WSRC U14 PROGRAM

The WSRC U14 Program is a twelve-week Train to Train / Learn to Race program for athletes aged 12 and 13 (as of Dec 31st,2022) that will begin the weekend of Saturday January 7th and run until the weekend of March 25th & 26th

The WSRC offers 2 DAY (Saturday and Sunday) U14 Programs as well as a 1 DAY (Sunday Only U14) Program if there are 6 or more athletes signed up for Sunday only.

The WSRC U14 is a SKI RACING Program for U14 athletes. Aged 12 or 13 by Dec 31st 2022.

If athletes need to be focusing on skill development so that they can properly attack a race course (SL, GS & SG) that is what the focus will be on for those athletes.

The Groups of U14 athletes will be mainly about having athletes of similar skill-sets grouped together so that the coaches can work with them on developing skill-sets (Technical or tactical) as a group. They will be grouped with other Senior Team Athletes.

U14 Program Goals – Train to Train & Learn to Race

1. To provide such training opportunities that our U14 Athletes can train as close as possible Alpine Canada's recommended number of on-snow training days. Days on snow recommended by Alpine Canada are 75 - 110 +/- . The WSRC is offering 100 +/- possible days of training / racing.

2. To provide a corresponding number of Competitive starts to our training opportunities. 14 to 18 Starts is recommended – WSRC is offering 24 +/- possible Starts.

3. To have ALL the athletes at this level of the Program have a minimum of 8 Competitive Race Starts this season.

4. To train start to finish, as fast as possible without falling and without supervision while showing excellent technical skills while diligently FOCUSING on THE PROCESS.

5. To develop specific fitness for ski racing, build the engine, refining specific racing skills. To have athletes do one day of dry-land maintenance weekly during the competitive season.
6. To have the Athletes understand the importance of mental training. Having each Athlete develop their own mental training goals & plan. To have each athlete using a training Journal daily. To Provide scheduled mental training opportunities in the Fall and during the season. To review these plans on a bi-weekly basis.

The WSRC is offering a seven day Pre-Christmas Camp at Mont Ste Anne (Dec 3rd – 9th) , a ten day Pre-Christmas Camp at Mont Ste Anne (Dec 11th – 21st) seven day Christmas training Camp (Dec 27 – Jan 2nd) , A four day GS Camp at MSA (Jan 3rd – 6th) A five day SPEED Camp at MSA (Jan 16th – 20th) A four Day SPEED Camp @ Crabbe Mtn (Jan 30th – Feb 2nd) , five day N.S. March Break Training Camp (March 13-17), as well as a seven day SPRING Camp at Mont Ste Anne (April 7th – 13th) and extra training opportunities every Thursday and Friday over the course of the season. In total we are offering our U14 athletes the opportunity to train/race for 100 days +/- over the course of the Winter.

Prior to their first training Camp the coaches will spend some one-on-one time with these athletes establishing a jumping-off-point for the season as well as some season long Process Oriented goals with intermediate milestones along the way so that they can track their progress and adjust when necessary. Hopefully, we can get most of the athletes covered by the end of the Christmas break at our first Club Camp at Wentworth.

For each athlete, this path through the season will be different with different goals and objectives. For each athlete, the key will be to: FOCUS ON THE PROCESS. To put in the time and effort / work required to be the best ski racer that they can and want to be. To build the PROCESS which when followed and worked at diligently will yield OUTCOMES.

Each athlete will be asked to outline their Process goals and objectives for the season along with the Coaches. The athlete will then be asked to keep a written training journal (outlining what they are doing each training day – both on and off the snow) so that we/ and they can track their progress toward their Process goals checking off the smaller milestones that will need to be reached along the route.

Also, so that we can review what an athlete did / ate / slept / thought / tuned / dreamed on the day they trained / raced REALLY well or REALLY poorly.

These goals / objectives will encompass nutritional, mental, physical, technical and tactical aspects of each athlete's development over the course of the season.

We would suggest that to succeed at the U14 Competitive level of racing that your athlete focuses keenly on weekly / daily Fall Dry-Land training.

We would also suggest that to be competitive at this age-group level that your U14 athlete attends the Holiday training camp at Ski Wentworth.

Our first training Camp at Wentworth will be from Dec 27th to Jan 2nd. We will be offering training through the Winter every Thursday and Friday at Wentworth for U14 and Up on a per diem basis.

The U14 RACE Group will meet at the Shack 8:15 sharp DAILY (on weekends) for a training day meeting with the Coaching Staff and a dryland workout. We will be able to use the Race Shack in the mornings for pre-brief and in the afternoons for debrief and video . The athletes may leave gear in the Shack but not skis. Skis must be taken home each day.

For Thursday and Friday Training we will meet at Shack at 8:15 AM.

The training Program Day begins with daily session review and brief at The Shack at 8:15 - On-snow for warm up at 8:45 sharp in the morning (warm up near timing shack) and goes until 11:30 +/- when the athletes break for lunch. We begin again in the afternoon at 12:30 (and run on-snow until 2:45. Video and debriefing sessions will run from 3:15 until 3:45 +/- depending on the day.

The U14 Racers will have the opportunity to race at Mont Farlagne , NB / Crabbe Mtn, NB / Poley Mtn, NB / Wentworth , NS / Ben Eoin ,NS / Val D'Irene , Quebec and some races in Ontario.

EQUIPMENT NEEDS

U14 Athletes should have JR Race Slalom and JR Race GS skis (2 pairs of SL & GS skis - Racers & Trainers - is a HUGE advantage if budget allows)

- Boots should be JR/SR Front overlap design Race boots of appropriate size & stiffness.
- Shin guards / pole guards and a Slalom helmet with chin bar for slalom
- Skin suit / race suit
- Rain Gear

- A FIS approved Hard ear helmet for GS as well as a Back Protector of appropriate size - NOTE helmets must be FIS Approved. There will be a sticker on the back of the helmet indicating this. Back protectors are mandatory for GS and SG Training and Racing.

- SkiCatalogue.Com is a Canadian on-line site where equipment can be sourced. You can also try ReliableRacing.com / WordCupRacingSupply.com / Artechski.com / Corbetts.com

TUNING EQUIPMENT NEEDS

For ALL Ski Tuning / Waxing equipment needs please visit HUB CYCLE in Truro N.S. They are located at 33 INGLIS PLACE and on the web at : www.hubcycle.ca Hub Cycle offers all WSRC Club members a 20% discount on non-sale items.

Also visit the websites listed above. Sidecut Racing is another great option for tuning needs.

RACING & TRAINING SAFELY

U14 Athletes will need a MINIMUM of three days of Gate training (GS & SL) in order to mitigate the risks they are exposed to on Race Day in a course. The WSRC Coaching staff ultimately makes the decision as to whether they feel an athlete is Safe enough to race an event.

U14 Athletes are eligible to race SUPER G. ALL U14 athletes who wish to Race in a SG event must have a MINIMUM of three days of SPEED Training in order to be safe while racing at speeds between 70 and 90 kmph. If the training is not done the athlete will not be permitted to compete. Again the WSRC Coaching staff ultimately makes the decision as to whether they feel an athlete is Safe enough to race in any event.

NUTRITION

A well-fueled ski racer will have the nutrients and energy they need to support proper growth and ski race. Coaches and parents should continue to educate and reinforce with their ski racers the positive benefits of healthy eating habits including refuelling and maintaining hydration before, during and after training and competition.

- Eat meals as a family as often as possible and use Canada's Food Guide to help you plan healthy meals that the family can eat together.
- Plan meals ahead of time help to ensure you have all the required ingredients to prepare a healthy meal in your allotted time frame.
- Plan and pack healthy meals and snacks to take to the ski hill to eat during and after training.
- Ski racers are encouraged to have a full water bottle of water with them at all times. Cold weather is dehydrating. Encouraging ski racers to sip on a warm, water - light electrolyte drink or tea will help to maintain hydration throughout a day on the slopes.
- Trust that your ski racer knows how much they need to eat. Listen and respond to signals of hunger and fullness.
- During growth spurts, ski racers may eat more.

Encourage ski racers to learn how to read nutrition labels along with learning how to prepare basic meals on their own.

RELATIVE ENERGY DEFICIENCY IN SPORT (RED-S)

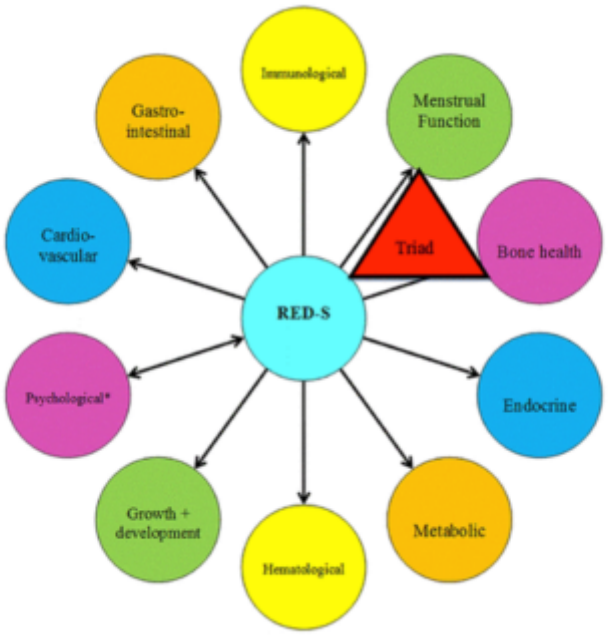


Figure from: Mountjoy et al. (2014)

Relative Energy Deficiency in Sport (RED-S) is a condition that can affect skiers of any age and sex. RED-S occurs when an imbalance in energy intake and energy output has detrimental effects on bone health, menstrual function (female), metabolic rate, immune function, cardiovascular health, and psychological health. (Mountjoy et al., 2014).

Sport performance lags when available energy stores are low. For ski racers during this stage of development, it's vital to assess intake needs and adjusting intake to meet the energy needs of training and competition.

Decreased energy intake can promote the development of osteoporosis resulting in reduced bone growth, weakened bones, reduced peak bone mass, increased susceptibility to stress fractures and premature osteoporosis. Stress fractures can lead to the loss of participation in on-snow training and competition for long periods.

Ski racers with RED-S are at an increased risk for injury, decreased endurance, and reduced muscle strength, along with reduced coordination, impaired judgement, irritability and depression (Mountjoy et al., 2014).

In female ski racers, poor and inadequate energy intake can also lead to delayed menarche and other irregularities due to the decrease in estrogen. Parents and coaches must be on the watch for girls who are now more susceptible to low moods, which can lead to depression, eating disorders,

and low self-esteem. Iron levels should be checked by a medical professional and monitored if required.

SUPPLEMENTS

At the end of this stage, ski racers should be educated about the use of performance enhancement substances and their possible side effects. Research supports a balanced diet as a legitimate means to top performance.

The Canadian Centre for Ethics in Sports (CCES) does not promote the use of supplements but recognizes that athletes often use them. Read the CCES supplement message to protect your ski racer against an anti-doping rule violation if they are using nutritional supplements.

In the spring of 2014, the CCES conducted a study of youth between the ages of 10 and 18 to determine the attitudinal drivers that set youth on the path to using performance-enhancing substances to assess associations between beliefs and drug use.

They found the strongest associations were observed in three category areas: steroid acceptance, social technology and self-image.

Common triggers to use performance-enhancing substances include; "If a close friend offered me a drug that would make me do better in sports, I would try it" or
"It is okay to try steroids once."

WHILE MANY YOUTH ARE UNSURE OF THE SIDE EFFECTS OF MOST LISTED SUBSTANCES, THEY ARE CONFIDENT THAT ENERGY DRINKS, CAFFEINE, AND ALCOHOL HAVE SIDE EFFECTS (CCES, 2014).

- A quarter of Canadian youth stated that in the past 12 months they had taken vitamin and mineral supplements to help them do better in sports. Energy drinks, protein supplements, and caffeine were also popular substances.
- Most commonly, Canadian youth do not think that vitamin and mineral supplements, protein supplements, caffeine, and asthma inhalers will not hurt them if used.
- They are more wary of creatine supplements, narcotics, thermogenics, nitric oxide boosters, cannabinoids, and alcohol.
- Among those youth who say they have used steroids to perform better at sports or change the way they look. There are a variety of sources of the drug; for those looking to perform better, friends, the internet, teammates and even parents are common sources and for those who want to change the way they look, friends of a friend or teammates are most common, followed by coaches and close friends. (CCES, 2014)

SLEEP

It's crucial at this stage to ensure that ski racers do not overtrain because their bodies can be more susceptible to injury during this period of rapid growth and development.

A ski racers total sleep requirement is the key to the foundation of post-exercise recovery and regeneration (PERR). The lack of sleep or cumulative sleep debt is associated with changes in mood, concentration, motivation, endurance and recovery this can hurt performance and put the ski racer at risk for overtraining/under-recovery.

DURATION

9.5 to 10 hours per day.

+30-minute nap between 2 pm and 4 pm

QUALITY

- Ensure a comfortable sleep environment.
- Initiate a regular napping strategy.
- Monitor for excessive sleepiness & fatigue.
- Observe for sleep disorders.

PHASE

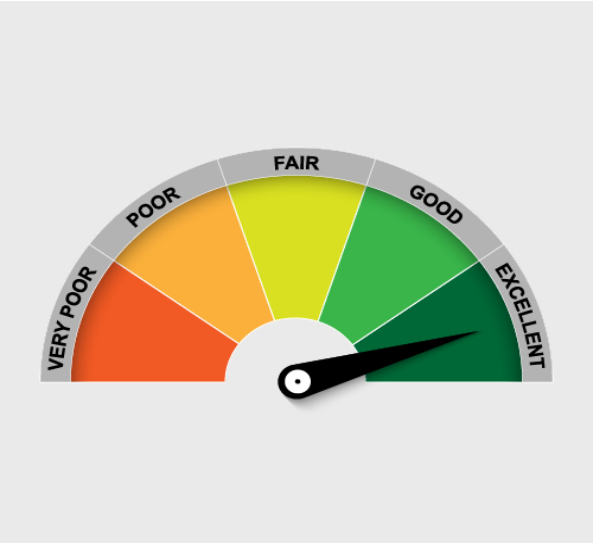
- Maintain a regular sleep/nap routine.
- Get early morning light exposure for 30 minutes daily.
- Monitor for a delayed sleep phase indicating difficulty falling asleep and waking up for school.
- Maintain regular nutrition routines; breakfast is the most important meal of the day. Remember to "break" the "fast."

KEY POINTS

- Reinforce the importance of a sleep routine.
- Monitor cumulative sleep duration. Be aware that sleep debt equals <9 hours per night or <56 hours per week.
- Monitor caffeine intake.

DO NOT TRAIN WITH AN UNRESTED MIND AND BODY!

REGENERATION



The use of a simple evaluation at the beginning of each day should become a regular routine for the ski racers. Monitoring questions should measure the level of enjoyment, level of energy expenditure, nutrition, hydration, soreness, stress levels, self-esteem, quality of sleep, illness and injury. At this stage, the number of variables monitored increases in coordination with their increased participation in sport and life.

Ski racers are encouraged to understand the impact of their choices outside of the training and competitive arena. Ski racers are educated on proper regeneration strategies and restoration strategies including stress management techniques.

Coaches should check in with their ski racers at the start of each training session to ensure their ski racers are well-rested, hydrated and fueled for the training and competition bout scheduled. Coaches should also be monitoring training loads to ensure the ski racers are being provided with the correct stimulus to create positive adaptations.

Ski racers should have a light snack and water available at the end of the training session to refuel. In this stage, ski racers should be taking more responsibility for their refuelling and regeneration as part of becoming an athlete.

Creation of post-ski day routines can aid ski racers in the development of a relaxation and regeneration routine in preparation for a good nights sleep. The recovery routine should include a short, active recovery exercise along with some light stretching.

Limit screen time an hour before bed if possible.

Sleep logs can be used to determine current behaviours and evaluated with the intent to develop training and recovery routines to match the sleep requirement.

Strategies for getting enough sleep include napping.

INJURY PREVENTION

Ski racers can prevent most injuries by being physically fit and literate, and by wearing the appropriate and adequately adjusted equipment for the activity including ski racing and training. A ski racer's most important tool is his/her body, doing what they can to defend it against injury is vital! Ski racers should seek to maximize their results without putting themselves at risk of injury by following a few simple steps:

- Spend time completing a proper warm-up.
- Adapt and set up equipment to match the needs of the ski racer.
- Stay hydrated, it's crucial to replace lost fluids and minerals.
- Ski racers should listen to what their bodies are telling them; go hard when there is energy!
- Recovery is as important as preparation

RISK FACTORS FOR INJURY INCLUDE:

- Physical fitness, ski racers need to be fit enough for the challenges presented during training and competition.
- Are the ski racers coming back from injury?
- Properly fitted and adjusted ski equipment. Poorly functioning, poorly fitting, or improperly adjusted equipment can cause more harm than good.
- Protective equipment including properly fitted helmets can prevent head injuries.
- Skiing while fatigued and not taking enough breaks for rest or stopping when tired. Often only a short break at the top of a course that includes a short warm-up routine is all that is needed.
- Skiing outside of the skill level and comfort zone of the skier. The level of challenge is dependent on the skier's current technical and physical capabilities or inabilities. Proper course setting to match the experience level of the ski racer correctly is vital. Exposing skiers to activities significantly higher than their abilities can result in frustration, failure, a decline in motivation along with increasing the chance of injury.
- Skiers should be well rested, hydrated and fueled before arriving at training. Proper hydration and nutrition throughout the day will decrease the risk of injury.
- Changing snow conditions can affect ski racers depending on their ability level. Check in to see how they feel about the terrain and snow conditions.

INJURIES CAN BE PREVENTED THROUGH THE CREATION OF WELL-PLANNED TRAINING SESSIONS LED BY PROFESSIONAL COACHES.

Planned training sessions should include the following activities:

- A proper introduction to the activity and skills ahead of the training session.
- A warm-up that includes supervised physical fitness movement preparation.
- Well, planned skill progression is matching the skill and development age of the ski racer.
- Course and terrain inspection.
- A proper cool down.
- Conclusion.
- Debrief with the ski racers to gain feedback on the session in preparation for the next training or competition bout.

In a study conducted by Müller, et al. on long term athletic development in ski racing they found no single fitness parameter responsible for determining the risk of injuries, a comprehensive fitness regimen starting at a young age is crucial for coping with the physical requirements of alpine ski racing and minimizing the rate of both traumatic and overuse injuries (Müller et al. 2017).

Possible injury prevention measures should concentrate on core strength, neuromuscular control, reactive strength training and limb (a)symmetry (Steidl-Müller et. al. 2019, Müller, et. al. 2017).