A HEALTH PROMOTION PROGRAM FOR YOUR WORKPLACE?

IS IT IMPORTANT AND HOW WILL YOU KNOW WHICH ONETO CHOOSE?

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Abstract

When considering specific health issues, it is alarming to find that men have the poorest health outcomes when compared to women. Of all occupational groups, male blue-collar workers have the most rapidly increasing incidence of many of these health problems. Statistics also reveal that men have the lowest rates of health service utilisation, generally only addressing acute medical issues.

In response to the latest findings, current occupational health and safety legislation has placed increasing emphasis on work-sites to take a more proactive approach in regards to employee safety as well as health. In a business climate where emphasis is placed on the bottom line, health promotion programs have often been viewed as expensive and ineffective with limited or no measurable return. Benefits, unless quantifiable in the short term, have been largely overlooked.

Yet, effective health promotion programs have been shown to decrease not only workplace injuries, but also have a flow on effect in reducing employee absenteeism, improving morale and decreasing many major health risks.

Results from longitudinal studies on work-place health promotion programs are beginning to show that the workplace benefits on a number of levels, with not only a safer environment but also healthier employees. This can then impact positively on both productivity and profitability.

There are a number of key factors recurrent in successful health promotion programs. Offering the program to the employee at their workplace and creating it as part of the weekly schedule, increases acceptability and participation.

Success is further enhanced when a program creates an environment conducive to change by encouraging participants to determine their own health goals and using trained health professionals who are specialists in their field to guide them.

Ongoing support and monitoring after the completion of the health program are also key factors in long-term success.

The real choice is not whether to run a health program, but how to determine which of the health programs on offer fulfils proven criteria for long term effectiveness. That program will then be of benefit in meeting both the specific needs of the individual, and the health and safety concerns of the employer.

Health promotion is a social movement of major proportions that has evolved around three related postulates: 1) prevention is preferable to cure; 2) teaching people to stay healthy is generally less expensive than treating them when they are ill; and 3) healthful lifestyles offer improved health, a better quality of life and possible increased longevity (1). Health promotion in the workplace refers to those educational, organisational or economic activities that are based in the workplace and are designed to improve the health of workers, their families and the community at large (2).

Even though a productive organisation may not necessarily be health oriented, it has been established that no organisation can remain productive without maintaining the health, job satisfaction and morale of its employees (1). Accidents, disability, and sick days always involve some readjustments to work schedules that affect entire work organisations. When considering the costs of poor health to business, and the rate at which this is growing, it becomes evident that initiatives need to be taken to stem the growing tide of accidents and injuries and subsequent workers'compensation claims (3).

In a business climate where emphasis is placed on the bottom line, health promotion programs have often been viewed as expensive and ineffective with limited or no measurable return. Yet, a growing body of evidence suggests that successful health programs play a pivotal role in reducing employee absenteeism, enhancing production and morale, and improving the retention of highly skilled staff (2,3,4, 5,6,7). Because of this evidence, there is growing enthusiasm for health promotion in the workplace (8). Business and industry leaders are now viewing employee health as an asset to be maintained and enhanced (1) and as a result, increased attention has been directed at health promotion and disease prevention initiatives.

Workplace health promotion has evolved over the past two decades and is now viewed as fundamental to improving the health and longevity of workers worldwide (9). While health promotion in the workplace is not new in Australia, there has been little documentation of programs, particularly those targeting blue-collar workers. On the other hand, the United States have been running and documenting cost savings of health promotion with blue collar workers for many years. Evidence continues to mount around the positive relationship between the running of a workplace health promotion program and improvements in the health behaviours and health status of participating employees (3,5,7).

A recent study of a comprehensive health program run by a large American industrial company employing a workforce of predominately blue collar workers showed measurable reductions in accidents and disability costs (10). After beginning a comprehensive health program in 1996, the organisation managed to reduce their workers compensation claims by 7.9 percent in 1997 with a further reduction of 5.5 percent in 1998, followed by a further decline of 0.4percent in 1999. Long-term disability cases also reduced by 29 percent over the same four years (10).

One of the major areas of workplace concern in Australia is workers' compensation costs. In Queensland in 2000/2001, more than \$285,000,000 was paid out in 85,340 claims (11). Costs per claim rose by 24percent in the same period. The mining industry's average cost per claim was \$11,710, more than double the state average cost per claim of \$4900 (11).

Of total claims, 47percent were as a result of sprains and strains (including back injuries) at a cost of over \$127.5 million, with back injuries accounting for 19.7 percent of the total claims. While the mining industry represented just 2.5 percent of total claims, they accounted for 4.4percent of total payout costs (11). Similarly, the construction industry represented just 7.8 percent of claims, however accounted for 11percent of total payouts (11).

With the mining industry in Australia employing 0.8 percent of the population, and contributing 4.4 percent of the Gross Domestic Product (12), it vital that this workforce, in particular, is offered every opportunity to enhance their health. The maximisation of productivity as a result of health and safety initiatives further enhances these figures not only for the individual or the organisation but the country as well.

Worksite health promotion programs are generally designed to help employees reduce specific health risks such as high blood pressure, high cholesterol, overweight and cigarette smoking and to improve overall health through physical exercise, nutrition and stress management (3).

These programs are prevention oriented with measurable differences seen in the short and long term. Primary strategies can be initiated by health promotion professionals that complement the existing, more traditional efforts of the organisation. This provides a cohesive foundation from which all other programs can build (6).

These programs are in a strong position to influence change within the organisation because they focus exclusively on employee health and well-being. Failure to adopt primary strategies that address the underlying issues of poor health can lead to an ineffective program resulting in little or no long-term change (6). By intervening early with appropriate health promotion programs, employers can improve the health and productivity of their workers (13).

Health promotion programs can be successful in reducing employee risks, but changing human lifestyles is a difficult task (14). It is important that any organisation planning to undertake health promotion, clearly defines the outcomes they wish to achieve. If management is concerned primarily with corporate image, then highly visible exercise facilities might be given priority (15). These often fail to produce benefits within themselves unless used as an adjunct to programs with proven results.

The exact economic benefits of health promotion programs are only now being researched and documented. Peterson et al found that as a consequence of health promotion interventions,

employee absenteeism due to poor physical health, as well as workers' compensation claims had reduced (7). A number of recent studies have shown an encouraging association between worksite health promotion programs and reduction in health care costs, accidents and absenteeism as well as improved fitness (5, 6).

A comprehensive health and productivity bench marking study researched 43 large public and private employers in the United States, who had undertaken health promotion initiatives. The study documented median annual health and productivity costs per employee of \$9992 of which 47percent were group health costs, 37percent productivity related costs, 8 percent due to absenteeism and 3 percent workers compensation (10).

The study noted that employers median cost savings directly on health and productivity was approximately \$2600 per employee (10). This will have a cumulative effect over time, particularly in reducing later demand for expensive medical services, after health has deteriorated (6). As evidence mounts validating the direct economic return of health promotion programs, they will be viewed as a necessity rather than an option.

Health promotion programs are generally based on the premise that poor lifestyle habits are responsible for the majority of chronic disease and therefore can be prevented (13). The latest programs available to workplaces acknowledge the importance of the promotion of health and wellness (9).

In the short term, participation in a well-structured health promotion program can result in a decline in employee absenteeism, (6), as well as a reduction in workplace injuries (14). Group participation in programs also leads to team building, improved morale and a flow on effect in productivity (16).

Studies have also found that lesser educated, lower socioeconomic groups and ethnic minorities were just as likely to want to participate in health promotion, when given the opportunity. Employers benefit, therefore, when they foster employee health, as healthy employees help create and maintain healthy organisations (1).

Current attitudes within Australia are changing, with the promotion of wellness being actively encouraged by federal as well as state governments and health care organisations (16). The ACTU also believes that the workplace is a valuable vehicle in which to implement programs designed to assist workers in making informed decisions regarding their health and well being (3).

Emphasis on a preventative approach is part of National Health Policy (17) with healthy diet and exercise choices being the preferred option in prevention and treatment of many lifestyle related diseases. Reducing obesity, through diet and exercise is also a strong recommendation of the National Heart Foundation (18).

Healthy eating enhances both health and quality of life. Thus it can contribute to improved employee morale, decreased absenteeism, higher productivity and lower health care costs (19).

Obesity, in addition to its role in risk factors for heart disease, diabetes and some cancers, increases the chances that employees will suffer from back pain and other preventable injuries (19). A decrease in weight, with a concomitant reduction in abdominal obesity and blood pressure as well as improvement in other areas

such as cholesterol levels and blood glucose management, reduces risk in relation to heart disease, diabetes, stroke and other debilitating diseases, including back pain (19).

These preventative measures enable the retention of highly skilled staff who can contribute to an effective and productive organisation for a longer period of time. Research also indicates that employees who participate in effective health programs are more likely to take an interest in other aspects of their health and safety (20).

Men, in particular have focused more on earning a living than concerning themselves with their health (17). As in most other industrialised countries, Australian men fare worse on most health indexes when compared to women (21). Levels of obesity and overweight in Australian working men are reaching 'crisis' proportions (22).

Obesity, is one of the main contributors in the development of heart disease, diabetes and stroke (19). Abdominal obesity, in particular has its own inherent risks with particular reference to lower back pain (19).

A leading figure in Australian men's health, Egger states, 'It is imperative that health promotion initiatives be developed and implemented in order to counteract the potential long term effects on the health of Australian men' (22).

Blue-collar workers, in particularly, experience poorer health and die at an earlier age when compared to their white-collar counterparts.(23).

The 'aging workforce paradox' (24) acknowledges the deterioration of health as skilled workers get older. The increasing costs of maintaining a skilled yet aging employee can eventually become a counter productive measure, as health deteriorates and productivity ratios decrease.

This is further exacerbated by the unwillingness of a male to have regular medical check ups, except for acute conditions (15). Responsible health promotion programs will require a medical review before commencement. This becomes an effective screening tool for addressing health concerns of individuals.

Primary health intervention with its emphasis on prevention, can have a positive flow in reducing the frequency of illness over time (6). This can stem the costs associated with diminishing health of valued employees as well as the added burden of recruiting and training new staff. Implementing appropriate worksite health promotion programs can reduce health care costs, accidents and absenteeism.

One study, reviewing nine health promotion programs involving 68,812 employees over 24 worksites, validated the hypothesis that employees who participate in worksite health promotion programs have lower subsequent levels of absenteeism when compared to employees who did not participate in a program (14).

Long range planning is an essential part of corporate success (3). Therefore it is vital that companies put in place strategies that will ensure the maintenance of good health by low risk employees as well as those at greatest risk (4).

Properly planned and implemented programs can improve the health of employees, improve employee/ employer relations and morale and also improve

physical, mental and social health of the workforce (3). The ACTU has also welcomed the initiatives designed to educate workers on making better choices regarding their own health and that of their families (3).

Another area where health promotion has made a significant difference is in work culture. When corporate culture places emphasis on production to the exclusion of employees' humanistic considerations, the potential for resentment and ill health is increased (7).

This counter culture can be appeased through health promotion programs. An attitude is conveyed to staff, that management is willing to provide programs and facilitate changes to help workers (7). Strong management support is vital to a successful program. When the culture of the workplace has a core value of improving the health and well-being of its workers, then enhanced productivity and employee morale are evident.

Organisations within Australia, that have been proactive in running health promotion programs acknowledge their importance as part of a productive organisation. They have found that participants are more effective in their roles and have noted improved morale and communication across the broad spectrum of employees (3).

One Australian company states 'It is difficult to estimate productivity, except that people involved in the program enjoy their involvement, appear to be more punctual and there is an air of renewed vitality throughout the organisation. Absenteeism for reasons other than sickness has declined and turnover of staff has decreased markedly' (3).

With such benefits available, it is important to determine desired outcomes and then develop or select a program which will best meet the needs of the employees as well as the organisation.

Programs targeting nutrition, cholesterol and stress generally attract the greatest number of participants (5) and are far more likely to attract greater numbers of workers in the high health risk groups. These also provide the foundation on which other programs can build.

The choice of which program to offer rests upon a number of key factors. If these criteria are met, then the program will have the greatest chance of success.

Key Criteria

1 Is the program aimed specifically at employees in your industry?

Although many health programs are on offer, it is important that they are designed specifically for the needs of their target audience. Once health priorities have been determined, it is important to find a program that addresses the specific needs of the target group.

Blue-collar workers face more barriers than other employment groups, especially if shift workers. A program aimed at health issues of blue-collar workers must identify the health and lifestyle issues of these workers and focus on addressing them (25).

The program needs to be acceptable in terms of length and number of sessions and duration of the course. Materials and content also need to be appropriate for the literacy and ethnic background of the participants.

Workplace health promotion programs targeted at blue collar workers, became a priority agenda item in the 1990s in the USA (26) after it was recognised this group of people were at high risk for many degenerative diseases and least likely to participate in health promotion.

Blue-collar workers have identified certain barriers that will stop them attaining optimal health (26) and it is essential that these perceived barriers are addressed.

Lifestyle including shift work, overtime, and availability of food and exercise facilities, all influence the acceptability of a new program and the adoption of suggested strategies. If an organisation claims their program can meet the needs of many different groups, unless it has separate proven results for each particular group, there is a need for caution.

Be very clear about the target group for your health promotion, and ensure the program you choose has a proven record working with this target group and addresses the challenges peculiar to that group. Ask about other organisations that have participated in the program and the composition of their workforce (27).

Some worksites target a specific health issue and the program will be offered to all employees regardless of their position within the organisation. This can work well when management and workers share the same health concerns and a positive and enjoyable learning environment is created by the facilitator. Determining the particular needs of the target group and verifying these will be met by the program is vital to its success.

2 Is there a recruitment strategy?

Inertia is often a problem with those who may have health concerns. Men in their 30s believe that they will address health issues when they have more time and life is less demanding. Conversely, men in their 40s wish they had addressed their health earlier (21). Many health and safety committees assume those people who are unhealthy are not interested in their health (4).

On most occasions it is a lack of knowledge that inhibits people from improving their health. Lesser educated, lower socioeconomic groups, and those people with poor health are just as likely to want to participate in health promotion if given the opportunity (2). Participation in a worksite health program (WHP) must be voluntary (3). This increases ownership of the program and enhances committed participation.

For men in particular, once a decision is made to do something about a health issue, and providing the program fits into the particular scheduling requirements of their work, the success rates can be high.

In order to increase signing up of the target group, the program should be promoted as valuable and interesting (2). The health provider needs to be able to offer successful strategies to enhance recruitment.

Regardless of where those who sign up rank in terms of risk, they will all have one important ingredient for success – desire to make a change. It is important that the recruitment strategy reaches all those who are contemplating change in the targeted area and encourages enrolment in the program.

3 The program should be run onsite at a time convenient to you and your workforce, and should meet the specific needs of your workforce.

Research has shown that there is a higher degree of voluntary employee participation in health services offered at the worksite than anywhere else (1). Health services at the worksite are convenient, and employees assume of a high quality, thus they are more likely to participate (1). In order for this to be optimised, the program needs to be acceptable in terms of duration as

well as length and number of sessions.

Although initially, participation levels may be high, the level of retention is a matter to be considered when selecting a health promotion program. To ensure a program's viability, the ease with which it can be coordinated into the workplace is a key factor.

The program provider needs to have the flexibility required to be able to meet with and track the participants on a regular basis, even when shift work is involved. Attrition rates can be illustrative of how well a program has met the scheduling requirements of a particular workforce. Even the best program will have no purpose if abandoned before completion.

Peer support is also a key component in reducing attrition (25), and should not be underestimated.

The workplace offers this kind of support, at a level which cannot be generated off site. Research from general studies of health, well-being and stress management, consistently support the proposition that social support can improve health and lessen the impact of work stress on general well-being (1). WHPs being offered on-site offer a greater chance for success because of friendly competition between participants (9).

This extra opportunity for social support can also be gained from positive managerial attitudes (1).

4 The program should be based on the latest research

To ensure the best results, the program should be based on the latest available validated research. Poorly researched or designed programs will not produce the targeted outcomes (14).

Research has shown that men want information and evidence before they will take action (21), thus out of date information will deter further participation in the program. The program provider needs to show evidence that the program material is regularly reviewed and updated in accordance with the latest scientific information and meets the needs of the target group(23).

The facilitator also needs to have on hand, accurate and up to date information. Most importantly, even when the program has been completed, there should be some form of information service in place to ensure participants are kept up to date with the latest information.

5 The program must be designed by specialists in their field. The program should be taught by qualified and accredited staff.

Whatever the particular health parameter, ensure that the program has been designed by a specialist in that area (19).

Research shows that the efficacy of a WHP is increased if contracted to an outside consultant (21). Preference should be given to those who have a proven program with particular experience in a similar industry (27).

Often occupational health and safety staff within the company may advise workers to reduce their weight or cholesterol or alert a patient who has a health risk(18). However, due to familiarity and limited ability to run a comprehensive program there is generally little or no significant change in the behaviour of the individual (21).

When a professional health provider is outsourced, there is greater likelihood that beneficial changes in

health behaviour will occur (27). A provider should be well educated in the field, have a tertiary qualification and be an accredited member of their professional organisation.

Experience in health promotion is also essential. They should be able to fine-tune the program to the needs of the participants and be able to answer questions in a comprehensive manner with a sensitivity to the understanding and abilities of the participants. If this is achieved the participants will acquire an understanding of the health concern and then be guided in developing new lifestyle behaviours to elicit change.

While specialists in their field are important for the design and development of the program, other health professionals can be trained to a suitable level to present the program and generate excellent results (19).

The main criteria are that the staff are qualified and dedicated to improving the health of your workforce. The program presenter also needs to have rapport with the group. Strong inter-personal skills, excellent verbal communication, sensitivity to the needs of the group and the individual are also important for the program's success (19).

Most good consulting firms will select trained health professionals and then further train them to a standard acceptable to the consulting organisation. Check that those people employed by the consulting firm have actually had experience with your target market, and will be able to relate to your workforce (23).

The other option is to employ a consultant with experience in your industry to train your own staff to an acceptable level, to be able to present the program, and gain sufficient knowledge to answer any questions that may arise.

6 Behaviour modification strategies should be a key element of the program.

In order to elicit lifestyle changes, there needs to be a movement beyond just supplying information. The latest research shows the most effective worksite health promotion programs are those that use multiple strategies in order to enhance awareness, convey information and develop skills (16).

A program that aims for maximum effect, needs to address the complexity of human behaviour in order to elicit change. One of the most widely accepted methods of ensuring a new behaviour is maintained is using behaviour modification techniques. Individual behaviour changes require modelling, practice, time for learning, recovery and reward. Programs must follow this continuum of change (19).

The American Medical Association Council on Scientific Affairs concluded that behaviour modification of exercise and diet in obesity treatment is essential for long term weight control and a program that incorporated these elements is more likely to succeed (28).

When discussing worksite nutrition programs, the American Dietetic Association also concurred that behaviour modification was an essential ingredient in successful program. By encouraging achievable, incremental changes and then having rewards in place on a consistent basis, the participants can move through their own goals at their own pace and be suitably rewarded as they progress (25).

Desirable behaviours become self reinforcing with

correct program implementation (12). Any good health promotion program no matter what the overall aim, should have a large focus on individual goal setting as well as an established track record in motivating participants to achieve their goals with a built in reward structure

7 The program needs to be motivating and enjoyable.

A large amount of evidence validates the need for the program to be engaging as well as informative (21). If interest and enthusiasm are developed in the individual as well as the group, attrition will be minimised and participants will be motivated towards success(2).

Testimonials of past participants are often a good indicator of the enjoyment level of the class. The program needs to be enjoyable, otherwise retention will be difficult. This is particularly the case for men (19). Another factor which can contribute to retention, is the offering of a high intensity program to smaller groups of 10 to 15. This aids group dynamics and participation and enhances cohesion of the group.

8 Does the program provider offer suggestions for organizing the work environment to support the changes?

When a program is offered in the workplace, strategies need to be suggested to support the changes participants are making. When there is policy change coupled with environmental change, the efficacy of the program is enhanced. This can be as simple as an appraisal by the program provider, of the workplace in relation to the proposed outcomes of the program. In the case of weight reduction, this may take the form of suggestions to enhance the availability and choice of foods via the canteen, mobile tuck shop or vending machines.

Studies have show that change is achieved at up to twice the rate when compared to sites that do not implement structural and environmental change (6). These enabling strategies support the long-term maintenance of positive behaviour changes. These policy changes can be worked on, in consultation with the health program provider and the participants of the program (29).

9 The program should be proven to produce short and long term results.

The health promotion program must include measurable outcomes that can be managed and monitored (30). When selecting a worksite health promotion program, it is important to choose those with validated results achieved and maintained over time (14).

While there are a myriad of programs on offer which can show they have produced plausible results in the short term, it is the maintenance of these results in the long term which will have positive impacts on absenteeism and productivity and produce cost savings for the business (14).

Changing lifestyle is a long-range goal. Results should indicate changes in the targeted areas, over the duration of the program, and then three months, six months and twelve months after completion.

Relapse is a major concern, particularly in the long term. The program needs to have results that are indicative of adherence to new behaviour patterns over time. The more sustained the gradient, the more indicative the results are that the program has been a success.

It is also important to verify how many worksites and participants are represented by the results and how recently the statistics have been updated.

Another valuable source of information is whether the results have continued to improve from the inception of the program. This would indicate the health provider is involved in process and outcome evaluations and improving the program over time. Validating the results by referring to others in the same industry who have participated in the program, is also an excellent reference.

10 The program should have a strong follow up component

Follow up counselling is fundamental to any program designed to enhance adherence to behaviour changes (26). The best programs are those that use a model of health screening, intervention, evaluation and follow up (27).

Monitoring of measurable parameters is a key factor in the follow up program. Ongoing monitoring may be needed to reinforce the adoption of new behaviours (12). When participants know they will be monitored on a continuing basis, they are much more likely to continue with the behaviours adopted in the WHP (19).

An open line of communication continues to be important, once the program has finished. It will allow participants to receive feedback on their progress, but more importantly advice when they find it difficult to maintain their new behaviours.

The use of a follow up program will assist participants in devising coping strategies, allowing them a greater chance of overcoming any potential barriers that may arise in the future (26). Ensure any program selected has ongoing monitoring as well as review sessions with the presenter.

Results of a worksite health promotion program

Following are the results of a healthy eating and lifestyle program, designed specifically for blue-collar workers. The program was developed by two qualified dieticians, using the latest research in healthy eating and lifestyle strategies.

A preliminary overview of the program and results was given to key personnel by the program facilitator. Enrolment strategies were discussed and promotional materials were provided to enhance program enrolments.

Of the 550 workers from three separate organisations, 110 voluntarily enrolled in the program. Of these, 92 were classified as 'blue-collar' workers, the remaining 18 participants were managerial or office staff.

Participants were divided into groups, with the program then scheduled to accommodate the variation of start times of each shift. Six sessions were run weekly with each of the groups, with a 10 week and 16 week review.

A medical screening took place after the initial session. This facilitated a blood cholesterol analysis as well as a medical clearance for a moderate exercise and weight training program. Key health measures were taken weekly to allow participants to monitor their individual progress.

This acted as an inherent reward system as individually set goals were accomplished. Behavioural goals were also monitored and adjusted to reflect the changes over time.

Friendly competition was evident between participants. This competition increased as structural changes were implemented in the workplace. Attrition averaged 2 percent for each of the programs. Those who failed to complete the program were unable to do so because of paternity leave and unanticipated off site demands.

Of the 106 participants who completed the program, the following results were achieved. The trends evidenced at the end of the 16-week follow up were still apparent 12 months after initiation of the program.

Summary

Effective workplace programs can provide a foundation from which further health initiatives can be built. An integrated course not only improves employee health and morale, but also enhances productivity and workplace relations. Being proactive in establishing a healthy workplace also aids in the retention of skilled personnel. Absenteeism, injury rates and workers' compensation costs diminish when well presented and validated health promotion programs are offered.

These changes are more likely to occur if a number of key elements are evident in a worksite health promotion program. A well defined outcome for the target group and selection of an appropriate program provider, with specialist knowledge of the key issues for that group are essential.

The program needs to have validated results in both the short and long term, with at least a 12 month follow up to ensure monitoring and adherence to the goals set. Positive behaviour patterns are more likely to become part of the participant's lifestyle if positive reinforcement is built into the program and behaviours become self reinforcing.

Positive outcomes are further enhanced when management support the program with structural and environmental initiatives. This supportive environment sends a number of positive messages to the employee that further enhances workplace relations.

As employers acknowledge the health and well being of the individual as an asset to their organisation, they can respond to the needs and interests of their employees. By implementing an appropriate health promotion program with expertise in the needs of the workforce, both the organisation as well as the individual will benefit.

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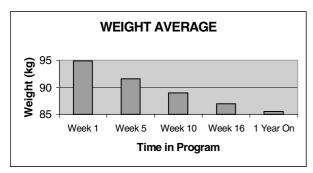
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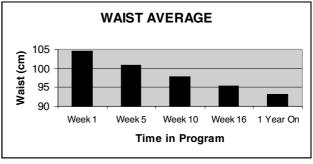
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	Week 1	Week 5	Week 10	Week 16	1 year on
Weight (kg)	94.9	91.6	89	87	85.5
Waist (cm)	104.5	100.8	97.8	95.3	93
Body Fat (percent)	28.5	26.8	25.7	24.9	23
Blood Pressure (mmHg)	139/91	127/82	123/78	122/76	121/78
Exercise (hrs/week)	1.3l	3.6	3.7	4.1	3.9
Fat Questions	28	15	NA	14	NA

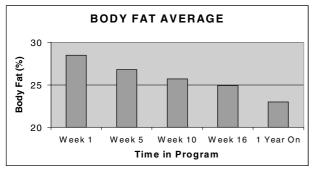
Table 1. Average change in major health parameters of participants in the Working Bodies Program. Source JKL Corporate Bodies (24)



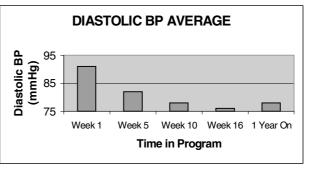
Graph 1. Average change in weight of program participants. Source JKL Corporate Bodies (24).



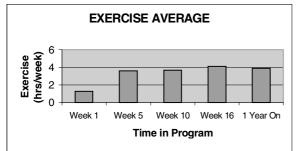
Graph 2. Average change in waist measure of program participants. Source JKL Corporate Bodies (24).



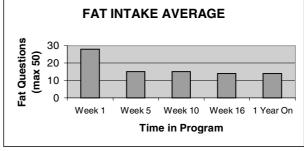
Graph 3. Average change in body fat of program participants. Source JKL Corporate Bodies (24).



Graph 4. Average change in diastolic BP of program participants Source JKL Corporate Bodies (24).



Graph 5. Average change in exercise level of program participants. Source JKL Corporate Bodies (24).



Graph 6. Average change in fat intake of program participants. Source JKL Corporate Bodies (24).

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