

USAWC STRATEGY RESEARCH PROJECT

**THE CULTURE OF FITNESS AND NUTRITION
IN THE U.S. ARMY – CAN WE DO BETTER?**

by

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This SRP is submitted in partial fulfillment of the requirements of the Master of Strategic Studies Degree. The views expressed in this student academic research paper are those of the author and do not reflect the official policy or position of the Department of the Army, Department of Defense, or the U.S. Government.

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ABSTRACT

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This paper discusses the current culture of physical fitness and nutrition maintenance in the United States Army. It advocates the need to improve that culture due to the current operational tempo of the force, and to meet the Army's aggressive transformation plans. The demands placed on the Army today, and for the foreseeable future, are far different than the demands on the force for the past twenty years. This necessitates a different approach and different standards of physical fitness in the Army. In addition, the Army transformation plan and the vision set by the new Chief of Staff of the Army, General Schoomaker, necessitate changes to ensure the Army culture adapts with the ongoing transformation initiatives. The paper recommends numerous changes to the way the Army develops and promotes its physical fitness and nutrition culture, and identifies how these changes will affect both its Active and Reserve Component Soldiers, its family members, and its retiree communities.

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THE CULTURE OF FITNESS AND NUTRITION IN THE U.S. ARMY – CAN WE DO BETTER?

In the summer of 2000, a Lieutenant Colonel took command of his Special Forces Battalion and immediately began assessing its combat capabilities, to include physical fitness. In the area of physical fitness he developed a six-month goal for all operational teams in the Battalion to compete in, and complete, an annual competition at Fort Bragg, North Carolina, called the Perimeter Relay. This competition consisted of a long-range team endurance race encompassing over 65 miles with several events, including an obstacle course, a canoe section, rucksack march, litter carry, and land navigation. Even for a group of endurance athletes who routinely train and compete in endurance events, this would be a challenge. For a group of Special Forces teams it provided an excellent preparation and evaluation tool to determine overall endurance physical fitness.

As a means of preparation, the unit began monthly leaders endurance events for the top three personnel in each Operational A Team, Company HQ, and Battalion HQ. As a part of each leaders endurance event, the unit invited professional experts to talk about endurance nutrition, human physiology, conditioning, water retention and absorption, stretching, and other related subjects that focus on endurance performance. During that training and evaluation period, the Commander discovered that even in this elite Army unit, which set higher physical fitness standards than the rest of the Army, the true experience with ultra endurance physical fitness training and performance techniques was the exception rather than the rule.

The exceptions were the personnel who routinely participated in ultra marathons and triathlons on their own time. Those few personnel were in tune with their body's performance. They exhibited an awareness and discipline to constantly adjust their hydration and caloric intake, by quantity and by type of food, to maintain their maximum physical performance levels. Those exceptional few did not have to think or be reminded of nutrition or hydration during an endurance event; they took care of it automatically. Like professional athletes looking for a slight edge in physical fitness over their opponents, these exceptional few had a physical fitness edge over, and performed better than, their peers. Any edge that an individual or a unit has during a battle can help it win that same battle.

Just one short year later, after an intense period of non-stop deployments throughout Africa, Bosnia, and the Middle East, that Special Forces Battalion was thrust into combat in Afghanistan, followed by Iraq, then Afghanistan again two more times, all within a two-year period. Each environment required the Soldiers to physically be at their peak. This operational tempo has become the norm, rather than the exception, across the entire Army. The peacetime

culture of physical training, physical fitness standards, and nutritional health needs to be reviewed to ensure it is adapting to the new environment the Army is operating in.¹

PROBLEM

Health & Fitness: Vulnerability?

“The susceptibility of a nation or military force to any action by any means through which its war potential or combat effectiveness may be reduced or its will to fight diminished.” JP 1-02
(Army Physical Fitness Research Institute Commander Briefing)

The Army has great literature, policies, manuals, and knowledge in the areas of physical fitness and health nutrition that served it well throughout the Cold War and the post Cold War down-sizing of the force. The environment has changed in the past few years with a dramatic increase in operational demands of the Army, even though the force has not grown with those demands. This paper will advocate that the Army could do much more to improve its culture of physical fitness and nutrition to meet these current and future demands. A rejuvenated drive and motivation for physical fitness, health, and nutritional maintenance, and the establishment of a professional sports type of culture in the Army could have an extraordinarily positive effect on the daily physical well being, work performance, combat performance, and mission accomplishment of the force and their families. It could also have the secondary effect of reducing the future costs of health care to the retired community.

The new Chief of Staff of the Army has reiterated in almost every major speech since he assumed that duty, “our people, not equipment, are our main resource” and one of our core values. The Army has established and updated doctrine and techniques over the entire 200 plus year history of its service, but nowhere in the fighting doctrine does it identify pre-deployment physical fitness standards, nor minimum physical fitness or health preparations before or during a battle. The competition to establish training priorities in the Army’s training institutions is fierce. Education of Army leadership, let alone the Soldiers, on sports medicine and advanced physical fitness and endurance nutrition techniques is usually left for unit level training as outlined in Army Field Manual 21-20, Physical Fitness Training. Arguably, unless a Soldier is naturally interested in, and participates in, triathlons or other endurance events, he/she would not gain the deep experience in the elements of endurance performance, preparation, training, and maintenance that are automatic for most endurance athletes.

Unlike the past, the Army is now in a period of continuous engagement and extremely high operational tempo where the benefits of physical fitness training and health programs could have their best effect. The example of Somalia, where Army Special Operations Soldiers were up all day in the heat preparing for a short mission, then conducted a stressful infiltration, followed by an entire night of fighting and movement, and culminating with a one-mile withdrawal under pressure, has become more commonplace throughout all units in the Army during the past few years. That kind of stress, physical exertion, and demand for endurance mirrors any ironman or ultra marathon event and stresses the need for all Soldiers to maintain a higher standard of physical fitness and health maintenance. Thus, Soldiers and leaders must ensure they are physically and mentally ready for that level of physical performance.

Since the attack on the World Trade Center the United States Army has changed significantly. Due to the Global War on Terrorism, the Army has maintained a wartime operational tempo against an elusive threat requiring new tactics and techniques to defeat. A recent large scale study conducted on military personnel during the North Atlantic Treaty Organization deployment to the former Yugoslavia indicated a degradation of physical health as well as psychological health in the Soldiers as a result of operational tempo.² The Army must adapt to meet the new challenges and new environments its Soldiers face. The new vision for the United States Army, approved by the new Chief of Staff of the Army, General Peter Schoomaker, says that the “Army must be prepared for operations of a type, tempo, pace, and duration different from those we have structured our forces and systems to achieve.”³ That vision also states “sustained operations will be the norm, and not the exception” and that the Army will need to develop its personnel for an “unprecedented level of adaptability.”⁴ The increased tempo and pace of the Army, sustained duration of the effort, and need for maximum adaptability of Army personnel, like preparing for an ultra endurance event, requires a change in the Army’s culture of physical fitness in order to meet the different demands.

Webster’s Dictionary defines the meaning of culture as “the behaviors and beliefs characteristic of a particular social, ethnic, or age group.”⁵ The U.S. Army is such a group, both social and professional, that creates a culture or set of behaviors and beliefs that drive that group. Just like professional sports athletes who make millions of dollars, Combat Soldiers are professionals whose lives may depend on their health and fitness. The Army Physical Fitness Program recognizes this as a basic concept that the program will “improve Soldiers’ combat readiness.”⁶ Using this premise that Soldiers must maintain a level of fitness similar to professional athletes, the Army as an institution, should create more of a professional sports type culture for its physical fitness and nutrition programs. Due to budget constraints and

conflicting priorities the Army is missing many of the tools available to professional sports athletes (e.g., sports trainers, the most advanced nutrition information, sports medicine training and support, individual programs to maximize training progress, and first class facilities to support our training). Accordingly, Combat Soldiers should have continuous access to the same types of resources and training as professional athletes. This would allow individuals, and the unit as a whole, to maintain the highest level of physical fitness readiness possible because a Soldier gets very little warning before deploying to his/her “Super Bowl” of combat operations. Although a Soldier can make up a lot of training and gain a lot of individual expertise on equipment and techniques on short notice between an alert and deployment, no Soldier can make up months of poor or mediocre physical fitness training during that same short period.

CURRENT HEALTH CULTURE IN THE ARMY

The seventh line of the Soldier’s Creed states that Army personnel must be “physically and mentally tough,” but what does the Army do to make that happen? Although the Army has many different sources of physical fitness and health information and support, none of them bring it all together to form the basis for true, top to bottom, synchronized effort, nor universal pride in the Army program. The results are only a small percentage of what is possible. A lack of universal pride in one’s physical fitness points to the lack of a physical fitness and nutrition culture that such pride would promote and sustain.

Even though the Army has had a successful physical fitness and nutrition culture in the past, it could learn some lessons from the other Services. In the Marine Corps, physical fitness is a matter of pride for every Marine. It is part of their culture, arguably causing every Marine to put a great deal more effort into health maintenance than Soldiers in the Army do. Marines are looked at negatively if they do not maintain a high degree of physical fitness. Among the Services, the Navy community has led the way on several innovative health programs. During the 80’s they conducted extensive experiments with their Special Operations personnel and worked with the health industry to evaluate the benefits of chondroitin and glucosamine, two drugs that reduce joint ailments and promote healthy joints for more maximal physical performance.⁷ This proactive evaluation process in taking a lead in the physical fitness industry is an excellent example of a Service culture promoting fitness for its personnel. The Navy’s culture of physical fitness, generated by the Special Operations elements, made them try new and innovative ideas which in turn led them to research, assess, and then procure the needed products for the good of their personnel. The Army still has neither adopted that program nor made these products routinely available for personnel with joint problems.

The Navy also led the Department of Defense community in the adoption of laser eye surgery for its personnel. The program was designed to increase individual combat effectiveness while transitioning from sea to surf to beach, where any type of corrective lenses is a potentially lethal impediment to the combat team conducting the mission. The Navy community went to great lengths to research the potential hazards of the surgery and faced the obvious truth that many sailors and special operators would get the surgery on their own anyway. The Army, by comparison, was slow and bureaucratic to approve that same procedure. The Army culture resisted change even when the operational benefits to the mission were so obvious and even after the medical community had fully evaluated the procedure as safe.⁸

The safety aspects of this culture should be retained, but the slow, indecisive, bureaucratic part of this culture must be eliminated if the Army is to remain responsive and adaptive to innovations that enhance operational ability. Therefore, staying on the cutting edge of innovation will inspire true physical fitness that will last for the rest of our Soldiers' lives. The current Army vision supports and stresses the concept of adapting our resources more quickly to have rapid effect: "rethinking and adapting our installation programs and facilities to better support our Soldiers and their families" and by treating Soldiers as systems, who "must be medically protected and sustained for optimum performance throughout their service."⁹

The rising obesity level in the American culture is affecting the military culture. Doctor William Winkenwerder, Assistant Secretary of Defense for Health Affairs, has "shown concern about the obesity rate among the military community" and has formed a "high-level group of defense health officials to plan a broad based offensive in the battle of the bulge (obesity)."¹⁰

To evaluate the current Army culture of physical fitness and nutrition requires an analysis of the areas of resources, policy and doctrine, organization, education and training, and family support.

RESOURCES

The Army has some excellent resources for physical fitness and nutritional health to draw on: The Army Physical Fitness School at Fort Benning, GA, and the Army Physical Fitness Research Institute (APFRI) at Carlisle Barracks, PA. These are two Army institutions that study, evaluate, and provide both education, and educational tools to raise the level of physical fitness and nutritional awareness, both in the leadership and the rank and file of the Army. The mission and focus of the APFRI is:

to prepare selected military, civilian, and international leaders to assume responsibility for health and fitness of the force, conduct health and fitness

research of the over-40 population, and provide outreach programs benefiting the U.S. Army War College, the U.S. Army, and the Nation.¹¹

The mission of the Physical Fitness School is to “develop and field physical fitness doctrine, performance standards, and training programs for leaders and Soldiers with the primary emphasis on preparing them to meet the physical demands of their mission”.¹²

There are many local health and fitness programs and efforts going on simultaneously throughout the Army, presumably because so many separate organizations see the same need. What is lacking is integration of all these separate efforts. Soldiers, if they are looking, come across programs on the Internet, which are local post programs, but have information that any Soldier could utilize. An example of one such program is Operation Aegis, an injury control program initiated by MG Peake at Fort Sam Houston, whose goals are “to reduce musculoskeletal injuries on Fort Sam Houston and to provide written guidance for other posts to use in developing an injury prevention program.”¹³ The U.S. Army Center for Health Promotion and Preventive Medicine offers several programs and has the mission to “provide health promotion and preventive medicine leadership and services to identify, assess and counter environmental, occupational, and disease threats to health, fitness, and readiness in support of the National Military Strategy.”¹⁴ These various programs are examples of the separate, local interest and need in physical training and injury reduction, but again, no one agency is taking the comprehensive lead to develop an overall program for the Army. The U.S. Army Center for Health Promotion and Preventive Medicine could be used as the Army consolidation point for both health education and physical fitness in the Army.

POLICY AND DOCTRINE

Army Regulation 350-41, *Training in Units*, establishes Army policy on physical fitness and Army Field Manual 21-20, *Physical Fitness Training* (FM 21-20), establishes the physical fitness program. These references were written in 1992 and 1993, respectively, and are at least eleven years old. Neither has been updated to account for the reduced size of the Army, the increased operational tempo demands, and the decreased time to conduct training between deployments.

Although FM 21-20 is an excellent document for establishing physical fitness programs and there are numerous other excellent Army references that are designed for mass production and basic, rather than advanced knowledge. For example, there are none that link those goals and techniques to current tactics. Army Field Manual 3-90, *Tactics* (FM 3-90), specifies that:

the art of tactics consists of three interrelated aspects: the creative and flexible array of means to accomplish assigned missions, decision making under

conditions of uncertainty when faced with an intelligent enemy, and understanding the human dimension of the effects of combat on Soldiers.¹⁵

Although FM 3-90 talks about understanding the human effects of combat on Soldiers as being an important element of tactics, nowhere does it make any recommendations or establish procedures for ensuring Soldiers are fit before combat missions. The Tactics doctrine does not establish the requirement to assess or ensure adequate nutrition or sleep as a means of increasing the chances of success on a tactical operation. Thus, fitness, health, and nutritional functions that could improve tactics and performance are not integrated into these tactics and potentially reduce the attention and priority leaders place on those functions.

Field Manual 100-14, *Risk Management*, stresses that leaders should constantly assess ever changing hazards, such as fatigue as a risk factor during operations. However, nowhere does it stress that increased physical fitness and better nutrition decrease the impact of fatigue and stress on operations. A measure of physical fitness could be used to predict the effect of fatigue and could even be taken a step further. If increased physical fitness reduces risk factors such as fatigue, then should not leaders be assessed on how well they develop and maintain the total fitness of their units? Currently, this is not done. Soldiers are evaluated only on their own physical fitness.

Another disjointed policy in the Army, as seen on the Army Physical Readiness Test grading table, is that as a Soldier gets older his/her physical fitness level is allowed to decrease due to age related decline in physical ability. Universally, we all agree that as we get older in the military we normally have more responsibility and therefore more stress and the need for greater mental alertness. Our own doctrine¹⁶ correlates increased physical fitness with increased mental alertness which would advocate maintaining the fitness standards for all age groups therefore improving the performance of our leaders. General Schoomaker's vision in creating a "fierce warrior ethos and spirit" states that "there can be only one standard of training for our Soldiers."¹⁷ In addition, the environment that our leaders fight in is the same as that in which the Soldiers fight, leading one to wonder why the leader, usually one of the oldest in a unit, has a reduced requirement for physical fitness. As a culture, the Army sends the wrong signal to the entire force by letting it's leaders decline in physical fitness due to increasing age, making them less capable of leading from the front and setting a positive example to the very Soldiers they lead.

ORGANIZATION

Tables of Organization and Equipment (TOE) and Modified Tables of Organization and Equipment (MTOEs) of combat units do not currently have physical trainers or nutritional experts assigned to them. These positions are normally seen at garrison or community hospital levels only. The presence of these personnel at battalion or brigade level would allow more developed, focused, and routinely demanding physical fitness training oriented to the mission of the unit and incorporating the latest physical fitness and nutrition techniques in order to reduce injury and improve fitness. They would also be the catalyst for more understanding and expertise by the entire force in those areas, which could have a very positive effect during pre-mission preparations and to ensure the force is prepared in all ways for upcoming missions.

EDUCATION AND TRAINING

The Army's Physical Fitness Program, as outlined in Field Manual 21-20, is excellent from the perspective of establishing a baseline physical fitness level for most Soldiers, and has truly established a baseline Army culture of physical fitness. Unfortunately a baseline program is not enough. The Army has to adapt to the current levels and intensity of combat operations and adjust the culture and attitude of physical fitness to meet those challenges. Throughout Education and Leadership Training, from Basic Training to the United States Army War College, the Army does very little actual education and training in the area of physical fitness, and much less on advanced sports nutrition and health subjects. Most personnel are left to their own interests to develop this expertise as they are so inclined. The Army has not set a training standard to educate all personnel universally, at least to the same basic level, which would help with sustainment training across the force. The Officer Basic Course does not teach either physical fitness techniques or sports nutrition and medicine information. It does require some daily unit physical training events to ensure all are doing physical training but does not create better physical fitness trainers and leaders. Most of the Officer Advance Courses offer no improvement and no additional physical fitness, health information, or education is given. The Command and General Staff Course is the same. At the Army War College there is an assessment program offered but it is not mandatory. The background of the APFRI program is:

to develop a comprehensive health and fitness program designed to fit the needs of senior middle-aged officers. A key focus was reducing the risk of cardiovascular disease. Over the years, the APFRI staff designed programs for stopping smoking, lowering blood pressure, cutting down on dietary sugar, fat, and cholesterol, managing stress, and improving body flexibility, strength, and aerobic fitness. Integral to the APFRI program is a comprehensive health and fitness assessment that students are invited to complete.¹⁸

The APFRI assessment includes a comprehensive evaluation of each individuals' current physical fitness, body composition, flexibility, maximum workout heart rate, offers feedback on eating habits and ways to improve nutritional health, and how to reduce stress. There are numerous noontime and evening lectures that also offer excellent education on physical fitness subjects. Those lectures are also voluntary and a majority of the students do not attend. These are the same leaders who will soon be responsible for senior level physical fitness and health policy, standards, and doctrine for our forces. Uneducated policy and doctrine makers add very little and many times cause more problems than they solve.

The education of the force must start in basic training as individuals enter the Army culture. From the beginning, all personnel must be taught that these subjects are extremely important to the force, that the Army is serious about physical fitness and health, and that it will not tolerate a lack of understanding and effort in these areas. Basic trainees must be taught the best times and types of carbohydrates to eat before different physical fitness events, how to hydrate their bodies for days before an endurance event or deployment to a hot environment, how to establish a pre-mission sleep cycle, and what supplements are best, and when to take them. The Army logistics system must provide these products and nutrients to the force in training and in operations in order to maximize physical capability and performance.

FAMILY SUPPORT

Many Army communities have excellent sports programs for Army families but few have an aggressive health education and physical fitness program that motivates and draws the family members of Army Soldiers to participate. An estimated sixteen percent of active duty members meet the national obesity rating, while 34 percent of non-Active Duty members and 40 percent of military family member children are also obese.¹⁹ Family physical fitness starts with the sports programs for Army dependent children and there is so much more the Army could do to teach its family members how to stay fit and healthy. On many posts, coaches now have to meet qualifications before they are allowed to coach children. The installation sports programs could easily add nutrition and general health subjects to that coaching instruction and require coaches to teach those subjects as part of practices and team activities. The Army does pretty well with elementary stretching and warm-ups, but very few programs introduce even the older children to muscle development exercises that are focused on developing the muscle groups most important to the specific sport in which they are participating. The Army Community Sports Program teaches the techniques and skills for the sport alone. What a perfect time to teach Army family member youth the concept of focused muscle development and the benefits

it can have in different situations, knowledge they would retain for a life time. In addition, the Army program could teach Army family member youth what kind and when to eat the right combinations of foods to obtain maximum performance during sports and maximum speed of recovery after the event.

Increased physical fitness of family members would decrease the effects of stress, especially while loved ones are deployed. It would also have the added benefit of reducing the cost of both short-term and long-term health care in the military medical system. A win-win situation.

WHAT CAN THE ARMY GAIN?

By creating a much more demanding and integrated culture of physical fitness, health, and nutrition, the Army can gain a great deal in readiness, increased work and mission performance, increased institutional pride, decreased health costs, and prepare Soldiers for the next generation of the military.

READINESS

The basis for the Army Physical Fitness Program is that "a Soldier's level of physical fitness has a direct impact on his combat readiness."²⁰ This makes it more likely that the mission will be completed correctly the first time. This becomes even more important as the Army transitions, placing more and more responsibility on individual Soldiers as systems rather than units to accomplish a wider diversity of missions in any environment. Physical fitness also reduces the risk of injury therefore ensuring a larger percentage of the unit is fit for duty. The *Atlas of Injuries in the U.S. Armed Forces* shows very clearly the positive effect of physical fitness on reducing injuries.²¹

The readiness cannot be measured simply by current physical fitness. There is also an element of knowledge and experience involved. Like the weekend tri-athlete who has an advantage over his/her peers during endurance events because of experience and knowledge of correct endurance nutrition techniques, the experienced Soldier will have that same advantage during sustained combat operations. There is a clear link between correct nutritional consumption during endurance events and the reduction of injury rates and reduced fatigue after the event.²² Cultural changes that increase Army personnel experience and knowledge in physical fitness and nutrition as they relate to combat readiness will provide a positive step toward increasing mission readiness.

INCREASED WORK AND MISSION PERFORMANCE

There are many studies that show a direct correlation between health and fitness and improved performance in the work place where either physical or mental energies are needed.²³ Therefore, increasing fitness levels and health is directly correlated with increased work performance and potential for mission performance in the Army.

The Army has recognized the need to for increased fitness and fitness program changes. The Army Physical Fitness School is designing a new physical fitness test which is more oriented on the performance expected at the Soldier's specific work place and true requirements for combat. The chief of doctrine for the school and a drill sergeant involved with the testing sum up the intent very well:

"There's a long-standing assumption that the more fit you are, the better you'll be at your job," said Stephen Van Camp, chief of doctrine for the U.S. Army Physical Fitness School. "But the real question is, 'Fit for what?'" "For a long time, Soldiers have focused primarily on (Army Physical Fitness Test) scores," Mobley (drill sergeant) said. "We've concentrated less on battle skills, and that means we're neglecting other necessary aspects of physical fitness. Variety is lacking." That's exactly what basic physical fitness studies are stating. "All research points to giving the Soldiers the body strength they would need in a battle situation," Van Camp said. "We follow the basic Army principle, 'Train as you fight.' It just makes sense."²⁴

These changes, although excellent indicators of the Army intent for positive change, are only the start of what could be done to improve physical fitness and nutritional education in the Army.

INCREASED PRIDE

Pride is a difficult emotion to measure, but many people join the military services out of a sense of pride in their Nation. Many of these personnel want to be on a winning team and they want to be challenged past what they thought they could do. When we do challenge them, and they succeed, pride in their accomplishments is evident and infectious. The whole leadership tool of "esprit de corps" is based on that principle. In the Marine Corps, one of the paramount sources of pride, or "esprit de corps," is physical fitness. The "esprit de corps" in the Marines is a major recruiting tool, and thus, physical fitness has a direct effect on recruiting. The Army should use this lesson and recruiting tool also, especially since increased physical fitness culture is as important to the Army as it is to the Marines.

DECREASED HEALTH COSTS

There are also many studies which show a direct correlation between physical fitness and reduced medical costs. One such study shows a potentially significant savings for military health care if our families develop a habit of physical activity and healthy habits:

Compared to sedentary persons, the physically active saved \$330 in direct medical costs in 1987 dollars, the year the survey was administered. In today's dollars that is equivalent to a savings of \$866 per active person. If sedentary individuals started taking a 30 minute walk three times per week, \$76.6 billion could be saved in healthcare spending. The largest difference in direct medical costs was among women 55 and older demonstrating that the potential health gain associated with physical activity is especially high for older women.²⁵

Although there are many physically active family members of military personnel, and of course most Soldiers are physically active as defined in the article, it is clear that any increase in physical fitness, especially if applied long term, would have a significant cost savings in health care. In the article, physically active is defined as 30 minutes of physical activity, three times per week. With the obesity level in the military and military families so high²⁶ any increase in physical activity among those two populations could have both a positive effect on decreasing obesity and on improving health. A culture of increased physical fitness and nutrition, for the Soldiers and their families, would have a short and long term effect, reducing medical costs for the Army and the Department of Defense for years to come.

ARMY TRANSFORMATION

The transformation of the Army focuses on smaller units of action that are more agile, flexible, and adaptable to any climate or environment.²⁷ Leadership will be more important at lower levels as is the requirement for stamina in a unit that must do more for itself while deployed since it will not have the support inherent in larger units. Under these conditions, physical fitness becomes much more important as does junior level leaders knowing and applying advanced health and physical fitness techniques to keep these units at a high level of true physical fitness, especially in a period of high operational tempo.

RECOMMENDATIONS FOR CHANGING THE ARMY PHYSICAL FITNESS AND NUTRITION CULTURE

Changing the culture in the U.S. Army to increase the importance and effort at all levels in physical fitness and healthy living lifestyles, both in the Active Component, and among the family members, is no easy task. Changing a culture in any organization is difficult. The Army should adopt the following recommended actions, as a minimum, to begin that culture change:

- Include physical fitness and nutritional preparations in all tactical level doctrine, utilizing proven techniques of stress reduction, sleep cycle, appropriate nutrition at the appropriate stage of the operation, and water hydration techniques.
- Change the officer and non-commissioned officer evaluation systems to include evaluation of how well a leader improved or maintained his/her unit's overall physical fitness average while in charge.
- Add physical fitness and nutritional education to every level of the individual school and training system. This should include mandatory physical fitness training at these schools and courses to maintain and reinforce that the culture is one of constant physical fitness.
- Improve family oriented physical fitness programs as part of all unit activities and family readiness programs. This should include positive and motivating incentives for a high degree of physical fitness in the families, such as preferred or priority treatment at routine appointments and activities on military installations and Morale Welfare and Recreation activities, and/or reduced cost for certain services that promote physical fitness on the military post.
- Add physical trainers and nutritionists to battalion and brigade level units so they are part of the training team and the military operational execution team, therefore integrating physical fitness and healthy techniques into all aspects of training and operations.
- Establish an additional skill identifier for personnel highly trained in physical fitness, health, and nutritional maintenance.
- Include unit's average physical fitness test scores on the monthly Unit Status Report as one of the key indicators of unit readiness.
- Garrison activities aggressively increase health and physical fitness events and challenges and entice big name companies to sponsor those events. Bring in those same big name companies to establish booths and sponsor research that may help the military community foster its increased emphasis on nutrition and fitness. Military communities should seek to sponsor the biggest and best physical fitness events in their areas in order to start raising the standard in the military community.
- Establish an aggressive Army Knowledge Online homepage on nutrition and fitness, with positive incentives to visit the site, containing current information on techniques, equipment, food, and nutritional items that really work and where to get them at the best prices.

- Add selected nutritional supplements to the mess halls, along with the legitimate information for their best use.
- Improve the coordination and efforts of the Army health community, preventive medicine community, nutrition community, Fort Benning Physical Fitness School, and the Army Physical Fitness Research Institute which are all separate and provide good but disjointed efforts.
- Change the Army Physical Fitness Test score table to establish one standard regardless of age.
- Mark individual meal item sub-packets in the Meals: Ready-to-Eat packages to indicate the best time during sustained physical activity to consume them (e.g., complex carbohydrates during movement and proteins during recovery).
- Establish one health and fitness record for each Soldier that keeps progressive track of fitness test results, cholesterol levels, blood pressure, stress, health education, height, weight, and body fat throughout their entire career and use it for counseling and evaluation.
- Include the application of appropriate fitness, health, and nutritional measures as part of the evaluation standards for individual and unit training tasks requiring physical performance.

CONCLUSION

The increased operational tempo of the Army, Army transformation, and emphasis on “every Soldier is a warrior” makes it the appropriate time to improve its physical fitness and nutritional culture. An aggressive campaign to improve the health and physical fitness culture in the United States Army would have a very positive effect on the readiness of the new units to fight, on contributing to the improvement of the well being of Army families, and on reducing the long term cost of health care for the retired community. It will also serve to foster a physical fitness culture as individuals apply their lessons for the remainder of their lives. This improved culture must start with a vision of Soldiers being professional athletes. This vision must be well communicated to the force and immediately implemented through the Army training and doctrine systems. Only then can the Army ensure personnel are constantly trained and retrained on its importance to the Army. This cultural change must incorporate legitimately helpful information that the Soldiers will use daily therefore improving the education and standards of the entire force. A starting point is incorporating the recommendations in this paper.

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ENDNOTES

¹ The introduction is a synopsis of the experience of the author while in battalion command from July 2000 to July 2002 and is just one example of the operational tempo experienced by units in the Army over the past three to four years.

² Carl A. Castro and Amy B. Adler, "Optempo: Effects on Soldier and Unit Readiness," *Parameters*, (Autumn 1999): pp. 86-95.

³ General Peter J. Schoomaker, "The Way Ahead, Our Army at War, Relevant and Ready," available from <<http://www.army.mil>>; Internet; accessed 11 March 2004.

⁴ Ibid.

⁵ *Webster's Encyclopedic Unabridged Dictionary of the English Language* (New York: Random House Publishing Co., 1996), 488.

⁶ Department of the Army, *Physical Fitness Training*, Army FM 21-20 (Washington, D.C.: U.S. Department of the Army, 30 September 1992), iii.

⁷ C.T. Leffler and A.F. Philippi, "Glucosamine, chondroitin, and manganese ascorbate for degenerative joint disease of the knee or low back: a randomized double-blind, placebo-controlled pilot study," *Military Medicine*, No 164(2), February 1999 journal on line; available from <<http://www.ncbi.nlm.nih.gov/>>; Internet; accessed 15 February 2004.

⁸ COL Timothy M. Sherwood the author personally witnessed the Army reluctance to make a decision while trying to parallel the approval process used by the Navy and Navy SOF communities. The Army finally adopted the program and is now conducting the program for non-special operations personnel and their dependents.

⁹ Schoomaker, 7.

¹⁰ Deborah Funk, "Battling the Bulge," *Army Times*, 23 February 2004: 10.

¹¹ COL William F. Barko and LTC Mark A. Vaitkus, eds., *Executive Health and Fitness* (U.S. Army War College, Carlisle Barracks, PA, August 2000), ii.

¹² Department of the Army, U.S. Army Physical Fitness School Mission Statement; available from <<http://www-benning.army.mil/usapfs/aboutus/index.htm>>; Internet; accessed 15 January 2004.

¹³ Department of the Army, Operation Aegis: Injury Control Program; (Fort Sam Houston-Academy of Health Sciences); available from <<http://www.cs.amedd.army.mil/aegis/>>; Internet; accessed 5 January, 2004.

¹⁴ BG William T. Bester, USACHPPM Mission Statement, available from <<http://chppm-www.apgea.army.mil/mission.asp>>; Internet; accessed 5 January, 2004.

¹⁵ Department of the Army, *Tactics*, Army FM 3-90 (Washington, D.C.: U.S. Department of the Army, 4 July 2001), 1-4, para. 1-12.

¹⁶ Department of the Army, *Physical Fitness Training*, Army FM 21-20 (Washington, D.C.: U.S. Department of the Army, 30 September 1992), iii.

¹⁷ Schoomaker, 7.

¹⁸ Department of the Army, Army Physical Fitness Research Institute web page, available from <<http://www.carlisle.army.mil/apfri/>>; Internet; accessed 15 January 2004.

¹⁹ Funk, 1.

²⁰ Department of the Army, *Physical Fitness Training*, Army FM 21-20 (Washington, D.C.: U.S. Department of the Army, 30 September 1992), 1-1.

²¹ Bruce H. Jones, Atlas of Injuries in the U.S. Armed Forces, supplement to *Military Medicine*, vol 164, no 8, August 99; available from <https://www.denix.osd.mil/denix/public/library/atlas/atlas.html>; Internet; accessed 5 January, 2004.

²² Philip N. Ainslie, et al., "Physiological, metabolic, and performance implications of a prolonged hill walk: influence of energy intake," available from <<http://jap.physiology.org/cgi/>>; Internet; accessed 11 March 2004.

²³ Leslee J. Scheuer and Dr. Debby Mitchell, "Does Physical Activity Influence Academic Performance," available from <<http://www.sports-media.org/sportapolisnewsletter19.htm>>; Internet; accessed 11 Mar 2004.

²⁴ Laura Martinson, "Basic Camp begins new Physical Readiness Training," *Soundoff!*, vol.54, no. 5 (31 January 2002): 37.

²⁵ Mary Concannon, "Moving to Reduce Medical Costs," *Business Monthly*, Dec 2000, available from <<http://nvo.com/upandmoving/movingtoreducemedicalcosts/>>; Internet; accessed 5 January, 2004.

²⁶ Funk, 1.

²⁷ Schoomaker, 10-11.

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