



BENEFITS OF SHORT COURSE TRAINING and AGE APPROPRIATE RACE COURSE LENGTHS

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Prior to puberty, the anaerobic lactate system is relatively undeveloped. Children are aerobically efficient, and run a ski course using more of the aerobic energy system than they will post-puberty. Training to try to improve their anaerobic abilities pre-puberty has little or no purpose to develop those systems.

Setting long courses for pubertal or pre-pubertal athletes therefore likely has little benefit for their anaerobic development, with the anaerobic energy system being important and gaining prominence for ski racing performance later in athletic development.

Attention spans and window of focus are relatively short at that age, we can determine that short courses make a lot of sense for pre-pubertal racers.

We must also emphasize the importance and value of teaching and developing fundamental technical skills and promote skills based learning environments- incorporating directed free skiing, skills stations, variable terrain, short course gate sections and race simulations.

Add to this the ideas that all athletes should be able to race a short course at full intensity and see more skiers feel in touch with the leader on a short course, the benefits of short courses for development and performance makes sense.

Finally, in looking at course length and vertical drop rules in Austria, we found almost exact agreement with the new shorter length recommendations we were making here.