

Nutritional Strategies for Optimizing Winter Sport Athlete Health



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Outline

- Risks of illness in Paralympic winter athletes
- Nutritional strategies used on a day to day basis to protect immune function
- Specific nutrition strategies Team USA have used for PyeongChang

Risk of illness in winter sport athletes

- Training loads
- Cold environments (increased energy expenditure)
- Frequent travel for competition in winter season
- For some events, need to achieve lean body composition to optimize performance
- Low vitamin D status over winter



Additional factors for Paralympic athletes

- Understanding of energy requirements
- Hydration – e.g. sit skiers on hill
 - Decreased drive to drink in cold
- Risk of UTI during travel in those who self-catheterize
- Hygiene – hands on wheelchairs, no hands, visual impairment



Long term nutritional strategies

- Sufficient calories to match training loads
- Rich in vegetables, fruit and whole grains
- Hydration and electrolytes
- Probiotic and prebiotic rich diet
- Protection of brain – fish oils & vitamin D
- Education on what increases risk of illness & how to counteract with timing and periodization of nutrition
- Minimum annual screening for vit D, iron and other parameters with supplementation as required



Pre Departure Travel Pack

- Probiotics
- Electrolytes – consider using on plane to support effective hydration
- Hand sanitizer
- Multivitamins



Flight, arrival and during games

- Flight – reinforced sleep plan, hydration, use of disinfecting wipes
 - Meal and snack plan for entirety of travel day
- Hydration testing (first morning USG) on selected days including day after arrival
- “Sick packs” – vitamin C and zinc for anyone with start of cold symptoms



Food for thought.....

- Bring a sport dietitian with your team!!

