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Physical Fitness and Diet Plan Guideline

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ABSTRACT

Physical fitness is a state of health and wellbeing and, more specifically, the ability to perform aspects of sports, occupations and daily activities. Physical fitness is generally achieved through proper nutrition, moderate-vigorous physical exercise and sufficient rest. Physical fitness has always been an important part of life. It is theorised that when people left a hunter-gatherer lifestyle and formed fixed communities based around agriculture that physical fitness levels declined. This is not to say that levels of physical labour decreased but that the type of work undertaken was not necessarily as conducive to a general level of fitness. As such, regimented fitness regimes were either invented or became more common. Gymnasiums which would seem familiar today began to become increasingly common in the 19th century. The industrial revolution had led to a more sedentary lifestyle for many people and there was an increased awareness that this had the potential to be harmful for health. This was a key motivating factor for the forming of a physical culture movement. This movement advocated increased levels of physical fitness for men, women and children and sought to do so through various forms of indoor and outdoor activity, and education. In many ways it laid the foundations for modern fitness culture.

Its recommended that all adults should avoid inactivity to promote good health mentally and physically. For substantial health benefits, adults should participate in at least 150 minutes a week of moderate-intensity, or 75 minutes a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity aerobic activity. Aerobic activity should be performed in episodes of at least 10 minutes, and preferably, it should be spread throughout the week.

The Parts of Physical Fitness

Physical fitness is made up of eleven parts - six of them health related and five skill related. All of the parts are important to good performance in physical activity, including sports. But the six are referred to as contributing to *health-related physical fitness* because scientists in kinesiology have shown that they can reduce your risk of chronic disease and promote good health and wellness. These parts of fitness are *body composition, cardiorespiratory endurance, flexibility, muscular endurance, power,* and *strength.* They also help you function effectively in daily activities. As the name implies, *skill-related physical fitness* components help you perform well in sports and other activities that require motor skills. For example, *speed* helps you in sports such as track and field. These 5 parts of physical fitness are also linked to health but less so than the health-related components. For example, among older adults, *balance, agility*, and *coordination* are very important for preventing falls a major health concern, and *reaction time* relates to risk for automobile accidents. Each part of physical fitness is described in more detail in the two following features: The Six Parts of Health-Related Fitness and The Five Parts of Skill-Related Fitness.

Health Related Physical Fitness

Think about a runner. You can probably run a long distance without training; it means you have good fitness in at least one area of health-related physical fitness. But does she have good fitness in all six parts? Running is an excellent form of physical activity, but being a runner doesn't guarantee fitness in all parts of health-related physical fitness. Like the runner, you may be more fit in some parts of fitness than in others. The feature named The Six Parts of Health-Related Fitness describes each part and shows an example. As you read about each part, ask yourself how fit you think you are in that area.

Fit Fact

Power, formerly classified as a skill-related part of fitness, is now classified as a health-related part of fitness. Power is associated with wellness, higher quality of life, reduced risk of chronic disease and early death, and better bone health. Power, and activities that improve power, have also been found to be important for healthy bones in children and teens. How do you think you rate in each of the six health-related parts of fitness? To be healthy, you should be fit for each of the six parts. Totally fit people are less likely to develop a health problem caused partly by lack of physical activity - such as heart disease, high blood pressure, diabetes, osteoporosis, colon cancer, or a high *body fat level.* People who are physically fit also enjoy better wellness. They feel better, look better, and have more energy. You don't have to be a great athlete in order to enjoy good health and wellness and be physically fit. Regular physical activity can improve anyone's health-related physical fitness.

Skill Related Physical Fitness

Just as the runner in our example may not achieve a high rating in all parts of health-related physical fitness, she also may not rate the same in all parts of skill-related physical fitness. Though most sports require several parts of skill-related fitness, different sports can require different parts. For example, a skater might have good agility but lack good reaction time. Some people have more natural ability in some areas than in others. No matter how you score on the skill-related parts of physical fitness, you can enjoy some type of physical activity. Remember that good health doesn't come from being good in skill-related physical fitness. It comes from doing activities designed to improve your health-related physical fitness, and it can be enjoyed both by great athletes and by people who consider themselves poor athletes.

As noted earlier, health-related fitness offers a double benefit. It not only helps you stay healthy but also helps you perform well in sport and other activities. For example, cardiorespiratory endurance helps you resist heart disease and helps you perform well in sports such as swimming and cross-country running. Similarly, strength helps you perform well in sports such as football and wrestling, muscular endurance is important in soccer and tennis, flexibility helps in sports such as gymnastics and diving, power helps in track activities such as the discus throw and the long jump, and having a healthy amount of body fat makes your body more efficient in many activities.

Physical fitness is often divided into the following categories:

1. Cardiovascular endurance: This is the ability of the body to deliver oxygen and nutrients to tissues and to remove wastes over sustained periods of time. Cardiovascular endurance can be improved through aerobic exercise; those performed at a moderate level of intensity over a relatively long period of time such as running or playing tennis.

2. **Muscular strength and endurance:** Strength deals with the ability of the muscle to exert force for a brief time period, while endurance is the ability of a muscle, or group of muscles, to sustain repeated contractions or to continue to apply force against an inert object. Weight training provides the means to develop both the strength and size of skeletal muscles.

3. **Flexibility:** This denotes the ability to move joints and use muscles through their full range of motion. Flexibility may be increased through stretching. Yoga and exercise are whole body workouts that focus on flexibility and balance.

4. **Body composition:** Composition refers to the body in terms of lean mass and fat mass. An optimal ratio of fat to lean mass can be determined by a person's body/mass index. A person's BMI is a more accurate method of determining whether a person's weight is healthy in relationship to their particular body type. Performing the right set of exercises can help people convert fat through increasing muscle mass.

In the case of athletics, terms such as accuracy, agility, coordination power, speed, and stamina are appropriate.

Many sources also cite mental and emotional health as an important part of overall fitness. This is sometimes presented as a triangle made up of three sub-sections, which represent physical, emotional, and mental fitness. The ideal triangle is balanced in all three areas. Like the food and nutrition pyramid designed for healthy eating, the "triangle" is in alignment with practitioners today that wish to address a more holistic approach towards health and aging.

Specific or task-oriented fitness is a person's ability to perform at a specific activity with a reasonable efficiency, for example, in sports. Specific training can prepare either an athlete or a worker in their particular field or sport.

Examples of athletic training would be: Training for a 400m sprint—in which case a runner performs at ultimate speed throughout a short distance. In the case of a sprinting, the athlete must be trained to run anaerobically throughout the race. In a marathon, which covers a long distance, the athlete must be trained to work aerobically; endurance must be increased to the maximum.

Anaerobic exercise is used by athletes in non-endurance sports to build power and by body builders to build muscle mass. Muscles trained under anaerobic conditions develop differently, leading to greater performance in short duration, high intensity activities, which last up to roughly two minutes. Aerobic exercise, on the other hand, includes lower intensity activities performed for longer periods of time.

Does sports performance equal physical fitness?

Physical fitness is defined as the ability and activity to cope with the demand of various activities. It is not just about athletic performance. Health-related physical fitness is measured by two aspects: the ability to cope with daily activities as well as the persistency in good functioning of the body. Sports-related physical fitness refers to outstanding performance in a particular kind of sport. Parents in general would take health-related physical fitness for granted while hoping their children will excel in sports-related physical fitness on top of academic excellence.

Such belief is based solely on parents' expectation and filled with fallacies.

1. Physical health should not be taken for granted. Physical fitness takes a lot of effort and time to achieve.

2. Physical fitness should not be viewed from only the sports-related aspect, but also its health-related aspect, such as the ability to attend classes and completing assessment.

3. Sports-related physical fitness takes consistent training as well as talent. It cannot be guaranteed by hard work.

4. To achieve long-term physical health, children should focus on developing their health-related physical fitness. It is not just for being healthy per se, but to keep away from obesity, high blood pressure, high lipid level, diabetes or other diseases.

Here are four practical ways for children to maintain their health-related physical fitness through exercising amidst busy school work:

1. Develop interest in at least one competitive sport like ball games or swimming, and practice regularly (say once a week).

2. Walk for thirty minutes consecutively.

3. Practice muscles strengthening and flexibility training twice a week during physical education lesson.

4. Actively participate in open events and receive right amount of training during preparation.

DIET PLAN

In nutrition, diet is the sum of food consumed by a person. The word diet often implies the use of specific intake of nutrition for health reason. Although humans are omnivores each culture and each person hold some food preferences or some food taboos. This may be due to personal tastes or ethical reasons. Individual dietary choices may be more or less healthy.

Complete nutrition requires ingestion and absorption of vitamins, minerals and essential fatty acids from fat-containing food, also food energy in the form of carbohydrate, protein, and fat. Dietary habits and choices play a significant role in the quality of life, health and longevity.

Low-fat

Low-fat diets involve the reduction of the percentage of fat in one's diet. Calorie consumption is reduced because less fat is consumed.

Low-carbohydrate

Low-carbohydrate diets are relatively high in protein and fats.

Low-calorie

Low-calorie diets usually produce an energy deficit of 500–1,000 calories per day, which can result in a 0.5 to 1kilogram weight loss per week.

Meals timing schedule

Meals timing schedule is known to be an important factor of any diet. Recent evidence suggests that new scheduling strategies, such as intermittent fasting or skipping meals, and strategically placed snacks before meals, may be recommendable to reduce cardiovascular risks as part of a broader lifestyle and dietary change.

KEYS TO A HEALTHY DIET

Babies and young children

- From birth to 6 months of age, feed babies exclusively with breast milk (i.e. give them no other food or drink), and feed them on demand.
- At 6 months of age, introduce a variety of safe and nutritious foods to complement breastfeeding, and continue to breastfeed until babies are 2 years of age or beyond.
- Do not add salt or sugars to foods for babies and young children

Reason:
On its own, breast milk provides all the nutrients and fluids that babies need for their first 6 months of healthy growth and development. Exclusively breastfed babies have better resistance against common childhood illnesses such as diarrhoea, respiratory infections and ear infections. In later life, those who were breastfed as infants are less likely to become overweight or obese, or to suffer from noncommunicable diseases, such as diabetes, heart disease and stroke.

Eat a variety of foods

- Eat a combination of different foods, including staple foods (e.g. cereals such as wheat or rice, or starchy tubers or roots such as potato), legumes (e.g. lentils, beans), vegetables, fruit and foods from animal sources (e.g. meat, fish, eggs and milk)

Reason:
Eating a variety of whole (i.e. unprocessed) and fresh foods every day helps children and adults to obtain the right amounts of essential nutrients. It also helps them to avoid a diet that is high in sugars, fats and salt, which can lead to unhealthy weight gain (i.e. overweight and obesity) and noncommunicable diseases. Eating a healthy, balanced diet is especially important for young children's and development; it also helps older people to have healthier and more active lives.

Eat plenty of vegetables and fruit

- Eat a wide variety of vegetables and fruit

- For snacks, choose raw vegetables and fresh fruit, rather than foods that are high in sugars, fats or salt
- Avoid overcooking vegetables and fruit as this can lead to the loss of important vitamins
- When using canned or dried vegetables and fruit, choose varieties without added salt and sugars

Reason:
Vegetables and fruit are important sources of vitamins, minerals, dietary fibre, plant protein and antioxidants. People whose diets are rich in vegetables and fruit have a significantly lower risk of obesity, heart disease, stroke, diabetes and certain types of cancer.

Eat moderate amounts of fats and oils

- Use unsaturated vegetable oils (e.g. olive, soy, sunflower or corn oil) rather than animals fats or oils high in saturated fats (e.g. butter, ghee, lard, coconut and palm oil)
- Choose white meat (e.g. poultry) and fish, which are generally low in fats, in preference to red meat
- Eat only limited amounts of processed meats because these are high in fat and salt
- Where possible, opt for low-fat or reduced fat versions of milk and dairy products
- Avoid processed, baked and fried foods that contain industrially produced trans-fat

Reason:
Fats and oils are concentrated sources of energy, and eating too much fat, particularly the wrong kinds of fat, can be harmful to health. For example, people who eat too much saturated fat and trans-fat are at higher risk of heart disease and stroke. Trans-fat may occur naturally in certain meat and milk products, but the industrially produced trans-fat (e.g. partially hydrogenated oils) present in various processed foods is the main source.

Eat less salt and sugars

- When cooking and preparing foods, limit the amount of salt and high-sodium condiments (e.g. soy sauce and fish sauce)
- Avoid foods (e.g. snacks), that are high in salt and sugars
- Limit intake of soft drinks or soda and other drinks that are high in sugars (e.g. fruit juices, cordials and syrups, flavoured milks and yogurt drinks)

- Choose fresh fruits instead of sweet snacks such as cookies, cakes and chocolate

Reason:

People whose diets are high in sodium (including salt) have a greater risk of high blood pressure, which can increase their risk of heart disease and stroke. Similarly, those whose diets are high in sugars have a greater risk of becoming overweight or obese, and an increased risk of tooth decay. People who reduce the amount of sugars in their diet may also reduce their risk of noncommunicable diseases such as heart disease and stroke.

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