Evidence is mounting that in several respects people in the world are becoming healthier, however, a substantial number of people around the world continue to experience increasing prominence of morbid diseases, and see their traditional or medical doctors regularly for one medication or another. And in most cases, those that are not ill within a medical framework are not genuinely well either, they are hardly maximising their potentials, enjoying wellness in their day-to-day life, or maintaining high levels of energy and vitality. The benefits of regular exercise and good nutrition are popular topics of conversation today, because they help in rallying the troops inside our bodies. The importance of exercise and nutrition in the prevention of illness and enhancement of health has brought to the fore the need for a review of the scientific literature on the benefits associated with types of physical activity. Using multimodal perspective, suggestions for educators, health care workers to use in counselling people toward increasing vegetable and fruit intake and incorporating proper nutrition and regular exercise are discussed.

“A human being is designed to exercise, just as birds are designed to fly in the sky; The quality of life is determined by its valour and activities”

- African Proverbs

A growing body of studies conducted by researchers (Biddle, Akande, Vlachopoulos & Fox, 1996; Biddle & Bailey, 1985; Biddle, Akande, et al., 1996; Blair et al., 1989; Blumenthal et al., 1989; Boyle, 1985; Carlson, 1982, Charlesworth & Nathan, 1984, Danish, Petitpas & Hale, 1993; Howard, 1993; Jennett, 1996; Magill, Ash & Smoll, 1978; Pettijohn, 1992; Sarafino, 1990; Selye, 1985; Serfass & Gerberich, 1984; Sheridan & Radmacher, 1992; Van Raalte & Brewer, 1996) has suggested that although the impact of sports or physical exercise on individuals today is pervasive, yet some people including children and adolescents are not getting enough exercise. Many children and adolescents are not pushed to exercise more vigorously in their classes. While we hear
a lot about the exercise revolution among adults, parents are poor role models to children and adolescents when it comes to vigorous physical exercise. Recent investigations suggest that the negative impact of stressful events on health declined as exercise and nutrition levels increased (Brown & Siegel, 1988; Feist & Brannon, 1989, Grimes & Mattimore, 1989). Exercise can be a valuable resource for combatting children and adolescents’ stresses. Children and adolescents who exercised a lot coped more effectively with stress and had more positive identities than their counterparts who engaged in little exercise. Any form of exercise is better than none. Exercise is important, one could be fit at any age and running is an excellent way to improve fitness and health. Nutrition, exercise and competition are innately human, no matter how much socialization or cultural manipulation is used to minimize them.

The human body was designed for an active life. Evidence is mounting that in several respects people in the world are becoming healthier. For example, fewer smoke, more eat low-fat diets, and some engage in a special type of physical activity in which they exert their bodies for the sake of fitness, health or body development. Still, a substantial number of people around the world continue to experience increasing prominence of morbid diseases such as ischaemic heart disease (IHD), coronary heart disease (CHD) cerebrovascular disease, obesity, depression, diabetes, or hypertension, and see their traditional or medical doctors regularly for one medication or another. And in most cases, those that are not ill within a medical framework are not genuinely well either, they are hardly maximising their potentials, enjoying wellness in their day-to-day life, or maintaining high levels of energy and vitality.

Exercise and nutrition are within the core of human beings; they are who we are. They are the creative of human aspects of civilization (May, 1996). In fact, humans may actually harbour a biological craving for good nutrition and competitive sport. The hormone surge in people who exercise regularly. Research suggests that physically active people have lower rates of anxiety and depression than sedentary people (Santrock, 1996; Schafer, 1996; Silva, 1996).

Exercise normalizes the brain’s stress response and biologically, exercise seems to give the body a chance to practice dealing with stress (Azar, 1996). Exercise makes human bodies stronger, because it increases the blood supply to our brains. Working out builds the mind’s muscles (Greenough, 1996). Some evidence in humans suggests that being physically fit helps people maintain their cognitive abilities as they age (Azar, 1996- Greenough, 1996). Exercise and nutrition may enhance treatment for those with even the most severe mental disorders. In addition, exercise can give depressed people nonthreatening social support. Physiological aspects of exercise can affect mood.

It has long been folk wisdom that exercise has a positive impact on mood. When children drive their parents to distraction from being cooped up too long, parents know enough to send them outside to play in order to “work off some steam.” (Schafer, 1996). As Silva (1996) points
out, “exercise can short-circuit the cycle of cognitive and physical tension that characterizes anxiety disorders. Cognitive anxiety creates physical anxiety. A person can dissipate the somatic anxiety through exercise. Exercise provides a form of mental ‘time out’ that gives the body a break” (p.23). Exercise and nutrition help to rally the troops inside our bodies. Physical activity and sports have great potential to increase children’s self-esteem and motivation. Weiss (1996) has consistently demonstrated that self-esteem and perceptions of physical ability can predict achievement behaviour, motivation and positive affect in school children.

Consistent with this line of reasoning, these researchers and others have demonstrated that besides being a cultural phenomenon, exercise or sports also play an important role in the development of identity, self-esteem and individual competence. Exercise, just like all physical activities, uses energy and burns calories as a way of health and body development (Biddle, Akande, Vlachopoulos, & Fox, 1996).

The benefits of regular exercise and good nutrition are popular topics of conversation today, because exercise and nutrition can be of importance in the prevention of illness and the enhancement of health. Major improvements in health are gained from physical exercises such as cycling, basketball, jogging, jumping rope, ice and roller skating, snow and water skiing, tennis, vigorous walking, dancing, swimming and running, especially involving increasing oxygen consumption over a period of time. These aerobic exercises are characterized by high intensity, long duration, and high endurance. Research has shown that poor flexibility and inadequate muscle strength contribute to musculoskeletal disorders (Carlson, 1982). For a better result, flexibility exercises must be practised daily until the desired level of fitness is reached. Sarafino (1990) has noted that people who begin a flexibility exercise programme should guard against overtaxing their bodies, exercise under safe conditions with proper skills, and have periodic medical examinations to determine whether any underlying risks exist.

Gas Exchange and the Regulation of Ventilation in Exercise

Jennett (1996) observed that despite the greater oxygen desaturation blood leaves the lungs extremely fully oxygenated and with the same gas tensions at rest. This is possible because of the simultaneous increase in alveolar ventilation, which is normally sufficient to maintain the alveolar gas concentrations at their resting level. The greater rate of removal of oxygen from the alveolar gas by the blood is matched by a greater rate of replenishment through ventilation, likewise the greater rate of delivery of carbon dioxide by the blood to the lungs is matched by a greater rate of removal through ventilation. The arterial blood gas tensions therefore remain virtually unchanged. This is true right from the start of exercise.

When effort begins abruptly, breathing increases, through an increase in tidal volume, within the first few breaths. The initial increase is fastest, there is then a further rise until a steady level is reached within about 3 minutes with a very sharp initial rise sometimes occurring. The increase in
C02 excretion follows a similar time-course to the increase in ventilation, and the arterial P$_{CO2}$ rises very little, if at all - it may indeed fall initially, depending on the steepness of the initial increase in ventilation. This means that the alveolar ventilation keeps pace with the increased rate of delivery of C02 to the lungs, which in turn keeps pace with the increased rate of C02 production in the working muscles.

At the same time, the O2 usage increases and the arterial oxygenation is kept normal. The precise matching of alveolar ventilation to C02 production and oxygen usage is still not satisfactorily accounted for. The control system performs as though it were operating to maintain arterial blood gas levels. There are at least three possible mechanisms for peripheral chemoreceptor involvement; they may 'see' the increase in amplitude of the fluctuations of the blood gases during the breathing cycle, which has been shown to occur in exercise (Blair et al., 1989; Blumenthal et al., 1989; Charlesworth & Nathan, 1984; Jennett, 1996-1 Palmer, 1987).

**Table 1**

**Suggested foods in everyday diet**

a. Bread, cereals, Nfeli meal/Sadza, Ogi/Corn pap and other grain products. These foods are essential for the body because they contain high proteins and fibre. Bread, potatoes, pasta, rice and dried beans are all essential to a person's diet. For example, pasta is high in carbohydrates, and can supply the body with renewed vigour and enthusiasm.

b. Vegetables. Different high quality vitamins are found in vegetables, and they are low in fat. Dietitians suggest an average person should eat five servings of fruit and vegetables a day. Physicians believe that the risk of cancer can be reduced considerably by eating more vegetables.

c. Fruit. To have a healthy diet, one needs to eat any diet that includes fruit. Fruit is high in carbohydrates, which provide overall energy level. For instance an apple supplies fibre, simple sugar and starch and gives an individual immense supply of vigour. Fruit is said to be the most perfect food, "created" specifically for humans.

d. Dairy products. These include milk which contains different kinds of good things - carbohydrates, fat, and proteins.

e. Poultry, fish, meat and eggs. A diet with moderate portions of meat, poultry, fish and eggs are high in vitamins, iron, and other minerals which helps the body.
Table 2
Classification of fruits

<table>
<thead>
<tr>
<th>ACID</th>
<th>SUB-ACID</th>
<th>SWEET</th>
</tr>
</thead>
<tbody>
<tr>
<td>grapefruit</td>
<td>apples</td>
<td>bananas</td>
</tr>
<tr>
<td>guavas</td>
<td>apricots</td>
<td>dates</td>
</tr>
<tr>
<td>lemons</td>
<td>berries</td>
<td>fried fruits</td>
</tr>
<tr>
<td>limes</td>
<td>cherries</td>
<td>figs</td>
</tr>
<tr>
<td>oranges</td>
<td>grapes</td>
<td>papinos</td>
</tr>
<tr>
<td>pineapples</td>
<td>pawpaws</td>
<td></td>
</tr>
<tr>
<td>mangoes</td>
<td>plums</td>
<td>prunes</td>
</tr>
<tr>
<td>strawberries</td>
<td>pears</td>
<td>raisins</td>
</tr>
</tbody>
</table>

Winter (or Rainy season) Fruits

<table>
<thead>
<tr>
<th>apples</th>
<th>pears</th>
<th>pawpaw</th>
</tr>
</thead>
<tbody>
<tr>
<td>oranges</td>
<td>guaveas</td>
<td>bananas</td>
</tr>
<tr>
<td>pineapples</td>
<td>grapefruit</td>
<td>kiwifruit</td>
</tr>
</tbody>
</table>

Summer or (Dry Season) Fruits

<table>
<thead>
<tr>
<th>mangoes</th>
<th>grapes</th>
<th>plums</th>
</tr>
</thead>
<tbody>
<tr>
<td>strawberries</td>
<td>bananas</td>
<td>pineapple</td>
</tr>
<tr>
<td>cherries</td>
<td>peaches</td>
<td>watermelons</td>
</tr>
</tbody>
</table>

Table 3
Exercise Pathways Schäfer (1996) suggests the following psychological and physiological pathways on how aerobic exercise can help control stress. Aerobic exercise helps control tension, anxiety, depression, and other stress symptoms.

Physiological pathways through which exercise is thought to improve stress control involve a number of factors.

Release of muscle tension
Burning off of stress-induced adrenaline, which leaves the bloodstream and consumed in the muscles
Post-exercise quieting of the sympathetic nervous system (the part of the system that produces tension).
Production of beta-endorphins, the body’s own morphine-like painkiller and source of euphoria.

Lowered baseline tension level.

Body becomes familiar with and habituated to physiological arousal.

Psychological pathways related to tension control from exercising are likely to include the following.

Release of pent-up emotions.

Creative problem-solving during the exercise session, resulting in more constructive coping the rest of the day.


Heightened internal control.

Feeling of well-being and calm - “afterglow” from exercise.

Mood stabilization.

“Time away” benefit (not unique to exercise, of course).

Decreased negative thinking and rumination.

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**Table 4**

**Aerobic Training Effect**

Research has shown that three main changes will occur with aerobic exercise, all of which provide full energy level through more effective use of oxygen (Schafer, 1996).

<table>
<thead>
<tr>
<th>i. Improvements in oxygen intake (respiration)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strengthening of diaphragm muscle.</td>
</tr>
<tr>
<td>Greater lung flexibility and capacity.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ii. Improvements in oxygen circulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>More red corpuscles</td>
</tr>
<tr>
<td>More output per heartbeat</td>
</tr>
<tr>
<td>Slower heart rate at given exertion level</td>
</tr>
<tr>
<td>More blood volume</td>
</tr>
<tr>
<td>Opening of new capillary networks</td>
</tr>
<tr>
<td>Expansion in size of blood vessels and capillaries</td>
</tr>
<tr>
<td>Less blood stickiness</td>
</tr>
<tr>
<td>Working out builds the mind’s muscles</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>iii. Improvements in oxygen use (metabolism)</th>
</tr>
</thead>
<tbody>
<tr>
<td>More efficient discharge of carbon dioxide</td>
</tr>
<tr>
<td>More efficient extraction of oxygen within muscle cells</td>
</tr>
<tr>
<td>More efficient burning of oxygen within muscle cells</td>
</tr>
</tbody>
</table>
Table 5
NUTRITION/ EXERCISE FOR WELLNESS

<table>
<thead>
<tr>
<th>Concept</th>
<th>Processes/Related Ideas</th>
<th>Characteristics/Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutrition</td>
<td>Its nature</td>
<td>Experts recommended range of Energy intake for individuals takes into account their various needs, their growth rate, and their level of exercise. Some individuals’ bodies bum energy quicker and faster than the others - a central concept is basal metabolism rate. Many people eat too fatty diets.</td>
</tr>
<tr>
<td>Exercise</td>
<td>Its nature</td>
<td>Experts agree that children and adults are not getting enough exercise. Schools, and electronic media have contributed to the poor exercise patterns of adolescents and young adults. Parents are poor role models in the realm and sphere of exercise. Toward an healthier individual life, experts recommended focus on preventive services, health promotion and children/adolescence and adult populations. Exercise can serve as buffer for stress.</td>
</tr>
</tbody>
</table>

**Acid-base Balance in Exercise**

In exercise, there is an increased rate of production of acidic metabolites in the contracting muscle fibres; these are released into the interstitial fluid and from there into the blood. There is therefore a tendency for the pH to fall in the whole extracellular fluid compartment of the body as well as in the muscle itself. The production of lactate increased with any degree of muscular effort. During moderate effort, lactate production can be balanced by its uptake and recycling, in the liver. It is therefore only when the effort is more severe or prolonged that the blood lactate rises and the pH falls. “This is associated with release of carbon dioxide from bicarbonate in the plasma, and with an increase in the rate of CO2 excre-
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tion from the lungs. Lactic acidemia stimulates a further increase in ventilation, one and above that which is required to keep arterial PC02 at its normal value. The arterial PC02 is therefore lowered, which partially corrects the increase in acidity’ (Jennett, 1996; p.357).

Temperature Control and Fluid Balance in Exercise. Heat loss

Muscle contraction generates heat, so there is additional heat to be lost during work or exercise if body temperature is to remain constant. The greater rise in temperature which ordinarily occurs in healthy people in very heavy exercise is about 2 C. The heat-losing mechanisms are activated by stimulation of the hypothalamic centres when the arterial blood becomes warmer than normal. Via the autonomic nervous system the resistance in skin vessels is decreased; therefore the skin blood-flow rises, heating up the skin so that the gradient for loss through the ‘shell’ is steepened.

Nutrient supply for muscular contraction in exercise

The nutrient most readily available to the muscle is its glycogen store. Use of this begins promptly and is at first anaerobic, resulting in the formation of lactate. This is removed by the blood and used by the liver in the synthesis of glucose. Blood glucose continues to be utilized, but to a lesser extent as exercise proceeds; free fatty acids become the major fuel. The ratio of insulin secretion to glucagon secretion from the pancreatic islets is decreased during muscular work. This is associated with a reduction in the storage of glucose and greater synthesis and release of glucose in the liver. The concentration of glucose in the plasma remains steady or rises (though it may decrease to less than the normal resting level towards the end of very strenuous endurance effort). The predominant effect of glucagon, together with adrenaline, is to mobilize free fatty acids stored in adipose tissue. There is an increase in the secretion of growth hormone, which has the same action (Blair et al., 1999-1 Jennett, 1996).

Benefits of Regular Exercise / Physiological benefits of exercise

Total quality and even length of life can benefit from such activities as aerobic dance, gardening, hunting, cycling, stair climbing rather than taking the elevator, swimming, running and most importantly brisk walking. All these activities if done vigorously can be beneficial in controlling stress, tension and rejuvenating the body and spirit (Schafer, 1996). Because the person is viewed as a whole system, therefore a change in any one part of the system affects the other parts of the system (Jenks, 1996).

In a progressive walking-jogging programme with a group of people in their 70’s. DeVries (1977) was able to find out that many of the negative physical characteristics of ageing can be reversed through exercise. At the end of the six-week programme, DeVries also noted that the majority of the old people gained many physiological benefits - lowering of systolic and diastolic blood pressure. Furthermore, he observed that the physiological characteristics of ageing can be produced in young people by keeping them in beds for several months (i.e. inactive). Many recent impressive studies found that
aerobic programmes are associated with higher levels of health and well being. Carlson (1982) has shown other health and physiological benefits of regular physical exercise and activity as follows:

- help to stay lean and avoid obesity.
- help to clear out arteries by relieving internal congestion.
- lower the lower blood pressure by reducing total peripheral resistance in blood circulation.
- aid digestion and elimination.
- stimulate bone marrow by increasing resistance to illness.
- improve the threshold and tolerance of pain.
- stabilize and lower systolic and diastolic blood pressure.
- improve bowel function, muscle tone, firmness, and strength.
- increase the loss of body weight and body fat.
- improve posture.
- aid blood circulation and increase the number of red corpuscles.
- help redistribute body weight for a more balanced shape.
- increase physical endurance.
- help clear the skin.
- may retard or reverse atherosclerosis or reduce the incidence of arrhythmic heartbeats.
- increase inner size of capillaries, lower blood lipids and improve lung capacity.
- increase bone mineral content among people at risk with bone fracture or osteoporosis.
- control blood sugar by conditioning the heart.

**Psychological benefits of exercise**

In DeVries’ (1977) study, cited earlier, the old people also reported improved self-esteem, body self-concept, family relations, memory, concentration, more energy, better sleep, and improved sex lives.

Certain forms of physical exercise have been found to decrease anxiety and depression. DeVries and Adams (1972) found that a 15 minute walk produced more relaxation than a standard dose of a mild tranquilliser. Raglin and Morgan (1987) found that both aerobic exercises (e.g., jogging, basketball, jumping the rope, tennis, vigorous walking, swimming, or stationary cycling), and quiet rest reduced anxiety, while increasing cardiorespiratory endurance, self-confidence, self-esteem and pleasure. Depression, as Sheridan and Radmacher (1992) observed, is associated with low levels of norepinephrine and regular exercise increases this neurotransmitter. It has been established that depression can be overcome through the sense of mastery and self-control gained through exercise. ‘Enhanced body image and feelings of self-worth are also byproduct gains of exercise that might counteract depression’. Carlson (1982) has noted that physical exercise can also bring about heightened joy, self-esteem, affective awareness, elevated mood and a higher state of consciousness. These feelings and emotional effects may be partially due to increases in certain biochemical levels, especially catecholamines. Secretion of catecholamines from the adrenal medulla is regulated by its sympathetic nerve supply and forms part of the overall response to activity and stress. As well as adjusting all body systems for physical activity, by actions on smooth and cardiac
muscle, cellular metabolism is accelerated and the supply of nutrients adjusted. Adrenaline is responsible for these effects. At rest, an increase in adrenaline secretion increases the whole body metabolic rate (Blair et al., 1989; Blumenthal et al., 1989; Jennett, 1996).

In demonstrating the direct effect that exercise can have on cognitive abilities El-Naggar (1981) found that left-hemisphere brain function was significantly enhanced with improvements in physical fitness levels. According to Carlson (1982) cognitive functioning seems to improve both during exercise and after finishing physical exercise. Research has shown that aerobic exercise or physical exercise led to an increase in self-esteem and body concept (fitness and agility) in preschool children, college students and healthy, older people at the end of an eight-week aerobics programme (Alpert, Field, Goldstein & Perry, 1990; Johnson, Radmacher & Terry, 1986; King, Taylor, Haskell & DeBusk, 1989). Physical activity also plays an important role in developing and maintaining effective interpersonal relationships. For example a workshop designed to improve interpersonal skills was more effective when combining physical training with interpersonal skills training than when using only interpersonal skills training (cf, Collingwood, 1976).

Behaviourally, exercise is said to be addictive, thus it may replace or prevent undesirable addictive behaviours such as alcoholism, smoking, overeating, and excessive drinking. Research findings have found that the more active and physically fit a person is, the more normal his or her assessment results are on psychometric tests, because physical fitness appears to affect behaviour in a positive way (Akande & Akande, 1994; Carlson, 1982; Gary & Guthrie, 1972; Glasser, 1976, 1981; Greist, Klein, Eischens, Gurman, & Morgan, 1979). The psychological gains of regular physical exercise are illustrated in the following summary of research findings:

- Exercise helps eliminate undesirable behaviours.
- Exercise improves sharpness of the five senses especially the sense of taste. This is true with food and drink tasting very much better after an exercise.
- Exercise or sport allows for the creative expression of values and abilities.
- Exercise enhances a firmer appearance and elevated mood.
- Exercise is a mental release.
- Exercise relieves depression.
- Exercise is fun and relaxation.
- Physical fitness helps vitamin fight off disease.
- Exercise means empowerment and energy source that motivates a person to action.
- Exercise helps individuals work and act with increased energy and reduced fatigue/boredom.
- Exercise improves immune response and better sleep.
- Exercise improves reaction time and gives greater ability to concentrate.
- Physical fitness improves self-esteem and self-regard.
- Physical fitness improves self-confidence, self-concept and assertiveness.
- Exercise promotes control of body weight by discouraging undesirable behaviours.
- Exercise reduces anxiety and hostility, as it is an essential part of comprehensive stress management. Research has shown
tentatively that stress was not a predictor of illness in students with high activity levels. In other words, stress life events were associated with illness primarily among students with low levels of exercise.

Exercise could change the entire life-styles. People quit undesirable behaviours such as excessive drinking and smoking, and change their eating habits because good nutrition is an integral part of physical fitness. People of all ages could get healthful levels of exercise from school, park, and worksite recreation programmes. However people should try and avoid exercise dependence. This is because exercise dependence, reflected in compulsive or excessive physical activity, can be detrimental to health and well-being (de Coverley Veale, 1987-1 Kirby & Adams, 1996).

Children of all ages should be aware of the importance of nutrition and exercise in their lives. This will involve people avoiding smoking, eating junk food, and having extra flab hanging around their middle, spending too much time sitting down watching television and living as couch potatoes’ (Santrock, 1996). There should be a special concern in the amount of fat in their diet. For example living on fast foods that provide only minimal nutritional value contribute to increased fat levels which result in larger fat cells (overweight) later in life. Also foods such as complex carbohydrates and plain sugars affect glucose levels in the blood. Some humans’ burn energy faster than others, although it could be argued that individuals could inherit a tendency to be overweight. However, research has shown that vast numbers of children and adolescents who do not have obese parents become obese themselves due to consumption of large quantities of fast-food meals which contribute to excess fat intake. As Santrock (1996) pointed out, every individual has a certain amount of stored fat in their bodies (set point) which regulates their body shape and weight. It is probable that when individuals gain weight the number of fat cells increases, and they may not be able to get rid of them. Generally, research has found that individuals with slow metabolism are likely to grow fatter or obese than individuals with fast metabolism (Browell & Stein, 1996; Santrock, 1996). It has also been discovered that, regardless of an individual’s genetic background, physical activity such as aerobic exercise raises metabolic rate, which helps to burn calories. Vigorous exercise not only burns up calories and fine-tunes the body’s set points but continues to increase metabolic rate for many hours after the aerobic exercise.

To get the full health and psychological benefits of nutrition and exercise or sport, people need to continue doing healthful levels of physical activities or being very active in their normal lifestyles throughout their lives. Using exercise to relax is more rewarding than another common release used at the end of a day’s work - alcohol. Drinking alcohol adds another stressor and can ultimately lower a person’s ability to manage stress (Charlesworth & Nathan, 1984). Recent research explored the effects of exercise and vitamins on the body’s immune system in its constant fight to ward off disease. Vitamins C and E improved immune functioning, but exercise augmented these effects. According to
physiologists, the recommended frequency of exercise is a minimum of three times per week. The three days should not be continuous but scheduled with a day of rest between the days of exercise to avoid negative effects of exercise. On average, the amount of time a person should exercise each time is twenty to thirty minutes. This time should be continuous. However, the belief that regular exercise should be vigorous and prolonged must not discourage many people from starting an aerobic programme. People must recognize that specific exercise would depend on a person's age, interests, current health and physical capacity. However, adolescents should not use their gender-role mentality to think that men are better built and suited to physical exercises than women. For older people who are not ready to begin a formal exercise programme, Charlesworth and Nathan (1984) have listed several ways to increase their physical activity level:

1. Cultivate a behavioural modification technique for dealing with nutrition, physical fitness and mental health.
2. Try and take a walk rather than sitting down for a coffee break.
3. Try and do some walking to a nearby restaurant instead of driving down or looking for somebody to deliver your food.
4. Walk vigorously or cycle to a store or post office instead of driving to all places.
5. Use a distant toilet or rest room rather than the one closest to your desk at work.
6. Stand instead of sitting down while travelling in a bus.
7. Walk vigorously the longer distance rather than taking a short cut.
8. Try and use the stairs whenever possible instead of relying on the elevator all the time.
9. Try and walk your dog or pet a long distance, more often and faster.
10. When using a public transportation, try and get off a stop earlier rather than asking the driver to drop you on your doorstep at every time.
11. Park the car farther away from the shopping complex or your office and walk the distance.
12. Remember you need to eat fresh food with numerous nutrients to stay healthy. These include water, vitamins and minerals, amino acids (proteins), fresh fruits, fresh vegetable oils calories from carbohydrates and proteins but less animal fats, less sugar, sodium.
13. Choose lean meat, fish, cautiously limit your intake of eggs, liver, butter, cream, coconut oil, palm oil, dairy products and excessive sugar. Trim excess fat off meats and remove skin from chicken. Eat raw vegetables, cruciferous vegetables, legumes, allium vegetables, green vegetables, carrots and citrus fruits. All these are major sources of dietary fibres which are commonly believed to be protective against colon cancer. Steinmetz and Potter (1996) have noted that dietary fibre may increase faecal bulk and decrease transit time; also fibre may protect cell membranes and DNA from oxidative damages caused by cancers of the stomach, esophagus, lung, oral cavity and pharynx, endometrium, pancreas and colon.
14. Food alone will not guarantee good health or well-being - but good eating habits combined with regular exercise
and stress coping skills can wonders for your health. Steinmetz and Potter (1996) has suggested guidelines for educators, health care workers and sports psychologists to use in counselling people toward fresh vegetable and fresh fruit intake.

15. Spend little time watching television. Try one new fruit or vegetable each week. Double normal serving sizes for vegetables. Eat fruit on cereal or muesli (not just bananas but also apples, grapes, berries, peaches, and mandarin oranges).

Have all-vegetable-based meals (eg. vegetable chili or stew).

Eat fruit as a snack.

Eat dried fruit instead of candy, chewing gum and sweets.

Drink fruit or vegetable juice instead of soft drinks.

Have fruit salad for dessert (eg. apples, peaches, pears, or bananas).

Take raw vegetable platters to parties (include raw sweet potato sticks, asparagus, green beans, jicama, red pepper rings, zucchini, broccoli flower, in addition to the more common carrot and celery sticks).

Add vegetables to favourite entrees (eg. tacos, spaghetti, pizza, lasagna).

Make frozen fruit kebobs for kids and children (use pineapple, bananas, strawberries).

Eat vegetable meals more often.

Eat more African and international dishes (eg. Nigerian Eba/Amala and Egusi/ogbono soup, Southern African Sadza/Mielimeal, Moroccan stew, Mexican vegetable enchiladas, Indian curries, Italian pasta primavera, Spanish paella, Oriental stir-frys, Greek vegetable moussaka etc.)

Reduce fats, especially saturated fats such as butter and untrimmed red meat.

Choose foods low in sodium, and minimize addition of table salt.

Consume very little alcohol per day and none for expectant mothers.

Minimize overeating, undereating, “sugar hits”, and excessive caffeine.

Remove skin from poultry before cooking.

References


A Global Village

If we could shrink the earth's population to a village of precisely 100 people, with all the existing human ratios remaining the same, it would look something like the following:

There would be:

- 57 Asians
- 21 Europeans
- 14 from the Western Hemisphere, both North and South America
- 8 Africans

- 52 would be female
- 48 would be male

- 70 would be non-white
- 30 would be white

- 70 would be non-Christian
- 30 would be Christian

- 89 would be heterosexual
- 11 would be homosexual

- 6 people would possess 59% of the entire world's wealth and all 6 would be from the United States
- 80 would live in substandard housing
- 70 would be unable to read
- 50 would suffer from malnutrition
- 1 would be near death; 1 would be near birth
- 1 (yes, only 1) would have a college education
- 1 would own a computer

When one considers our world from such a compressed perspective, the need for ACCEPTANCE, UNDERSTANDING, and EDUCATION becomes glaringly apparent.