What if I told you there was a caffeine alternative that would also give you that boost in the morning while improving your health and simultaneously enhancing your brain function and your chances of living longer in fit condition? Well, there is…and it’s bicycle commuting!

“It’s my coffee substitute!” said two of the people I interviewed at the Department of Environmental Conservation’s Albany office who bicycle commute on a near daily basis. Six of them commute year-round—braving the cold, darkness and hazards such as snow, ice and corrosive salt. Why do they do it? How do they do it? And what do you need to know to get started?

“You need to be comfortably cold,” says Maxwell Wolchenhauer (Max) who commutes roughly four miles each way. “The key is not to sweat.” As winter wilderness survival instructors teach: “Sweat kills.” If you allow yourself to overheat, and perspire heavily, your clothing tends to lose its ability to insulate and strips your body of warmth. According to Max, if you start out comfortably cold, your body will generate enough heat from exertion that you will be somewhat cozy while also not perspiring significantly. This is the “zone” you want to stay in—and if you start to exceed it, remove layers. Of course, the opposite is also true: if you start to slow down and generate less body heat, add layers.

BY BICYCLE?

The key to comfortable winter cycling is dressing in layers.

By Rudyard Edick
Photos by Robin-Lucie Kuiper
The operative word here is layers—something all of the winter commuters emphasized. Randy Orr, for example, will wear up to four layers of synthetic clothing under a fleece topped with a wind-breaking shell. But the general rule-of-thumb is to dress with three layers in mind. It’s the same rule hikers follow: a wicking layer next to your skin; an insulating middle layer; and an outer layer that repels wind, rain and snow.

Evaporation is an excellent way to remove heat, and sweating in the cold can quickly chill the body. A wicking layer moves any moisture away from the body, transferring it to the next layer. Since wool and synthetics retain their insulating properties when moist, both materials make excellent middle layers. You should never use cotton as your insulating layer. While warm when dry, it is exceedingly chilling when wet. Hence, jeans are out. For the outer layer, use a wind resistant, water repellent, breathable fabric.

In extreme cold, the middle layer should consist of multiple sub-layers. This allows you to regulate the amount of insulation you have at a given moment and thus prevent overheating from exertion and excess moisture. Be prepared to stop and remove (or add) insulating layers as necessary, because while wool and synthetic materials do provide insulation when wet, they still function best when dry.

It’s important to pay special attention to your hands, feet and head in colder weather. This is particularly true on a bicycle because of the wind chill experienced while cycling. Randy Orr uses regular fingerless gloves with simple cloth work gloves over the top. Fellow commuter Jennifer Dean prefers a pair of “bar mitts” (neoprene covers that attach to the handlebar and effectively block moisture and wind) when commuting the four miles each way year-round. Kevin Civerola has made his nine-mile commute in 5°F weather wearing three layers on his hands.

Warm footwear is just as essential. Jennifer uses neoprene booties that slip over her regular “clipless” cycling shoes (shoes that snap onto the pedals, allowing the cyclist to pull up, as well as push down), while Max simply wears wool socks under his standard mesh mountain bike shoes. Max says, “My feet are always cold in the winter, but it’s part of my tactic of preventing overheating and perspiration.” Another commuter, George Heitzman, also wears wool socks, but adds a waterproof cover for additional warmth and water resistance.

It goes without saying that helmets are a must when commuting by bicycle. But bike helmets aren’t particularly warm, so a number of cyclists wear balaclavas under their helmets. Balaclavas are tube-like, warm, snug-fitting hats that cover most of the face, head and neck. While only a three-season commuter, in cold weather I use my speed-skating helmet (which has a solid profile) with a hat specifically designed to be worn under a helmet. You can purchase one at most bike shops.
Sharing the road with cars during the winter can be potentially dangerous, and all of the cyclists I interviewed emphasized the need for lights: the more the better. Jennifer has lights that blink rapidly on the front and back of her bike, and runs them all the time—night and day—to increase her visibility. George has two forward facing lights (one set to blink, the other set on steady view) clipped to his handlebars, plus a headlamp attached to his helmet. Like Jennifer, he also uses a rear-facing blinking light.

One commuter who cycles five miles thru heavy city traffic, covered his bike with electroluminescent wire. The result is a “glow in the dark” bicycle that grabs a driver’s attention. It also has the added benefit of being visible from all directions, not just from the front and back. Another way to be seen from the side by drivers is to use bike headlights with a side blinking window. This can help keep you safe while crossing intersections. It also helps to wear highly visible clothing such as lime green or bright orange jackets. Wearing a “blinky” vest (clothing with blinking lights embedded on it) is another possible safety option.
All of the commuters emphasized the need to follow traffic rules and regulations. Use hand signals when turning, obey stop signs and traffic lights, and don’t lose your temper if someone makes a mistake. In addition, cyclists should watch for pedestrians (particularly at intersections or emerging from between parked cars), avoid lingering in the blind spots of cars, and be careful when passing parked cars as their doors may suddenly open. Also be conscious that cars passing you may make sudden right turns into your path, and look ahead for road hazards such as potholes or road debris. An advantage of the more rugged mountain bikes, with wider tires, is that they better navigate such hazards. Rearview mirrors for your handlebars or helmet are another safety feature you may want to consider using.

Bicycling commuter Rudyard Edick works in DEC’s Albany office.

I’ll admit that even as a biker, winter commuting sounds daunting to me. But after interviewing these hardy souls, I’m thinking of possibly trying it. These folks commute this way (logging more than 1,000 miles each year) for a number of reasons: it’s fun; it’s healthy; it protects the environment by reducing air emissions and greenhouse gas generation; it saves money on gas; and it reduces wear and tear on their car. Everyone agreed that it was more satisfying than driving a car, and did much more for them than what many people value most first thing in the morning: a cup of coffee.

Bikes for Winter

When it comes down to choosing a bike for winter commuting, it’s really a matter of personal choice and preferences. Some winter commuters use a touring bike, while others prefer a mountain bike. The most common choice, however, is a hybrid. A hybrid is similar to a mountain bike but blends in characteristics from touring and road bikes such as narrow, smooth tires, lighter wheels, and mounts for racks and bags. Most hybrid cycles also have upright seating and straight handlebars, features that may allow for more visibility and better steering control. Long-distance commuters often gravitate towards touring bikes as they are more energy efficient. Short-distance commuters are more likely to use a mountain bike because their ruggedness and tires provide more traction on snow and road debris.

Some commuters like to outfit their bikes with “studded” tires, which provide better grip on snow and ice. Studded tires fit best on mountain bikes and can be either purchased or made at home (using sheet metal screws). Touring and some hybrid bikes have fenders which are particularly welcomed on commutes in cold rains.