

LAW ENFORCEMENT MANAGEMENT INSTITUTE

A REPORT WITH RECOMMENDATION CONCERNING  
THE MANAGEMENT OF PROPER  
NUTRITION FOR THE POLICE  
OFFICER

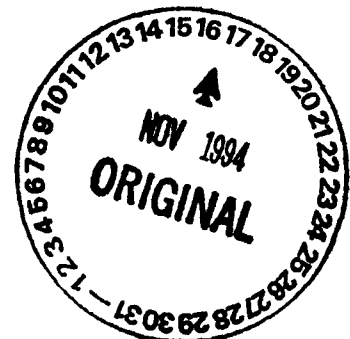
A RESEARCH PAPER  
SUBMITTED IN FULFILLMENT  
OF THE REQUIREMENTS FOR MODULE III

BY  
CLAUDE F. HOOKER

VILLAGE POLICE DEPARTMENT

HOUSTON, TEXAS

JUNE, 1994



# 248

## TABLE OF CONTENTS

I.	INTRODUCTION.....	3
	How Food Works	
II.	ANTIOXIDENTS.....	5
III.	FATS.....	8
IV.	FIBER.....	11
V.	FAST FOOD.....	13
VI.	JUICING.....	15
	Recipes	
VII.	STRESS.....	19
	Management	
	Out Breath Technique	
	Basic Technique	
VIII.	EXERCISE.....	23
IX.	MANAGING A PROGRAM OF PROPER PERSONAL NUTRITION.....	25
	On Duty	
	Off Duty	
	What Will Work	
X.	CONCLUSION.....	30
XI.	NOTES.....	32
XII.	BIBLIOGRAPHY.....	35

## INTRODUCTION

The purpose of this paper is to give the police officer and manager guidelines for proper nutrition. Some officers and managers are unaware that their diet and lifestyle can be harmful. This paper will give the officer and law enforcement manager proper guidelines for better health that are in accord with the views of leading nutritionists and current schools of thought, exemplified by such notables as Dr. Earl Mindell and the American Institute for Cancer Research.

It is vital that police managers be aware of the effects of diet and nutrition, on the police officers they command. At this time there are no departments keeping records concerning lost time and wages as a direct result of poor employee health. In the future this will change. Trends in management indicate an increasing burden on management to produce results. Managers are beginning to be held accountable for their officers. If the law enforcement manager fails to educate and train officers in proper nutrition, it can be argued he is mis-managing his resources. Mis-management such as this results in lost wages, lost time, and lost benefits. An officer who leaves his department early due to poor health is a drain on financial resources. It can cost \$50,000.00 to train a new officer and the veteran officer's experience is forever lost to the manager and his department.

Managers and mayors want the most "bang" for their buck. As a law enforcement manager, can you afford to leave a nutrition education program out of your training? Based on the cost, you cannot; based on a total management program, you cannot; based on the increased pressure for bottom line results placed on management, you cannot.

As a manager, you have the chance to be among the first to recognize the

importance of a proper nutritional education program for police and to implement such a program for your department. Not only will the law enforcement manager save money, he will save lives.

According to the National Cancer Institute, fewer than 25 percent of all Americans are actually eating the foods they should to fully protect themselves against cancer, heart disease, and other common ailments.<sup>1</sup> One out of three Americans will get cancer sometime in their lifetime and by the year 2000 that figure will rise to one out of two. One out of two will develop some form of heart disease.<sup>2</sup>

Each police officer works a different district with different restaurants. It is important to know the proper foods to select to control the amount of fats and calories in the diet. Around thirty-five percent of all cancers are related to diet, this is a conservative figure and many experts believe the figure is closer to fifty percent.<sup>3</sup> The diet link may be even stronger for heart disease, the number one killer of both men and women.<sup>4</sup> It is hoped that police department training academies will adopt a similar nutrition education program.

The health of a police officer is not only important to the officer's family, but also to the police department that employs the officer. A healthy officer will use less sick time and perform tasks more efficiently. Insurance claims will decrease and career longevity will increase. This translates to dollars saved by local governments, always a bottom line for administrators.

Lastly, this paper will provide a basic knowledge of a proper nutritional program and lifestyle. It will enable the police officer and manager to make the "best" choices when confronted with daily decisions regarding restaurants and menu items.

## HOW FOOD WORKS

Digestion begins in the mouth, where food mixes with saliva, an enzyme that begins breaking the food down into simple sugars. The food is swallowed and propelled through the esophagus to the stomach, where the food is broken down further. The food then moves into the small intestine where the absorption of nutrients occurs. The food then moves into the large intestine or colon where it becomes waste product. This process takes twelve to fourteen hours.

Each day we are exposed to many different carcinogens. Carcinogens are various chemicals in our food and environment that can cause cancer. These carcinogens can attack healthy cells and cause damage and thus susceptibility to cancer grows. A proper diet consisting of fruits and vegetables along with antioxidants (vitamins) and fiber may help protect the body from carcinogens.

Thusly, what we put into our mouths can control and affect what happens to our bodies. Law enforcement managers must be able to integrate proper nutrition into a comprehensive and up to date training program for all officers.

## ANTIOXIDENTS

An apple slice left in the open air will shortly turn brown. This browning effect is caused by oxidation. If you squeeze lemon juice over the freshly cut apple slice it will prevent the oxidation process. Lemon juice contains vitamin "C", an antioxidant which

can prevent this damage, not only to apples, but also to human cells. Similarly, unstable forms of oxygen molecules called "free radicals" can damage healthy cells. Antioxidants can prevent the formation of free radicals, or if formed, can help stop these bad oxygen molecules in their tracks, preventing them from binding with other molecules.<sup>5</sup> Vitamins are powerful antioxidants and fall into two categories, water soluble and fat soluble.<sup>6</sup> Fat soluble vitamins are stored by the body, water soluble vitamins are not stored and must be constantly replenished. The vitamins and minerals listed below are major antioxidants. Their importance in the police officer's diet should not be underestimated.

Vitamin A: This vitamin occurs in two forms, preformed vitamin A and provitamin A (beta-carotene). Preformed vitamin A comes from foods such as liver, egg yolks, milk and butter. Beta-carotene can be found in foods such as carrots, squash, greens, spinach, sweet potatoes, peaches, papaya, and pumpkin. When possible, stay with the plant family for your source of vitamin A. This vitamin is a potent weapon against cancer. Studies show that beta-carotene may inhibit the formation of cancer cells in the mouth, esophagus, stomach, colon, rectum, bladder, breasts, cervix, and lungs.<sup>7</sup> Studies also indicate that beta-carotene may reduce the risk of heart attack. The Physicians Health Study, directed by Charles Hennekens, M.D. of Brigham and Women's Hospital in Boston, followed 22,000 male physicians, ages 40 to 84. Out of that group, 333 men with chronic, unstable angina were given 50 milligrams of beta-carotene daily. Those taking beta-carotene had reduced risks of heart attack, revascularization procedures, bypass surgery, angioplasty to open clogged arteries, and cardiovascular death by an average of forty-nine percent.<sup>8</sup> The RDA (Recommended Daily Allowance) is 3 milligrams of beta-carotene.

Vitamin C: This vitamin is water soluble and must be replaced. Good sources of vitamin C are peppers, orange juice, pineapple juice, strawberries, asparagus, brussel sprouts, watermelon, mango, papaya, grapefruit, cantaloupe, broccoli, tomatoes and cauliflower. Vitamin C guards against cancer caused by natural body processes. Vitamin C has the ability to prevent abnormal clotting of blood, which can block major arteries, causing serious complications or death. A study conducted at the University of California at Los Angeles found that men who took 300 to 400 milligrams of vitamin C daily had 45 percent fewer deaths from heart attacks and lived six years longer than those who failed to supplement their diets.<sup>9</sup> Researchers have discovered that vitamin C supplementation can lower blood cholesterol also.<sup>10</sup> The RDA of vitamin C is 60 milligrams. Five helpings of fruits and vegetables per day will meet the RDA. Officers should supplement their diet with 1,000 mg. per day.

Vitamin D: This vitamin is fat soluble and is responsible for building strong teeth and bones. Good food sources of vitamin D are dairy products and fish oils. Vitamin D is believed to help prevent colon cancer. The RDA of this vitamin is 400 IU.

Vitamin E: This vitamin is another powerful fat soluble antioxidant. It is essential for the normal functioning of the human body. As an antioxidant it prevents cell damage which can make the cell ripe for cancerous changes. Vitamin E also prevents the conversion of nitrites, which are present in meats such as bacon and ham, to cancer promoting nitrosamines in the stomach. These types of free radicals can cause the type of cellular damage that has been linked to the initiation of cancer and heart disease.<sup>11</sup> Also, vitamin E is an immune system booster, helping the body fight off unwanted invaders. A

major study performed at Johns Hopkins School of Hygiene and Public Health showed that low levels of vitamin E appear to increase the risk of developing lung cancer.<sup>12</sup>

Vitamin E is a strong protector against heart disease. Vitamin E is routinely given to coronary by pass patients because it appears to accelerate healing and prevent new blockage from occurring.<sup>13</sup> A study of 40,000 male health professionals showed that participants who consumed vitamin E supplements for two years were at a 40 percent lower risk of developing heart disease.<sup>14</sup> Good sources of vitamin E are peanuts, whole grains, almonds, brown rice, and oatmeal. The RDA of vitamin E is 8 to 10 IU. Officers should supplement their diets with 400 IU per day. One IU is equivalent to one mg.

A short comment about the RDA's (Recommended Daily Allowance) as set up by the Federal Drug Administration is necessary. RDA's are merely the minimum amount of vitamins necessary to sustain life. The amounts are not necessarily enough antioxidants to sustain good health.

## FATS

Most all of us at least know fats are not good for us because they make us fat, but also because eaten in excess can lead to cardiovascular disease and cancer. There are different types of fats and scientists seem to think all fats are not equally harmful. Evidence shows it is more the amount of fat consumed over the type of fat that poses the most risk. Fats are classified as either saturated or unsaturated. Unsaturated fats are either monosaturated or polyunsaturated. For reduction of risk of heart disease, the recommendations have principally been to reduce saturated fat intake, leaving an approximately equal balance of saturated, monosaturated, and polyunsaturated fats. For lowering cancer risk, reducing total fat intake has been the principal recommendation.<sup>15</sup>



Saturated fats can be differentiated from unsaturated fats because generally saturated fats are solid at room temperature and unsaturated fats are liquid. Also, usually animal fats are saturated whereas vegetable fats are unsaturated. According to the American Institute for Cancer Research, some foods high in saturated fat are beef, lamb, pork, chocolate, butter, milk and cream, cheese, palm oil, coconut oil, and lard. They also list foods high in unsaturated fats as almonds, avocados, peanuts, margarine, mayonnaise, olive oil, peanut oil, canola oil, and corn oil.

Strangely enough, saturated fats and unsaturated fats in the same proportions contain the same amount of calories. For example, you will not reduce your caloric intake by eating margarine over butter.

The American Institute for Cancer Research has developed the following dietary guidelines to lower cancer risk:

1. Reduce the intake of total dietary fat from the current average of approximately 37 percent to a level of no more than 30 percent of total calories and, in particular, reduce the intake of saturated fat to less than 10 percent of total calories.
2. Increase the consumption of fruits, vegetables, and whole grains.
3. Consume salt-cured, salt-pickled, and smoked foods only in moderation.
4. Drink alcoholic beverages only in moderation, if at all. <sup>16</sup>

While on the subject of fats it is imperative to explain the relationship of cholesterol. Cholesterol also can cause heart disease when present in excess. Cholesterol is a waxy, yellowish, fat-like substance that is produced in the liver and in lesser quantities

in the intestines and specialized cells throughout the body.<sup>17</sup> The purpose of cholesterol is for production of sex hormones, synthesis of Vitamin D, production of cell membranes, and creating the protective coating that surrounds the nerves. Since the body naturally produces cholesterol, a diet high in fat can throw off the natural balance of the body. A high fat diet triggers cholesterol production in the body and a high level of blood cholesterol can cause a build up of plaque in the arterial walls hindering the flow of blood. When the flow of blood becomes constricted, a condition known as atherosclerosis can be the result. Cholesterol circulates through the bloodstream packaged in fatty protein wrappings called lipoproteins. The low-density lipoproteins (LDLs) distribute cholesterol throughout the body, dropping it off where needed. The liver also packages another type of cholesterol, called high-density lipoproteins (HDLs), which pick up circulating cholesterol and return it to the liver for processing or excretion.<sup>18</sup> LDL is considered bad cholesterol as it is the component that builds up in arterial walls causing atherosclerosis.<sup>19</sup>

Cholesterol levels should not exceed 200 mg/dl to be considered in a good range. Levels from 200-239 are borderline high, and anything above 240 is considered high. A high number does not automatically mean you are in danger as long as your ratio of HDL, or high density lipoprotein, is higher than your LDL, low density lipoprotein. As stated by Earl Mindell;

1. The ratio between total cholesterol and HDL should not exceed 6:1.

Therefore, if a man has a total cholesterol level of 240, but an HDL of 60, the ratio is 4:1, which is quite good.

2. The ratio between LDL and HDL ideally should be 3:1, but should not exceed 4:1. For example, if the LDL is 120, the HDL should be 40 or better.<sup>20</sup>

Conversely, if your cholesterol level is low and your HDL level is also low you may be considered in danger of having a heart attack. A good way to differentiate HDL from LDL is to remember the "H" in HDL stands for "helpful".

There are ways to increase your HDL levels thus decreasing risk of heart attacks. The healthiest ways are regular exercise, diet, and to quit smoking. Niacin has become a popular and potent cholesterol fighter. A variety of studies have indicated that high doses of Niacin increase beneficial HDL cholesterol and lower harmful LDL cholesterol.<sup>21</sup> There is also a cholesterol lowering prescription drug for severe cases of high cholesterol, but anytime an alternative to drugs is available it should be attempted first.

## FIBER

Fiber is a very important ingredient to good health. Fiber is the indigestible remnant of plant cells, mostly cell walls, that can be found in everything from bran to blueberries.<sup>22</sup> Those who have low levels of dietary fiber intake have increased risk of several chronic diseases including large bowel cancer. To reduce such risks, the 1982 report of the National Academy of Sciences recommends that fruits, vegetables, and whole grains be consumed in greater proportions because they contain high levels of dietary fiber.<sup>23</sup>

There are two types of fiber, soluble and insoluble. Experts do not seem to fully understand which plays the most essential role in cancer prevention, but they generally agree that an overall increase in intake of dietary fiber is associated with lower risk of cancer development. Many studies do suggest that:

1. Fiber can decrease transit time for food in the digestive system (the time between eating and elimination of food material), thereby reducing contact time between carcinogens and the intestines.
2. Digestion and absorption of fat requires bile acids, which are secreted in bile. However, some bile acids are believed to promote colon cancer. The bulk produced by dietary fiber is thought to dilute the acids and lower cancer risk.<sup>24</sup>

Experts suggest 20-30 grams of dietary fiber a day. As stated earlier, the best sources for dietary fiber are whole grains, fruits, and vegetables with the peeling left on. Fiber also has the benefit of making you feel more full when consumed because it stays in the stomach longer, and its bulk fills the intestines.

Try some of these substitutions to increase intake of dietary fiber:

1. Whole wheat bread or rolls instead of white bread.
2. Brown rice instead of white rice.
3. Baked potato in the skin instead of mashed potatoes.
4. Unpeeled apple or applesauce with skin left on instead of traditional applesauce.
5. An orange instead of orange juice.
6. Whole grain cereals instead of refined cereals.
7. Popcorn instead of potato chips.
8. Wheat or oat bran instead of bread crumbs.<sup>25</sup>

To reach the recommended level of 20-30 grams of dietary fiber a day, healthy adults should eat at least five half cup servings of fruits and vegetables and at least six servings of grain products (one slice of bread or one half cup of most others) each day.<sup>26</sup>

## FAST FOOD

Eating away from home is a growing trend and is on the rise. According to a Gallup survey for the National Restaurant Association, more than 85 million people (47% of United States adults), ate meals away from home or purchased food to go from restaurants on a typical day in June 1988. In the same year the number of fast food restaurants increased from 30,000 to 140,000. The industry is enormous and annual sales crest 10 billion for hamburgers alone, serving 200-400 every second. The industry as a whole nets \$51 billion a year.<sup>27</sup> Because the nature of police work seems to force an excessive amount of eating on the go, it is important to be aware of the amounts of fat, calories, sugar, and sodium that are in most fast food menu items.

First, on the average 40-60% of calories in fast food come from fat.<sup>28</sup> One meal at a fast food restaurant can take up half or more of your daily allotment of calories and salt. For example, if you have a fried fish sandwich, a milk shake, and french fries you have consumed 1,142 calories, 1,425 milligrams of sodium, and 53 grams of fat, with fat making up 42% of the calories.<sup>29</sup> There is an "honorable mention" according to Eating on the Run by Evelyn Tribole. McDonald's milk shakes have only 2 grams of fat, but they still contain 290-320 calories. This is a good ratio compared to Dairy Queen shakes that have 490-990 calories with 13-26 grams of fat.<sup>30</sup>

The next culprit in fast food meals is sugar. Sugar is used to make french fries

taste better as well as improve the taste of many menu items. Sugar is mainly derived from consuming soft drinks and shakes. In 1985, the average American drank 484 12 ounce cans of soda pop, each can containing 8-11 teaspoons of sugar. Shakes also get most of their calories from sugar.

There are some acceptable choices to be made when you are forced to eat on the run at a fast food restaurant. For example, some of the favorite picks of The Low-Fat Fast Food Guide are:

<u>RESTAURANT</u>	<u>FAT</u>
<b>BURGER KING</b>	
*BK Broiler chicken sandwich (no mayo)	8g
*Chunky chicken salad without dressing	4g
<b>JACK IN THE BOX</b>	
*Chicken fajita pita	8g
*Side salad with low calorie dressing	5g
<b>LONG JOHN SILVERS</b>	
*Light portion fish, baked dinner	5g
*Ocean Chef Salad with seafood sauce	<2g
<b>MCDONALDS</b>	
*Chunky chicken salad with lite vinegarette	6g
*Fat-free apple bran muffin	0g
*McLean Deluxe	10g

## SONIC

*Fish Sandwich (without mayo)	7g
*Grilled chicken sandwich (without mayo)	10g

## TACO BELL

*Chicken burrito	12g
*Chicken soft taco	10g

## WENDY'S

*Chili (small)	6g
*Grilled chicken salad (with one breadstick)	11g

## DAIRY QUEEN

*Strawberry breeze (1 small)	<1g
*Frozen yogurt cup or cone (1 regular)	<1g

## TCBY

*Non-fat or sugar-free frozen yogurt (1 cup)	<1g <sup>31</sup>
--	-------------------

## JUICING

You can eat all the raw vegetables (or juice) you want and you will not become overweight. It is in the preparation that the extra fats and calories are added. The juices extracted from fresh raw fruits and vegetables form the means of furnishing all the cells in the body with the elements they need, in the manner in which they can be most readily assimilated.<sup>32</sup> Fruit juices are body cleansers and vegetable juices are the builders and regenerators of the body.<sup>33</sup> It is tough to sit down and eat five raw carrots and a handful of spinach. You can easily drink the juice of the carrots and vegetable spinach and gain

90% of the nutrients. Raw vegetable juice contains many nutrients known to benefit human cells. When these vegetables are cooked, many of the nutrients are destroyed. It takes about twenty minutes to prepare a glass of fresh vegetable juice and clean the juicer. I recommend a glass of fresh vegetable or fruit juice every morning. Give it a try, you will see an increase in your energy level. The below listed recipes are some of the best. Make as much as you want but make at least twelve ounces. Use organic vegetables and fruit if possible.

### VEGETABLE JUICE RECIPES

1. My recipe: 5 carrots  
                     Handfull of spinach  
                     1 small apple  
                     1/2 knob of ginger root
2. Juiceman's: 1 slice of jicima (for upset stomach)  
                     6 carrots  
                     Handful of parsley<sup>34</sup>
3. Juiceman's: 5 carrots (good stress reducer)  
                     1 four inch wedge cabbage<sup>35</sup>
4. Juiceman's: 5 carrots (calming nightcap)  
                     2 stalks of celery  
                     Handful of parsley<sup>36</sup>
5. Juiceman's: 2 one inch thick slices pineapple  
                     (remove skin)  
                     2 stalks of celery (also calming nightcap)<sup>37</sup>



In many of the above juices, if you do not like the taste, add some apple. The apple is the only fruit that can be mixed with anything. In other words, do not mix fruits with vegetables, except for apples.

## FRUIT JUICE RECIPES

All fruit juices seem to be good. You can mix any fruits you like together. I buy what is freshest and what is in season. I use pineapple juice most often because the bromelain is good for muscle aches and pains and I like the taste. You must peel the skin of oranges and grapefruit before juicing. Leave as much of the white layer beneath the skin as you can because much of the vitamins are in this material. You can always add water to thin the juice.

1. My recipe: 2 slices pineapple (remove skin)

1 slice papaya

1/2 banana (throw skin away)

12 oz. water (spring or distilled)

\*This recipe is for the Vitamix Processor only as other juicers will not process a banana.

2. My recipe: 1 grapefruit (peeled)

2 apples

3 peaches (pitted and peeled)

2 oranges (peeled)

\*Cut this recipe in half if using the Vitamix

Recommended juicers: I have two juicers. The Vitamix is the best fruit juicer because it is actually a large, powerful blender with two main advantages. One, the Vitamix uses the whole fruit, fiber and all. Secondly, you can add water and ice to cool the juice and control the thickness. For fruit juice it can not be beat and is worth the money. I do not like it for vegetable juice because, again, you are using the whole vegetable, and I can find no way to make the juice smooth and palatable.

The Champion Juicer is one of the best juicers for vegetables. The quality of the juice is very good. It is easy to use and clean-up is easy, though a bit slower than the Vitamix, which just requires a good rinse under the kitchen faucet.

I own a Vitamix and Champion juicer and highly recommend both. I use them daily. If you want one juicer to do both jobs, choose the Champion. Another consideration might be "The Juiceman" juice extractor. Do not buy "The Juiceman Jr." It is not powerful enough for everyday use. The quality of "The Juiceman" juice does not match the Champion and it takes longer to clean up. Do not buy a cheap juicer, you will be wasting your money. If you are not sure you want to try juicing, find a healthfood store and sample some fresh juice.

I have been juicing for eight years. I drink 14 ounces of vegetable juice (carrot, spinach, apple, ginger) every morning and 20-30 ounces of fruit juice every evening. I used to eat antacid tablets on a daily basis, but no longer have any stomach problems. I am rarely sleepy or tired regardless of how much sleep I may miss. Juicing will deliver relatively quick benefits. If you are overweight, juicing is a great way to loose weight without dieting. Drink all you want, you are not going to gain weight. Fruit juice is a

great cleanser and diuretic. The juice is into your bloodstream in a matter of minutes; your digestive system does not have to work as hard to digest juice. This translates to more energy for your body.

## STRESS

Stress has many definitions. A basic definition would be anything that causes anxiety. Stress or anxiety can come from two sources, external and internal. Almost anything is potentially a stressor.<sup>38</sup> What is a stressor to one person may have no affect on another.

### Examples of External Stress

1. Noise. Does your partner play the radio too loud? Rock music versus Country music.
2. Air pollution. Does everyone in the investigative section smoke except you?
3. Adverse lighting. Are your eyes strained from doing computer work? Is the lighting poor in your office?
4. Overcrowding: Are you forced to share a locker or desk at work?
5. Negative personal interactions. Do you dislike your immediate supervisor?
6. Adverse work conditions. Do you like your duty assignment? Do you like your shift assignment?
7. Major life changes. Have you experienced any major changes in the past two years? Divorce, marriage, etc.
8. Choices. Are you forced to make too many critical decisions? Are you bored much of the time?
9. Rules. Are the rules and guidelines you live by at home and work too restrictive?

### Examples of Internal Stress

1. Nutrition. Do you eat too much? Do you eat at irregular intervals or have an unbalanced diet?
2. Junk Foods and Nonfoods. Do you eat too much junk food (cookies, candy, chips, etc.)? Do you use alcohol to extremes?
3. Exercise. Do you get enough exercise to keep your heart and lungs healthy? Do you get winded walking up a flight of stairs?
4. Posture. Do you sit behind the wheel of a patrol car all day without getting out to stretch and move about regularly?
5. Pacing. Do you work at your own rate or do you try to keep up with others? Do you get angry if caught in traffic?
6. Personal feelings. Are you in conflict about your job assignment? Does your "common sense" conflict with your enforcement duties? How is your sex life at home?
7. Creative attitude. Is there a lack of meaning to your job? Is there still a purpose in your actions at work?
8. Personal interests. Do you do things for yourself? Do you feel guilty if you do things for yourself?

The above items are merely a sample of possible stressors in the police environment. As you read the questions answer them. Once identified, a stressor can be dealt with. Take a few minutes to sit down and identify stressors in your life. There are many and we all have them.

As one can see, there are many causes of stress. When you combine several of these stressors, results can be magnified. The good law enforcement manager should recognize this fact and strive to educate officers regarding their diets as related to stress. An officer's diet alone can cause stress. A good nutritional program run by management can train the officer to eat properly and give him the key tool, proper nutrition, to enjoy enhanced job performance and longevity. New research data and theories are being introduced almost daily. It behooves the law enforcement manager to keep abreast of these developments so that regular inservice training updates can be provided for all officers.

### Management of Stress

Excessive stress can lead to job burnout and in its aggravated stage can manifest itself in physical symptoms. Job Burnout is physical, emotional, and mental exhaustion caused by long-term involvement in situations that are emotionally demanding and very stressful, combined with high personal expectations for one's performance.<sup>39</sup>

Below are listed several techniques the individual officer can use for managing stress. Let me reiterate that you must identify stressors in your internal and external environment first. Once identified you may be able to relieve a stressor by simply changing a 60 watt light bulb with a 100 watt light bulb or by simply moving your desk a few feet.

To manage stress you must be able to relax. The ability to relax in any situation serves two purposes. First, as soon as you begin using it you will decrease wear and tear on your body. Next, it will give the police officer the ability to manage certain responses such as fight-or-flight, anger, and fear. Below are listed some basic techniques for

relaxation. They can be modified to fit one's particular environment. For example, some techniques would work better for a foot patrolman and others would be better suited to an officer driving a patrol car.

**OUT-BREATH TECHNIQUE<sup>40</sup>:** This technique is a good relaxer and is a basic, especially if your sergeant has just assigned you to give a speech on the merits of the D.A.R.E. program to the local P.T.A.

- Step 1. Take a small gentle breath through the nose, allowing the diaphragm and waist area to expand but not the chest.
- Step 2. Exhale very slowly through the nose, feeling the diaphragm, stomach and shoulders relaxing. Try to make the out breath last a minimum of five seconds. Repeat six times.
- Step 3. When you can, allow your head to relax gently forward on the out breath.

**BASIC TECHNIQUE<sup>41</sup>:** Another basic that can be used most anywhere.

- Step 1. Separately tense your individual muscle groups.
- Step 2. Hold the tension about five seconds.
- Step 3. Release the tension slowly and at the same time say, "Relax and let go".
- Step 4. Take a deep breath.
- Step 5. As you breathe slowly out, silently say, "Relax and let go".

These are two basic techniques; they will work well and are easy to learn. Things that are easily learned are more often used. The second technique, steps one thru five, will work on the head, neck, shoulders, arms, hands, chest, lungs, back arch, stomach, hips, legs, and feet.

## EXERCISE

The majority of police work is done with a pad, pencil and radio until the lid comes off and all hell breaks loose, at which time the officer may need the physical attributes of an athlete to survive.<sup>42</sup> Take your exercise seriously, it is a great way to reduce stress. There is a trend in law enforcement agencies toward setting up minimum standards for fitness and wellness. Fitness and wellness are just as important as mastering high speed pursuits or combat shooting. Below are listed some tips in starting your own exercise program. Every officer is different, and as you begin your exercise program you will be able to customize the exercises to best benefit you.

1. Get a complete physical exam including blood work. The police officer should have a physical exam every year.
2. Start slowly.
3. Exercise at your own pace. Do not try to "keep up" with others.
4. Listen to your body. If it hurts stop doing it.
5. Exercise regularly. Infrequent exercise is better than no exercise but is of limited value.
6. Aerobics is the core of any exercise program.
7. Stick with your exercise program. It usually takes a month to begin to feel and see results.
8. Exercise at least every other day for thirty minutes. You do not have to begin at this pace but once your program is established this should be a minimum.

9. Have a five minute warm-up period before beginning exercise and a five minute cool down period after exercise. Calisthenics make a great warm-up.
10. Choose a physical activity that interests you or is fun.

### AEROBICS

The purpose of aerobics is to strengthen the cardiovascular system. It is the one exercise that can potentially extend your life expectancy. I recommend jogging as the most efficient and complete aerobic exercise. I recommend this exercise for two reasons. First, jogging is inexpensive and easy to do. All you need is a good pair of shoes. There is no equipment, therefore you can go for a jog anywhere, anytime. Secondly, when jogging, you are using all major muscle groups. Below are listed some of the more popular aerobic activities.

Walking-least strenuous.

Cycling-good exercise especially if you have knee or back problems.

Aerobic Dancing-can improve flexibility and strength.

Jogging-best exercise for average officer.

Swimming-fine if you have access to a pool.

Running-advanced exercise.

### WEIGHT TRAINING

Although some people use weights as an aerobic exercise, I do not recommend it. Weights put a great strain on joints and cartilage. Free weights are the easiest for most officers because they are cheap and they are more portable. The Soloflex machine is also



a good choice for the police officer. For best results, weight training should be done on different days from aerobic training. Two days per week should be adequate for weight training, do not exceed three days per week as it takes twenty-four hours for muscles to recover when weight training.

### MANAGING A PROGRAM OF PROPER PERSONAL NUTRITION

It is not the intent of this paper to have the often harried patrol officer counting grams of fat in every meal. However, once the patrol officer becomes aware of the best choices he will automatically become quite astute at making the best choices from the menus. Here are a few examples of some meals not so bad nutritionally.

#### Patrol officer:

##### On Duty Breakfast:

1. Any fast food chain: Pancakes (no butter, easy on the syrup)

Orange juice

Apple bran muffin

2. McDonald's: Cheerios or Wheaties

Orange juice

Low-fat milk

Apple bran muffin

3. One-minute meal: Bagel

Mini-box of raisins

4. Quick breakfast: Grab a banana and an apple (you can eat these while driving)

#### On Duty Lunches:

1. Wendy's: Chili  
Side salad  
Orange juice or low-fat milk
2. Subway: 6 inch turkey breast sandwich (no cheese or oil)  
Veggie salad (no cheese) with light Italian dressing
3. Coffee Shop: Garden salad or broth based soup  
(Minestrone, vegetable)  
Chicken breast sandwich (grilled not fried)

#### On Duty Dinners:

1. Dominoes Pizza: Two slices of veggi pizza (no olives)  
Salad  
Water or non-fat milk
2. Hardee's: Chicken 'n pasta salad  
Water to drink
3. Long John Silver's: Baked fish or baked chicken  
Mixed vegetables  
Side salad

**Off Duty Breakfasts:**

1. 12 ounces or more of any juice from juicer

Whole wheat bagel topped with Simply Fruit or Polaner brand fruit spread

2. Bowl of oatmeal

2 slices whole wheat toast

3. Bowl of Cherrios with skim milk

Any fresh fruit

**Off Duty Lunches:**

1. Tuna fish sandwich on wheat (go easy on the mayonnaise, or better yet try mustard)

Garden salad or carrot sticks

2. Pasta with olive oil and garlic sauce

Salad with vinegarette dressing

3. Large fruit bowl (fresh fruit only)

Apple, orange slices, grapefruit, banana (eat until you are full)

**Off Duty Dinners:**

1. Large baked potato (some butter is okay but no sour cream or cheese)

One or two ears of sweet corn

2. Any broiled or baked fish (a little olive oil and lemon pepper works great as a topping)

Cauliflower and broccoli salad with vinegarette dressing

3. Large bowl of beans (beans are a staple and should be a major part of any nutritional program)

**\*Recipe for Beans a la Charra (low-fat)**

1 1/4 lbs. pinto beans

3 fresh tomatoes

1/2 lb. of bacon (cut the meat from the bacon and dice, throw the fat away)

1/2 lb. any sausage (venison is best)

1/2 cup bell peppers diced

2 to 4 cloves fresh garlic chopped

1 1/2 cups onions coarsely diced

Handful Cilantro chopped

1 to 3 jalapenos to taste

Cook beans in a large pot until done, salt to taste while cooking. Remove the sausage from casing and cook in a large skillet until well done. Pour off all the fat. Add the rest of the ingredients (except cilantro) to the skillet and simmer for 10 to 15 minutes. Add the contents of the skillet plus the cilantro to the beans and simmer one hour.

I like to double the recipe because beans freeze well and you can make several meals off of one pot of beans.

## WHAT WILL WORK

1. Try to eat something raw with every meal, the enzymes aid digestion.
2. Do not overeat.
3. Eat only when you are hungry, never eat before bed.
4. Do not drink liquids before or during meals.
5. Keep meals simple, one or two courses.
6. Avoid fried foods of any kind.
7. If the label reads "hydrogenated" do not eat it. Use butter sparingly, and margarine not at all.
8. No soft drinks, drink water and plenty of it.
9. Drink fresh juice.
10. Exercise every other day.
11. Do not take your work home with you.
12. Make time to enjoy something fun with family or friends.

There seems to be a trend in law enforcement towards minimum physical fitness standards for police officers. This bodes well for the future. However, requiring police officers to reach a certain standard without giving them the means is bound to cause problems. Police officers are not graduating from high schools and colleges with the knowledge necessary to survive in a high stress environment. They are not getting basic survival tools such as proper fitness and nutrition. A program for physical fitness must be coupled with a program of proper nutrition and stress reduction to complete the equation.

Management of stress should not be left totally up to each individual officer. A

good law enforcement manager must incorporate stress management into a nutrition program. Once incorporated, this will give the individual officer the knowledge necessary to tailor his own stress management program to his needs. Give the officer the tools, he will use them.

This paper is prepared in the hope it will be a guideline for departmental academies. It is designed to be presented in an eight hour format for each academy class. There should be a two hour required update every year for officers. This update can be combined with other schools and will be sufficient to keep officers updated on new research, restaurant menu changes, and diet guidelines. Frequent updates tend to keep officers focused and motivated toward good habits relating to nutrition. Also, it is important for officers to feel administrators are concerned regarding their health and fitness.

## CONCLUSION

A recent headline in The Wall Street Journal reads: Coronary Disease Found to Threaten 82% of Americans.<sup>43</sup> Blue Cross Blue Shield says the biggest killer of police officers is heart disease. The National Cancer Institute spent \$400,000 in a campaign to get people to eat fruits and vegetables, conversely; \$49,000,000 was spent on advertising by the two best selling sugary cereals.<sup>44</sup> Is it any wonder the average police officer is lacking knowledge when it comes to proper nutrition. Police officers are like most other people; they learn from example. School cafeterias continue to serve fried foods. Most items are over cooked, salads contain iceberg lettuce which is of little value to the human

body. Where is the spinach salad? Where is the fresh juice bar? Ideas and habits are going to have to change. Many police officers' diets are putting them at much greater risk than the daily performance of their duties. The first step in the re-education of police officers regarding their diets should be taken by police department academies. Armed with the knowledge provided by proper nutritional guidelines the officer will choose to be healthy. This training can be implemented at little additional cost. The information is there, it simply must be adapted to the police officer.

The key to effective nutritional change and thusly physical fitness rests in two words, mental toughness. It is a daily battle. Waiting in line at McDonalds while your partner orders a Big Mac, fries and apple pie, you a garden salad with light vinegarett. Exercising on your regular day even though the weather is bad. Mental toughness can not be taught, but it can be developed. It comes from within. As the officer begins to see and feel improvement, toughness begins to develop and it is easier to turn down that free Mexican dinner and run that extra mile. Officers will have occasional lapses, that is fine. A steak dinner to celebrate an anniversary is okay. Officers need to change lifestyles and not worry about one or two meals. If the basics of this paper are built upon and taught in the various academies, longevity and good health for police officers will be the result.

## ENDNOTES

1. Earl Mindell, Earl Mindell's Food as Medicine, Simon and Schuster. New York (1991), 13.
2. *Ibid.*
3. *Ibid.*, 14.
4. *Ibid.*
5. *Ibid.*, 20.
6. Jay Kordich, The Juiceman's Power of Juicing, William Morrow and Company, New York (1992), 207.
7. Mindell, Earl Mindell's Food as Medicine, 37-38.
8. *Ibid.*, 39.
9. James F. Sheer, Better Nutrition for Today's Living, Vol. 56 No. 2 (February, 1994), 24.
10. *Ibid.*, 24.
11. *Ibid.*, 59.
12. Mindell, Earl Mindell's Food as Medicine, 60.
13. *Ibid.*, 11.
14. *Ibid.*, 61.
15. American Institute for Cancer Research, "All About Fat and Cancer Risk", 1993, 3.
16. American Institute for Cancer Research, "Get Fit, Trim Down", 1991, 12.
17. Anthony J. Cichoke, "Understanding Cholesterol", The Energy Times, March/April 1994, 34.
18. Susan Smith Jones, Choose To Be Healthy, Celestial Arts, Berkeley, California, (1987), 88.
19. *Ibid.*, 88.



20. Mindell, Earl Mindell's Food as Medicine. 298-299.
21. Cichoke, The Energy Times, 35.
22. *Ibid.*
23. American Institute for Cancer Research, "Dietary Guidelines To Lower Cancer Risk", 1990, 12.
24. American Institute for Cancer Research, "Dietary Fiber To Lower Cancer Risk", 1992, 2.
25. *Ibid.*, 4.
26. *Ibid.*, 5.
27. Marion J. Franz, Fast Food Facts, Chronimed Publishing, Minneapolis, Minnesota, (1990), 1.
28. *Ibid.*, 6.
29. *Ibid.*, 3.
30. Evelyn Tribole, Eating On The Run, Leisure Press, Champaign, Illinois, (1992), 72.
31. Jaime Pope-Cordle, The Low-Fat Fast Food Guide. Norton and Company, New York, (1993), 1-3.
32. Kordich, The Juiceman's Power of Juicing. 26.
33. *Ibid.*, 27-28.
34. *Ibid.*, 132.
35. *Ibid.*, 108.
36. *Ibid.*, 106.
37. *Ibid.*, 140.
38. Martin Schaffer, Life After Stress, Plenum Press, New York, (1982), 13.

39. Christine A. Leatz, Career Success/Personal Stress, McGraw Hill Inc., New York, (1993), 116.
40. Lyn Marshall, Lyn Marshall's Instant Stress Cure, Century, London, (1990), 30-31.
41. Arnold A. Lazarus, Stress Management, Athenum, New York, (1985), 50-51.
42. Art Hoffman, "Add Muscle To Your Fitness Program", Law Enforcement Technology, PTN Publishing, August 1993, 25.
43. Helen Cooper, "Coronary Disease Found To Threaten 82% of Americans", Wall Street Journal, February 4, 1994, see C15.
44. "Health Facts", Health, Time Publishing Ventures Inc., May/June, 1994, 12.

## BIBLIOGRAPHY

## ARTICLES

- Austin, Steve. "Steps You Can Take To Prevent Cancer." Delicious, July/August 1993, 24, 26-28.
- Barks, Charis. "How Police Departments Can Encourage Physical Fitness." Minding the Badge, Spring 1994, 1.
- Bradley, Robert L. "First Nation in History Thats Afraid to Each Lunch." Houston Chronicle, December 13, 1992, IF.
- Brody, Jane E. "New Research on Bad Fats Only Adds to Confusion." Houston Chronicle, April 14, 1993, 14G.
- Childre, Dac Lew. "Nine Tips to De-Stress." Delicious, September, 1993, 33.
- Cichoke, Anthony J. "Understanding Cholesterol." Energy Times, March/April, 1994, 34-38.
- Cichoke, Anthony J. "An Apple a Day?" Energy Times, Volume 3, Number 4, 1994.
- Cooper, Helene. "Coronary Disease Found to Threaten 82% of Americans." The Wall Street Journal, February 4, 1994, C15.
- Finn, Kathleen. "Beat Job Burnout." Delicious, March 1994, 32-33.
- Fisher, Stuart. "A New Body." Tomorrow's Health, Fall 1993, 1-6.
- Hoffman, Art. "Add Muscle to Your Fitness Program." Law Enforcement Technology, August 1993, 24-27.
- Levy, Gail A. "How to Eat for a Longer Life." Houston Chronicle Parade, November 14, 1993, 4-7.
- McGinley, Laurie. "Planned New School-Lunch Guidelines Prompt Food Sellers to Think Nutrition." The Wall Street Journal, June 6, 1994, B1, B6.
- McVicar, Nancy. "Up the Antioxidents." Houston Chronicle, March 31, 1994, 1C, 6C.
- Pizzorno, Lara. "Maximize Your Life." Delicious, May, 1994, 30-34.
- Scheer, James F. "Restating Praise for Dietary Role of Vitamin C." Better Nutrition for Today's Living, February 1994, 22-26.

## BOOKS

- Bailey, Covert. Smart Exercise, Boston, Houghton Mifflin Company, 1994.
- Feiden, Margo. The Calorie Factor, New York, Simon and Schuster, 1989.
- Franz, Marion J. Fast Food Facts, Minneapolis, Minnesota, Chronimed Publishing, 1990.
- Hausman, Patricia. The Healing Foods, New York, Dell Publishing, 1989.
- Jones, Susan Smith. Choose to be Healthy, Berkeley, Celestial Arts, 1987.
- Kordich, Jay. The Juiceman's Power of Juicing, New York, William Morrow and Company, 1992.
- Mason, John L. Stress Passages, Berkeley, Celestial Arts, 1988.
- Mindell, Earl. Earl Mindell's Food as Medicine, New York, Simon and Schuster, 1994.
- Piscatella, Joseph C. Controlling Your Fat Tooth, New York, Workman Publishing, 1991.
- Pope-Cordle, Jaime and Martin Katahn. The Low-Fat Supermarket Shoppers Guide, W. W. Norton and Company, 1993.
- Sharma, Hari. Freedom From Disease, Toronto, Veda Publishing, 1993.
- Tribble, Evelyn. Eating on the Run, Champaign, Leisure Pres, 1992.
- Walgi, Hasnain. Vitamin Guide, Rockport, Shaftesburg Dorset, 1992.

## OTHER

- American Institute for Cancer Research, "All About Fat and Cancer Risk", 1993, 1-17.
- American Institute for Cancer Research, "Be Your Best: Nutrition After Fifty", 1988, 1-32.
- American Institute for Cancer Research, "Dietary Fiber To Lower Cancer Risk", 1992, 1-9.
- American Institute for Cancer Research, "Dietary Guidelines to Lower Cancer Risk", 1990, 1992, 1-22.
- American Institute for Cancer Research, "Diet, Nutrition, and Cancers of the Colon and Rectum", 1992, 1-24.

American Institute for Cancer Research, "Get Fit, Trim Down", 1991, 1-26.

American Institute for Cancer Research, "The Cancer Process", 1994, 1-11.