

NUTRITION & IMMUNE HEALTH

for High Performance Athletes

As a high performance athlete, it is important to follow a nutrition plan that will support the immune system in order to meet the high demands of training and competition and reduce the risk of illness and injury!

The immune system is highly organized to provide a potent, multi-layered defence against attack from pathogenic microorganisms including viruses, bacteria, fungi, protozoa's, and injury!

1

EAT ANTIOXIDANT RICH FOODS - VITAMIN A, C, E AND MORE!

Antioxidants help prevent cell damage caused by the formation of free radicals from stress, aging, or strenuous exercise. This benefit can be achieved through eating a variety of foods, a vitamin supplement is likely not necessary!

TRY BRIGHTLY COLOURED FRUITS AND VEGGIES!



2

EAT FOODS RICH IN IRON AND ZINC

Low iron stores can result in symptoms of dizziness, fatigue, and lowered immunity which can alter athletic performance. Zinc works in the body to help fight infection and battle against damaging free radicals.

TRY LEAN MEATS, NUTS AND SEEDS!



3

EAT FOODS RICH IN VITAMIN D

Vitamin D is important for maintaining strong, healthy bones, it may also help fight off infections and keep the immune system healthy.

TRY FATTY FISH AND MUSHROOMS!

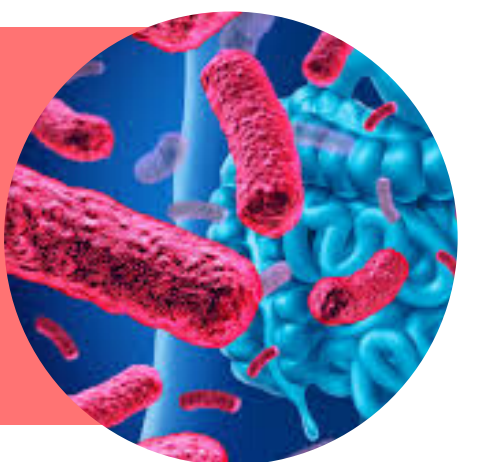


4

INCLUDE FOODS WITH PROBIOTICS AND PREBIOTICS

Prebiotics allow probiotics to multiply and remain in the digestive system. Eating a combination of probiotics and prebiotics will help keep the digestive and immune system healthy.

TRY KEFIR AND YOGURT!



5

FOCUS ON QUALITY CARBOHYDRATES AND PROTEIN BEFORE AND AFTER EXERCISE

Aim to eat complex carbohydrates and quality protein before and after training to provide sufficient energy throughout the day and to promote a quick recovery, decreasing the risk of illness and infection.

TRY OATMEAL WITH MILK AND FRUIT!



Remember, there is no single super food (or supplement) that will keep you healthy, well, and performing. What will work is a balanced approach including a variety of quality foods packed with immune enhancing nutrients, along with good hygiene (hand-washing), quality sleep, and staying active!

A FEW MORE CONSIDERATIONS:

1. Eat well, and avoid over or under fuelling.

This means: eat when you're hungry and don't eat when you're not hungry.

1. Eat quality carbs before and after workouts.

2. Stay well hydrated.

3. Get enough quality sleep.

4. Follow proper hand washing techniques all the time - soap and water and scrub for 20 seconds

5. Don't share bottles, utensils, or straws.

References:

Armstrong, A. (2020) Nutrition and Immunity

minimalist baker (2019) 30-Minute tempeh stir-fry, Retrieved from <https://minimalistbaker.com/simple-vegetable-tempeh-stir-fry/>

Janzen, J. Boosting Your Immune System for High Performance

Walsh, N. P. (2018) Recommendations to maintain immune health in athletes. European Journal of Sports Science, Volume 18 - Issue 6, pp. 820-831. Retrieved from

<https://www.tandfonline.com/doi/full/10.1080/17461391.2018.1449895>

MEAL & SNACK IDEAS

that contain a combination of nutrients to keep your immune system healthy

1

FRUIT SMOOTHIE

milk/alternative, yogurt, fruit, leafy greens, and nut butter

2

LEAN MEAT SANDWICH, VEGGIE STICKS, AND HUMMUS

lean red meat, turkey or fish sandwich

3

OATMEAL WITH MILK, BERRIES, AND GLASS OF ORANGE JUICE

yogurt could be substituted for milk

4

CANNED TUNA AND FRUIT SALAD

choose brightly coloured or citrus fruits

5

STIR FRY WITH TOFU AND RICE

vibrant coloured veggies, tofu or lean meat or fish, and rice or quinoa

6

NO BAKE ENERGY BITES AND SHAKE

contact sports dietitian if using a supplement

RECIPE: 30-MINUTE TEMPEH STIR-FRY

Servings: 4

Recipe Adapted From: minimalistbaker.com

INGREDIENTS:

Glaze:

- 3 tsp sriracha or chili garlic sauce
- 4 Tbsp creamy peanut butter
- 4 tsp sesame oil
- 1/4 cup soya sauce
- 4 tsp lime juice
- 1/2 tsp ground ginger
- 1 tsp maple syrup
- 3-4 Tbsp water

Tempeh:

- 8 ounces tempeh (chopped into bite sized squares)

Stir Fry:

- 4 tsp sesame oil
- 4 cups mixed chopped vegetables (red bell pepper, broccoli, carrots, and kale)
- 3 cups leftover cooked quinoa or brown rice

INSTRUCTIONS:

- Prepare glaze by adding all ingredients to a small bowl. Whisk to combine, until a pourable sauce is formed.
- Taste glaze and adjust flavour as needed, adding more sriracha for heat, maple syrup for sweetness, lime juice for acidity, or soya sauce for saltiness.
- Add chopped tempeh to the glaze and toss to coat. Then cover and refrigerate for 15 minutes. Prep other vegetables and toppings at this time.
- Heat a large rimmed metal skillet over medium heat. Once hot, spoon in the tempeh, reserving most of the glaze in the bowl. Fry for 3-4 minutes, turning on each side until browned. Then remove from pan and set aside.
- While the pan is still hot, add sesame oil and mixed vegetables. Cover to cook and steam the vegetables, stirring occasionally until slightly golden brown and tender (about 4-5 minutes). If they stick to the pan, add 1-2 tsp of water to loosen.
- Once the vegetables are nearly done, add greens and grains and fry for 3-4 minutes or until warmed through and slightly browned. Then add in cooked tempeh and the rest of the glaze.

Nutrition Facts

| | |
|---|------------|
| 4 servings per container | |
| Serving size | |
| Amount Per Serving | |
| Calories | 530 |
| % Daily Value* | |
| Total Fat 24g | 31% |
| Saturated Fat 4.2g | 21% |
| Trans Fat 0g | |
| Sodium 640mg | 28% |
| Total Carbohydrate 54g | 20% |
| Dietary Fiber 10g | 36% |
| Total Sugars 14g | |
| Includes 0g Added Sugars | 0% |
| Protein 23g | 46% |
| <small>Not a significant source of cholesterol, vitamin D, calcium, iron, and potassium</small> | |
| <small>*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.</small> | |

