The Pyramids
Outdoor Wellness
Fitness Facility

Susan I. Doran

Terminal Project
Department of Landscape Architecture
May 18, 1987
Acknowledgments

* Advisory Committee
  Dee Ann Birkel
  Randy Gimblett
  Gary Oliver
  Charles Sappenfield
  George Young

* Equitec Property Corporation

* Constance Smoczyk
  Director for the Institute of Wellness
# Table of Content

Introduction ......................................................... 1

Background Information ..............................................
  Research Project Proposal ........................................ 2
  Existing Outdoor Wellness Facilities ............................ 11
  Wellness Director’s Viewpoint ..................................... 23
  Potential For Design ................................................ 24

Design Problem
  Area of Study .......................................................... 26
  Concept Development .................................................. 35
  Site Master Plan ......................................................... 37

Conclusion ................................................................. 48
INTRODUCTION

Health Promotion in the United States has evolved through two distinct phases. The first phase was characterized by the distribution of accurate health information in hopes that the information alone would be a catalyst for lifestyle change. The second phase attempted intervention by addressing the psychological and social factors influencing personal health practices. It is now believed that health promotion in the United States is entering a third new phase (Petosa 37). This new phase is becoming known as "wellness." Enthusiasm about this new phase appears to be increasing with more businesses, industries, and community groups joining the band wagon to help promote and support the movement.

Wellness is a movement toward total fitness. It focuses on the person's lifestyle and attempts to make the lifestyle more conducive for a healthy mind and body. Recent wellness literature, frequently describes designs for indoor facilities. Since wellness is a new movement, little research data is available that describes the opportunities an outdoor setting may provide for a wellness program. An opportunity does exists for the designing of a outdoor facility area that serves the physical, educational, and aesthetic needs of a wellness program.

The following will report on background information of the wellness/fitness issue, describe existing outdoor wellness/fitness facilities, and examine the application of this information to the design of an outdoor facility to serve the Pyramid office complex in Indianapolis, Indiana.
BACKGROUND REVIEW

Wellness is a new evolving movement in the health promotion field. The number of wellness programs are increasing and in the future there should be a greater demand for the planning and design of wellness programs throughout our society. The purpose of this review is to: define wellness, describe the benefits and the design of physical facilities for wellness programs, and identify characteristics of successful programs.

WHAT IS WELLNESS?

Wellness is a movement toward total fitness. Unlike traditional health programs which focus on primarily psychosocial factors influencing health practices, wellness focuses on the person's lifestyle and attempts to make the lifestyle more conducive to a healthy mind and body. In focusing on lifestyles, wellness not only addresses the psychological and social factors but, the "political, economic and social arenas that have impact on people's health actions" (Petosa 37).

To emphasize the importance of normal lifestyles and habits of Americans, Earl Hipp, president of Human Resource Development, Inc., suggests that in the United States it is normal to eat when one is not hungry; to reward one's children with concentrated sugar; to be overweight. In our society it is normal for people to never move faster than a walk unless absolutely necessary. It is normal to drive around the parking lot looking for the closest spot so one will not have to walk an extra minute. It is normal to sit for hours each night watching television. Finally it is normal to believe if one becomes ill that medical science will
provide the cure and one's employers will pay the medical costs (11-12). People are encased in a "mountain of habits that is all supported by peers and the surrounding culture" (11). In order for the wellness movement to be successful, it is inevitable that lifestyle and normal habits be addressed.

Rebecca Parkinson (71) and Richard Petosa (39) emphasize that part of the success of the wellness movement is due to the educational, organizational, environmental, and economic activities designed to support behavior conducive to the health of the participant. Since businesses and industries have the resources to offer such activities, they have so far been the main initiators and supporters of wellness programs.

BUSINESS AND INDUSTRY AND THEIR WELLNESS PROGRAMS

In 1976 alcoholism alone cost American industries 15 billion dollars a year, and premature death cost industries 19.4 billion dollars (Forouzesh 18). In 1980 United States health care expenditures exceeded 247 billion dollars (Hosakawa 12). Such figures are reasons for making health promotion an integral part of business and industry.

In a 1984 survey of Fortune 500 businesses and industries, close to 30% of the respondents had some type of health and wellness program, and an additional 5% were in the initiating stages. Of those who did have programs, 90% provided on-site facilities to help motivate and encourage participation (Forouzesh 19).

As for the benefits of participating in a wellness program, they appear at two levels. At the individual level, a person may experience improved well-being, cardiac capabilities, and appear-
ance. Some persons report less tension, anxiety, depression, fewer aches, pains, and stiffness. At the corporate level, businesses and industries benefit from an increase in productivity and work performance, as well as from a decrease in job absenteeism and health care costs (Forouzeh 18).

When looking at health care costs, it is important to recognize both short and long term benefits. Forouzesh (18) indicates that business and industry end up paying twice for health care. The first is through insurance premiums. The second is through economic burdens such as the cost of absenteeism, turnover, retaining problem employees, and premature death. Many industries receive reduced insurance premiums when initiating wellness programs and thus reinvested their savings into health programs and facilities (Hosokawa 12).

SUCCESS OF WELLNESS PROGRAMS

The success of wellness programs is increasing and should continue for many years to come, especially in communities where civic organizations, church groups, labor groups, etc. become supporters of the wellness movement. Such organizations have an impact on the accepted values and lifestyles within a community. Rentmeester (6) theorizes that in communities where social groups "support the transfer within companies of economic resources to wellness programs, the community will evolve in its value system and eventually force economic resource transfers within other segments of society". Together, civic groups and businesses can provide support and direction for the wellness movement.

Successful wellness programs normally begin with a physical
exam/wellness assessment, proceed through information sessions, and move to specific individualized programs for improving and maintaining employees' health (St. Vincent 2). Eighty percent of the Fortune 500 respondents having wellness programs required a physical exam. Since wellness is total fitness, the extent of the information sessions and programs varies with exercise, weight control, stress management, anti-smoking, high blood pressure safety, and alcohol and substance abuse programs coming out on top. Other programs include nutrition, cancer education, CPR, and first aid classes.

**FACILITY DESIGN**

The majority of businesses and industries with wellness programs have on-site facilities. Unfortunately since the wellness fitness movement is a relatively new, starting only in the mid-1970's, literature on the actual facility design is lacking. Of the limited literature available *Managing Health Promotion in the Workplace* and *Health Promotion in the Workplace* are the two most helpful sources on actual facility design. Both books emphasize the need for careful planning. Two factors which must be considered are who will be using the facility and in what type of activities and programs will they be interested. In evaluating these, one considers the participants' age, sex, education level, current health condition, and job characteristics.

One of the important issues on facility design is knowing what programs one will be offering and planning for the future. Specifically designed spaces make best use of existing space and help to reduce the amount of space requirement.
SUMMARY

Wellness is a rapidly growing concept focusing on a person's lifestyle which leads to a more healthy mind and body. In recent years business and industry have realized economic and social benefits for their employees as well as for themselves. To date, faculty design is in its infancy in relation to the understanding of the facility design needs in maximizing space and equipment design. This proposal will address the relationship between identifying the physical needs of a wellness facility to a design and development of outdoor wellness facility which incorporates aesthetic and educational conditions.

PROBLEM STATEMENT

The goal of this study is to increase the awareness of the Landscape Architect of his potential in the designing of outdoor facility areas that serve the physical, educational, and aesthetic needs of wellness programs.

1. Research Question

Can we assess the muscular and cardiovasular components of a fitness workout?

Objectives

A. To define the physical activities necessary for a total muscular and cardiovascular workout by summarizing available published data.

B. To develop criteria for a proper muscular and cardiovascular workout through the use of a matrix that correlates muscular and cardiovascular functions to the physical activities performed.
2. **Research Question**
Can we assess the physiological and psychological components inherent in a wellness program?

**Objectives**
A. To identify the different types of wellness fitness activities by researching three successful wellness programs.
B. To identify those activities that are found in a well designed wellness fitness facility by means of interviewing program directors.

3. **Research Question**
If we can assess muscular and cardiovascular components of a fitness workout and assess physiological and psychological components inherent in a wellness program, is it possible to design an outdoor wellness fitness area which meets the various fitness levels of the participants?

**Objectives**
A. To correlate the objectives of muscular and cardiovascular components with the physiological and psychological components through the use of a matrix.
B. To identify program directors from a list of program directors provided by Ball State faculty involved in the wellness program.
C. To select a suitable site which may be used for a wellness program based upon the criteria provided by program directors.
D. To design the wellness fitness area so there is year round interest and use.

4. Research Question
Is it possible to develop methods to educate participants through the dissemination of information related to wellness activities?

Objectives
A. To identify the educational components which should be communicated to participants either on a permanent or occasional basis.

B. To design an educational program that will communicate the educational information related to the wellness activities.

METHODOLOGY
In order to understand the muscular and cardiovascular components of a fitness workout a library search will be made in order to gather and summarize the available published data on the activities necessary for a total muscular and cardiovascular workout. Ball State Wellness faculty will also be interviewed for additional information. A matrix will then be developed correlating physical to muscular functions. A second matrix will correlate physical to cardiovascular functions.

In order to understand the physiological and psychological components inherent in a wellness program interviews will be conducted with program directors and with Ball State Wellness faculty. Through these interviews the various types of wellness fitness areas and the activities found in such areas will be identified. Also through these interviews, the location of three outdoor wellness fitness areas will be determined. These fitness areas will be observed and documented through sketching and
photographing to further understand the physiological and psychological components inherent in a wellness program.

In order to design an outdoor wellness fitness area which meets the various fitness levels of the participants, several steps will be taken. A matrix will be developed to correlate the objectives of muscular and cardiovascular components with the physiological and psychological components. A client will be selected from a list of potential clients to be provided by the Ball State Wellness faculty. The client will be in the Indianapolis area and should express an interest in the development of an outdoor wellness fitness area. A list of site criteria will be developed based upon the client's needs and program.

In designing the outdoor wellness fitness area, the issue of year round interest and use will be addressed. Program potentials for various seasons will be listed, and a feasibility study of incorporating such activities into the area design will be made. A variety of plant material which have seasonal interest (bark, foliage, flowers, berries, texture, etc.) will be utilized in the wellness fitness area to help provide year round interest.

In order to meet the educational needs of a wellness program for a selected participant's population, Ball State Wellness faculty, health organizations and fitness equipment distributors will be contacted about available wellness educational materials. A program for communicating educational information will be established using permanent displays for information directly related to the wellness activities, as well as, displays for
pamphlets and more temporary information. Arrangements will be made for pamphlets containing information from health experts to be available to the users.

EXPECTED OUTCOME OF PROJECT

To develop a Master Plan for an outdoor wellness program. The Master Plan will address the findings from the questions asked as related to the problem statement. The final terminal project will also include a written report that describes the process used in developing the Master Plan.

WORKS CITED


Existing Outdoor Wellness Facilities

In continuing studies on the subject of outdoor wellness/fitness centers, I looked back to my initial thoughts. Currently when one mentions an outdoor wellness/fitness facility, the general idea that comes to mind is a large park with variety of organized sport facilities (ie. softball field, football field, running track, tennis courts). The question comes to mind, what can one do on a site which had greater limitations on space and site suitability? One of the most recent type of outdoor fitness facility I found being added to the list of activities is a Swiss concept for fitness called parcours. The following sections gives a brief overview of the type of layouts of fitness areas and examines three operational outdoor facilities.

Parcours is an outdoor obstacle course for walkers and jogger which is designed to exercise almost every set of muscles in the body. Parcours was first introduced by the Vita Life Insurance Company of Zurich in the 1960's in effort to raise the Switzerland national fitness level (American 1). The concept since then has spread throughout Europe and is currently being promoted in the United States by a growing number of companies.

Today there are numerous companies producing fitness courses -- Parcours, Fit-Trail, Big Toys, Vita Course to name a few. When observing the company literature, fitness areas seem to bustle with people and activities. When observing existing outdoor facilities first hand, in the majority of cases the opposite appears to be true.
Fitness areas appear to be laid out in two manners. The first is a circuit layout with a series of exercise stations, 9 to 20, spread over a 1/2 to 2 mile course. The second layout system is a clustering of the stations. This system is most often used when space is limited. The number of clusters vary between one and four. In a four cluster system, the exercise stations may be broken down as such: Series 1 Warm-up and Cool-down, Series 2, 3, 4 Toning and Strengthening (Parcourse: Joint Use Circuits). Each series would include exercise for the three key areas of the body: lower body, torso, upper body.
In both layout systems, sign illustrate how each station is to work. The sign's illustration shows the participant how to perform the exercise and how to use the apparatus correctly. Many of the company's sign list the various fitness levels (i.e. starting par, sporting par, championship par (Parcourse) along with the corresponding number of repetitions. An additional education component sometimes listed or illustrated is the benefits of the exercise (i.e. strengthens lower back muscles).

<table>
<thead>
<tr>
<th>Your Fitness Level</th>
<th>Number of Repetitions</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starting Par</td>
<td>5 (highest bar)</td>
<td></td>
</tr>
<tr>
<td>Sporting Par</td>
<td>10 (middle bar)</td>
<td></td>
</tr>
<tr>
<td>Championship Par</td>
<td>20 (lowest bar)</td>
<td>This will strengthen the back, shoulder and hip muscles.</td>
</tr>
</tbody>
</table>

Wellness fitness areas are appearing throughout our communities: corporations, hospitals, parks, residential properties, military bases, hotels and resorts, schools and universities. Fitness brochures advertise that their systems "can be put virtually anywhere" (Fit-Trail 2). The brochures suggest
that the trail layout can be designed as an attention getter or it can be tucked away to blend with the environment" (Fit-Trail). Of the numerous outdoor fitness areas this writer has visited, the sites where the design tucks away the equipment are the most successful. The following will describe three of the facilities visited.

Mayflower Moving Vans National Headquarters, Indianapolis, IN.

The Mayflower facility is located conveniently on the grounds of the headquarters and is accessible to all employees. The outdoor facility consists of a measured, one mile track with six exercise stations located along the gravel path. The trail being a small picnic area next to a pond. One then returns to the starting point by doubling back on the trail.

The trail begins with an introductory sign which reviews steps for checking ones "heart rate" as well as "steps for feeling good." Under these heading it is explained how often, how hard, how long, and type of exercise one should perform to obtain a good fitness level.
The trail as a whole has its good and bad features. The trail works well in that it has a drawing feature—the picnic area next to the pond. During good weather many Mayflower employees utilize this picnic area—exercising in the process of getting there. This type of drawing feature is good since it gives people the opportunity to get some exercise (walking) without really being aware of it. Other avid exercisers make it a point to walk/jog, and utilize the exercise stations—before, during, or after working hours. The features I find lacking in quality are the types of trail surface and signage. Gravel is a difficult material to walk or jog distances on. Also since it is in a business situation, gravel limits the people who use it on the spur of the moment. One does not want to walk any distance on gravel wearing dress shoes. The second negative feature is the lack of signage. If one is not familiar with the type of equipment utilized along fitness trails, the identity and use of many of the stations is not apparent.

McLain State Park

McLain State Park provides a scenic fitness trail situated on a ridge along Lake Superior’s shoreline. The Trail is bark covered with stations situated along the path. Stations consist of wood equipment and simple, stick figure signage explaining the exercise.

Station 1: Push-ups
benefits: Strengthens back, shoulder, and tricep muscles.

Station 2: Balance Beam
benefits: Improves balance and coordination.

Station 3: Log Jump
benefits: Strengthens calf and thighs.
Water Station

Station 4: Chinning Bar
benefits: Strengthens shoulders, upper back, biceps, forearm, and lats (muscles to side of back).

Station 5: Vaulting Bar
benefits: Strengthens the shoulders, upper body, calves and triceps (muscles behind biceps).

Station 6: Sit-up Bench
benefits: Stretches the stomach and lower back (hip extension muscles).

McLain State Park’s fitness trail is a refreshing sight. Situated in such a private secluded place, the fitness trail offers the opportunity for people who would never dream of using such a trail to test the equipment without being watch by others. The trail offers the opportunity to forget our insecurities of trying things for the first time. The trail does need more complete signage for their equipment. Currently signage consists of a stick figure person illustrating the use of the individual equipment piece. Signage should include a better description of the exercise to prevent unnecessary injuries. Benefits and number of repetitions should also be included.
St. Vincent Hospital, Indianapolis, IN

One of the most heavily used outdoor fitness system in the Indianapolis area is the St. Vincent Hospital's wellness/fitness area. St. Vincent is actively involved in setting up wellness programs for individuals as well as for businesses and other groups. The circuit is located in close proximity to the hospital and the St. Vincent Stress Center, as well as to many adjoining neighborhoods and businesses. The circuit is laid out in a heavily wooded block and is designed to insure a complete, safe fitness program for people of all ages, abilities and fitness levels. The course is laid out along a trail meandering through the trees. Because the equipment is positioned as it alternates between depressed and elevated areas, one is not aware of the other participants on the course. This helps to create a more relaxed atmosphere for one to exercise while enjoying the natural beauty of the wooded site.
Station 1  Achilles Stretch
Grasp post.
Move right foot back, feet straight ahead.
Move left knee and hip toward post.
Slowly stretch back heel down, and slightly bend knee.
Hold slight stretch for requested time.
Recover. Reverse legs. Repeat to par.

Starting Par  2 each leg
             hold 10 seconds
Sporting Par  2 each leg
             hold 15 seconds
Champion Par 2 each leg
             hold 20 seconds

Benefits:  Stretches the achilles tendon (just behind the ankle) and the calf muscles.

Station 2  Sit and Reach
Sit on bench,
legs outstretched, feet together.
Keep back and legs straight.
Slowly reach forward along legs.
Hold slightly stretch for required time.
Slowly recover. Repeat to par.

Starting Par  3 times for 10 seconds
Sporting Par  3 times for 15 seconds
Champion Par 1 time for 60 seconds

Benefits:  Strengthens the hamstrings muscles (behind the thigh) and the muscles in the lower back.

Station 3
Stand, arms and legs out stretched.
Keep legs straight.
Bend forward, touch left toe with right hand. Recover.

Bend forward, touch right toe with left hand. Recover.
Repeat alternating sides.

Starting Par  5 each side
Sporting Par  10 each side
Champion Par 15 each side

Benefits:  A good stretch for the upper and lower back muscles. Also stretches the hamstring muscles.
Station 4  Knee Lift  
Stand erect.
Raise knee and grip with hands.
Pull to chest.
Recover. Repeat, alternating legs.

Benefits:  Loosens and stretches the hamstrings muscles and provides a light stretch around the knees.

Station 5  Jumpin Jacks  
Stand erect, arms at sides, feet together.
Jump, spread legs while raising arm and clasp hands above head.
Recover by jumping to start position.
Repeat exercise to your par.

Benefits:  Serves as a cardiovascular warm-up. Also warms-up the muscles in the calves, back, and shoulders.

Station 6  Log Hop  
Hop over logs without stopping.
Keep legs together during log-hop.

Benefits:  A strengthening exercise for the calf and thigh muscles.

Station 7  Step-up  
Choose stump of challenging height.
Place left foot on stump.
Step-up; step down with right leg.
Then step-up with right leg; step down with left.
Continue alternating legs.

Benefits:  A concentrated strengthening exercise for the thigh muscles.

Station 8  Circle Body  
Grip rings of easy reach; keep feet together on ground beneath rings. Relax and hang from rings.
Move body in clockwise circle to your par. Recover.
Repeat in counterclockwise circle to your par.

Benefits:  Strengthening of muscles in the shoulders, back and forearm. Also stretches the back muscles.
Station 9  Body Curl
Lie on incline board.
Grasp bar with both hands
behind head.
Curl body into tuck position.
Recover and repeat to par.

Benefits: This exercise strengthens the stomach, lower back, and bicep muscles. It also stretches the lower back.

Station 10  Chin Up
Select bar higher than your reach.
Jump and grip bar palm outward.
Pull yourself up until chin is
above bar. Recover by lowering
body completely to hang position.
Repeat to par.

Benefits: A strengthening exercise for the shoulders, upper back, biceps, forearm, and lats (muscles to sides of back).

Station 11  Hop Kick
Stand erect.
Spring off left leg;
at same time, kick right leg
out and extend right hand
to touch right toe. Recover.
Repeat; alternating sides.

Benefits: This will strengthen the muscles in the calf, thigh and lower back. Also strengthen the hamstrings.

Station 12  Vault-Bar
Grip bar at challenging height
with both hands.
Vault over bar, legs together.
Return to starting position.
Repeat, alternating sides.

Benefits the shoulders, upper body, calves and triceps (muscles behind biceps).

Station 13  Sit-up
Sit on bench, feet under foot
lean clasp hands behind head.
Lean forward until elbows
touch knees.
Lean backwards until back lightly
touches rear support beam.
Recover. Repeat to par.
Benefits: A good stretching exercise for the stomach and lower back (hip extension muscles).

Station 14  Push-up
Grip bar, arms outstretched and back straight.
Lower yourself, keeping back straight and push up to starting position.

Benefits: This will strengthen the back, shoulder and tricep muscles.

Station 15  Bench Leg-raise
Sit on bench in front of post of challenging height. Grasp bench. Raise legs to line on post.
Raise legs over post and bring feet together. Recover by returning legs to line on post.
Repeat to par.

Benefits: A strengthening exercise for the muscles in the muscles in the stomach, thighs and lower back.

Station 16  Hand Walk
Step up. Grip parallel bar keeping arms straight.
Hang between bars with arms supporting body.
Hand walk to opposite end.
Recover. Repeat to your par.

Benefits: An excellent exercise to strengthen the upper back, shoulders, and tricep muscles.

Station 17  Leg Stretch
Grasp bar with arm outstretched.
Place right knee under chest stretch left leg back.
Slowly move pelvis forward and down.
Reverse leg.

Benefits: Will stretch and loosen the muscles in your groin and back.
Station 18  Balance Beam
Stand erect on end of
balance beam.
Walk to opposite end
without touching ground.

Benefits: Serves as a cool-down activity. It will improve balance and coordination.
Wellness Director's Viewpoint

Connie Smoczyk, Ball State University's Wellness Director feels that the overall concept for new outdoor wellness areas must include family involvement. Two overwhelming factors which support such a concern is the United States' health care expenditures and recent statistics on the condition of America's young people.

In 1976 alcoholism alone cost American industries 15 billion dollars a year, and premature health cost industries 19.4 billion dollars (Forouzesh 18). In the 1980 United States health expenditures exceeded 257 billion dollars (Holakawa 12). Ms. Smoczyk stated at Kimberly Clark in Atlanta, Georgia in 1985 health expenditures totaled 38.5 million dollars. Of that money 80 percent was used by dependents of Kimberly Clark employees. Such figures are reasons for making health promotion an integral part of business and industry as well as an integral part of the family life.

Family involvement in developing America's young people is essential. United Press International published an article during the summer of 1986 reporting the findings of the President Council on Physical Fitness and Sports. The report concluded that "the physical fitness of American public school children has shown virtually no improvement in the last 10 years and in some cases has greatly deteriorated." Some of the findings are as follows:

* 40 percent of boys 6-12 cannot do more than one pushup. One out of four cannot do any.
* 70 percent of all girls tested cannot do more than one pull-up, and 55 percent cannot do any.
* Approximately 50 percent of girls ages 6-17 and 30 percent of boys ages 6-12 cannot run a mile in less than 10 minutes.
* In a simple flexibility test, 40 percent of boys ages 6-15 cannot reach beyond their toes.
* In the 50 yard dash, girls age 10, 11, 14 and 16 are significantly slower than their counterparts were in 1975.

(President 1)

As for Smoczyk’s opinion on existing outdoor wellness areas, she is not impressed. During her employment with Kimberly Clark, an outdoor fitness trail was installed on the corporation’s grounds. Smoczyk stated that it fails to draw people to it. She feels only a small percentage of the employees actually use the area. A fitness area which incorporates better site planning, year-round use, family involvement, and some sort of drawing feature can be more successful.

Potential for Design

In the MidWest climate can be one problem in motivating people to use an outdoor facility. Nevertheless circuits are recommended as an alternative to indoor aerobic exercise. Brandt McFarlin, supervisor of the Health Maintenance Center in TRW, Inc., Cleveland, Ohio, partially blames the low rate of use on the fact that outdoor wellness areas are fairly new to the Mid-West. "Once people have fair chance to be outside and in contact
with the course, they will become aware that it can offer more variety to their programs (Rondeau 2)." Here the Landscape Architect has the potential to design the area so there is a drawing factor. Season interest is a must, as well as the potential for year-round use.
Area of Study

In selecting a site to apply my studies on outdoor wellness/fitness facilities I looked for a site which was in the business situation yet had some unique features. The site which I have selected is the Pyramids office complex located on the northwest side of Indianapolis.

The Pyramids were designed by Kevin Roche and John Dinkeloo from 1967-1971 for the College Life Insurance Corporation. The Pyramids were intended to be the core of the 640 acre planned development known as College Park. Included in the total development plan were restaurants, offices, shopping centers, apartments, and single family housing. The College Life Pyramids development was to occupy 159 acre within the College Park plan. The College Life Insurance development masterplans called for the realization of nine separate buildings, connected by tunnels and bridges, on a trapezoidal platform. The complex was to be further distinguished by the presence of a reflecting pool. The first phase consisting of the three, southern most pyramids was open for occupation in the early 1970's. College life Insurance employees occupied only one of the three buildings, meanwhile the two additional office buildings were leased for added income.

It is interesting to note that when Kevin Roche began the design of the College Life Insurance complex, the client initially suggested one 25 story office tower. Kevin Roche convinced the College Life Insurance Group to divide the 421,000 sq. ft. floor area into three, eleven story buildings (Forum 26). Roche emphasized that programmatic requirements determined the shape of the office towers. With major highways to the north and
to the west. Roche choose to orient the back of the buildings to the roads with the major face of the building oriented to the country side. Elevators and mechanical shafts were located in the back of the building in the L-shaped concrete walls, allowing for a more open office space plan. Heavily trafficked area (i.e. computer facilities, food service, etc.) were then located on the lower two stories. Smaller businesses and offices were located on the upper floors.

City: Indianapolis, Indiana  
Client: College Life Insurance Company of America

This building complex, situated on an area adjoining a superhighway and distinguished by the presence of a reflecting pool, is an extension of the general headquarters of the insurance company that commissioned it. The plan envisages the realization of nine separate buildings, connected by tunnels and bridges, on a trapezoidal platform. Three of these buildings have been constructed. In each, the elevator and mechanical shafts are housed in the full L-shaped walls, leaving the floors completely free. The columnar grid of the interior measures 30 x 30 feet. The cafeteria and data processing centers are located on the ground floor.

Since the early 1970's the pyramids have experienced very little change. Today the Equitec Property Corporation is the new owner/manager of the Pyramids and is in the process of completing much needed maintenance and improvement work. The site now occupies a much smaller parcel of land than original plans indicated. The six additional pyramids were never built and due to financial hardships and increasing land values over the past years sections of the original acreage has been sold off leaving the pyramids with approximately 47 acres. The Equitec Property Corporation leases office space to various businesses bringing the number employed within the pyramids to approximately 1150 people. The new owner of the Pyramid office complex have expressed interest in new ideas for amenities to offer their clients.

**PYRAMIDS**
Indianapolis, located near the geographical center of the state, is the capital of Indiana and the county seat of Marion County. In relation to other midwestern cities, Indianapolis is about 185 miles southeast of Chicago, Illinois; 110 miles northwest of Cincinnati, Ohio; and 115 miles north of Louisville, Kentucky.
Project Uniqueness

In the process of inventory and analysis, the areas which make the Pyramid’s outdoor wellness/fitness facility project unique become apparent.

- The project deals with an existing site.
- The outdoor wellness/fitness facility has the potential to be utilized by a wide range of people (i.e. pyramid employees, neighborhood residents, retirement community members, fellow business employees).
- The Pyramids are a business providing a outdoor facility to the public (social consciousness).
- The design deals with a variety of problems (i.e. degraded concrete platform base, erosion along the lakeshore, wave action against the lakeshore, sediment problems in the lake, consideration of adjacent land uses).
Concept Development

The concept upon which I developed is one of going from the hard architectural forms of the pyramids to the soft, more natural environment of the lake and its' shoreline. In carrying out this concept one must deal with several issues.

- Reshaping the concrete platform
- Reshaping the straight lakeshore
- Creating a sediment pond
- Laying out a fitness trail
- Allowing Handicap Access
- Planning bridge design
- Creating a lakeshore path
Site Master Plan

Activity zones included within the master plan include the following:

- platform area
- seating areas
- lakeshore path
- fitness trail
- picnic area
- putting green

Also included in the proposal is the remodeling of a first floor office space within the pyramids in order to create locker and shower facilities, classrooms, weight room and indoor activity room for aerobics, yoga, etc.
Platform Development

In evolving the shape of the new concrete platform upon which the pyramids sit, I work with the original intentions of Kevin Roche design. The original master plan called for a complex consisting of nine pyramids with a series of walkways and outdoor spaces between the buildings. I began examining the spaces and shapes such a configuration would create.
Bridges

The bridge design shall be consistent in character with the existing dam structure - concrete rectangular base with black rod iron railings. No fishing portals should not be included in the new bridge structures. Such elements would in conflict with the simplistic shapes of the pyramids. The bridge would be designed with a width consistent with the lakeside path (six feet) or the width could be increased to ten feet to allow for a seating area on the structure.
Handicap Access

Handicap Access is provide by means of a ramp on the eastside of the platform. The ramp is in close proximity to the most heavily used area - picnic area, fitness trail, pedestrian bridge and seating areas. Handicap access would also be provided from the adjacent land use area. Access from such points as RCI, Xerox, College Park Two, retirement community, and neighborhood park, can be installed easily due to the gentle slope in such areas.
Fitness Trail

Fitness trails are proving to be an excellent form of exercise for people of all ages. Not only do fitness trail circuits exercise the upper and lower body parts but the heart as well. Numerous tested circuits are currently on the market with the amount of stations varying between nine and twenty-four. The fitness trail I have recommended is approximately a 1/5 mile loop. Due to the shortness in length, a nine station package is recommended. Many packages, however, incorporate more than one type of exercise at each station. Additional distance for walking/jogging/bicycling/cross-country skiing may be obtained by continuing along the one mile lakeside trail.
Sediment Pond Development

The new plan calls for the development of a sediment pond on the north end of the lake. This is due to the fact that a majority of the sediment comes by means of Crooked Creek which feeds into the lake. Water would then be fed into the lake by means of a V-shaped structure under the pedestrian bridge.
Lakeshore Development

In the new plan the lake would experience changes in its shoreline shape. The plan calls for the expansion of the grassy slope — bringing the lakeshore out in a gentle curving fashion. Doing so would create a more natural shape to the shoreline. Bringing out the shoreline would also allow for a more gentle slope from the platform to the lakeshore. This would help to ease the erosion problems and enhance the natural beauty of the lake area. Additional recommendations are to dredge the lake due to the large amount of sediment present, and new slopes of the lake walls should be 3:1 or greater to prevent plant growth along the water edge.
Lakeshore Path

The Equitec corporation owns a permanent easement surrounding the entire lake. Within this ten to fifteen foot easement is the opportunity to develop a continuous path around the lake. Not only would it serve as a one mile fitness loop, but it would help link the neighboring land uses and its people.
BOARD WALK
EAST LAKESHORE PATH

BOARD WALK
Conclusion

Wellness is a rapidly growing concept focusing on a person’s lifestyle which leads to a more healthy mind and body. Management within business and industry are realizing the economic and social benefits related to wellness programs. Due to this fact the United States should experience an increase in the amount of businesses and other organizations taking the initiative to start wellness programs for their employees and families.

The Pyramids office complex serves as a distinct landmark with which most people in the Indianapolis area identify. People agree however despite the strong image one perceives from the distance, the Pyramids lose their wonderful mystical qualities close-up. This may be due partially to several factors: lack of human scale, harshness of the surroundings (vast parking, vast concrete platform, vast expanse upwards, steep lakeshore embankment) and/or the degraded conditions of the site.

The Equitec Property Corporation is in the process of upgrading the conditions of the Pyramids. Carrying through with an outdoor wellness facility is a means of further strengthening the strong corporated image the Equitec Property Corporation is seeking for the Pyramids.

The Pyramids are located in a segment of Indianapolis which is experiences rapid growth and development. The site of the Pyramids is one of the few beautiful open green spaces remaining
in the area. The Equitec Property Corporation has a wonderful opportunity to strengthen their image as well as the Pyramids' image by making the commitment to preserve the natural qualities of the site.
WORKS CITED


Physiological & Psychological Components

In order to access the physiological and psychological components inherent in wellness programs, the examination of numerous programs and publications must take place. The bottom line seems to be that wellness/fitness programs should make allowances to accommodate the three fundamental: body, mind and spirit. For the body a wellness program might offer exercise classes, exercise facilities, fitness testing, along with individualized programs. For the mind a program may offer education classes such as nutrition-based weight management. For the spirit participation in a wellness program can offer stress reduction, self confidence, friendship, and a chance for family involvement.

Physical Fitness

Physical fitness is described as a condition that helps us to look, feel and do our best. The President Council of Physical Fitness further describes fitness as "the ability to perform daily tasks vigorously and alert with energy left over for enjoying leisure time activities and meeting emergency demands. It is the ability to endure, to bear up, to withstand stress, to carry on in circumstances where an unfit person could not continue and is a major basis for good health and well-being (President 2)."

To understand physical fitness it is essential to examine the basic components. The basic components include: cardiovascular endurance, muscular strength, muscular endurance, and
flexibility. Body composition is also sometimes included in the basic components of physical fitness. The following are the basic physical fitness components as defined by the President Council on Physical Fitness and Sports:

Cardiorespiratory endurance - the ability to deliver oxygen and nutrients to tissues, and to remove waste, over sustained periods of time. Long runs and swims are among the methods employed in measuring this component.

Muscular Strength - the ability of the muscles to exert force for a brief period of time. Upper-body strength, for example can be measured by various weight-lifting exercises.

Muscular Endurance - the ability of a muscle, or a group of muscles, to sustain repeated contractions to continue applying force against a fixed object. Pushups are often used to test endurance of arm and shoulder muscles.

Flexibility - the ability to move joints and use muscles through their full range of motion. The sit-and-reach test is a good measure of flexibility of the lower back and backs of the upper leg.

Body Composition - refers to the make-up of the body in terms of lean mass (muscles, bones, vital tissue, and organs) and the fat mass. An optimal ratio of fat to lean mass is an indication of fitness and the right types of exercises will help you decrease body fat and increase or maintain muscle mass.
In a American Medical Association 1984 report the following physiological and emotional benefits of exercise were reported.

* improved cardiorespiratory conditioning
* improved metabolic and endocrine functions, with an increased ability to handle stress
* increase aerobic capability, with an increase in the ability of the blood to absorb and transport oxygen to the tissues which have an increased ability to absorb oxygen
* increase capability to do physical work
* prevention of bone loss (osteoporosis) and an increase in bone mass
* lower percentage of body fat and an increase in lean body mass
* overall better general health
* better capacity to cope with daily environmental hazards that come with life activities as walking and driving an automobile
* faster reaction times and movements
* improved unity of the mind and body, which comes with an improved self-image and more positive approach toward life.

Additional Health Benefits

Other reports have listed additional health benefits of exercise. Among them are these:

* reduction of triglycerides and cholesterol in the blood
* increased peripheral circulation

A3
* lowered resting heart rate
* increased heart efficiency
* lower blood pressure
* increased lung capacity
* improved physical coordination
* enhancement of relaxation
* reduction of anxiety and tension conditions such as headache, backache, and insomnia

(Berland 10-11)

Sports & Other Activities

Every fitness program, regardless of sport or activity should include three facets: frequency (the number of times the activity is done during a week); duration (the length of the activity); and increasing the cardiorespiratory rate to strengthen the heart. Sports and exercises vary in their benefits. The National Institute of Health provides the following information on exercise.

The following activities do condition heart & lungs:

Cross-Country Skiing, Hiking (uphill), Ice Hockey, Jogging, Jumping Rope, Rowing, Running in Place, Station Cycling

The following exercises can condition heart & lungs:

Bicycling, Downhill Skiing, Basketball, Calisthenics, Field Hockey, Handball, Racquetball, Soccer, Squash, Swimming, Tennis (singles), Walking

* These activities are moderately vigorous but can be excellent conditioners, if done briskly at least 30
minutes, three times a week. When done briskly, they give the same benefits as those activities listed previously under "Can Condition."

The following activities do not condition the heart & lungs:

Baseball, Bowling, Football, Golf (on foot or by cart), Softball, Volleyball

* These activities by nature are not vigorous or sustained. They are still enjoyable, help improve coordination and muscle tone, and help relieve tension. However, they neither condition the heart and lungs nor burn off many calories.

(Public 21)
The following chart which appeared in the February 1987 issue of Indianapolis Magazine lists additional sports and activities along with their benefits and rating.

## Fitness Potential for Popular Sports

<table>
<thead>
<tr>
<th>Sport</th>
<th>Cardiorespiratory Endurance</th>
<th>Muscular Strength and Endurance</th>
<th>Upper Body</th>
<th>Lower Body</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basketball</td>
<td>Good</td>
<td>Fair</td>
<td>Good</td>
<td></td>
</tr>
<tr>
<td>Canoeing</td>
<td>Good—Fair</td>
<td>Good</td>
<td>Poor</td>
<td></td>
</tr>
<tr>
<td>Handball</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td></td>
</tr>
<tr>
<td>Racquetball</td>
<td>Good—Fair</td>
<td>Poor</td>
<td>Good—Fair</td>
<td></td>
</tr>
<tr>
<td>Skating (Ice)</td>
<td>Good—Fair</td>
<td>Good</td>
<td>Good</td>
<td></td>
</tr>
<tr>
<td>Skiing (Downhill)</td>
<td>Fair</td>
<td>Good</td>
<td>Good</td>
<td></td>
</tr>
<tr>
<td>Skiing (Cross-Country)</td>
<td>Excellent—Good</td>
<td>Good</td>
<td>Excellent</td>
<td></td>
</tr>
<tr>
<td>Tennis</td>
<td>Good—Fair</td>
<td>Good—Fair</td>
<td>Good</td>
<td></td>
</tr>
<tr>
<td>Volleyball</td>
<td>Good—Fair</td>
<td>Fair</td>
<td>Good</td>
<td></td>
</tr>
</tbody>
</table>

### MET* Range

<table>
<thead>
<tr>
<th>Sport</th>
<th>Flexibility</th>
<th>MET* Range</th>
<th>Calories</th>
<th>CaloriesHour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basketball</td>
<td>Fair</td>
<td>8-10</td>
<td>10-12.5</td>
<td>800-750</td>
</tr>
<tr>
<td>Canoeing</td>
<td>Poor</td>
<td>3-4</td>
<td>4-10</td>
<td>240-800</td>
</tr>
<tr>
<td>Handball</td>
<td>Fair</td>
<td>6-12</td>
<td>10-12.5</td>
<td>800-750</td>
</tr>
<tr>
<td>Racquetball</td>
<td>Fair</td>
<td>6-10</td>
<td>7.5-12.5</td>
<td>450-750</td>
</tr>
<tr>
<td>Skating (Ice)</td>
<td>Fair</td>
<td>4-8</td>
<td>5-10</td>
<td>300-600</td>
</tr>
<tr>
<td>Skiing (Downhill)</td>
<td>Good</td>
<td>5-9</td>
<td>8-10</td>
<td>360-800</td>
</tr>
<tr>
<td>Skiing (Cross-Country)</td>
<td>Good</td>
<td>6-12</td>
<td>7.5-15</td>
<td>450-900</td>
</tr>
<tr>
<td>Tennis</td>
<td>Fair</td>
<td>4-8</td>
<td>5-10</td>
<td>300-600</td>
</tr>
<tr>
<td>Volleyball</td>
<td>Fair</td>
<td>4-8</td>
<td>5-10</td>
<td>300-600</td>
</tr>
</tbody>
</table>

*MET refers to the rate of energy expended; one MET is equivalent to the energy needed to rest (i.e., 1.25 calories, about 1 liter of oxygen). An activity rated at 7 METS means it requires seven times more energy than at rest. Seven METS would be at the high end of moderate exercise; it is equivalent to 6.5 calories per minute, or a little more than 1.75 liters of oxygen uptake.

## Fourteen Sports and Exercises Ranked by Seven Medical Experts*

### PHYSICAL FITNESS

<table>
<thead>
<tr>
<th>Activity</th>
<th>Jogging</th>
<th>Bicycling</th>
<th>Swimming</th>
<th>Snowmobiling (Ice &amp; Snow)</th>
<th>Handball (Indoor)</th>
<th>Cross-Country Skiing</th>
<th>Downhill Skiing</th>
<th>Tennis</th>
<th>Basketball</th>
<th>Calisthenics</th>
<th>Weightlifting</th>
<th>Golf</th>
<th>Softball</th>
<th>Bowling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endurance</td>
<td>21</td>
<td>19</td>
<td>21</td>
<td>18</td>
<td>18</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>13</td>
<td>12</td>
<td>11</td>
<td>9</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Muscular Endurance</td>
<td>20</td>
<td>18</td>
<td>20</td>
<td>17</td>
<td>17</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>13</td>
<td>12</td>
<td>11</td>
<td>9</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Strength</td>
<td>17</td>
<td>16</td>
<td>18</td>
<td>17</td>
<td>17</td>
<td>16</td>
<td>16</td>
<td>16</td>
<td>13</td>
<td>12</td>
<td>11</td>
<td>9</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Flexibility</td>
<td>9</td>
<td>8</td>
<td>9</td>
<td>9</td>
<td>8</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>13</td>
<td>12</td>
<td>11</td>
<td>9</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Balance</td>
<td>17</td>
<td>18</td>
<td>18</td>
<td>20</td>
<td>20</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>15</td>
<td>15</td>
<td>14</td>
<td>13</td>
<td>13</td>
<td>12</td>
</tr>
</tbody>
</table>

### GENERAL

<table>
<thead>
<tr>
<th>WELL-BEING</th>
<th>Weight Control</th>
<th>Muscle Definition</th>
<th>Digestion</th>
<th>Sleep</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>14</td>
<td>14</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>15</td>
<td>13</td>
<td>14</td>
<td>11</td>
<td>15</td>
</tr>
<tr>
<td>13</td>
<td>12</td>
<td>13</td>
<td>12</td>
<td>13</td>
</tr>
<tr>
<td>12</td>
<td>12</td>
<td>13</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>11</td>
<td>12</td>
<td>13</td>
<td>11</td>
<td>12</td>
</tr>
</tbody>
</table>

### TOTAL

<table>
<thead>
<tr>
<th>Jogging</th>
<th>Bicycling</th>
<th>Swimming</th>
<th>Snowmobiling (Ice &amp; Snow)</th>
<th>Handball (Indoor)</th>
<th>Cross-Country Skiing</th>
<th>Downhill Skiing</th>
<th>Tennis</th>
<th>Basketball</th>
<th>Calisthenics</th>
<th>Weightlifting</th>
<th>Golf</th>
<th>Softball</th>
<th>Bowling</th>
</tr>
</thead>
<tbody>
<tr>
<td>146</td>
<td>142</td>
<td>140</td>
<td>140</td>
<td>129</td>
<td>134</td>
<td>134</td>
<td>128</td>
<td>128</td>
<td>126</td>
<td>102</td>
<td>96</td>
<td>64</td>
<td>51</td>
</tr>
</tbody>
</table>

*Each expert rated components of activities on a 1-3 scale — 1 indicating no benefit, 3 indicating maximum benefit. A cumulative rating of 21 for a component indicates maximum benefit from that activity.

From a survey conducted by the President's Council on Physical Fitness and Sports.
Health Promotion Programs: Keys to Success

There are numerous models for establishing a wellness program within the business situation. Unfortunately the situation and circumstances varies between businesses so there is no set standards. Corporate health management personnel have recognized some key factors based upon oral reports from programs which have worked and some which have not.

1. Long term commitment
2. Top management support
3. Employee involvement
4. Professional leadership
5. Clearly defined objectives
6. Emphasis on careful planning
7. Attention to confidentiality
8. Strong and continuing promotional effort
9. Appropriate assignments of program responsibility
10. Family involvement

(Fielding 295-297)

The overriding factor which is related directly to some of those previously listed, is the "human factor" (Cooper 90). The human factor is what really influences the participant to comply to a program. Employees need to see the administrative support, involvement, and commitment. Administration as well as employees must realize results take time. Group goals must be set to direct participants yet they need to be personalized to maintain participants' commitment. Program scheduling and facility use must be convenient for the participants and their families.
Programs should be safe and progressive. This will help to avoid injuries and to maintain interest. Other factors found in successful humanized programs include supervision, personalization, education, motivation, feedback, social involvement, and fun.
Physical Fitness & Mental Health

- Do you feel physically and mentally fit, or are you out of shape and out of sorts?
- Is your weight under control and are you feeling good, or are the scales going up and your spirits down?

plain talk about...

HANDLING STRESS

You need stress in your life! Does that surprise you? Perhaps so, but it is quite true. Without stress, life would be dull and unexciting. Stress adds flavor, challenge, and opportunity to life. Too much stress, however, can seriously affect your physical and mental well-being. A major challenge in this stress-filled world of today is to make the stress in your life work for you instead of against you.

Stress is with us all the time. It comes from mental or emotional activity and physical activity. It is unique and personal to each of us. So personal, in fact, that what may be relaxing to one person may be stressful to others. For example, if you're a busy executive who likes to keep busy all the time, "taking it easy" at the beach on a beautiful day may feel extremely relaxing, nonproductive, and upsetting. You may be emotionally distressed from "doing nothing." Too much emotional stress can cause physical illness such as high blood pressure, ulcers, or even heart disease. Physical stress from work or exercise is not likely to cause such ailments. The truth is that physical exercise can help you to relax and to handle your mental or emotional stress.

Be Sensible

Before you start out on a new program of vigorous physical activity, it is a good idea to get a medical evaluation, especially if:
- You're over 40 and haven't been exercising regularly, or
- You have medical problems.

Helping Yourself

When stress does occur, it is important to recognize and deal with it. Here are some suggestions for ways to handle...
Join the YMCA for Total Fitness

• Body • Mind • Spirit

For your body: Exercise classes. Sport’s sports. Fitness testing. Individualized programs.

For your mind: Educational classes on nutrition based weight management for healthy lifelong options.


YMCA

More student involvement sought by Wellness Institute

BY JOEL WECHE
Chief Reporter

In the four months since Ball State’s student health center opened, the center has jumped off to a great start according to the small staff, Constance Smolczyk.

The emphasis, she said, is on health education. Students need to be aware of the importance of preventive health care.

One of the programs has been the “Health Fair.” Smolczyk, who is a registered dietitian, said the fair was set up to help students learn about the importance of a healthy lifestyle.

The students are encouraged to take part in the programs and to come back for follow-up appointments.

A drug that can serve as an alternative to back surgery was approved by FDA a short time ago. Hailed by some as a breakthrough drug, chymopapain (Chymodex) is useful in cases of back pain in which the pain arises from a herniated disc.

Chymopapain, a drug that is injected into the back, can help to reduce the swelling of the inflamed disc.

Keeping in Shape

To be effective, exercise needs to be rhythmic, regular, reasonably vigorous, and continuous for 20 minutes or more at least three times a week, preferably every other day. If you save it all for the weekend, you may overexert yourself and do more harm than good. For muscle strength, flexibility, endurance, and weight control you can choose from a variety of physical activities including tennis, WHS Dv b e t c, swimming, backpacking, jogging, running, walking, calisthenics, cycling, or cross-country skiing. These are but some of the fun ways to keep fit.

Physical activities include more than formally programmed exercise. Climbing stairs, for instance, will provide some aerobic activity, stimulating to the heart and lungs. Gardening can be good stretching, pulling, and bending exercise, and it's great for working off anxieties.

Back Pain: Ubiquitous, Controversial

by Judith Willis

"The Bridge," have been incorporated into other back exercise programs. Hamilton Hall, M.D., author of The Back Doctor (McGraw Hill, 1980), says that the most common sources of lower back problems are torn facet joints, herniated discs, and pinched nerves.

Dr. Hall explains that a person with a torn facet joint, one aspect of osteoarthritic of the spine, experiences worsening pain when bending forward. He says the opposite is true of someone with a herniated disc.

A torn facet joint may result in misalignment of vertebrae due to loss of thickness in the disc separating them. The result is that vertebrae grind against one another. The vertebrae, causing pain. Almost everyone eventually has some osteoarthritis since it is an inevitable part
TABLE OF CONTENTS

“Adult Children” from Alcoholic Homes
CPR (Basic Life Support)
Stress Management
Coping with Anger
Smoking Cessation
Adventures in Attitudes
Current Issues in Wellness
Women and Health
Diet Analysis
Weight Management for Children
Aerobics: High Level
Low Impact Aerobics
Get Started, Get Fit
Yoga
Faculty/Staff Retirees and Spouses Exercise Program
Tai-Chi Chuan
Noon Faculty/Staff Exercise Program for Women
Gym and Swim
Registration Form

Some, like Janice Rios, walk in the mall solely for the exercise. Mrs. Rios, along with her partner Ovie Eads, is known among the walkers for her brisk pace. And she has walked off 82 pounds.
Many health experts support the hypothesis that chronic negative lifestyles are the leading cause of illness today. Industries acutely aware of this problem have encouraged employees to seek strategies to help preserve their health, and most important asset: the employee. Approximately 50,000 American companies have developed health and fitness programs emphasizing the acquisition of self-care skills that require their participation. These programs generally use a health promotion strategy which begins with employee awareness and understanding followed by instruction and practice in health fitness areas. The central theme is expanding the employees' personal responsibility for their health. Critical to the success of the program is motivating employees to participate, thereby enabling them to improve and maintain their health. Many exercise professionals would agree that adherence to an exercise program depends almost entirely on motivation. Motivation researchers have shown that positive feedback has become a critical challenge in these programs. With computers have come creative approaches for motivating participants.

Design and Development

Tennessee's health and fitness program uses a computer system to help achieve departmental goals and objectives. Individuals, both inside and outside the company, worked together over 1 year to develop the system which was reviewed, then revised into a useful program by a task force of computer and health and fitness personnel. The task force ensured that the program was feasible to develop, produce, and maintain and that it would fully support the health and fitness staff's various needs. Important in the initial development were detailed descriptions of the computer functions: (1) employee membership, (2) participant check-in and check-out, (3) fitness and medical testing and exercise logging.
Building a healthier work force in Japan

Calisthenics on the job: “It pays”

Tai-Chi Chuan

Looking for an exercise in which the tempo is slow and the movements graceful? Tai-Chi Chuan, a traditional Chinese health and self-defense art form, combines strength and softness, tension and relaxation, body and mind in the pursuit of an increased awareness and physical relaxation.
Harry S. Truman—66 years old—on a morning walk in Chicago. Truman covered 1/2 miles each day, striding at a purposeful 120 paces a minute. "If you are going to walk for your physical benefit," he observed, "it is necessary that you walk as if you are going someplace."