

THE FEASIBILITY AND VALUE OF  
JOGGERS CLUBS FOR HEALTH  
AND RECREATION

BY

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## ABSTRACT

The physical condition of the average American adult is becoming a matter of grave concern. Technical advances are rapidly removing any and all types of physical activity. We are in need of a fitness program which would be acceptable and beneficial to adults of all ages.

Statement of Problem: It was the intent of this paper to show that jogging is a beneficial type of physical activity in relationship to; overall physical health, improved mental attitude, and proper apportionment of body weight for adults of all ages.

Procedures: An experiment was conducted with thirty-six adult members. An accurate chart was kept by each member, which measured; body weight, body measurement changes, pulse recovery rate, and general physical and mental health.

The experiment consisted of jogging on a daily basis by the members, for a period of three months. At the conclusion of the experiment, the following results were noted: Most members experienced some degree of weight loss, a change in body measurements, and a more rapid recovery rate in their pulse count following a workout.

The most pronounced result of the experiment, as stated by the members, was a marked degree of improvement in general mental and physical health.

Conclusion: Results of the experiment and statements of joggers in other parts of the world, lead to the following conclusions:

1. Jogging is a very beneficial exercise from a physical and mental standpoint. It is a feasible and acceptable form of exercises for all age groups.

2. Some degree of physical activity is a desirable trait which should be incorporated in everyones daily routine.

CHAPTER ONE  
INTRODUCTION

Walter Camp, as early as 1920, expressed a philosophy that is even more apparent today than when he stated; "The number of men who keep fit in this country has been surprisingly few, while the number of those who have made good resolutions about keeping fit is astonishingly large".<sup>1</sup>

With the advances in technology and automation, and the increase in leisure time, the plight of the physical condition of the American adult population is in dire need of some type of acceptable, feasible, recreational program which will help rectify this problem.

Reflection upon this fact has convinced the writer that the reason for this state of affairs lies partly in our inability to visualize the conditions and our failure to impress upon all men the necessity of physical exercise. Specifically, it rests upon our failure to make a scientific study of reducing all the variety of proposals to some standard of exceeding simplicity. Present systems have not produced desirable results, no matter what the reason.

What is necessary today is a program which is within reach of every adult male and female in the country. Not only does this have to be practical, it also has to be acceptable before it can serve its purpose. A clarification of the word acceptable would mean it must not only be acceptable to the person who is involved, but, it must also be acceptable in the eyes of the rest of the public. Because we are a country of

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<sup>1</sup>Camp, Walter, Handbook on Health and How To Keep It, D. Appleton and Co., New York and London, 1920, Introduction.

conformists and followers there is a tendency to reject and ridicule something new until it is accepted and practiced by a group of influential people of the community.

Now, assuming we have a workable, acceptable program, what physical results might be expected? Mateef and Dragomir in their book, "Morphological and Physiological Factors of Ageing and Longevity," stated that;

Research work done by Czechoslovak and American scientists shows that physical exercises, if sufficiently intensive, lead to a decrease in the plasma cholesterol. Levis, Brown and Page have found that on a high cholesterol diet the plasma cholesterol is somewhat lower in rats exercised regularly for months than in their sedentary controls. It may be assumed, that this is the physiological mechanism, which lies at the basis of the known phenomenon, that men of physical labour are more rarely affected by such severe manifestations of arteriosclerosis as cardiac infarction, cerebral thrombosis, etc.

It is further considered that the various phenomena of senescence, as for instance the decrease in muscle mass, diminished oxygen intake, reduced heat production, and fall in total blood quantity are caused and accelerated to a large extent by senile inactivity, by lack of sufficient physical activity.

On the basis of microscopic investigations of human brains extending over many years, C. and O. Vogt came to the conclusion that the best means against senile involution of the brain cells is to preserve cerebral activity for as long as possible. This may be accomplished through efforts to preserve the all around activity and training of the human body. It is easy to understand why physical exercises and sports have such beneficial influence on the human organism when we take into consideration the fact that physical exercises are actually intensive cerebral activity, which unlike onesided mental activity, stimulates metabolism, respiration, blood circulation, digestion and the activity of the glands of internal secretion. A correct combination of mental activity and physical exercises and sports is at present the best method of preserving for as long as possible the activity of the brain cells on a high level with respect to their extremely important regulating and trophic function in the organism. If the activity of the brain cells is maintained on a high level, especially as regards their regulating and trophic function, the whole organism

and all its functions will be in good health.<sup>2</sup>

Physical exercises therefore are the best physiological means of controlling the phenomena of senescence.

In the spring of 1962, Joggers Clubs were organized in Portland, Salem, and Eugene, Oregon. Their inception is credited to Bill Bowerman, track coach at the University of Oregon, who borrowed the idea from New Zealand where jogging is considered a national pastime.

As a result of jogging regularly during his two month visit in New Zealand, Mr. Bowerman had a decrease of three inches in waistline while still retaining the same weight. This one factor was incentive enough to inflame the hopes of the average American male to the point of actual participation. The original goals of the groups were for improved mental health attitudes, optimum improvement of the physical body, plus the social benefits obtained from group participation.

Since their origin the clubs have flourished in increased membership and public acceptance. These two factors plus the varied age span of the members attest to their feasibility, measurable values and appeal for all age groups.

To some individuals the expansion of Joggers Clubs is the apparent solution to our national problem of how to improve the decadent physical being of the majority of the adult American population.

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<sup>2</sup>Mateeff, Dragomir, "Morphological and Physiological Factors of Ageing and Longevity," Health and Fitness in the Modern World, Athletic Institute--Library of Congress, Washington, D. C., 1962.

### Statement of the Problem

It is the purpose of this investigation to:

1. Determine by experiment if a Joggers Club is a beneficial type of physical activity in relation to optimum physical health, desirable mental attitude, proper apportionment of body weight and its control, for all adult age groups.
2. With no previous study to rely on, the author proceeded to construct a chart which would serve as a measuring device for the 36 members progress during the experiment. People of all age groups were solicited in an effort to obtain a representative adult group.

### Procedures

1. A review of related literature was made to ascertain the findings of related and similar studies.
2. Correspondence was carried on with noted authorities in the area of track and field, both in the United States and abroad, in an effort to study and analyze their opinions and experiences in relation to the feasibility and value of Joggers Clubs.
3. An experiment was conducted with 36 individuals who ranged in age from 23 to 57. There were no requirements or standards established for membership. The personal habits of the members were quite varied. Smoking, drinking, overeating (in moderation), and late hours, were not appreciable significant factors in the experiment.

During the three months of the study the members jogged varying distances depending upon their ages and desires.

4. A detailed monthly chart was kept on each individual to measure

the changes in body weight, pulse rate, distances covered in jogging, variances in body measurements, and degrees of improved mental attitudes. A sample copy of the monthly chart is found in the appendix.

#### Limitations

Research and correspondence failed to reveal any related studies of the benefits of jogging. Numerous experiments have been conducted with highly selected and rigidly controlled groups in the areas of calisthenics, running, weight training, and isometrics. The author felt that these were not applicable to this experiment due to the differences in; the type of exercise, selection and limitation restrictions on participants, and the degree of control involved in the other experiments.

Although the state of Oregon has several jogging clubs, they are of a loosely knit organizational arrangement with emphasis placed on health and pleasure, and not on statistics.

This investigation had the following limitations:

1. The newness of jogging as a form of recreation and health in the United States limited the amount of related and similar studies in this field.

2. The small number of participants involved in the experiment was due to the inability of the author of this paper to recruit men in this type of activity because; in general American men are reluctant to participate in something which does not result in immediate personal gain; the recreational appeal is not as great as that of golf, tennis, and other organized sports; it is something new and different; due to present commitments to family, business, and other organizations many felt they did not have the

available time.

#### Definition of Terms

"Joggers Clubs" refer to groups of people who run or "jog" at a very slow pace.

## CHAPTER TWO

### ORGANIZATIONAL STRUCTURE

Selling the idea of a joggers club is absolutely necessary for the survival of the club. Most people are reluctant to commit themselves to something they are unfamiliar with, therefore it is the suggestion of this writer that when a club is in the organizational stage it be duly stressed to the prospective members that they are under no obligation and are welcome to participate at their convenience.

When weather permits, the members should run outside as it is much more enjoyable and it creates more interest within the community. In regions where winters are severe the use of inside facilities such as a gymnasium would be necessary. Most school districts are willing to donate the use of their facilities when available.

In regards to apparel, "Wear a pair of comfortable shoes with thick moderately soft soles. As for the rest of your garments, wear what makes you feel comfortable in the prevailing weather."<sup>1</sup>

Establishing a time for workouts is a problem due to the varied occupations of the participants. It is recommended that the facilities be available at two different times in the evening. This is a convenience to the group and will result in greater participation and membership.

As the age of the members will vary widely it is suggested that awards or certificates be awarded to the members who reach accumulative distances jogged such as 100 miles, 250 miles, 500 miles and 1,000 miles. This will act as an incentive and also give recognition to individual

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<sup>1</sup>Bowerman, Bill, The Joggers Manual, University of Oregon pamphlet, Courtesy of U. S. National Bank of Portland.

members regardless of age or sex.

Prospective members should be made aware that jogging is not a competitive sport, and that miracles should not be expected overnight. This point can best be expressed by Mr. Andrew Steedman of New Zealand who said, "We started out here with about one hundred enthusiastic members, but as the months passed the members grew less until we could only rely on fifty staunch members. Quite a few couldn't stand up to the early exercise through trying to do much, and instead of going quietly they expected to be one-hundred percent fit in a month or so. When they couldn't go with the fitter men, they just foolishly wrote themselves off as permanently unfit."<sup>2</sup>

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<sup>2</sup>Letter from Andrew Steedman, June 24, 1964, 50 Great North Road, Glen Eden, Auckland, New Zealand.

### CHAPTER THREE

#### RESULTS OF EXPERIMENT

The weight pattern change was very slight due to the irregularity of the members participating although a definite loss trend was established.

Body measurement changes were most pronounced at the waist, thigh, and calf. The recovery rate pattern showed a more rapid recovery rate between the six and ten minute readings. Some specific changes were noted by individuals which were not in accord with the trend or usual pattern. The only available explanation for this would be due to the individuals varied physical qualities.

The people who showed the greatest weight loss and body measurement changes were those members who worked out regularly and for an extended period of time.

The male members who were not associated with any type of physical labor in connection with their occupations were leaders in the categories of weight reduction and change in body measurement.

In general, the female members experienced a greater degree of change in body measurement than did the male members, but the male membership was more dominant in the area of body weight loss. The only plausible explanation this writer could give to this occurrence was, that most of the male members were proportionally more overweight at the beginning of the experiment than were the female members.

In regard to this experiment it is assumed that the social and psychological values derived outweighed the physical values. One hundred per cent of the membership endorsed the idea that they benefited from social

companionship and enjoyed a feeling of improved physical health.

The members were divided into two groups, those who worked out at least four times a week, and those who participated from three to zero times a week. This division was based upon the premise that individuals interested in this form of exercise and its results would be able to draw a more valid assumption of what they might expect to accomplish if they followed a similar program.

In general, the male members worked out more often and covered greater distances per session than the female members, as indicated by Table 1.

TABLE 1. LIST OF GROUPS INVOLVED IN JOGGING CLUB.

Total number of members	36
Number of female members	22
Number of male members	14
Number of members who worked out at least four times a week	16
Most work outs by a member	45
Most total miles jogged by a male member	93.75
Most total miles jogged by a female member	71

In regard to the weight chart in Table 2, the members weighed themselves approximately every two weeks, prior to their workout, and on their own scales in an attempt to make the experiment as valid as possible.

All four members who gained weight were males. Three attributed the weight increase to a stimulation of the appetite by the jogging, which was usually sated upon reaching home. The fourth member who gained weight, had

recently given up smoking, and he felt that this factor probably accounted for his weight increase.

Of the seven members whose weight remained static, all seven experienced some degree of body measurement change during the experiment.

TABLE 2. WEIGHT PATTERN CHANGE.

Total number participating	36
Number of members who lost weight	25
Number of members who gained weight	4
Number of members whose weight remained static	7
Greatest amount of weight lost by a member	7½ lbs.
Greatest amount of weight gained by a member	.3 lbs.
Average number of pounds lost by all members	1½ lbs.
Average number of pounds lost by regular members	3½ lbs.

The body measurement chart showed definite trends which were applicable to both sexes in the same body areas. It also revealed some areas of body measurement change which were more pronounced in one sex than the other.

Male and female members had a pronounced measurement decrease in the thigh, and a definite increase in the calf of the leg. Female members had a noticeable decrease in the hip measurement while that of the male members was very minute. Most of the male members lost inches at the waistline whereas the female members lost only in the fractions of an inch.

The average number of pounds lost by the regular members was slightly more than twice the amount lost by all members. This result would tend to indicate that the increased number of workouts by the regular members was directly related to their greater degree of weight loss.

TABLE 3. MEASUREMENT CHANGE CHART.

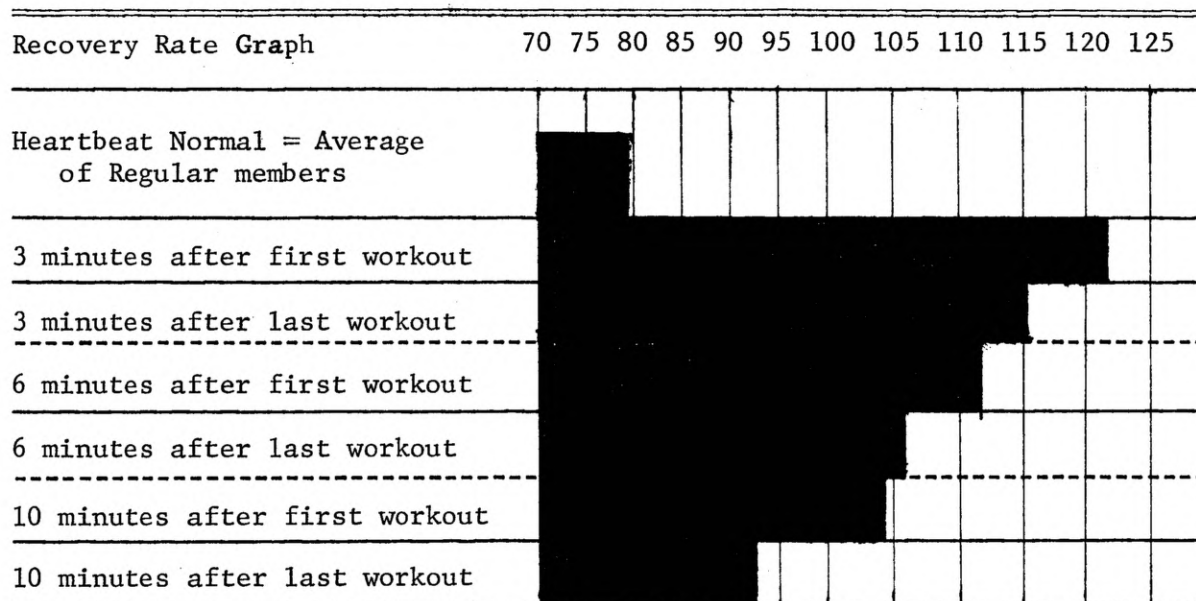
Measurement Changes	Average of All Members	Average of Regular Members	Greatest Change
Forearm	None	+1/4 in.	+1/4 in.
Upper-arm	None	-1/4	-1/2
Chest-normal	None	None	+1/2
Chest-expanded	None	+1/2	+1
Waist	-1/2	-1	-2
Hips	None	-1/2	-1
Thigh	-1/4	-3/4	-1
Calf	+1/4	+1/2	+3/4

The recovery rate of each individual regular member was plotted in an attempt to see if repetition of this exercise would speed the recovery rate back to its normal count and to find the interval at which this recovery would be the most rapid.

The results indicated a more rapid recovery rate between the six and ten minute periods following a workout. Those people involved in the experiment did not chart the recovery rate completely back to the normal pulse count due to the extended period of time which they would have had to spend at the gymnasium following a workout.

The results of the section of the chart on mental and physical tone showed that thirty-five members felt there was an improvement in their condition in both areas. One member felt that he could see no change from the original markings of good in either area.

TABLE 4. RECOVERY RATE GRAPH.



the original markings of good in either area.

After talking with the members, it is this writers opinion that, the majority of the participants were happier with the improved mental tone than they were with the physical changes which occurred.

CHAPTER FOUR  
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The original purpose of this paper was to organize and conduct a jogger's club in an attempt to measure its feasibility and value as a form of exercise and recreation for all age groups. A review of related literature, and correspondence with men familiar with this form of exercise was conducted.

An experiment was conducted with thirty-six members. The high school gymnasium was open in the evenings, five nights a week for a period of three months and the members jogged as often and for as long a distance as they wished.

To measure with some degree of validity that this one form of exercise would help a person attain better physical and mental health, each member was given a chart on which to plot the results of: weight fluctuation, change in body apportionment at the arm, chest, waist, hip, thigh, and calf; and the time required for the pulse count to return to a near normal beat following a workout. A section labeled mental tone and physical tone on the chart was filled in the first time as good for all members. Upon termination of the experiment, all members were urged to fill in this space in relationship to their original feeling, and in doing this, they would mark poorer, unchanged, or improved.

Although the weight change was minute in most cases, and the body apportionment pattern did not show startling results, they did reveal a trend which was conclusive enough to substantiate the value of this form of exercise.

The interval at which the pulse recovery rate was most pronounced occurred between the six and ten minute periods following a workout.

The experiment revealed that jogging as an exercise was to some degree responsible for a weight reduction and a more desirable body proportionment for most members.

The major value derived by the members was an improved mental and physical feeling. More than ninety percent of the group said they felt more alert and invigorated as a result of the jogging.

#### Conclusions

As a result of this study, these conclusions have been reached.

1. Some type of physical exercise should be included in everyones daily routine.
2. The results of jogging are beneficial mentally as well as physically.
3. Jogging is one of the best physical exercises for all age groups. This statement can be further substantiated by Mr. Andrew Steedman the seventy-six year old jogging enthusiast from New Zealand who stated, "When I started jogging, quite a few people younger than myself would shake their heads and say, he is going around the bend fast. These people needn't have worried as my doctor has since found an improvement in my cardiac condition and general health.

My general health has improved beyond belief, and my only regret is that I hadn't started earlier in life, and my wish is that many who I know are suffering from ailments can be sure of a cure if they would only try."<sup>1</sup>

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<sup>1</sup>Letter from Andrew Steedman, June 24, 1964, 50 Great North Road, Glen Eden, Auckland, New Zealand.

4. Jogging is an acceptable form of exercise. The fact that more than fifty percent of the members expressed an avid desire to continue the program next fall substantiates this statement.

#### Recommendations

It is recommended by the author that further studies in this area be made in an effort to determine the following:

1. What percent of individuals over thirty-five years of age would show an improved cardiac condition as a result of jogging?
2. Show a comparison of the results of jogging versus other types of adult exercises in the areas of weight fluctuation and body measurement changes.
3. Make a comparison of the pulse recovery rate of an adult group who jog varying distances.

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APPENDIX

## APPENDIX A

## SAMPLE COPY OF ENTERPRISE JOGGERS CLUB

Name	Sex	Weight	Height
Occupation		Smoke	Drink

BODY MEASUREMENTS      Feb 4 Feb 18 Mar 10 Mar 24 Ap 14 May 5 May 24 Change

Forearm
Upper-arm
Chest-Normal
Chest-Expanded
Waist
Hips
Thigh
Calf
Weight
<u>Recovery Rate</u>
Heartbeat Normal
3 minutes
6 minutes
10 minutes
Mental Tone
Physical Tone
Number of Workouts
Total Distance Jogged

Comments:

APPENDIX B  
TIPS FOR JOGGERS

WHO -- Anyone--six to 106--male or female.

WHEN -- Once a day, if you can find the time. Repetition not only brings better results, but greater enjoyment.

WHAT -- Jogging is a bit more than a walk. Start with a short distance (50-100-150 yards), then increase as you improve. Jog until you are puffing, then walk until you are breathing normal again. Repeat until you have covered a mile or two, or three. If you do not like to think of distances, make it a time jog of five, ten, fifteen or perhaps 30 minutes to start.

WHERE -- Anywhere. At home you are in business the moment you step out the door. Town, country or track makes no difference at all. Join a friend for a companionable jog at a pace best suited for the least fit of the pair.

SOCRATES SHUFFLE -- Ideal for keeping on schedule when a trip or bad weather prevents regular jogging. Use your hotel room, or any indoor area if you are home. Jog in place for three, five or seven minutes at a time, keeping your arms, shoulders and head loose with regular movement. It's an ideal substitute for the real thing.

APPAREL -- Wear a pair of comfortable shoes with thick, moderately soft soles. As for the rest of your garments, wear what makes you feel comfortable in the prevailing weather.

POSTURE -- Keep a good, erect posture with your arms swinging easily. The better your posture, the easier the jogging. Don't get all bunched up, it only makes for hard work.

DIET -- Just use moderation as a guide. Eat what you like, have a drink if you will, smoke if you like . . . . . but do remember good sense is the best guide to healthful living.

CHECKUP -- If you have any question on your physical condition, check with your doctor on your jogging schedule before you begin.

MEETINGS -- Most Jogger's Clubs meet once a week for a few minutes before beginning to jog. No officers, no dues, no minutes, no roll call. . . . just companionship, better health and a better outlook on life in general.

GOOD JOGGING TO YOU!

Remember -- Train, Don't Strain<sup>1</sup>

PATIENCE + WORK = IMPROVEMENT

Check off each day's jogging, and this chart will be a reminder to keep your workout schedule, as well as yourself, in good shape. Check it daily.<sup>2</sup>

	1ST	2ND	3RD	4TH	5TH	6TH
√	WEEK	WEEK	WEEK	WEEK	WEEK	WEEK
Monday						
Tuesday						
Wednesday						
Thursday						
Friday						
Saturday						
Sunday						

<sup>1</sup>Bowerman, Bill, The Joggers Manual, University of Oregon pamphlet, Courtesy of U. S. National Bank of Portland.

<sup>2</sup>Ibid.