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Warm thoughts for cold weather but in reality for any weather.

Quick tips about this article.

The heart is a muscle and must be treated as such.

Muscles drive and the hearts response not other way around.

Warm ups and cool downs are musts to prevent problems.

As one gets on in age and with the possibility of narrowing of arteries these practices become more important.

Most riders start out each ride cold. By this I am not speaking of the weather but of the mechanics of the body. There is little or no time allotted for the body to warm up and adapt to the stress being placed upon it. The transition from a cold state to a warm one is not a simple process. Then why on some rides is this done? Jumping into a ride at the stated speed creates a huge demand upon the cardiovascular system and this could have catastrophic results. One is used to seeing the grand tours on television and there one doesn't see the warm ups that the riders perform. Nor does it show the neutral start where all of the riders follow a pace car for a distance before starting the actual race. When one starts out the body is somewhat reluctant to participate. Breathing is harder, the legs are stiffer, and the body is just not in a relaxed state. The reason for this is that the body must play catch up to the demands being placed upon it. It is a simple case of demand and supply. Until there has been a demand for blood supply in the extremities it is basically in the core of the body. Here again remember that the muscles are dictating the necessity for additional blood and this drives the heart in an effort to meet this demand. It is here that one has to realize that the heart is also a muscle and it will respond as any other to a demand. The

initial call for fuel is filled by the body using Adenosine Triphosphate more commonly known as ATP. This compound is necessary for the muscles to contract. The body keeps a store of this on hand in case there is an emergency call for fuel. The body usually carries about a 10 second supply for this. Once used other forms must be called upon to supply the fuel needs. Most people are glucose based while others are fat burners. Glycolysis is the breakdown of glucose and this can be done with or without oxygen or aerobic or anaerobic respectively. The anaerobic system can run for about 2-3 minutes before it must shift to the aerobic system. The body will create a fuel system from what is available and this will include glucose as well as fat. The fat burning system lasts far longer but one has to be used to operating on this means of fuel supply. In any case there is a lag time between shifting from one system to another. This is one of the reasons that one works harder in the beginning of a ride. The muscles may express their displeasure in the form of burning or hurting.

In the beginning of a ride the brain is stating to the muscles here is what I want. More power to create faster speeds causes the cardiac system to be taxed. As the heart increases its workload

so must the lungs meet the demand for the oxygen deficit. When the entire system has reached a state of dynamic equilibrium things begin to ease. The initial point of this article was to point out that dramatic changes occur in the state of the body when there is no warm up period. If one hammers from the outset the stress will be significant and this could lead to major problems. One must also point out that the opposite at the end of a ride is also true. Stopping without giving the system an opportunity to cool down could potentially cause catastrophic damage. Take the time to allow the body to adjust to the beginning and end of a ride and it will be much happier for it. I am simply pointing this out in hopes that riders will realize that taking it easy for the first 10 minutes of a ride might save some one's life. Each person will get to know which way is the most appropriate for them to warm up and cool down. In some ways this is an oversimplification of a rather dynamic and complex system. It does point out the need to realize that as we age things are not going to occur as they once did. After all as complicated a system is the heart it is after all a muscle. A cramp in the calf or hamstrings is one thing but one in the heart is another. As always check with your physician before embarking on any exercise program. If you have any questions please feel free to contact me at richardchaykin@yahoo.com.