

ARTICLE: Layer Up

The reason for dressing in layers is that it allows you to remove clothing if you become too warm and to put clothing back on if you get too cold. It is all about regulating your body temperature so that you avoid excessive sweating and you prevent that "nasty moisture build-up". Moisture draws heat away from your body with amazing speed so staying warm is all about staying dry! Layers also give a place for your body heat to become trapped.



Layer #1 - Next-to-Skin Layer or Base Layer



This is the most important layer when it comes to moisture management. The base layer should be worn close-to-your-skin so that it can wick away moisture that you produce while at the same time trapping body heat. Some fabrics are naturally better than others at wicking moisture:

Good 'moisture-wicking' fabrics = wool, polyester, polypropylene, silk, bamboo.

Bad 'moisture-wicking' fabrics = cotton

Useful Tidbit: Base layers come in different weights. Use a light weight for 'not-so-cold' temperatures or if you are doing highly aerobic activity such as cross-country skiing. Use a heavy weight if it is very cold outside and you are doing a less aerobic activity such as downhill skiing. Use a mid weight if you are doing anything in between or you are not sure just what you'll be up to.

Layer #2 - Insulating Layer



This is the easy one. The insulating layer is worn on top of the base layer. The fabric should have some bulk so that warm air from your body can be trapped inside. The nature of the insulating layer depends on just how cold the temperatures are and on how active you plan to be. This layer is easily adjusted. It is still important to use a moisture wicking fabric for the insulating layer. Since a very high proportion of body heat is lost through the top of your head.....for heaven's sake put on a hat!

Good insulating fabrics = wool, fleece, down, thinsulate, primaloft, other synthetic fibres..and fur!

Bad insulating fabrics = cotton

Useful Tidbits - Unlike synthetics, wool keeps you warm even if it gets wet and reduces that "damp chill" that results after activity. Down is the warmest, lightest and most compact insulator but it is useless if it gets wet. Many people wear a good base layer and then spoil the effect by wearing a cotton turtleneck over top. The cotton holds moisture that is passed through by the base layer and still makes you feel damp and cold even if it is not right next to your skin. Remember "cotton is rotten" no matter which layer it is.

Layer #3 - Shell



The shell is the outer layer that protects against wind, rain and snow. It protects you from the elements but it should also allow your body heat and moisture to escape. In other words it needs to be breathable! A loose fit allows you to easily accommodate the layers underneath and allows freedom of movement.

Good "shell fabrics" = nylon; nylon with a waterproof/breathable application such as Gore-Tex; softshell

Bad "shell fabrics" = cotton

Useful Tidbit - Customers have often reported wearing a waterproof breathable jacket for cross-country skiing but find they are quite damp after an hour on the trail. The truth on waterproof breathables is that although they are waterproof, they are not as breathable as a jacket that is not waterproof. (i.e. a jacket that has no coating on it). For cross-country skiing, cycling, running and rugged snowshoeing, we recommend a wind jacket that has no waterproofing so that maximum breathability is maintained.

Because there are so many variables, there is no alternative for "trial and error" and old fashioned experimentation when it comes to dressing for cold weather activity. However the principles of layering are the most important foundation on which to build.

Remember, there is no such thing as bad weather, just bad clothing....so "layer up" and get out there!