

Making/cutting Weight

Adapted from "Making Weight" by Kim Tirapelle

Losing massive amounts of weight in a short period of time is never healthy. However, in reality, wrestlers still engage in weight cycling to make weight for competitions.

Recent studies have shown that acute dehydration in the 24 hours prior to competition followed by aggressive rehydration and refueling is a safer method than larger weight cuts with more severe dehydration and food restriction over a longer period of time. This practice may allow a wrestler to train at a higher weight, while wrestling in a class that optimizes his or her power-to-weight ratio. Doing so would prevent severe or long term energy restrictions that result in lean tissue loss and focus more on water shifts that can be replaced with proper refueling after weigh-in.

Clint Wattenberg, MS, RD, CSCS, who works with the Cornell University wrestling program in nutrition and strength and conditioning, agrees with this approach. "The big misconception surrounding wrestling, especially among practitioners, is that all weight loss is the same," he says. "Quickly shifting fluids by restricting intake and increasing sweat loss is the safest and most effective way to achieve weight loss. However, **dehydrating too early, outside of 24 to 36 hours prior to the weigh-in, is a common weight loss tactic that compromises both health and performance.**"

Losing Weight

Early in the season/preseason pair a guided moderate energy restriction of approximately 250 to 500 calories per day with usual wrestling workouts and additional cardio. Their goal should be to lose one to two pounds of body fat per week. This slow rate of weight reduction will minimize the loss of muscle protein and maintain optimal hydration for workouts.

A pre-workout meal rich in carbohydrates like a bagel with peanut butter, banana, and low-fat milk will provide carbohydrates for the muscles to utilize during the workout, as well as amino acids that will be available for post-workout refueling. Following a workout, consume both carbohydrates and protein within one hour for optimal recovery. Research suggests aiming for 1 to 1.5 grams of carbohydrates per kilogram of bodyweight plus 0.1 to 0.2 grams of protein per kilogram of bodyweight. A good example of a post-workout snack would be eight to 16 ounces of low-fat chocolate milk paired with a turkey sandwich and a piece of fruit.

It is best that any major weight gain or loss happens in the off-season as the preseason is the time to focus on wrestling skills. Athletes should be within five percent of their competition weight before the preseason begins.

To replenish the fluid lost in a workout, wrestlers should aim to consume 150 percent of the weight lost by dehydration, or 16 to 24 fluid ounces per pound lost.

COMPETITION TIME

The last piece of the nutrition puzzle is implementing best practices leading up to weigh-in on

match day. It's recommend that wrestlers be within two to three percent of their target weight the day before weigh-ins. However, this plan varies for each wrestler based on how it impacts their performance.

To achieve the final two to three percent weight loss before weigh-ins, the following strategies should be used:

- 48 to 72 hours before weigh-ins, reduce fiber and residue in the diet. High residue foods, including fiber, remain in the intestinal tract, are not digested, and contribute to stool. This strategy should only be used around competition, as it limits the nutritional quality of the diet. It can result in approximately a one to two pound weight loss due to reduction of gastrointestinal contents.

Examples of low-fiber, low-residue foods include cooked carrots, spinach, and green beans, melons like cantaloupe and watermelon, vegetable juice, and plain enriched grains like white rice, rice cakes, cream of wheat, enriched bagels, Cheerios, and waffles.

- Moderately reduce food intake **two days** (no more than 2 days) before weigh-ins and pair this with reduced energy expenditure to minimize glycogen depletion.

- Up to 24 hours before weigh-ins, keep fluid intake high. Sipping on nutrition shakes can provide carbohydrates, electrolytes, and energy needed for competition and what the body does not need can be expelled in urine during the 24 hours before the event.

- 24 hours before weigh-in, restrict fluids and promote sweat loss through low intensity exercise to induce dehydration of up to two percent. If possible, do this the night before weigh-ins to limit the dehydration time period. Dehydrating too early will result in a reduction in health and performance. Be sure to watch the body for overheating.

- If you are not a salty sweater and/or need to make weight on consecutive days, a mild sodium reduction to 1,500 milligrams per day may be beneficial.

After weigh-in, recovery is paramount to allow the wrestler to refuel and rehydrate prior to competition and should begin immediately. Here is what we advise our athletes:

- Consume fluids that equal 150% of the weight lost by dehydration, or 16 to 24 fluid ounces per one pound lost. Aim for six to 12 fluid ounces every 15 minutes. Flavored sports drinks containing carbohydrates and electrolytes can help to stimulate further thirst, while refueling carbohydrates and electrolytes, and cool beverages are typically tolerated better and help cool the athlete.

- Consume easy-to-digest carbohydrate-rich foods and fluids that contain salt, such as pretzels, low-fat salty crackers, sports drinks, and endurance formulas with added salt. Other carbohydrate-rich foods include: bagels, bananas, English muffins, peanut butter and jelly sandwiches, low-fat yogurt, low-fat chocolate milk, low-fat granola, low-fat pudding, and sports replacement bars and beverages.

- Try to eat small, frequent snacks rather than large meals to avoid gastric discomfort. And avoid high fiber and high fat foods, which may delay gastric emptying and prevent nutrients from reaching the bloodstream and being carried quickly to the muscles for expedited recovery. Additionally, high fiber and high fat foods may cause bloating and gas.

Pedialyte mixed with carbohydrate-rich snacks work well, or a carbohydrate-electrolyte beverage to help replace electrolytes lost in sweat. The main point is to ingest fluids and fuel rich in both carbohydrates and electrolytes.

One very important note is that these strategies may not be appropriate for every wrestler. Try these tactics before in-season competition to establish what works best you feel in terms of energy level and performance.

Wrestlers need to consume a healthy diet at all times. In order to have the energy for competition, an athlete needs to eat a diet rich in whole grains, fruits, and vegetables along with adequate protein and fluids.

Sample case study of 145lb high school wrestler:

Here is a sample diet that provided him with 2,605 calories, including 400 grams of carbohydrates, 66 grams of fat, and 128 grams of protein.

Breakfast: 445 calories

1 1/2 cups cooked oatmeal (240)
3/4 cup blueberries (60)
8 walnut halves (45)
8 ounces skim or one-percent milk (100)

Snack: 310 calories

6 ounces low-fat yogurt (100)
1 large apple (120)
12 almonds, whole (90)
8 to 16 ounces water (0)

Lunch: 440 calories

2 slices whole grain bread (160)
2 ounces sliced deli turkey (70)
1 ounce cheese (90)
2 tablespoons avocado (45)
1 cup raw spinach and tomato slices (for sandwich) (25)
16 baby carrots (50)
16 ounces water (0)

Pre-workout snack: 220 calories

1 orange (60)
34 mini pretzels (1.6 oz) (160)
16 to 20 ounces water (0)

Post-workout snack: 675 calories

1 banana (120)
2 slices whole grain bread (160)
1 tablespoon peanut butter (95)
16 ounces reduced-fat chocolate milk (300)

Dinner: 515 calories

4 ounces grilled chicken breast (180)
1 cup cooked broccoli (50)
1 cup cooked quinoa (240)
1 teaspoon olive oil (45)
16 ounces water (0)