

PASS IT! I'M OPEN...

*Not all openings are a good thing.
Hard workouts strung together can
open the window for illness.*

Light or moderate exercise can give your immune system a boost, but repeated hard workouts can open a window for infections (Gleason, 2011). The good news is that there are easy ways to keep yourself from being an "open window" to both chronic and acute infections like Upper Respiratory Infections, Strep Throat, Influenza etc.



Your immune system is what keeps your body healthy and fights off infections!

As an athlete, your body's defense can be weakened by several things (Ashour, 2017):

- ⚡ Not eating a balanced diet
- ⚡ Not eating enough food
- ⚡ Increased levels of stress
- ⚡ Intense levels of training
- ⚡ Vitamin and mineral deficiencies
- ⚡ Lack of sleep or recovery

STILL HAVE QUESTIONS?

Contact Coach Kelley...

PHONE: (207) 602-2073

EMAIL: llibby2@une.edu

INSTAGRAM: noreaster_strength



REFERENCES:

Gleason, M., N.C. Bishop, D.J. Stensel, M.R. Lindley, S.S. Mastana, and M.A. Nimmo (2011). The anti-inflammatory effects of exercise: mechanisms and implications for the prevention and treatment of disease. *Nat. Rev. Immunol.* 11:607-615.

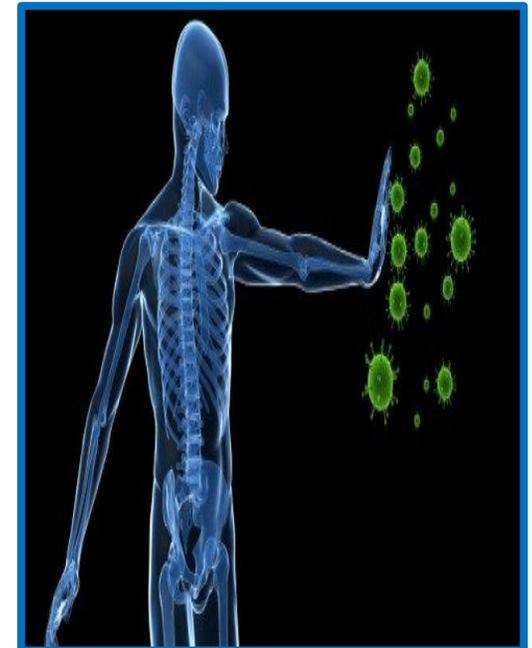
Rossi SJ, Buford TW, McMillan J, Kovacs MS, Marshall AE. Nutritional strategies and immune function. *Strength and Conditioning Journal.* 2010;32(6):65-70.
<https://search.proquest.com/docview/847389903>.
doi: 10.1519/SSC.0b013e3181fc5155.

Spence, L., W.J. Brown, D.B. Pyne, M.D. Nissen, T.P. Sloots, J.G. McCormack, A.S. Locke, and P.A. Fricker (2007). Incidence, etiology, and symptomatology of upper respiratory illness in elite athletes. *Med. Sci. Sports Exerc.* 39:577-586.

Moreira A, Kekkonen RA, Delgado L, Fonseca J, Korpela R, Haahtela T. Nutritional modulation of exercise-induced immunodepression in athletes: A systematic review and meta-analysis. *European Journal of Clinical Nutrition.* 2007;61(4):443460.
<http://dx.doi.org/10.1038/sj.ejcn.1602549>
doi: 10.1038/sj.ejcn.1602549.

Gleason M. Effects of exercise on immune function. *Sport Science Exchange.* 2015;28(151):1-6.
<file:///C:/Users/llibby2/Desktop/Asthma%20-%20APN%20Key%20Assesment/Gatorade%20Athlete%20Immunosuppression.pdf>.

IMMUNE-BOOSTING NUTRITIONAL STRATEGIES FOR COLLEGIATE ATHLETES



GET THE SHUT OUT...

*It takes a team effort to get a “shut out” –
Recovery + Nutrition + Training = Healthy Athletes*



Following a hard workout, athletes are more susceptible to illness for about 24-48 hours (Spence, 2007). You can close the window of immunosuppression (when your immune system is weak) and *shut out* illness that can force you to miss training opportunities or decrease your performance with the help of some simple nutrition tricks.

Learning some *healthy defaults*, or good choices that require little effort or thought, can help athletes avoid getting worn down and/or sick throughout the season!

Think of healthy defaults like an easy choice button...

Make it easy for yourself to do the right things to stay healthy and competitive!



PLAY TO YOUR STRENGTHS...

They say defense wins championships, but defense is fueled by great nutrition!

Just like a well-planned strength and conditioning program will improve the strength of your muscles, a well-balanced diet and prior planning on busy days can strengthen and *defend* your body!

Ways to hit the easy choice button:

- ⚡ Go grocery shopping with your teammates for the ultimate accountability! Buy nutritious snacks for your dorm/apartment to have on hand.
 - ⚡ Visit the salad bar and fruit stations in the dining hall first to build a plate full of vitamins and minerals
- Check out the next page!* →
- ⚡ Prepare for travel on game days by bringing nutritious snacks you enjoy
 - ⚡ Carry a water bottle throughout the day to stay well hydrated

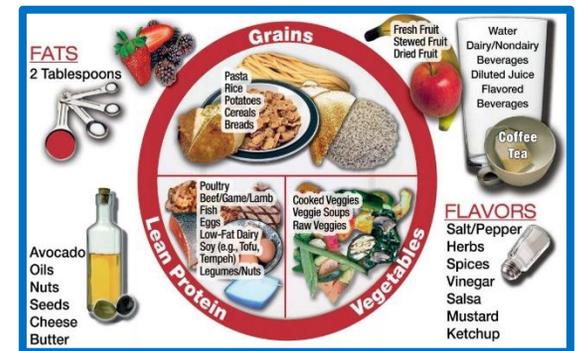


WEAR DOWN THE COMPETITION...

Wear out the competition, not yourself, by eating well, having great hygiene and sleeping deeply!

Follow these steps to boost your immune system for success:

STEP #1 – Eat a well-balanced diet that includes plenty of fruit, vegetables and protein to get important vitamins and minerals key to immune health... Vitamins A, E, B-6, B-12 and Zinc and Iron (Moreira, 2007).



Source: Team USA Nutrition U.S.O.C

STEP #2 – Practice good personal hygiene techniques to protect yourself and your teammates from infections and illnesses (Gleeson, 2015).

STEP #3 – Recover like a champ! Build a good sleeping environment and try to get a good night of shut eye, about 8+ hours. Ensure you eat within 15 minutes of finishing your workout (Gleeson, 2015).

STEP #4 – Understand your personal energy needs and make sure you are eating enough calories to give you energy to play and enough to recover (Rossi, 2010).