

Letter from Jimmy Zhang

## Post-training nutrition

(Jimmy Zhang is an accomplished former Otters' swimmer that swam with us for almost a decade. He won medals at Age Group Nationals and was the 2017-2018 Otters' Team Captain. Jimmy is a member of the SFU swim team.)

**Hi Janusz and Norman,**

It's been a while since we have talked but I hear you guys are doing some great work with the otters. This summer I plan on doing research on the things outside of the pool that can make me and the rest of the swimmers better athletes. These will be things like nutrition, hydration, recovery methods, and possibly supplements.

I know from experience that after swimming almost all high school swimmers aren't taking advantage of their "30-min window". A swimmer needs the right nutrition after practice to help your body refuel, repair, and rehydrate and if you don't eat right away and wait hours until the next meal then your body will start to eat itself. And since none of us live right next to the pool in order to get the maximum benefit you will need to eat at the pool.

As a general rule, we should eat something that has both carbs and protein in order to refuel and repair our muscles and we should have some liquids to rehydrate after practice. This refueling is important to consume after every practice in order to recover and it is especially important if you have a double practice that all of us have whether it is a double swim or a swim and a weights session.

Any food is better than no food at all but some good recovery snacks include:

For smaller athletes (less than 100lbs)

- 25-50g of carbs
- 7-10g of protein

and for larger athletes (larger than 100lbs)

- 60-80 g of carbs
- 10-20 g of protein

Some examples are:

- 1 cup (250mL) of chocolate milk
- a protein bar - but make sure its one that is made of both protein and carbs not a low carb version of a protein bar - some examples include: pure protein, RXBARS, Smart for life protein bars, Gatorade protein bars, and even cliff bars have all the required macronutrients. Some bars I would avoid are - any bars that are made for the keto diet that are high in fats and protein but very low in carbs.
- Some fruit (banana, apple, grapes, pears) and a protein shake - protein shakes by themselves is an alright snack but they are high in protein but very low in carbs.
- overnight oats - some oats, with half a scoop of protein powder and whatever else you want
- some type of fruit smoothie with 1/2 to 1 scoop of protein powder
- a pre-made recovery scoop - this is what I personally has been drinking - a full serving of this contains 60g of carbs and 15g of protein - this is a very good option but is probably the most expensive one. Companies that make include infinit, Skratch Labs, Tailwind nutrition, and Biosteel

Even after you have eaten your recovery snack it is important to eat your next meal within 2 hours to continue refueling, repairing, and rehydrating

If you have any questions feel free to message me or talk to me in person. If people are interested in the future I can send out a similar email but for supplements.

Feel free to send this to the whole swim team including the parents. I will also be sending a follow-up email that will talk about the importance of hydration.

I hope to keep in touch and good luck to both of you and your swimmers for the rest of the season. I will keep my ear out and listen to some of the times your swimmers post in these virtual meets.

**Jimmy**