

Ride Stronger Through Intentionality

Behind Energy Balance

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Mountain biking is physically demanding; it requires cardiovascular endurance, being able to conduct full body manoeuvres at high speeds, climb steep grades, engage both aerobic and anaerobic systems, and regulate the emotional and mental intensity that comes with each of the previous considerations. Mountain biking requires a lot of energy intake as it is a high energy expenditure sport.

All athletes, including mountain bikers, can be at risk for developing RED-S (Relative Energy Deficiency in Sport) if they do not consume enough energy for their body's energy expenditure. It affects hormones, the immune system, bone health, menstrual cycles, and even psychological well-being, to name a few. Both males and females can experience RED-S; it is important to note that for female athletes, losing their menstrual cycle is a key sign that they are experiencing RED-S. Low-grade symptoms to look out for include frequent illness, irritability, fatigue, decreased athletic performance, difficulty staying warm, slow recovery, and increased injury rate. [9] Ways to combat this condition are to be intentional about fueling, training intensity, and overall psychological state.

Regarding fueling - before an endurance event such as mountain bike racing or training efforts, focus on carbohydrates to maximize glycogen stores, consuming 1 to 4 grams per kilogram of body weight, depending on the duration until race or training. Keep the intake of fat and protein low in the hours leading up to activity to help with digestion and prevent stomach upset, while making sure to hydrate sufficiently. [8]

Active youth have significant energy needs, based on a variety of factors such as age, gender, activity level, and more. It is vital that parents and coaches emphasize the importance of consistent and sufficient fueling to support their training. Fueling is not a one-size-fits-all situation, and comparison between athletes can lead to negative effects down the road.

Allowing the child to make decisions regarding their recovery, training, and overall stress load allows them to practice being intuitive and understanding their bodies' needs. This could be as simple as letting them choose a day off after a hard week of training. Rest is not a weakness; it is the way to become stronger.

Speaking positively about fueling, body image (including how you speak about yourself), and performance is key to helping your athlete develop healthy habits that will keep them motivated, passionate, and most importantly, healthy. Young people are extremely vulnerable to figures of authority, whether coaches, parents, peers, or other role models. It is vital that we are conscious of the words we speak to youth as they navigate their experience as athletes. Creating an uplifting culture and educating young athletes instills a sense of empowerment that lasts a lifetime.

HOW DO PARENTS HELP A CHILD BECOME INTUITIVE IN TERMS OF LISTENING TO AND UNDERSTANDING THEIR BODIES?

Guide them by encouraging them to reflect on their energy levels or ask:

- How did that workout feel?

- Do you feel your pre-race (or pre-practice) meal gave you the energy you needed?

Questions like these will help them listen to their bodies and find what works for them.

Oftentimes, young athletes want it all and want it now. It is important for parents and coaches to keep the child's growth and development at the forefront and not push the young athlete to train too much, too soon. Having an open line of communication with youth athletes as they continue in sport is critical to guiding them to develop positive fueling and training habits.

When young athletes under-fuel, overtrain, and hyperfixate on sport, it almost always leads to burnout and health compromises, both physical and mental. This is compounded by the pressure to succeed at a young age, which can lead to high volumes of over-training and, perhaps intentionally, under-fueling. When an athlete's energy balance is chronically off, the psychological effects from RED-S can result in loss of enjoyment in sport, contributing to widespread burnout and attrition among youth athletes.

When an athlete's energy balance is chronically off, the psychological effects from RED-S can lead to loss of enjoyment in sport, which can contribute to burnout and attrition among youth athletes. [4] At the core of youth sports is connection, passion, and the desire to fulfill a goal.

Centering training on the individual is essential for building lifelong mountain bikers. It teaches them to value their personal journey and fully assume the autonomy and responsibility for their development in the sport. With this autonomy, they can grow to understand they are in charge of how they strive to achieve their goals. Through continued education about intuitive training, fueling, and personal recovery needs, they can find what feels right to them and continue on in a strong and healthy way.

The goal for our mountain bikers is for them to be lifelong athletes who prioritize health and have a passion for the sport that burns for years to come.

SOURCE NOTES

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