

Believe and Perform like Champions

Bio-Chemistry

What you eat and drink affects your production, your mood and your performance. Balance and maintenance of insulin levels (proper fueling) is critical to performance.

The effects of dehydration

- Being dehydrated by a mere 3 percent can decrease focus and clarity.
- Increase the heart rate by up to 10% which can lead to confusion, stress producing thoughts and raise cortisol levels.
- Lose 10 percent of its strength and 8 percent of its speed. (athletic)

Colorado Springs is roughly 6,000 feet above sea level.

- You perspire and exhale twice the amount of moisture you would at sea level!

There are several ways to compute fueling and hydration requirements. The information below is designed to provide you with one of many options.

Sample: **hydration formula** 115-pound active person who lives at 7000 feet elevation

Divide body weight by 2.0

$115/2 = 57.5$ ounces of water

4 ounces per 1000 ft. elevation

7000 ft. elevation = 28 ounces

4-6 ounces per 15 minutes exercise

60 minutes of exercise = 16-24 ounces

Believe and Perform like Champions

Calculate Basal Metabolic Rate (Male)	
Enter:	
Weight (in kilograms)	90
Height (in centimeters)	188
Age (in years)	60
Output: (do not edit fields below)	
Basal metabolic rate (BMR)	1780

Calculate Basal Metabolic Rate (Female)	
Enter:	
Weight (in kilograms)	72
Height (in centimeters)	167
Age (in years)	35
Output: (do not edit fields below)	
Basal metabolic rate (BMR)	1427.75

Link to BMR calculation

<https://www.wikihow.com/Calculate-Basal-Metabolic-Rate#wh-dialog-sample>

Believe and Perform like Champions

There are several ways to compute fueling and hydration requirements. The information below is designed to provide you with one of many options.

Sample: **hydration formula** 115-pound active person who lives at 7000 feet elevation

Divide body weight by 2	$115/2 = 57.5$ ounces of water
4 ounces per 1000 ft. elevation	7000 ft. elevation = 28 ounces
4-6 ounces per 15 minutes exercise	60 minutes of exercise = 16-24 ounces

Sample **Daily Caloric Intake** Formula 115- active person

1. Body Weight / 2.2 = Body Weight in Kilograms $115 / 2.2 = 52.2$ BWK
 2. Body Weight in KG /3.0 PRO $52.2 \times 3.0 = 156$ g PRO or 624 kcal (37%)
 3. Body Weight in KG / x 4.0 CHO $52.2 \times 4.0 = 208$ g CHO or 835 kcal (49%)
 4. Body Weight in KG / x 0.5 FAT $52.2 \times 0.5 = 26.1$ g FAT or 234 kcal (14%)
- 1693 kcal**

The ratio of Protein, Carbohydrate and Fats may be adjusted based on body fat %, activity level and other factors. This number does not reflect calculated BMR and ADAL.

Calories Counting

- 1 Gram of PRO = 4 calories e.g. 21 g of PRO = 21×4 or 84 calories
- 1 Gram of CHO= 4 calories e.g. 21 g of CHO = 21×4 or 84 calories
- 1 Gram of FAT = 9 calories e.g. 10 g of FAT = 10×9 or 90 calories

Believe and Perform like Champions

Fueling for Optimal Health



Set aside predisposed genetics and other potentially limiting factors, more than fifty percent of your success in achieving optimal health is based on your nutrition. If you are willing to change the way you fuel your body, you are well on your way to a healthier way of life!

Believe and Perform like Champions

Stress

As an education professional, stress management should be a top priority for you. Excessive stress can increase the risk of high blood pressure, heart disease and obesity over time. But stress-related diseases also affect the gastrointestinal (GI) tract—more so than any other physiological system in the body—and can bring about illnesses and conditions such as ulcers, acid reflex, colitis, irritable bowel syndrome and Crohn's disease.

Nutrition

It is imperative not to overlook the important link between stress and nutrition. Stress affects all aspects of human nutrition. If you are stressed, your body cannot digest food or absorb nutrients properly, and your **metabolism** will suffer. Additionally, certain foods and eating habits can trigger the body's stress response and compromise your immune system.

For example, **certain types of fat**, such as saturated fat, cannot be taken in through the bloodstream easily. As a result, eating a diet heavy in saturated fats put undue stress on your body because the digestive system must work harder to break down these foods. In addition, foods with **refined sugar can compromise the immune system**, because they decrease the number of white blood cells, thus affecting the functionality of the immune system. The bottom line is the more sugar you consume, the more it will suppress your immune systems.

The good news is that the reverse holds true—by choosing certain foods, changing your eating habits and making more conscientious nutritional decisions—you can reduce the stress and even reverse the harmful effects it has on the body.

Your health is truly in your hands!

Believe and Perform like Champions

Dietary Coaching Points

- ✓ Determine DCR and Hydration Requirement
- ✓ Create Shopping List
- ✓ Create Menu
- ✓ Download Lose It, Livestrong app or equivalent
- ✓ Track fuel for two weeks to become calorie conscious

Plan your meals, prepare the bulk of your foods on Saturday or Sunday, and place them in containers in the freezer. If you are not planning, you're planning to fail.

Increase the amount of water you drink daily. Your kidneys will love you for it. I suggest 60-96 ounces daily. This *measurement* does not include teas, sodas or fruit juices.

Minimize all apparent **refined sugars** *such as* alcohol, cakes, cookies, sodas, candy bars, etc. This will help balance your blood glucose level.

Eat **every three hours**. This will keep your metabolism working at a higher rate. Don't skip meals.

Increase your **lean fibrous vegetable** intake at least 4-6 servings daily. (See List)

Increase your **fruit** intake at least 1-3 servings daily. (See list)

Select **proteins** that carry no excess baggage. (See list)

Choose good sources of **carbohydrates**. Whole grain/non refined sources are preferred.

Compliment every meal with a **protein** source. This will also help balance your blood glucose level and minimize insulin secretion.

Consume 28-32g of **fiber** daily.

Action Plan

Plan your training time. Make an appointment with yourself.

Record your information. Be specific --- activity, time.

Accountability. Find a partner or a personal trainer.

YOU

Expectation. Will determine your success or your failure.

RESULTS. Deal only in results. Intentions don't mean anything. Life rewards action!!!

Believe and Perform like Champions

Fruit

Green apples
Granny Smith apples
Green pears
Strawberries
Blackberries
Banana
Cranberries
Boysenberries
Kiwi

Starchy Carbohydrates

Barley
Brown rice
Buckwheat
Bulghur (cracked wheat)
Butter beans
Chard
Chickpeas
Corn
Garbanzo beans
Kasha
Kidney beans
Legumes
Lentils
Lima beans
Millet
Steel cut oats
Peas
Pinto beans
Potatoes
Rice cakes
Sweet Potatoes
White beans
Winter squash
Yams
Any natural unrefined
whole grain

Fibrous Vegetables

Alfalfa sprouts
Artichokes

Asparagus
Bamboo shoots
Bok choy
Broccoli
Broccoflower
Brussels sprouts
Cabbage
Cauliflower
Carrots
Collard greens
Eggplant
Green beans
Green leafy vegetable
(not iceberg lettuce)
Kale
Leeks
Mushrooms
Okra
Onions
Parsley
Parsnips
Rutabaga
Salad Vegetables
Scallions
Spinach
Summer squash
Turnip greens
Watercress
Zucchini
Good Oils
Olive oil
Flaxseed oil
Safflower oil
Canola oil
Linseed oil
Hain All-Blend
Evening primrose oil

Protein

Egg whites
Cottage Cheese
Low -fat plain yogurt

White poultry (chicken
and turkey)

Bass
Catfish
Cod
Flounder
Grouper
Halibut
Haddock
Mackerel
Marlin
Ocean Perch
Orange Roughy
Red Snapper
Salmon
Shrimp
Sole
Swordfish
Trout
Tuna
Lean cuts of beef
(eye of round,
tenderloin, filet)

Condiments

No- salt seasoning mix.
Cider Vinegar
Paprika
Garlic Powder
Onion powder
Italian seasoning
Molly Mcbutter

Believe and Perform like Champions

	Calories	Fats	Carbs	Protein
Breakfast				
½ c. steel cut oats	75	3	27	5
3 egg whites	51	1	2	18
Mid-Morning Snack				
pure protein bar	158	4	15	18
Lunch				
2 cups cauliflower rice	35	0	2	2
1 cup zuchini noodles	22	0	2	1
1/4 cup black beans	57	0	10	4
3 Oz. salmon	175	11	0	19
Mid-Afternoon Snack				
12 almonds	83	7	3	3
Dinner				
4 cups romaine lettuce	8	0	5	2
1/2 cup stmd broccoli	14	0	3	1
1/2 tomato	10	0	2	1
1 tbsp. Italian, light salad dressing,	26	2	1	0
3 oz. skinless chicken breast	140	3	0	26
Evening Snack				
1/2 cinnamon roll	150	6	22	2
	1117	37	94	102
		333	376	408
		29.81%	33.66%	36.53%