe peaches to brighten up the tangy notes of the lemon-garlic dressing.

Makes 4 servings

Ingredients

- 1 head of kale, destemmed
- 1 cup small broccoli florets
- 2 Palisade peaches, if available, remove pit and cube

Lemon & Garlic Vinaigrette

- 1 teaspoon olive oil
- Juice from one lemon
- 2 tablespoon minced garlic
- Dash black pepper

Instructions

- 1. Whisk together all ingredients of vinaigrette in a separate bowl.
- 2. Finely chop kale and broccoli into bite-sized pieces.
- 3. In a large bowl, combine kale, broccoli and peaches. Add vinaigrette to kale salad and mix together. The acid from the lemon juice will soften the kale.
- 4. Store in air-tight container for up to 4 days.
- 5. You can add different veggies, grains and or legumes to make a one bowl meal or try the recipe below!

ONE PAN WONDER VEGGIE DINNER

Makes 1 serving

Ingredients

- 1 medium sweet potato, diced
- 1 small zucchini, cut into half moons
- 1 bell pepper, diced
- ½ small onion, cut into wedges
- 1 lime
- 15 oz. can black beans, drained and rinsed
- 3 garlic cloves, minced
- 2 teaspoons chili powder
- 2 teaspoons cumin
- ¾ teaspoon sea salt
- 1/2 teaspoon oregano
- Freshly ground black pepper

Instructions

1. Preheat the oven to 425°F.

- 2. Line a large baking sheet with parchment paper or spray with cooking oil.
- 3. Chop the veggies.
- 4. In a small bowl, stir together chili powder, cumin, sea salt, oregano, lime juice and pepper. Set aside.
- 5. Placed sweet potato, zucchini, pepper, onion, beans and garlic on pan in an even layer. Sprinkle with spices. Toss to combine.
- 6. Bake for 25 minutes, stirring halfway through. Season to taste with additional salt and pepper if needed.

SNACKS TO FUEL YOUR FUN

While I would not consider these hydrating recipes, these are my two favorite snacks for healthy fueling for my training runs.

PUMPKIN BANANA PANCAKE OBSESSION

I am pancake obsessed! And as an ultra-athlete and registered dietitian, I have come up with recipes that feed my passions for food, skiing, running and climbing 14ers. For the pancake recipe, you can serve it for breakfast, but I like to add nut butter and take these with me on long runs, hikes and ski days.

Ingredients

- 1 1/4 cups flour
- 1 tablespoon sugar
- 2 teaspoons baking powder
- 1 teaspoon salt
- 1 egg
- ½ cup pumpkin puree
- $\frac{1}{2}$ $\frac{3}{4}$ cup cow's milk or unsweetened nut milk
- ½ teaspoon pumpkin pie spice
- 1 teaspoon vanilla extract
- 1 banana, sliced
- Optional nut butter, to taste

Instructions

- 1. In a large mixing bowl, combine flour, sugar, baking powder, salt and pumpkin pie spice.
- 2. In another bowl combine wet ingredients of pumpkin puree, milk, egg and vanilla extract.
- 3. Combine the wet ingredients with the dry ingredients. Mix until combined.
- 4. Heat a lightly oiled pan on medium-high heat. Pour about ¼ cup of batter on the pan. Add sliced banana pieces to each pancake.
- 5. Brown the pancake on both sides and serve hot, or if taking on a long excursion, top with your favorite nut butter and stash it in your pack for

COCONUT CHOCOLATE ENERGY BITES

Energy bites are another great snack to take on the go when you know you are going to need a nutrient-dense snack to keep you going.

Ingredients

- 2 cups old fashioned oats
- 1/4 cup ground flax seed
- ½ cup nut butter
- 1/3 cup pure maple syrup or honey
- 1 teaspoon vanilla extract
- 1 teaspoon cinnamon
- ½ teaspoon pumpkin pie spice
- 1/4 cup unsweetened coconut flakes
- ½ cup chocolate chips

Instructions

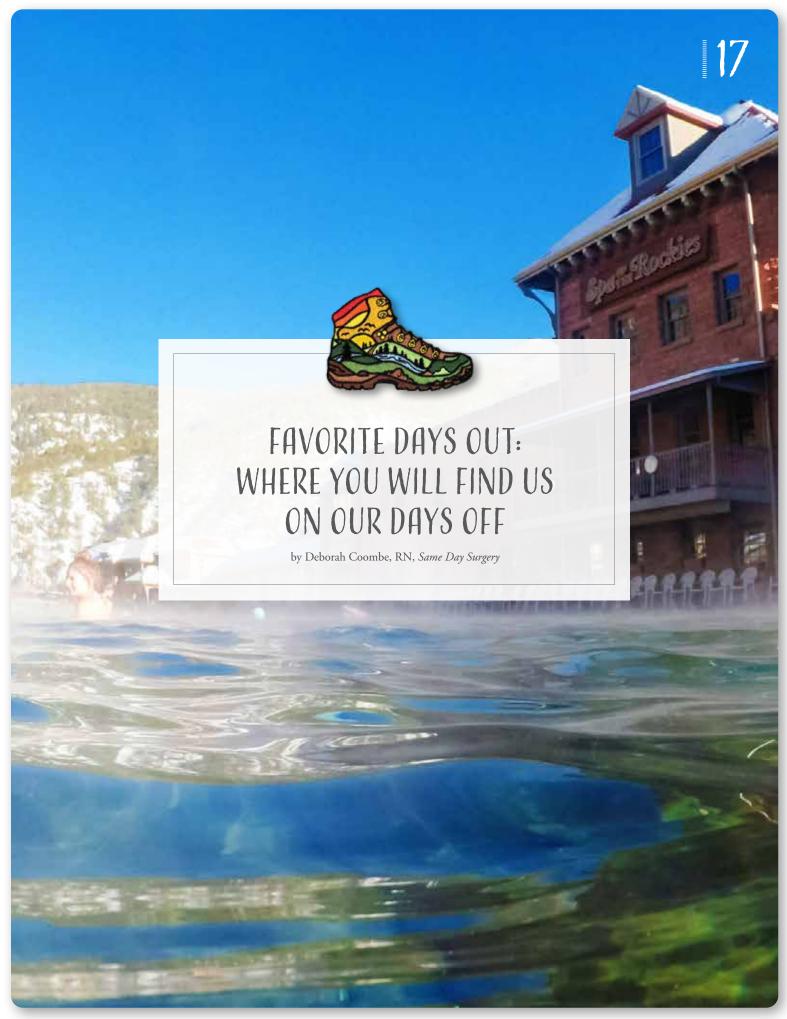
- 1. Start by blending the oats to make a finer texture to help absorb the nut butter.
- 2. Combine the oats, flax, nut butter, vanilla extract and cinnamon to make a dough. If it seems a little dry, add some almond or other unsweetened nut milk.
- 3. Add the coconut chips and chocolate chips and mix until combined.
- 4. If the mixture seems too wet or sticky, add some old fashioned oats so you have a texture that easily forms into a ball.
- 5. Pinch off a piece of dough to make a golf ball sized portion.
- 6. Store in an airtight container for up to a week.

You now have stashable snacks for all of your excursions!

For more healthy recipes and nutritional education, dive into our Dietitian Demos video archive for an extra helping of healthy eats. Follow us on Instagram @aspenvalleyhospital to get new episodes in your feed!



An elite athlete and Board-Certified Specialist in Sports Dietetics, Lauren has used her own knowledge of sports nutrition to fuel her performance goals. In addition to working with patients with special dietary needs, she provides nutritional coaching for athletes of all ages and abilities to help give them an edge. Lauren is a six-time Boston Marathon qualifier, an Ultra-marathoner and recently ran the Leadville Silver Rush 50-mile race and Crested Butte Ultra. In her free time, you'll find Lauren training for her next event.





Sopris Rainbow, by Alizée Hebert, Patient Screening Coordinator at Aspen Valley Primary Care

One of the best things about the Roaring Fork Valley is that you could live your whole life here and never stop discovering new places. There are many places I return to every year, and in different seasons, that have layers of memories, stretching back to my childhood in the Valley. At the same time, I am always eager to explore those places on my local bucket list just waiting to be discovered.

One of the best ways to find trails in our area is the Aspen Trail Finder website and app which has trails from Aspen to Glenwood Springs and up the Crystal River Valley.



Rio Grande Trail

This paved walking and cycling trail was created from the old railroad track that brought miners and supplies up to Aspen from Glenwood Springs. It more or less follows the Roaring Fork River as it winds down through the different terrain in the valley. But no matter where you access it, you are sure to bump into someone you know.

Ute Cemetery, Park and Trail ♦ ■ ●



Tucked away in a high grove of aspens and wildflowers at the base of the east side of Aspen Mountain is the Ute Cemetery. It is a really peaceful place to wander among the lichen-covered stones of fallen World War I soldiers before heading over to the park and playground with picnic tables and outdoor grills. Across Ute Avenue, you'll find the Ute Trailhead. It is an arduous 6.2 miles with a 3,500 vertical foot ascent up the back of Bell Mountain to the Sundeck on Aspen Mountain.

Maroon Bells Crater Lake



The Crater Lake Trail is a moderate 1.8-mile there-and-back section of the Maroon-Snowmass Trail. The hike winds through some interesting geological formations, and once you reach the lake you can catch a glimpse of the waterfalls cascading down the rocks.

Ashcroft •



The ghost town of Ashcroft has easy walking paths in summer and crosscountry trails in winter. In spring and summer, the wildflowers take over the valley, and the variety changes as you climb in altitude. Ashcroft is also the access point to Cathedral Lake.

Cathedral Lake ♦



The incredible views from the top make this difficult trail worth the effort. You will need to have a few technical abilities to make your way through the boulder field and some steep areas.

Aspen to Crested Butte ♦ ♦ ♦



It's a mountainous 11 miles from Aspen to Crested Butte; if you travel by car, it's 100 miles. You will need to be in top shape to take on the steep switchbacks up to the 12,000-foot summit of West Maroon Pass and still have energy for Schofield Pass at 10,722 feet. If you plan on doing this rite-of-passage hike of a lifetime, get some local guidance and go with an experienced group.

Snowmass Village

Highline Trail



An easy trail with views down to Snowmass Village. Connect with the Lowline Trail for a short loop.

Rim Trail

Views from the Rim are the main feature of the trail, which traverses the west and north Rims of Snowmass Village.

Sky Mountain Park ♦



This 2,500-acre park with a network of mountain bike-only trails connecting Aspen and Snowmass Village is a local favorite for flow-style riding. But with incredible 360-degree views, you'll want to take a break for some mountain gazing. A short 2.5-mile ride from the Village, the trail features well-maintained bermed turns, rollers and tabletop jumps to add a little excitement to your day.

Snowmass to Aspen Government Trail ◆



There are different ways of enjoying this 13-mile trail that goes across Snowmass ski mountain, Buttermilk and Tiehack and right into downtown Aspen. You can hike or mountain bike to Aspen, have lunch and take the free bus back to Snowmass Village or vice versa.

Basalt

Arbaney Kittle Trail ♦

"Boot camp" comes to mind when I think of this trail; it will get you in shape fast as you climb about 2,000 vertical feet in just 1.75 miles to the Frying Pan Overlook. Once at the top, there is the option to continue on the full 17.5 miles on this out-and-back hike.

Crown Mountain Park ♦■●

This park does a great job of being all things to all people. A mile-long paved path offers year-round walking and running; there are tennis and basketball courts, two baseball fields, and several soccer and lacrosse fields. Two extra-large enclosed dog runs make for a social spot for dogs and their humans. In winter, a network of cross-country trails is groomed daily and an outdoor skating rink is built. The bike park is legendary, one of the best and most technical mountain biking/BMX trails on the Western Slope. For everything that the park offers there are child and adult classes and leagues to go with them.

Ruedi Reservoir ♦ ■ ●

Fourteen miles up the Frying Pan River from Basalt, Ruedi (pronounced roo-DYE) is an oasis of fun. In summer the Aspen Yacht Club, a 50+ year-old non-profit institution, holds court to the many sailboats, and there is a marina for motorboats. There are areas for swimming and stand-up paddleboarding, and infinite hiking, biking and camping surrounding the 1,000-acre reservoir. In winter there is ice fishing, and, when there is a long clear and cold stretch, some areas are safe for skating. Get some guidance from the locals who live up there before taking to the ice.

Carbondale

Mushroom Rock ♦

Mushroom Rock is a popular two-mile out-and-back, dog-friendly trail near Carbondale that takes you up a steep red rock and dirt trail to the mushroom-like outcroppings. On the way up, you will gain over 900 feet in elevation in one mile, and the reward of the sweeping view of the Crystal River Valley that perfectly frames Mount Sopris is well worth the effort.

Prince Creek **♦** ■ ●

As you head up Prince Creek Road, you will have several trailheads to choose from. Keep going and you will find a refreshing lake at 9,000 feet that is perfect for swimming and SUPing and even has a little beach. Beyond the lake are magnificent views and some rustic campgrounds.

Avalanche Ranch Hot Springs

By appointment only, but well worth planning ahead. The different soaking pools have beautiful views to the other side of the canyon. There's nothing better than a soak in winter after a long day on the slopes.

Redstone

So much to see and do in this once sleepy town that is experiencing a revival. There are galleries, restaurants, live music, and the General Store still scoops homemade ice cream, a nice treat after hiking up in Marble.

Marble

Mill Site Park

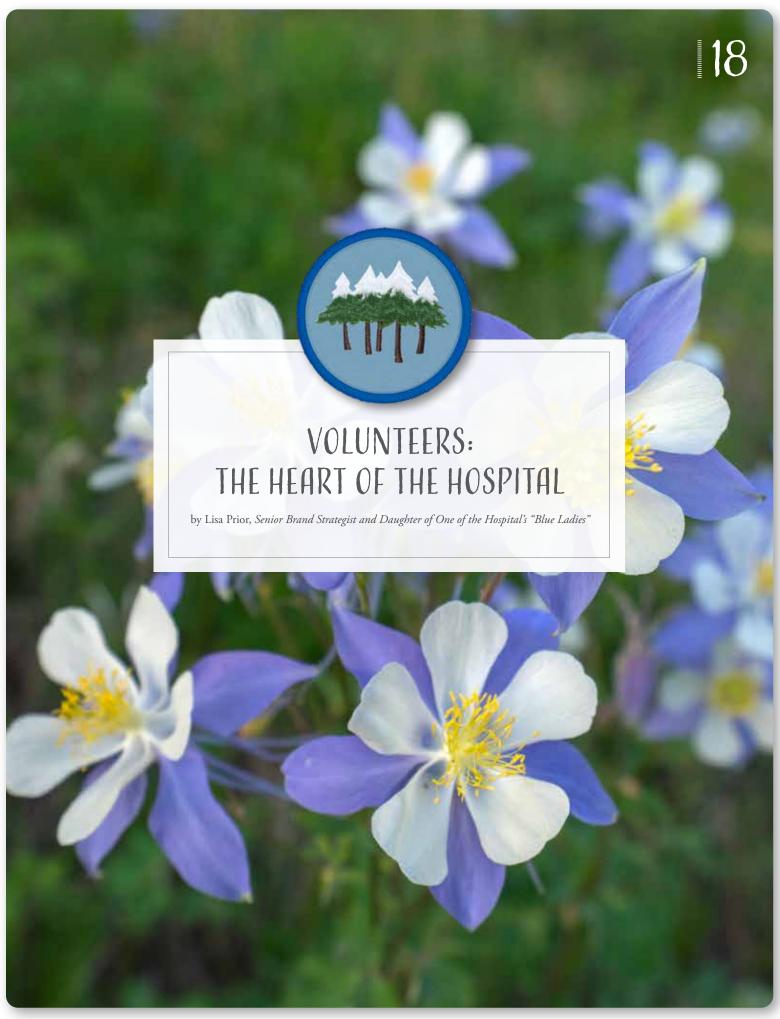
This mostly level trail is peppered with markers that tell the story of the once-thriving mining operation as you make your way up the easy trail. Along the way are marble benches and tables for picnics. It is a great place for kids to play amongst the marble ruins.

Glenwood Springs

Take your pick of hot springs from the famous Glenwood Hot Springs Pool, the country's largest outdoor hot springs pool; or Iron Mountain Hot Springs, with a "flight" of different soaking pools at varying temperatures; or descend into the Yampah (Ute for "Big Medicine") Vapor Caves where the thermal waters create a relaxing sub-terranean Turkish bath-style experience.



Deborah, aka "Ducky" was born at the original Citizens Hospital and has spent most of her career growing with Aspen Valley Hospital, both as a nurse and as the official canine photographer for our Pet Enrichment Therapy Program (PET Program). Ducky comes from a ski pioneering family and continues the tradition of exploration with her family.





The summer picnic recognizing the contribution of Aspen Valley Hospital's volunteers.

Growing up in Aspen in the 70s and beyond, my mother, like most of my school friends' mothers, volunteered for the Hospital. On her "hospital days," she wore the "Blue Lady" dress. If she had a late afternoon shift, my sister and I would come and do our homework after school in the café and wait for Mom to end her shift right at dinnertime. The old-school cafeteria benches belied the deliciousness that has been the hallmark of what is now called the Castle Creek Café for over 50 years.

om formed many life-long friendships while providing a vital service to the Hospital. The dedicated volunteers add to the warm, small-town feel of the Hospital. Mom served in many parts of the Hospital throughout her 25+ years as a volunteer, but her favorite spot was with her dear friend, Sally Vroom. Sally really put the Hospital Gift Shop on the map with her keen eye for the intersection of great deals and trends, including being the first to bring Beanie Babies to Aspen during the craze in 1994. Today, Sally's Gift Shop remains a popular destination for all kinds of gifts, toys, accessories as well as necessary items for folks who have made an "unexpected visit" for an overnight stay.

Since 1891, Aspen Valley Hospital has been shaped by the needs of the community it serves. From providing lifesaving care for pioneering silver miners (who gave a day's wages per year to help fund the hospital), to a community supported by Network of Care with clinics and services throughout the upper Roaring Fork Valley.

Established in 1960, the "Blue Ladies" dress has kept pace with the times as well. Today, the Aspen Valley Hospital volunteer coat is worn by the women and men who have found purpose in serving their community this way.

Our two-legged volunteers are joined by a league of canine volunteers, also with their very own uniforms, who together with their handlers bring joy to patients and staff as part of the Pet Enrichment Therapy (PET) Program.

Many of us who work at Aspen Valley Hospital find ways to give, through employee payroll deductions and volunteering our time for special events such as our annual health fairs in Aspen and El Jebel.

I warmly invite you to join others in giving to your new community in this unique and fulfilling way as you come together in friendship with some of the most interesting people in town.



Lisa Prior, Senior Brand Strategist, Community Relations, grew up in Aspen. After many years of exploring the world, she decided there's no place like home and feels fortunate to bring the stories of the staff and visitors to life. In her free time, she jumps on planes to connect with friends and discover new vistas. Lisa credits her mom, Sharon, with her wanderlust, seen together ziplining Mombacho Volcano in Nicaragua.



HELPFUL NUMBERS & SERVICES

ASPEN VALLEY HOSPITAL CAMPUS

Aspen Valley Hospital Level III Trauma Center, Open 24/7 970.925.1120, dial 911 for emergencies 0401 Castle Creek Road, Aspen

Clinics Located on the Aspen Valley Hospital Campus:

Aspen Valley Primary Care | 970.279.4111 Internal, Family and Pediatric Medicine

Cardiology | 970.544.7388

Ophthalmology | 970.544.1460

Otolaryngology (ENT) | 970.544.1460

The Steadman Clinic at Aspen Valley Hospital | 970.476.1100

Whitcomb Terrace Assisted Living $\mid 970.544.1530$

275 Castle Creek Road, Aspen

- Primary Care
- Cardiology
- Ophthalmology
- Otolaryngology/ENT
- +25 fields of specialty medicine

FIND A DOCTOR

WALK-IN CARE

Snowmass Clinic | 970.544.1518 Walk-in medical care for acute illnesses and injuries. 77 Wood Road Suite #N200, Snowmass Base Village 7 days/week, 8:30 am – 4:30 pm

After-Hours Medical Care | 970.544.1250

A lower cost option to the ER when you have acute non-life-threatening medical needs outside of office hours.

234 East Cody Lane, Basalt

Monday – Friday 3:00 pm - 11:00 pm

Saturday & Sunday 8:00 am - 5:00 pm

MIDVALLEY MEDICAL SERVICES

Basalt - Southside | 234 East Cody Lane

After-Hours Medical Care | 970.544.1250

Cardiology | 970.544.7388

Rehabilitation Services | 970.544.1177

Basalt - South of Willits | 1460 East Valley Road

Aspen Valley Primary Care | 970.279.4111 Internal, Family and Pediatric Medicine

Midvalley Imaging Center | 970.544.1260

Midvalley Laboratory | 970.544.1528

