



move for health



Health and Development Through Physical Activity and Sport

**WORLD HEALTH ORGANIZATION
NONCOMMUNICABLE DISEASES AND MENTAL HEALTH
NONCOMMUNICABLE DISEASE PREVENTION
AND HEALTH PROMOTION**



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1. Introduction

We Can Improve our Health and Well-being Through Physical Activity and Sport.

Physical activity and healthy sports are essential for our health and well being. Appropriate physical activity and sports for all constitute one of the major components of a healthy lifestyle, along with healthy diet, tobacco free life and avoidance of other substances harmful to health.

Available experience and scientific evidence show that the regular practice of appropriate physical activity and sports provides people, male and female, of all ages and conditions, including persons with disability, with wide range of physical, social and mental health benefits. It interacts positively with strategies to improve diet, discourage the use of tobacco, alcohol and drugs, helps reduce violence, enhances functional capacity and promotes social interaction and integration. Physical activity is for an individual; a strong means for prevention of diseases and for nations a cost-effective methods to improve public health across the population.

2. World Health in Transition

The Increasing Burden of Preventable Noncommunicable Diseases Worldwide

The world is witnessing a significant increase of the global burden of non-communicable diseases (NCD) such as cardiovascular diseases, cancer, diabetes and chronic respiratory diseases. The increasing global epidemic of these diseases relates closely to respective changes in lifestyles mainly in tobacco use, physical inactivity and unhealthy diet. **The 2002 World Health Report on “Risks to Health - Promoting Healthy Living”** highlights the significant contribution of these risk factors, including physical inactivity to the overall burden of NCD worldwide (see graph on risk factors worldwide, page 16)

The World Health Organization (WHO) estimates that mortality, morbidity and disability attributed to major NCDs, currently accounts for approximately 60% of all deaths and 43% of the global burden of disease. They are expected to raise to 73% of all deaths and 60% of the global burden of disease by 2020: Already today in the entire world, with the exception of sub-Saharan Africa, chronic diseases are now the leading causes of death. Unhealthy diets, caloric excess, inactivity, obesity and associated chronic diseases are the greatest public health problem in most countries in the world.

Overall physical inactivity is estimated to cause 1.9 million deaths globally. Physical inactivity causes globally, about 10-16% of cases each of breast cancer, colon and rectal cancers and diabetes mellitus, and about 22% of ischaemic heart disease. The risk of getting a cardiovascular disease increases up to 1.5 times in people who do not follow minimum physical activity recommendations.

Thus the world witnesses the burden of NCDs moving to poorer and poorer countries. Chronic NCDs are no more “diseases of affluence”. These diseases and their risk factors are moving to lower socio-economic population groups. **NCDs are therefore becoming the greatest contributors to inequity in health.**

The high burden of NCDs, especially in the developing world, means a double burden to health services. In addition to human suffering this means great costs and problems in terms of social development. The financial resources of developing countries are very limited to respond to the great number of NCDs by curative services. **Prevention of these diseases through physical activity and healthy lifestyles, based on strong medical evidence, is the most cost-effective and sustainable way to tackle these problems and to support positive social development.**

A combination of improper diet, insufficient physical activity and tobacco use are estimated to be the cause of up to **80% of premature coronary heart disease**. In populations as diverse as in China, Finland and in the USA (several ethnic subgroups), studies have shown that even relatively moderate changes in lifestyle, especially by increasing physical activity and improving diet, are sufficient **to prevent the development of almost 60% of type II diabetes cases**. It is likely that one-third of cancers can be prevented by maintaining a healthy diet, normal weight and physical activity throughout one's life.

The unfavourable trend continues. At the same time the level of overweight and obesity is rapidly growing world wide, in developed and developing countries also among young people.

While lack of food is a major issue in some segments of society, data show that caloric excess, unbalanced diet, physical inactivity, obesity and the chronic diseases that they spawn are equally dangerous. The affected population with obesity has increased with epidemic proportions, with more than one billion adults worldwide overweight and at least 300 million clinically obese.

Physical activity is in key position for weight control. In the United States, obesity causes 300 000 deaths annually, a number exceeded only by deaths related to tobacco. A higher rate of obesity is found in many countries of Latin America, the Middle East and Asia. Some island nations of the Western Pacific have especially high rates of obesity. In China, an estimated 200 million people could become obese in the next ten years.

It should also be emphasized that physical inactivity – like diet – does not lead to NCDs only through obesity. **The health benefits of physical activity and a healthy diet take place through many other mechanisms besides influencing weight control.**

3. Alarming Global Trend of Physical Inactivity

World wide, more than 60% of adults do not engage in sufficient levels of physical activity which are beneficial to their health. Physical inactivity is more prevalent among women, older adults, individuals from low socio-economic groups, and the disabled. Physical activity also decreases with age during adolescence, and this decline continues throughout the adult years. In many countries, developed and developing, less than one-third of young people are sufficiently active to benefit their present and future health. Female adolescents are less active than male adolescents. **Decreasing physical activity and physical education programmes in schools is an alarming trend worldwide.**

At the same time, high body mass Index (obesity/overweight) rates are increasing among young people as well as among middle-aged adults. This is related in part to lack of physical activity in leisure time, but is even more likely the result of people spending increasing amounts of time in sedentary behaviours such as watching television, using computers, and excessive use of "passive" modes of transport (cars, buses and motorcycles). Sedentariness is consuming a great deal of people's time, and the health consequences are significant.

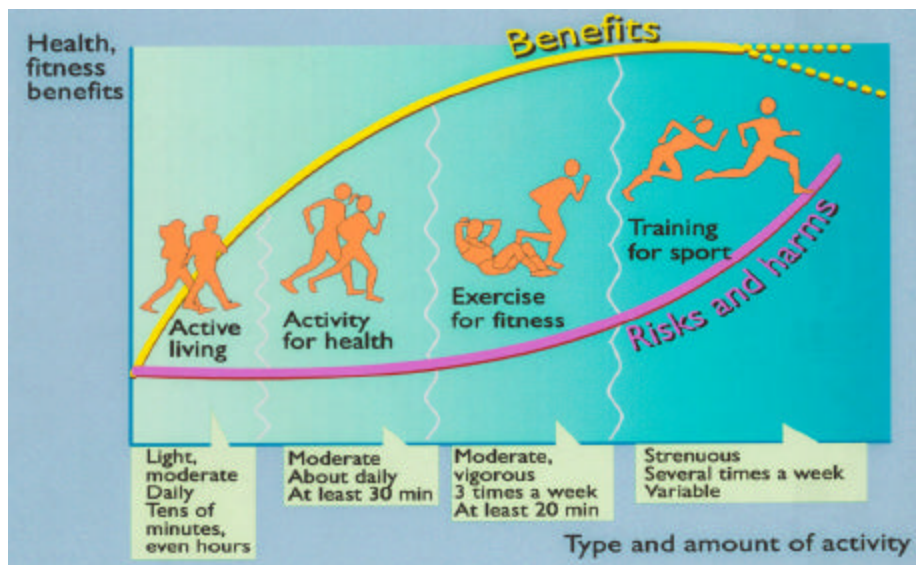
4. Direct and Indirect Health Benefits

Regular physical activity, active play and sports can be a practical means to achieving numerous health gains, either directly or indirectly through its positive impact on other major risks, in particular high blood pressure, high cholesterol, obesity, tobacco use and stress.

Physical activity reduces the risk of cardiovascular disease, some cancers and type 2 diabetes. These benefits are mediated through a number of mechanisms: in general, it improves glucose metabolism, reduces body fat and lowers blood pressure. Physical activity may reduce the risk of colon cancer by effects of prostaglandins, reduced intestinal transit time, and higher antioxidant levels. Physical activity is also associated with lower risk of breast cancer, which may be the result of effects on hormonal metabolism. Participation in PA can improve musculoskeletal health, control body weight, and reduce symptoms of depression.

Regular physical activity:

- reduces the risk of dying prematurely
- reduces the risk of dying from heart disease or stroke, which are responsible for one-third of all deaths
- reduces the risk of developing heart disease, colon cancer and type 2 diabetes
- helps to prevent/reduce hypertension, which affects one-fifth of the world's adult population
- helps control weight and lower the risk of becoming obese
- helps to prevent/reduce osteoporosis, reducing the risk of hip fracture in women
- reduces the risk of developing lower back pain can help in the management of painful conditions, like back pain or knee pain
- helps build and maintain healthy bones, muscles, and joints and makes people with chronic, disabling conditions improve their stamina
- promotes psychological well-being, reduces stress, anxiety and depression
- helps prevent or control risky behaviours, especially among children and young people, like tobacco, alcohol or other substance use, unhealthy diet or violence



5. How Much Physical Activity is Needed in Order to Improve and Maintain Health?

Much of the health gain is obtained through of at least 30 minutes of cumulative moderate physical activity every day. This level of activity can be reached through a broad range of appropriate and enjoyable physical activities and body movements in people's daily lives, such as walking to work, climbing stairs, gardening, dancing, as well as a variety of leisure and recreational sports

Additional health gains can be obtained by relevant daily moderate to vigorous physical activities of longer duration: e.g.

- i) children and young people need an additional 20 minutes' vigorous physical activity 3 times a week.
- ii) weight control would require at least 60 minutes every day of moderate/vigorous physical activity).

6. Economic Benefits of Physical Activity

Physical activity also has economic benefits especially in terms of reduced health care costs, increased productivity, healthier physical and social environments. Economic consequences of physical inactivity affect individuals, businesses and nations.

Data from developed countries indicate that the direct costs of inactivity are enormous.

In the USA, an investment of US\$ 1 (time and equipment) leads to US\$3.2 in medical cost savings. Physically active individuals save an estimated US\$ 500 per year in health care costs according to 1998 data. The costs associate with inactivity and obesity accounted for some 9.4% of the national health expenditure in 1995. Inactivity alone may contribute as much as US\$75 billion to US medical costs in the year 2000.

Workplace physical activity programmes in the USA can reduce short-term sick leave (by 6-32%), reduce health care costs (by 20-55%) and increase productivity (by 2-52%).

In Canada, physical inactivity costs about 6% of total health care cost. In companies with employee physical activity programmes/initiatives, the benefit of US\$ 513 per worker per year can be reached (from changes in productivity, absenteeism, turnover and injury).

No data are available from the developing world. Although presently the costs may still be lower, they are increasing. Reduction of this kind of avoidable costs is, however, potentially important, especially in the developing world with great scarcity of resources.

7. Physical Activity for Various Population Groups

Children and Young People

Regular physical activity provides young people with substantial physical, mental and social health benefits. Regular practice of physical activity helps children and young people to build and maintain healthy bones, muscles and joints, helps control body weight, helps reduce fat and develop efficient function of the heart and lungs. It facilitates developing the skills of movement and helps prevent and control the feelings of anxiety and depression.

Engagement in play and sports gives young people opportunities for natural self-expression, self-confidence, relief of tension, achievement, social interaction and integration as well as for learning the spirit of solidarity and fair play. These positive effects also help counteract the risks and harm caused by the demanding, competitive, stressful and sedentary way of life that is so common in young people's lives today. Involvement in properly guided physical activity and sports can also foster the adoption of other healthy behaviour including avoidance of tobacco, alcohol and drug use and violent behaviour as well as the adoption of healthy diet, adequate rest and better safety practices.

Some studies show that among adolescents, the more often they participate in physical activity, the less likely they are to use tobacco. It has also been found that children who are more physically active

showed higher academic performance. Team games and play promote positive social integration and facilitate the development of social skills in young children.

Patterns of physical activity acquired during childhood and adolescence are more likely to be maintained throughout the life span, thus providing the basis for active and healthy life. On the other hand, unhealthy lifestyles—including sedentary lifestyle, poor diet and substance abuse, adopted at a young age are likely to persist in adulthood.

Ample participation in play, games and other physical activities, both in school and during free time, is essential for the healthy development of every young person. Access to safe places, opportunities and time, and good examples from teachers, parents and friends are all part of ensuring that children and young people move for health. **Schools have unique opportunities to provide adequate physical activity for all young people an equal basis through official compulsory physical education programmes as well as through school sport programmes and after school leisure-time physical activity initiatives.**

Women and Physical Activity

Regular physical activity helps prevent cardiovascular diseases (heart disease, high blood pressure and stroke) **which account for one-third of deaths among women around the world.**

Cardiovascular diseases cause half of all deaths in women over 50 in developing countries.

Regular physical activity, combined with adequate diet has shown to be one of the most effective means of **controlling mild to moderate obesity and maintaining an ideal body weight in women.**

Diabetes affects more than 70 million women in the world. This figure is projected to double by 2025. **Recent studies show that even modest physical activity and dietary changes can prevent more than half of the cases of non-insulin dependent diabetes.** Physical activity can also greatly **help prevent and manage osteoporosis**, a disease in which bones become fragile and more likely to break. Women, particularly post-menopausal, have a higher risk of developing osteoporosis than men.

Reducing stress, anxiety, depression and loneliness through regular physical activity is particularly important for women, as rates of depression for women are almost double those of men in both developed and developing countries.

Appropriate policy actions and culturally relevant community programmes would facilitate the regular involvement of greater number of girls and women in sport and physical activities. However, while women should be encouraged to participate in physical activity, one should not overlook the fact that in rural areas and in low income peri-urban areas of developing countries, women may be already physically exhausted by other forms of day-long “occupational” physical activities in and outside the home. These women groups may need a better-balanced set of support actions such as adequate nutrition. Income generating initiatives, advise on physical activities that are most relevant to their specific conditions and possibly adapted leisure pursuits.

Ageing Population (Active Ageing)

Ageing of populations is taking place in most parts of the world at a higher rate than ever. The increasing number of old people is a positive sign of development. However, that can be of increasing burden to health and social services, depending on the health and functional capacity of the older population.

Physical activity is important for healthy ageing, improving and maintaining quality of life and independence as people age. The number of people of 60 years old is projected to double in the next 20 years. Most of these older persons will be living in developing countries. Reducing and

postponing age-related disability is an essential public health measure and physical activity can play an important role in creating and sustaining well-being at all ages.

For adults and ageing individuals physical activity has shown **to improve balance, strength, coordination, flexibility, endurance, mental health, motor control and cognitive function**. Improved flexibility, balance, and muscle tone can help **prevent falls**— a major cause of disability among older people.

Walking or organized exercise sessions, appropriately suited to an individual's fitness level can provide the opportunity for social interaction, for reducing feelings of loneliness and social exclusion. Physical activity improves self-confidence and self-sufficiency.

The benefits of physical activity can be enjoyed even if regular practice starts late in life. While being active from an early age can help prevent many diseases, regular movement and activity throughout life can also help relieve the disability and pain associated with common diseases among older people are cardiovascular disease, arthritis, osteoporosis and hypertension.

Persons with Disability

Persons with disability should be provided with **enough opportunities and support to perform sport and physical activities adapted to their physical conditions**. The aim is to help persons with disability improve their muscle strength, their psychological well-being and quality of life by increasing the ability to perform daily living activities. This is an equitable approach to their social and economic integration and to their quality of life.

8. Environmental Issues

The physical and social environment of cities has a major impact on the extent of physical activity. Multiplier effects are important levers for change. For example, the promotion of physical activity through commuting encourages a greater utilization of public transport and is thus attractive to urban planners and transportation agencies. **Key issues include also access to open spaces, playgrounds, gymnasium, stairwells and road networks** as well as social factors such as levels of crime and the local sense of community.

Crowding, crime, traffic, poor air quality, a lack of parks, sports and recreational facilities and sidewalks make physical activity and sports a difficult choice for many people. The challenge is therefore as much the responsibility of governments as it is for people, particularly for fostering the creation of sustainable environments which encourage the regular practice of physical activity and sport in the community.

9. Towards Multisectoral Policy in Support of Physical Activity/Sport for All

A strong political commitment and support at all levels is an essential prerequisite for the development and sustainability of physical activity initiatives and programmes within countries. Thus, it is important that advocacy move beyond individuals to reach policy-makers as well.

Relevant multisectoral policies initiatives are needed to motivate and involve people in appropriate sports and physical activity within supportive environments. These policies should target especially populations who are not sufficiently physically active, particularly in urban areas; high priority should be given to children and young people, boys and girls, in and out of school, so a physically active

lifestyle can be maintained throughout the life span, thus providing the basis for active and healthy life and independent living.

The following actions are examples of possible input by most concerned development sectors for promoting the regular practice of physical activity and healthy sports in the population, ensuring equity in accessibility to healthy sports and physical activity as well as supportive environments. The list of sectors is not exhaustive. The below actions constitute also a preliminary set of recommendations battery recommendations for partnership-based intersectoral planning and implementation.

The Health sector can:

- Provide nation-wide evidence-based advocacy on the health, social and economic benefits of physical activity
- Develop action-oriented networks with other relevant sectors and stakeholders on physical activity
- Promote an integrated, multi-sectoral public policy
- Prepare health professionals, especially on physical activity counselling and programme development
- Organise specific physical activity programmes in health services
- Promote physical activity programmes in community and family
- Secure seed investment and mobilise resources for physical activity
- Participate in global actions to promote physical activity

The Sport sector can:

- Strengthen programmes for physical activity and sport for all, promoting the idea that sport is a human right for all individuals regardless of race, social class and sex
- Make community use of local sport facilities easy and convenient
- Allocate a proportion of sport funds to promoting physical activity
- Teach about the benefits of physical activity in the sport sector training programmes
- Advocate for physical activity and sport for all at professional, amateur and scholastic sporting events
- Organise physical activity events in the community
- Use of physical activity and sport to promote healthy lifestyles, reduce violence and foster social integration, development and peace.

Policy-makers in Education and Culture should focus on:

- Strengthening national policies related to physical education, physical activity and Sport for All in schools
- Implementing sufficient physical education programmes by trained teachers in school curricula
- Providing sufficient playgrounds and sports facilities on school premises
- Making schools' sport facilities available for public use
- Increasing physical activity in cultural and leisure programmes and events

The Media could help promote physical activity by:

- Disseminating appealing messages and information about the benefits of physical activity
- Organising regular programmes/campaigns to promote physical activity
- Preparing journalists (e.g. sports, health or science journalists) to advocate for physical activity

Urban Planning policy choices should include:

- Planning for plenty of safe sidewalks and cycling paths
- Inclusion of open spaces, parks and facilities for physical activity
- Support to municipal or local authorities to implement these choices

The Transport sector can:

- Strengthen efforts to reduce traffic speed reduction in cities
- Support action for clean cars, thus clean air

Action by Local Governments and Municipalities should concentrate on:

- Developing local legislation and policy to support physical activity
- Allocating safe indoor and outdoor spaces for physical activity, play and sports
- Organising community programmes
- Supporting physical activity initiatives initiated by various sectors and actors
- Strengthening, through local actions, national public policy in support of physical activity

Financial and economic planning decisions should aim at:

- Looking seriously at the health, social and economic benefits of physical activity
- Taking relevant measures to allocate resources to concerned sectors
- Encouraging public and private sectors to invest in physical activity
- Supporting physical activity programmes
- Raising funds through levies of certain taxes (e.g. tobacco, alcohol, soft drinks, etc.) for physical activity and other health promotion programmes

10. Barriers

Some Major Constraints to Physical Activity Development:

- Lack of awareness about benefits
- Insufficient data on trends, levels and determinants of physical activity
- Lack of political commitment and support
- Insufficient cooperation between concerned sectors
- Inaccessibility to the community of available sport facilities
- Existence of strong barriers to people participation in physical activity

Potential Barriers or Catalysts to Equitable Population Participation in Physical Activity/Sport for All:

- national health, sport, educational and related policies
- perception of the value of sport in society
- prevailing local culture
- economic and other competing pressure
- time constraint
- personal motivation
- support from family and friends
- access to sport facilities
- past experiences
- availability of local physical activity programmes
- for women: status of women in society

11. “Move for Health”: A Global Partnership and National Action Plan

WHO dedicated World Health Day 2002 to “Move for Health” and World No Tobacco Day 2002 to “Tobacco Free Sports: Play it Clean”. The 55th World Health Assembly also adopted in May 2002 Resolution WHA55.23 (May 2002) which **“Urges Member States “to celebrate a Move for Health Day each year to promote physical activity as an essential for health and well being”**. The resolution called also for the development of partnership-based global and national strategies on diet, physical activity and health. This recommendation is strongly backed by findings of the 2002 World

Health Report on “Reducing Risks, Promoting Healthy Living”, which lists physical inactivity among the main risks contributing to noncommunicable disease global morbidity and mortality.

The Move for Health Day should be considered as part of a larger “Move for Health Initiative” linked to an on-going process/movement to promote sustained population participation in physical activity and sport for all throughout the year in the context of an integrated approach to the prevention of non communicable disease, health promotion and socio-economic development.

The Move for Health Day/Initiative aims particularly to:

- facilitate the development of sustained national and local physical activity initiatives, policies and programmes;
- increase regular physical activity practices in the population, men and women of all ages and conditions, in all domains (leisure time, transport, work) and settings (school, community, home, workplace);
- increase participation in physical activity through sports organizations, events and other socio-cultural forums; and,
- promote healthy behaviours and lifestyles and address health-related issues through sports and physical activity such as no tobacco use, healthy diet, reduction of violence, stress and social isolation.

The Move for Health Initiative is driven by countries. For its implementation, Member States need cooperation and support from WHO, which has a pivotal leading and coordination role in this endeavour, as well as from all concerned partners, national and international, in particular The Special Advisor of the United Nations Secretary General on Sport for Development and Peace, other concerned UN Agencies, the International Olympic Committee, other sport organizations, NGOs, professional organizations, relevant local leaders, development agencies, the media, consumer groups and private sector.

Given the health, economic, and social benefits of physical activity, and the high costs of inactivity, it is time for urgent action to integrate physical activity promotion in health and social development strategies, policies, and programmes worldwide. Achieving higher levels of physical activity in a population will also contribute indirectly to gains in other sectors vital to human development and economic progress.

The need to use sport for health and development was also highlighted by the Sport Community in the **Declaration of the 9th World Sport for All Congress** organized by the International Olympic Committee and the Netherlands in (Arnhem, 27-30 October 2002):

“the sports community is facing new social challenges such as public health, equity, tolerance and environmental sustainability, which call for a sensible response from both sport for all and elite sport. Of particular importance currently is the recent WHO initiative in taking physical activity as an integral part of its agenda to combat the increasing global burden of non-communicable diseases, in both the developed and developing worlds. This initiative represents a new challenge and at the same time a tremendous opportunity for the sports movement as a whole, and sport for all in particular. An active role in this area can contribute uniquely and importantly to the promotion of public health and at the same time strengthen the social credibility and accountability of sport”.

WHO and all concerned partners will continue to work together to increase the participation of population groups, men and women, of all ages and conditions in physical activity and healthy sports at global and national levels. This partnership action is actually pursued by WHO particularly through:

- the development and implementation of the global strategy on diet, physical activity and health;
- the above-indicated Annual Global Move for Health Day/Initiative and
- major global health and sport events.

12. Global Strategy on Diet, Physical Activity and Health

Based on the high and growing burden on NCDs and the great potential that diet and physical activity have in the prevention of NCDs, the 55TH World Health Assembly in May 2002 asked the Director-General to prepare a Global Strategy for Diet, Physical Activity and Health and to present it to the World Health Assembly in May 2004 (Resolution WHA55.23).

The work that has started considers the above aspects and is based on a wide process of consultations with Member States, other UN Agencies, NGOs and the private sector. The aim is to have a strategy that should pave the way for Member States and various stakeholders for cost-effective, sustainable actions to promote physical activity and healthy diets for effective prevention and control of NCDs.

13. Concluding Remarks and Recommendations

- Given the health, economic, and social benefits of physical activity, and the high costs of inactivity, it is time for urgent action by governments and concerned stakeholders to integrate physical activity promotion in health and social development strategies, policies, and programmes worldwide. Achieving higher levels of physical activity in a population will also contribute indirectly to gains in other sectors vital to human development and economic progress.
- Physical activity is not merely about individual behaviour. It is a societal problem and demands an integrated evidence-based, population-focused, equity-driven, multisectoral and culturally relevant national policy and programme, supported by a clear and strong political commitment at all levels. Consequently, physical activity must be a part of public policy with regulatory and legislative approaches balanced with education and health promotion.
- To that end, there is crucial need to raise the level of awareness in society about the multiple benefits of physical activity and appropriate sports, particularly among policy and decision-makers, health professionals, the media, education and sport community, local leaders and the public at large. Dissemination of relevant knowledge to all concerned sectors and actors along with critical intersectoral debates on the issue would improve collective awareness and facilitate policy support.
- National physical activity programmes and initiatives should be adequately planned and coordinated with clear and realistic objectives (short term and long term) and approaches leading to an increase in population participation in physical activity and sport over a given period of time. Such planning will be prepared within an integrated approach to the prevention of chronic diseases, health promotion and sustainable socio-economic development.

- Programmes should:
 - i) make judicious use of: a) national and local resources (human, financial and logistics) available within all relevant development sectors, and b) major national, regional and global events related particularly to sport, health, youth, education and culture;
 - ii) build supportive coalitions and partnerships.
- Priority areas of action within multisectoral policies and programmes include, in particular:
 - assessing physical activity and sport practice levels, trends and determinants;
 - up-dating and dissemination in society of the knowledge on health, social and economic benefits of physical activity and sport as well as on best practices;
 - promoting physical activity and sport among young people, boys and girls, in and out of school. Official programs of quality physical education need to be strengthened in schools.
 - developing culturally relevant physical activity and sport programmes in the community (e.g. periodic walking, cycling and leisure sport campaigns) involving various population groups of all ages. A special attention should be made to secure the participation of women. Specific actions are required to involve the ageing population as well as persons with disability;
 - designing regular physical activity programmes in health services within integrated interventions which include healthy diet and healthy lifestyles and as part of prevention and rehabilitation measures;
 - promoting physical activity and related healthy behaviours at the workplace;
 - making public/community use of existing sport facilities;
 - promoting active transport initiatives (walking, cycling, greater use of public transport, etc.) and developing parks and open space where population can practice enjoyable physical activities within clean air and safe environments;
 - launching initiatives to raise public awareness through physical activity and sport about priority issues related to health (diet/nutrition, no tobacco use, NCDs, AIDS, malaria, Tuberculosis, etc.) and development (poverty reduction, social integration, reduction of violence).
- The Annual Global Move for Health Day/Initiative will serve as a precious opportunity for developing and/or strengthening global, national and local policies and programmes on physical activity and sport programmes within integrated NCD prevention, health and development.

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