



# Impact of Nutrition on a Swimmer's Performance

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## Abstract

### *Objective:*

The objective of my study was to evaluate the impact that food and nutrition makes on a swimmer's performance.

### *Methods:*

Case Study in addition to a matched-pairs test (before and after).

### *Results:*

Through my findings I was able to conclude that carbohydrates as well as protein and fats all play a huge role in a swimmer's performance.

### *Objectives*

- Objectives of my study included
  - Identifying if nutrition was an important element in swimmer's performance.
  - Helping myself and my teammates develop an understanding on how nutrition can impact their swimming in the long run

### *Limitations*

- I had a small sample pool so less reliability.
- I was dealing with a couple of months and could have benefited from more time.

### *Conclusions*

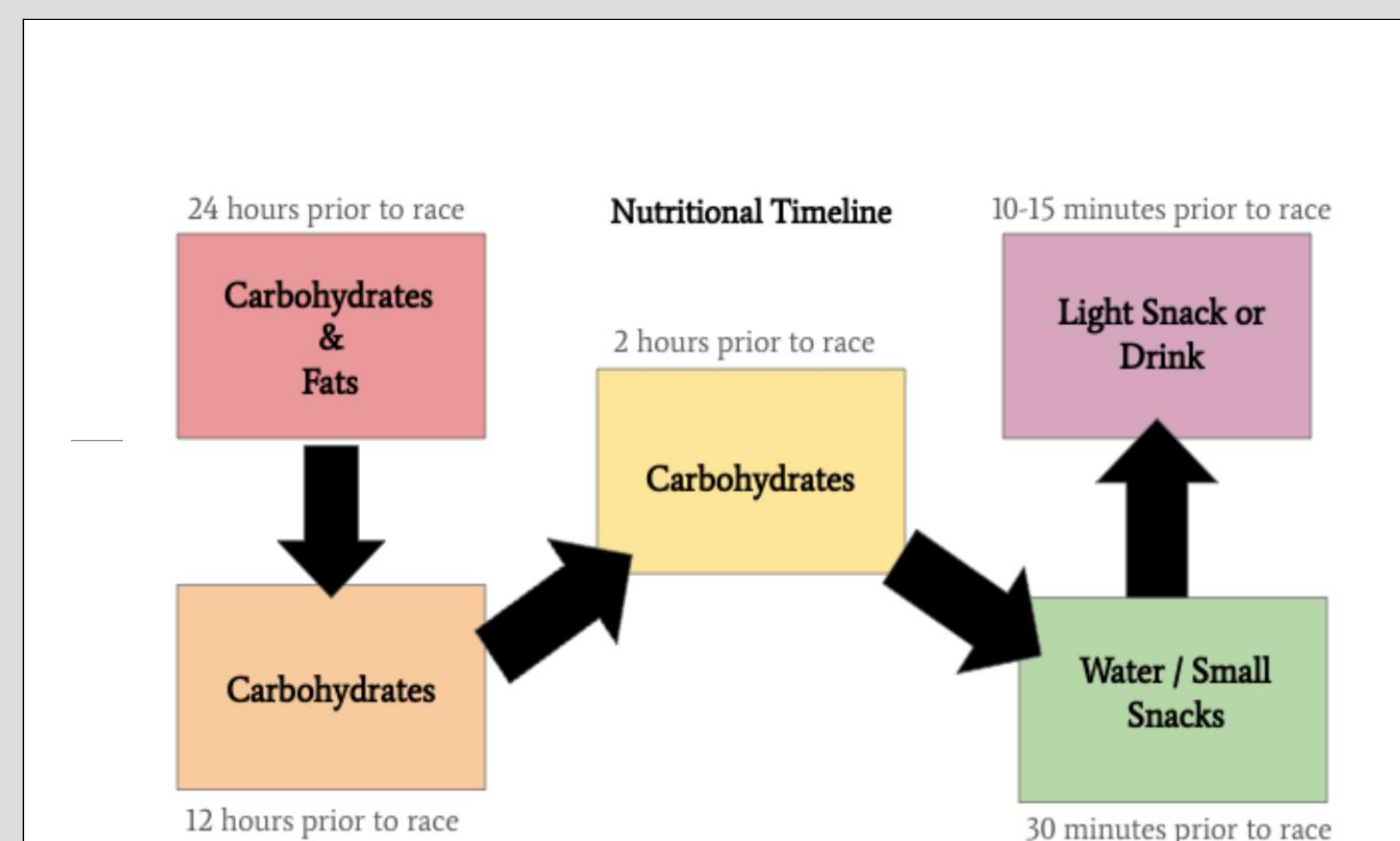
- I concluded nutrition is important for swimmers.

### *Implications*

My study will allow for more of my teammates to consider what they eat leading up to their races.

### *METHODS*

- I chose to use a case study matched-pairs design because I wanted to utilize both qualitative and quantitative data in order to compare how carbohydrates contributes to a swimmer's performance. I did this by using their best and worse meets throughout the season and recording their meals.

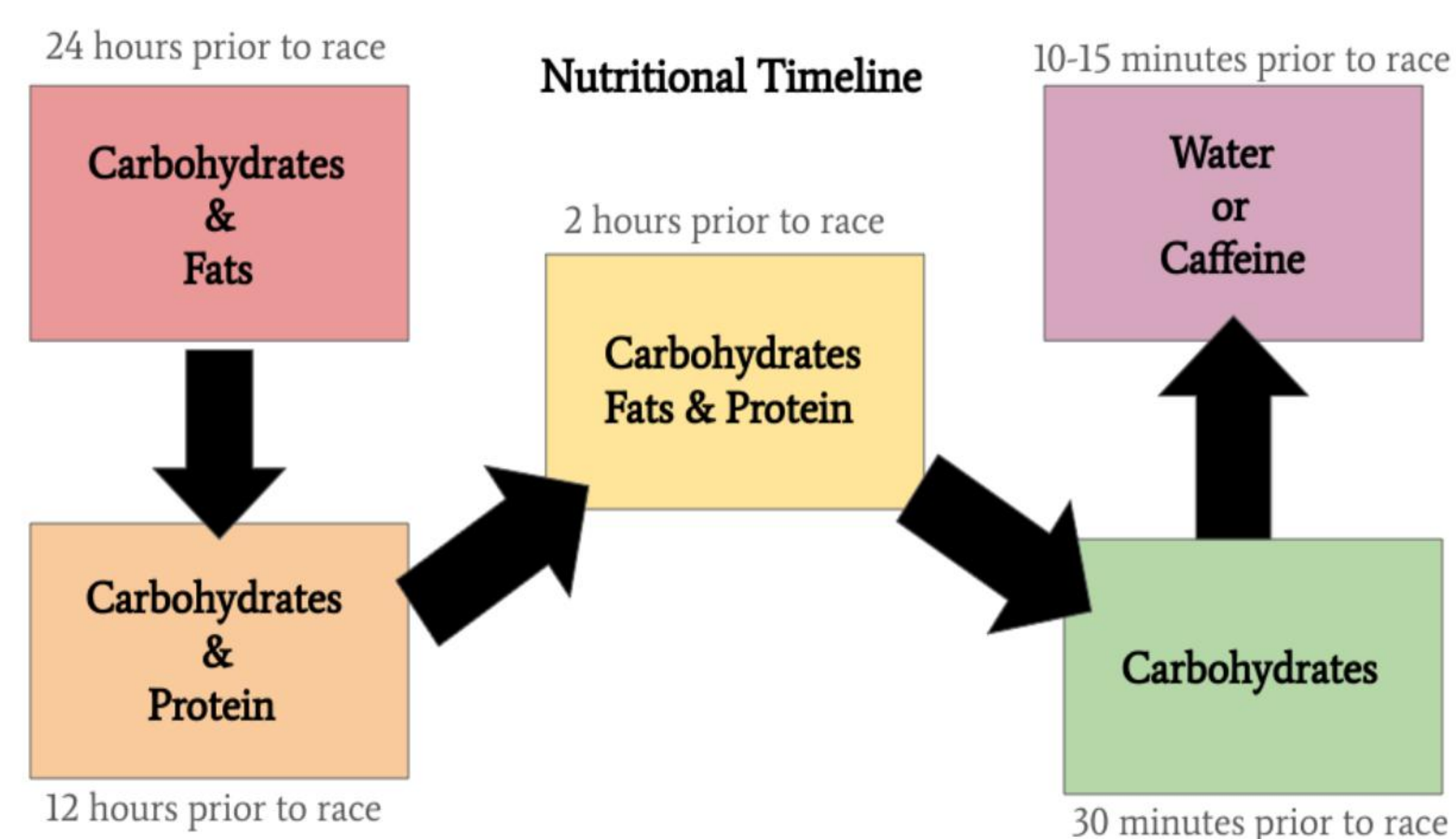


Female

## RESULTS

These two charts depict the ideal nutritional timelines for both male and female swimmers.

Male



## Additional Information

My study found that male athletes both sprint and distance do significantly better when consuming a high amount of carbohydrates. My study also found that female swimmers differ. A female sprint swimmer needs a substantial amount of carbohydrates to perform well while it is the opposite for female distance swimmers. Additionally, it is important to note that my findings also suggest that caffeine is a useful resource for sprint swimmers.