Combating Police Officer Fatigue

By Reece Towle

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Recently I was asked to prepare a presentation for our local police force on officer fatigue and how officers can combat dangerous tiredness through sleep education, exercise, and proper nutrition. As I researched the issue, I came across some startling findings that highlight the importance of making lifestyle changes to deal with this pervasive problem.

Sobering Consequences

The consequences of police officer fatigue are well documented by scientific research. Among other things, fatigue:

- · Impairs your mental and physical ability
- · Creates a persistent cycle of fatigue
- · Limits your job performance
- · Damages your health
- · Results in the use more sick leave
- · Increases the likelihood of your using inappropriate force
- · Exposes you to greater risk of vehicle accidents and accidental injuries
- · Makes it more difficult for you to deal with the community members and other law enforcement agencies
- · Creates a higher likelihood that you will die in the line of duty
- · Increases mood swings
- · Impairs your judgment
- · Decreases your adaptability to changing situations
- · Heightens your sense of threat
- · Increases anxiety or depression
- · Increases your risk of mental illness
- · Reduces eye-hand coordination
- · Causes weight gain
- · Causes pain (e.g., backaches, headaches)
- · Makes it harder or impossible to relax (e.g., causes restless sleep, provokes heightened alert response)
- · Causes gastrointestinal problems
- · Damages your cardiovascular system[1]

Let's take a look at some things you can control in your daily lives to help fight fatigue and lessen these serious consequences.

Importance of Sleep

The biggest and most obvious cause of fatigue is lack of sleep. In a January 2009 report by the National Institute of Justice titled "Impact of Sleep Deprivation on Police Performance," 53% of officers report an average of 6.5 hours of sleep or less and despite this lack of sleep, some officers work well over 1,000 hours of overtime a year and/or work double shifts, triple shifts, and second jobs. One might ask, "What's the big deal? A lot of people get only 6.5 hours of sleep each night."

Here's the big deal. A sleep deprivation study found that not sleeping for 17 hours impaired a person's motor skills to an extent equivalent to having an alcohol toxicity of 0.05 percent. Not sleeping for 24 hours was equivalent to a toxicity level of 0.10 percent.[2] Keep in mind that a blood alcohol level of 0.08 is considered legally drunk in all states[3]. Such levels of sleep deprivation will obviously have adverse effects on speech, balance, coordination, and mental judgment.

The National Sleep Foundation recommends that adults get at least 7 hours of sleep each night. What can you do to establish better sleep routines and patterns? To pave the way for better sleep, experts recommend that you and your family members follow these sleep tips:

- · Establish consistent sleep and wake schedules, even on weekends
- · Create a regular, relaxing bedtime routine, such as soaking in a hot bath or listening to soothing music, beginning an hour or more before you expect to fall asleep
- · Create a sleep-conducive environment that is dark, quiet, comfortable, and cool
- · Sleep on a comfortable mattress and pillows
- · Use your bedroom only for sleep and sex (keep "sleep stealers" out of the bedroom; avoid watching TV, using a computer, or reading in bed)
- · Finish eating at least 2-3 hours before your regular bedtime
- · Exercise regularly during the day or a few hours before bedtime
- · Avoid caffeine and alcohol products close to bedtime and give up smoking[3].

Importance of Exercise

Another major cause of officer fatigue is poor exercise habits or lack of exercise. Researchers at the University of Georgia found that sedentary, otherwise healthy adults who engaged in as little as 20 minutes of low to moderate aerobic exercise, 3 days a week for 6 consecutive weeks, reported feeling less fatigued and more energized. Exercisers reported a 20% increase in energy levels[12].

It is easy to find excuses not to add exercise to our daily schedules: feeling too tired, too many things to do at work, too many things to do at home, need to take the kids to practice, need to walk the dog, etc. Of course these are all things that need to be done, but don't forget about taking care of yourself.

Everyone needs to make exercise a scheduled part of their day. Exercise is necessary to keep our bodies healthy enough to handle the rest of the day's hectic schedule. To handle your daily schedule with 100% effort and efficiency, your body needs to be healthy. Without a healthy body, your days begin to fall apart, schedules become harder to keep up with, you become more stressed, your body begins to break down, and the downward gets worse and worse.

What do we need to do to be healthy? The American College of Sports Medicine states that for improvement of cardiovascular fitness and body composition, adults should perform physical activity 3 to 5 times each week for 20-60 minutes at a time. This activity should include the large muscle groups (e.g., walking, running, cycling, and swimming). The level of intensity (target heart rate) should be at least 55% to 65% of your maximum heart rate.

The ACSM also recommends that adults include muscular strength and flexibility training in all exercise programs[6]. In addition, the US Department of Health and Human Services states that adults should do muscle strengthening activities that are moderate or high intensity and involve all major muscle groups on 2 or more days per week[7].

The importance of exercise cannot be overstated when it comes to a healthy, efficient, and more energetic body. Let's look at a few more benefits of exercise and the resulting healthy body.

The Mayo Clinic website in an article titled "Exercise: 7 Benefits of Regular Activity" list these top benefits:

1. Exercise improves your mood.

Need to blow off some steam after a stressful day? A workout at the gym or a brisk 30-minute walk can help you calm down. Physical activity stimulates various brain chemicals that may leave you feeling happier and more relaxed than you were before you worked out. You'll also look better and feel better when you exercise regularly, which can boost your confidence and improve your self-esteem. Regular physical activity can even help prevent depression.

2. Exercise combats chronic diseases.

Worried about heart disease? Hoping to prevent osteoporosis? Physical activity might be the ticket. Regular physical activity can help you prevent—or manage—high blood pressure. Your cholesterol profile will benefit, too. Regular physical activity boosts high-density lipoprotein (HDL), or "good," cholesterol while decreasing triglycerides. This 1-2 punch keeps your blood flowing smoothly by lowering the buildup of plaques in your arteries. And there's more. Regular physical activity can help

you prevent Type 2 diabetes, osteoporosis, and certain types of cancer.

3. Exercise helps you manage your weight.

Want to drop those excess pounds? Trade some couch time for walking or other physical activities. This one's a no-brainer. When you engage in physical activity, you burn calories. The more intense the activity, the more calories you burn—and the easier it is to keep your weight under control. You don't even need to set aside major chunks of time for working out. Take the stairs instead of the elevator. Walk during your lunch break. Do jumping jacks during commercials. Better yet, turn off the TV and take a brisk walk. Dedicated workouts are great, but physical activity you accumulate throughout the day helps you burn calories, too.

4. Exercise boosts your energy level.

Winded by grocery shopping or household chores? Don't throw in the towel. Regular physical activity can leave you breathing easier. Physical activity boosts the delivery of oxygen and nutrients to your tissues. In fact, regular physical activity helps your entire cardiovascular system (the circulation of blood through your heart and blood vessels) work more efficiently. Big deal? You bet! When your heart and lungs work more efficiently, you'll have more energy to do the things you enjoy.

5. Exercise promotes better sleep.

Struggling to fall asleep? Or stay asleep? It might help to boost your physical activity during the day. A good night's sleep can improve your concentration, productivity, and mood. And you guessed it—physical activity is sometimes the key to better sleep. Regular physical activity can help you fall asleep faster and deepen your sleep. There's a caveat, however. If you exercise too close to bedtime, you may be too energized to fall asleep. If you're having trouble sleeping, you might want to exercise earlier in the day.

6. Exercise can put the spark back into your sex life.

Are you too tired to have sex? Or feeling too out of shape to enjoy physical intimacy? Physical activity to the rescue. Regular physical activity can leave you feeling energized and looking better, which may have a positive effect on your sex life. But there's more to it than that. Regular physical activity can lead to enhanced arousal for women, and men who exercise regularly are less likely to have problems with erectile dysfunction than are men who don't exercise, especially as they get older.

7. Exercise can be fun!

Wondering what to do on a Saturday afternoon? Looking for an activity that suits the entire family?

Get physical! Physical activity doesn't have to be drudgery. Take a ballroom dancing class. Check out a local climbing wall or hiking trail. Push your kids on the swings or climb with them on the jungle gym. Plan a neighborhood kickball or touch football game. Find a physical activity you enjoy, and go for it. If you get bored, try something new. If you're moving, it counts!

But how does a person get started? A basic starter program for the general public could look something like this:

Cardiovascular Training:

Monday, Wednesday, and Friday: 20-30 minutes of walking, biking, jogging, swimming, etc.

Strength Training

Tuesday and Thursday: choose 2-3 exercises for each of chest, shoulders, back, legs, arms (biceps and triceps), and abdominals (for a list of exercises, go to www.exrx.net); perform 2-3 sets of 12-15 repetitions per exercise (abdominal exercises should be performed in higher repetitions such as 20-25); rest 20-30 seconds between sets.

Again, this would be a good "starter" program. As a person progresses with his or her level of fitness, there are many variables that need to change and new goals to set and achieve. If you are beyond the beginner level and feel that your program has stagnated, contact your local Max Muscle Preferred Trainer to update your program.

Starter Program for Police-Specific Training

The overall function of police weight training is to maximize 10 general physical functions: cardio-respiratory, endurance, stamina, strength, flexibility, power, speed, coordination, agility, balance, and accuracy that are required for job duties such as defensive tactics, arrests, and general control[8].

With those 10 skills in mind, a program that resembles the "real world" and includes a variety of functional movements and steers away from isolation or machine exercises works best. A sample 3-day-per-week workout could look something like this:

Day 1 Circuit: jog 90 seconds, perform 10 pull ups, 20 sit-ups and 20 bodyweight lunges. Repeat this circuit 4 times.

Day 2 Strength: perform 3 sets of 10-12 of the following exercises—barbell squats, barbell rack clean and press, barbell bent over row, dumbbell bench press, barbell biceps curl, barbell triceps extension, medicine ball Russian twists for abs (perform set of 50 repetitions).

Day 3 Circuit: 30-second high-intensity run/30 second jog, 10 mixed grip pull ups, 20 crunches, 20 cycled split jumps. Repeat this as many times for 15-20 minutes (set a time goal for the first time you do this workout, then progress to setting goals for number of circuits in a given time).

Note: the above workout should be performed with a day of rest between workouts.

The Importance of Nutrition

Think of your body as a wood-burning stove. You need to continue to stoke the fire with wood to keep the fire burning and produce heat. Your body is the same way. You need to continually feed your body to keep the energy levels up.

As your metabolism burns throughout the day, your energy levels will deplete and you need to feed the flames to keep it burning. As our bodies utilize the energy-producing nutrients that we feed it, our energy levels can be depleted unless we refuel with the right nutritional intake. In other words, we can fight fatigue with the right nutrition plan.

There are no secrets or magical foods. We just need to follow some simple and effective steps to ensure that we are getting the right nutrients at the right time and in the right amounts.

What should we eat?

Protein is the first nutrient to begin building your nutrition plan. Protein is probably the most essential macronutrient for survival. Proteins are a critical component of body tissues, including organs, muscle, and bone, and are used in hormone synthesis that regulates bodily functions. Examples of protein are lean meats (chicken, fish, turkey, lean beef), low-fat dairy (cottage cheese, low fat string cheese, skim milk, most protein powders), and eggs.

Fats are the next macronutrient and should not be left out completely. Fat is a storage form of energy found in various forms in both plants and animals. Our bodies use fat for cellular growth and hormone synthesis and absorption of fat soluble vitamins.

We want to stay largely with the good fats available, better known as unsaturated fats. These are your omega 3, 6, and 9 fats that can be found in fish. We should also be comfortable with moderate amounts of mono-unsaturated fats that are found in olive oil, avocados, almonds, and sesame seeds. As for bad

fats, these are the saturated fats that are found in animal products such as high-fat meats, poultry skin, high-fat dairy, egg yolks, and vegetable fats like coconut and palm oils. Other fat sources that we need to limit or stay away from are fried foods, candy bars, greasy meats/foods, added fats such as mayonnaise, sour cream, creamy dressings, butter, cheese dips, etc.

Carbohydrates are the third macronutrient essential for our fatigue-fighting nutrition plan. Think of carbohydrates as anything that grows in the ground, with some exceptions such as milk and yogurt. Carbohydrates are used for energy in the body as well as for digestive health (fiber) and to control cholesterol levels. Examples of good complex carbohydrates are whole grains, starchy vegetables, brown rice, whole wheat pasta, whole grain cereals, oatmeal, and bran muffins. Carbohydrate sources that we need to limit or stay away from are the processed sources such as white rice, white breads, white bagels, donuts, pastries, candy, cookies, potato chips, etc. These so called "white" foods are usually void of any solid nutritional calories and typically include higher levels of sugar.

With regards to fatigue, sugar deserves special attention. We have all experienced a high level of energy after eating something high in sugar, only to be left dragging a short time later as our bodies burn through the sugar and the bottom drops out of our energy levels. The key here is to avoid any carbohydrate that is comprised of more than 20% sugar. Check the label on what you are eating. If the sugar content is more than 20% of the carbohydrate, put it back on the shelf and look for something else. For example, if a given product has 40 grams of carbohydrates and the sugar content is 20 grams or more, move on.

If you have no other choice, a key to survival is to make sure that you have some protein and healthy fats with your high-sugar foods. This will balance out the sugar and keep the digestive processes and gastric emptying times longer so you won't experience the sudden fatigue and drop in energy.

For the general adult population that do not consider themselves athletes but do exercise on a regular basis, the 2005 Dietary Guidelines for Americans suggests 10-35% of calories from protein sources[10]. Carbohydrates, our frontline source of energy, should make up approximately 45-65% of our caloric intake. Fats should make up approximately 20-35% of the nutritional intake for the average exercising adult[10].

When should we eat?

Gone are the days of 3 square meals. In order to keep the fires burning, we should be eating 5-6 small meals per day. Again, think of the wood stove. If you overload the stove with too much wood, what happens? The fire can become overburdened and the flame can be snuffed out. The same can happen with your body. In order to get the right amount of nutrients in 2 or 3 meals, we would need to eat more than our bodies can process efficiently. Break up our nutrient requirements over 5 or 6 meals and the fire keeps roaring and our bodies can efficiently process what we are putting in.

With that in mind, eat every 3 to 3.5 hours and do not skip breakfast. Breakfast is the most important meal of the day. It kicks your metabolism into gear and gives you energy to start the day.

Ponder this for a moment: If you did not eat for 7 or 8 hours during the day, you would be hungry and your body may go into a starvation mode because it has nothing to burn, so it conserves. Now, think

about how much time passes between your last evening meal and breakfast. Usually 6-8 hours. You are not as active during that time, but your body still needs nutrients. If you don't eat breakfast, the time your body is without nutrients could expand to 10 hours or more. The fire is out and no heat is being produced. Your body begins to burn other available energy sources, such as muscle, and that's the last thing you want to happen.

Keep the fires burning. Give your body what it needs during the day and the flames will continue to produce energy.

Its in the bag…or cooler

Eating the right kind of foods at the right time in the right amounts takes planning. Officers who are out in the public—on foot, on a bike, or in a patrol car—will need to plan ahead if they want to achieve optimum energy levels throughout the day.

Before leaving home, packing a small cooler or lunch bag with meals and/or snacks to have during your shift will help keep the right nutrients for fueling your body within reach and help you avoid the convenience store snack attacks.

Right next to your cooler or lunch bag should be your gym bag. Have it packed and handy for your planned workout for the day. When your day comes to an end, hit the sack and get some good quality sleep by following the recommendations above. With some advanced planning, fatigue can be a thing of the past.

To fight fatigue, it is important to take an overall "big picture" approach. Getting the right amount of sleep, staying physically active, and creating healthy eating habits are all very important pieces of the puzzle. Making a change in one area may help a little, but to really get the greatest benefit and to be at the top of your game, making changes in all of the areas mentioned is essential.

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