

Promotion of Physical Activity for Thai People at All Age Groups**1. Definition**

Physical Activity refers to any body movement or exertion, including activities undertaken while working, traveling, and engaging in recreational pursuits and other physical exercises. Thus, physical activity means more than exercising and playing sports.

Sedentary behavior refers to little body movement, e.g. sitting, lying, or staying inactive for a long time in one posture; however, it does not include sleeping.

2. Situation and action concerned

Insufficient physical activity of the global population has been on the rise. This is especially true with teenagers and adults, a situation in which there are more females than males. Such an increase is prevalent in countries whose population has a high average income. In Thailand, a survey on physical activity, conducted by Institute for Population and Social Research, Mahidol University together with Thai Health Promotion Foundation (ThaiHealth), finds that the years 2012-2015 saw Thai people having sufficient activity at 66.3%, 68.1%, 68.3% and 71.7% respectively. A look at the changes that occurred in 2014-2015 in various age groups reveals that the group with the highest increase in physical activity is people of working age, an increased from 70.4% to 75.8%. The groups that saw a slight increase of 0.2-0.8% are teenagers and elderly people, increasing from 66.4% and 67.7% to 66.6% and 68.56% respectively. Children, on the other hand, saw a decrease of physical activity from 67.6% to only 64.8%.

Physical activity is classified by intensity into three levels: (1) light-intensity activities, e.g. standing, walking a short distance, doing house chores, (2) moderate-intensity activities in which the person doing the activity can talk in complete sentence with a heart rate of 120-150 beats per minute, e.g. walking briskly and cycling, (3) vigorous-intensity activities in which the person cannot talk in complete sentence with a heart rate of more than 150 beats per minute, e.g. digging and planting in farming and carrying a very heavy object. Sufficient physical activity, when started young and continued throughout life to old age, will help to promote wellbeing at every stage of life.

Sufficient activity in children and teenagers, aged between 5 and 17 years, should have moderate- to vigorous-intensity physical activities at least 60 minutes a day. These activities that strengthen the muscles and bones should be done at least three times a week. Adults between 18 and 64 years old and the elderly 65 years old and above should exercise a moderate to vigorous level at least 150 minutes per week, at least three times a week. The activities should aim to strengthen the muscles. For older people with limited mobility, additional activities should be included to strengthen balance and prevent fall.

Physical activity in Thai people is declining, reflecting increased sedentary behavior. A survey in 2012 shows that each day Thai people exhibited 13.25 hours of sedentary behavior. The figures for 2014 and 2015 showed the sedentary behavior

1 increasing to 13.42 and 13.54 hours respectively. The top four sedentary behaviors
2 lasting more than one hour per session are sitting/reclining watching television (50%),
3 sitting talking or at meeting (28.4%), sitting working or studying (27.0%), and sitting
4 playing video games, mobile telephones, or other electronic gadgets (20.1%). Broken
5 down into groups, the finding reveals that, compared to other age groups, more
6 children and teenagers spend on average more than one hour per day sitting in front of
7 the television, using computer, staying in computer games parlors, and using various
8 types of portable electronic gadgets. The trend is more likely to continue or increase.

9 Insufficient activity and sedentary behavior brings with it health, economic and
10 social impacts. The World Health Organization estimated that each year sees nearly 1.9
11 million deaths in the global population due to insufficient physical activity. Such
12 inactivity has a close relation to an increased incidence of obesity and non-
13 communicable diseases (NCDs), including diabetes, hypertension, cardiovascular
14 disease, chronic kidney disease, and cancer. The morbidity for colorectal cancer is at
15 25%, for breast cancer at 21%, for cardiovascular disease at 6%, for heart-related
16 diseases at 30%, and for diabetes at 27%. The risk of mortality is as high as at 20-
17 30%, while sedentary behavior is related to the mortality rate of cardiovascular disease
18 and diabetes in a significant way.

19 Studies on economic impacts on the quality of life from obesity find that capital
20 and economic losses from the disorder in Thailand amounts to 12,142 million baht. This
21 amount is calculated on the basis of care and treatment costs and productivity loss. The
22 former amounts to 5,584 million baht. Three top disorders from obesity with the
23 highest costs are diabetes, cardiovascular disease and colorectal cancer, amounting to
24 3,387 million, 1,071 million, and 337 million baht respectively. The productivity loss
25 amounts to 6,558 million baht, broken down into loss from work absenteeism due to
26 sickness being 694 million baht and premature death being 5,864 million baht.
27 Diabetes, stroke, and cardiovascular disease are the leading three disorders causing
28 productivity loss and premature death, amounting in financial terms to 2,550 million
29 baht, 1,800 million baht and 1,035 million baht, respectively. Productivity loss due to
30 absence from work to receive diabetes treatment at the hospital is as high as about
31 448.8 million baht or about 12 million days. Diabetes comes second with a loss of 102.2
32 million baht or about 276,000 days, followed by cardiovascular disease with a loss of
33 62.8 million baht or about 170,000 days.

34 The World Health Organization emphasizes that an active lifestyle is vital to good
35 physical and mental health. Sufficient physical activity and little sedentary behavior is
36 important to health promotion and disease prevention, especially to good development
37 at all stages of life. Sufficient and appropriate physical activity, from childhood to old
38 age, will help strengthen cardiovascular health, muscles, bone functions, body
39 movement and coordination, and balance. It also reduces the risk of fall, fracture of hip
40 bones, and spines, contributing to the body balance when exerting energy and weight
41 control, reducing risks of such disorders as diabetes, hypertension, cardiovascular
42 disease, various kinds of cancer, especially breast and colorectal cancers, and helping to
43 reduce the rate of premature death.

44 In addition, physical activity contributes to brain development, better analytical
45 thinking, and planning, as well as children's ability to secure better scholastic
46 achievements, better concentration, emotional development, greater self-confidence,
47 and other skills in fostering interpersonal relationship with family and community
48 members through participating in various activities. Examples of physical activity are

1 walking and cycling, activities that help conserve the environment and nature and
2 reduce air pollution at the same time.

3 4 **3. Factors related to physical activity**

5 Promotion of physical activity for Thai people is related to three important
6 factors: individual, environment and structural:

7 Individual factors included knowledge, understanding, awareness and behavior of
8 physical activity by each person, including awareness of personal health. The
9 knowledge and capability of professionals in their own fields have an impact on personal
10 physical activity. For instance, people who can help support, directly and indirectly, the
11 promotion of physical activity in the general public are health and medical workers, town
12 and transport planners, architects and landscape architects, sports and recreational
13 officials, educators and policy makers, friends, family, role models and leaders of
14 physical activity.

15 Environmental factors refer to the physical structure derived from architectural
16 design and town planning, including transportation systems, commuting system, and
17 public space, e.g. appropriate, sufficient and safe public parks that enable the general
18 public to do physical activity. Environmental factors also include the physical structures
19 for schools, buildings, and workplaces designed to facilitate physical activity. Equally
20 applicable is making available public and private fields and sports grounds, as well as
21 lighting facilities. All this will enable students to play and learn in a creative manner,
22 while workers will have more space for physical activity. Sedentary behavior, whether
23 at school or workplace, will be reduced. Besides, a policy related to promotion of
24 physical activity is another important factor that will encourage the public to engage in
25 more physical activity. This is particularly pertinent if it can help motivate the
26 participation of every sector, including the people sector, public and private sectors,
27 local government organizations and professional bodies, in sharing information, ideas,
28 planning, decision making, responsibility, benefits, monitoring, evaluation and inspection
29 (2nd Charter on the National Health System, B.Ed. 2559 (2016)). Some examples of a
30 policy to create incentives and promote more physical activity are tax measures and
31 reduction of health insurance premiums.

32 Structural factors refer to all systems and mechanisms deriving from the
33 participation of every sector, including the public sector, local sector, private sector,
34 people sector, and academic sector, in promoting and advocating physical activity.
35 Some examples are health service establishment, health volunteer network,
36 participatory health region for the public, district committee on the development of the
37 quality of life, and local health fund created through the cooperation of local
38 government organizations and the National Health Security Office, academic and
39 research institutes, as well as other organizations, federations, clubs, and groups, e.g.
40 sports association, Thai Jogging for Health Club, and Bicycle for Health Club of Thailand.

41 In addition, if we have in place a system to manage information, knowledge and
42 public communication, it will greatly help to generate correct information,
43 communication and advocacy for more physical activity of the Thai general public.

44 45 **4. Ways to implement promotion of physical activity**

46 Important ways to promote physical activity for Thai people at all age groups are:
47 1) provide knowledge, understanding, knowledge management, and communication
48 innovation 2) develop the capability of individual, organization and network, 3) create

1 model healthy area, 4) advocate the public policy at national and local levels, and 5)
2 create mechanisms for cooperation between organizations, agencies, and stakeholder
3 networks and develop an area-based approach to development of local mechanisms as
4 follows:

5 **4.1 Provide knowledge, understanding, knowledge management, and**
6 **communication innovation:** The aims are to stimulate knowledge management,
7 innovation, creation of tools, and media production, leading to greater awareness and
8 understanding, and to provide practical guidelines for increased physical activity, i.e.
9 through generation of knowledge conducive to sufficient physical activity, forms of
10 physical activity in everyday life, while commuting, working, or doing recreational
11 activities. It also embraces ways and means to promote learning through physical
12 activities for children and youth, working people and the elderly. It supports education
13 institutes and research agencies in their research and development on physical activity
14 for Thai people. For example, there are projects to promote the use of stairs rather
15 than elevators through symbols. Floors are paved with rubber tiles and carpets for
16 safety purposes. Walls are painted in bright colors and decorated with artistic work
17 depicting food, nutrition, landscape, and people in different poses of physical activity.
18 Musical sounds are heard when a person walks past the picture. Infrared signals are
19 used to collect information on stair use.

20 **4.2 Develop the capability of individual, organization and network:** The
21 aims are to inspire the thirst for knowledge, to build capability and skills on action to
22 increase physical activity in an effective and efficient manner, and to promote the
23 creation of the environment conducive to physical activity. Some such processes to
24 develop the capacity mentioned are: development of personal capacity, creation of
25 model leaders at individual, organizational and network levels, while focusing on
26 learning by doing, and promotion and development of physical activity models covering
27 the issues of wellbeing (physical, mental, social and spiritual) and value development for
28 self, society, and community. The main target groups are health personnel, education
29 personnel, local community, volunteer network, sports business operators, large public
30 and private organizations, and such physical structure designers as architects and town
31 planners. The following are some of the examples. The Municipality of Waeng-Noi,
32 Khon Kaen Province, promotes appropriate physical activity for different groups of
33 workers, including farmers, civil servants, or merchants. Phuket City Municipality sets
34 up a Phuket walking street and organizes cycling events following the route of the
35 ancient time to the modern time, including walking tours in the city of Phuket lined with
36 old shophouses of Sino-Portuguese architectural style.

37 **4.3 Create model healthy areas** through promoting the environment conducive
38 to physical activity: The idea is to create community models covering such areas as
39 housing, education institutes, workplaces, public and private business establishments,
40 health service establishments, religious places and public space. The presence of a
41 good model area can then lead to further policies that will make it more likely for
42 everyone, every sector, and every level to participate in the promotion of physical
43 activity. Early childhood development centers are encouraged to provide learning and
44 creative play appropriate to child development through physical activity. Schools and
45 universities are equipped with curriculums, teaching methodologies, and subjects
46 together with quality physical activities. Physical activity is organized during the
47 break/free time at work. The design of physical structure and town planning all lend
48 support to the environment conducive to physical activity in public space and on travel

1 route, as well as in school, organization and state enterprise. The following are some of
2 the examples of model health areas. PSU Wittayanusorn School in Hat Yai District,
3 Songkhla Province, puts an emphasis on interior design without elevators, but providing
4 larger stairways to facilitate the walk of its students and personnel. The Municipality of
5 Ang Thong puts in place a health park and water park built in honor of the late king.
6 These places are designed for community physical activity. It also organizes an activity
7 "Ang Thong Opens the Town for Cycling, Cycling Happy in Ang Thong". The
8 Municipality of Waeng-Noi, Khon Kaen Province, turns the Public Park of Huai Hat into a
9 place suitable for physical activity. It has a community plan in which there are roads,
10 footpaths, bike lanes, bicycle parking in community, a municipal fresh market to which
11 safe walkways are connected, and government offices are open for public use for
12 physical activity. Phuket City Municipality supports the use of the area at Youth Center
13 of Sapan Hin in which workers from hotel and department store or other shift workers
14 can turn on the light themselves and they can use the place for physical activity after
15 work at night.

16 **4.4 Advocate the public policy at national and local levels:** Efforts are made
17 to advocate policies designed to promote physical activity, e.g. education policy, policy
18 toward health service establishments, policy toward business establishments concerning
19 physical activity at workplace, use of tax measures and reduction of health insurance
20 premiums as incentives toward holding physical activity. Also, there is a move to
21 incorporate physical action plans into such existing systems and mechanisms of the
22 public sector as local/area health funds and other funds in the locality. An example of
23 such a move is ThaiHealth's support for local government organizations to take lead
24 action along the three-pronged strategy of "park, route, and field".

25 **4.5 Create mechanisms for cooperation between organizations, agencies,
26 and stakeholder networks and develop an area-based approach to
27 development of local mechanisms:** This is done by integrating participation of
28 agencies that have something to do with the implementation of physical activity, such as
29 the public sector (every ministry and department), private sector, state enterprise,
30 religious network, and the people sector. The approach also involves the development
31 of the network of physical activity clubs, development of information/ICT systems,
32 knowledge management, development of the public communication system to promote
33 appropriate physical activity, development of the support system through the National
34 Sports Development Fund, and the strengthening of the local government organization's
35 role in promoting physical activity in the general public. Efforts will be made to develop
36 the surveillance, monitoring and evaluation of physical activity, especially in the area
37 where little information is available, e.g. economic analysis, action research on
38 behaviors of the population, evaluation of the policy and the monitoring system,
39 including developing research organizations and supporting research on physical activity.
40 Some examples on the cooperation mechanisms by the Department of Local
41 Administration are the Municipality of Chiangrai, Municipality of Ang Thong, Municipality
42 of Waeng-Noi Sub-district in Khon Kaen Province, and Phuket City Municipality.

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44 **5. Past action and results**

45 Over the years, Thailand has had policies and strategic plans that promote physical
46 activity based on the policy of the World Health Organization, of which the country is a
47 member, National Economic and Social Development Plan, Strategic Plan on the

1 Development of Health Promotion and Environmental Health, (draft) National Strategic
2 Plan on Promotion of Physical Activity:

3 **5.1 The policy of World Health Organization in light of Sustainable**
4 **Development Goals (SDGs) (2030)** has something to say about physical activity.
5 The promotion of physical activity will be based on activities of everyday life and
6 environmental development, turning the place into healthy or active city. The idea is to
7 raise the level of physical activity, develop the physical space, and put in place a
8 transport system conducive to body movements, e.g. walking, cycling and connectivity
9 of the public transport system. All this will bring about the quality of life and cost
10 savings for urban health services, leading to greater availability of public space and
11 green areas, quality housing, less social isolationism, stronger community, and
12 expansion of community networks on sustainable development goals.

13 **5.2 Global Action Plan for the Promotion of Physical Activity (GAPPA)**
14 **(2018-2030):** The objective is to create a healthy society, healthy environment,
15 healthy life and other healthy systems.

16 **5.3 12th National Economic and Social Development Plan (2017-2021):**
17 There is a strategy on strengthening and development of human capital designed to
18 reduce health risks and encourage every sector to consider health impacts of their work.

19 **5.4 Strategic Plan on the Development of Health Promotion and**
20 **Environmental Health in the 12th National Economic and Social Development**
21 **Plan (2017-2021):** The plan covers health promotion for four different age groups,
22 the strengthening of the sustainable environmental health system, governance of health
23 promotion and environmental health, and work reform toward organizations with high
24 capacity and good governance.

25 **5.5 Bangkok Declaration on Physical Activity for Global Health and**
26 **Sustainable Development:** Its essence includes a call to increase investment in the
27 implementation of policy to increase physical activity as a contribution to reducing the
28 global burden of NCDs, to establish multi-sector engagement, to develop workforce
29 capabilities in every discipline concerned, to increase technical assistance and share
30 experience, to strengthen monitoring and surveillance, and to support and promote
31 research and policy evaluation.

32 **5.6 Physical Activity Promotion Plan of Thai Health Development Fund:** It
33 sets a number of work strategies, e.g. promotion of a life-course approach to physical
34 activity, advocacy for model health spaces conducive to physical activity in household,
35 school, workplace/organization, and public/community space, policy-related expansion in
36 cooperation with other lead strategic partners, and upgrading of physical activity to the
37 level of national strategy serving as the common target in every health-related policy.

38 **5.7 (draft) 1st National Strategic Plan on Promotion of Physical Activity**
39 **(2017-2026)** by the Department of Health, Ministry of Public Health: This national
40 strategy includes promotion of physical activity for people at every age
41 group, promotion of environmental conditions to be conducive to physical activity, and
42 availability of a support system for physical activity.

43 The work on physical activity in Thailand can be divided into various levels – law,
44 strategy and policy, agency, and project:

45 **1) At the level of law, strategy and policy:** There are, for example, the
46 Constitution of the Kingdom of Thailand, B.E. 2560 (2017), 20-year National Strategy
47 (2017-2036), 12th National Economic and Social Development Plan, 20-year National
48 Strategy on Public Health, Health Promotion Fund Act, B.E. 2544 (2001), Strategy on

1 Tourism and Sports, 6th National Sports Development Plan (2018-2021), Strategy on
2 Labor Development, Strategy on Development of Thai Transport Infrastructure (2015-
3 2022), Child and Youth Development Promotion Act, B.E. 2550 (2007), Elderly Person
4 Act, B.E. 2546 (2003), and Social Welfare Promotion Act, B.E. 2546 (2003), as well as
5 (draft) Strategy on Promotion of Physical Activity due to be announced by the end of
6 2017.

7 **2) At agency level:** Agencies taking part in promotion of physical activity of Thai
8 people are: Thai Health Promotion Foundation (ThaiHealth), Ministry of Public Health,
9 Ministry of Tourism and Sports, physical education institutes, Ministry of Interior,
10 Ministry of Education, Ministry of Labor, Ministry of Transport, Ministry of Social
11 Development and Human Security, Mahidol University's Physical Activity Research
12 Center, Department of National Parks, Wildlife, and Plant Conservation, and religious
13 places, Department of Religious Affairs.

14 **3) At project level:** Projects undertaken by public agencies are: Diet & Physical
15 Activity Clinics designed to bring about behavioral change in NCD patients in State
16 hospitals. The project was started by ThaiHealth networks of "Khon Thai Rai Phung"
17 (Thai People without Big Bellies) and through the cooperation of various agencies
18 participating in the International Congress on Physical Activity and Public Health, leading
19 to the "Bangkok Declaration on Physical Activity for Global Health and Sustainable
20 Development".

21 **6. System and mechanisms favoring promotion of physical activity**

22 Thailand has a number of systems and mechanisms that favor the promotion of
23 physical activity. Responsible agencies include the public sector, private sector,
24 academia, and civil society. The lead public agencies are Thai Health Promotion
25 Foundation (ThaiHealth), Department of Health, Ministry of Public Health, Ministry of
26 Education, Ministry of Tourism and Sports, National Health Security Office, Department
27 of Local Administration, Ministry of Interior, Ministry of Transport, and some other
28 government agencies concerned. The academic sector includes Physical Activity
29 Research Center (PARC), Health Systems Research Institute (HSRI), Thailand Research
30 Fund (TRF), Prince of Songkhla University's Health Systems Management Institute
31 (HSMI PSU), and other universities. The private sector includes Provincial Electricity
32 Authority, SCG Co. Ltd., Thai Airways International Public Company, and several other
33 organizations with physical activity programs for their workers. Associations and club
34 networks are Professional Network of Architects and Town Planners, Thailand Walking
35 and Cycling Institute Foundation, Thai Cycling Association, Thai Cycling for Health
36 Association, and Federation of Jogging Clubs for Thai Health. There are also a large
37 number of cycling clubs, running clubs and sports club across the country.

38 Despite action taken to promote physical activity for quite some time, Thailand
39 still sees little behavioral change in its people especially when it comes to sedentary
40 lifestyle. An analysis of the situation reveals a number of factors accounting for such
41 limiting behaviors: a limited extent of knowledge in the promotion efforts at individual
42 and environmental levels including the existing system and mechanisms. The limiting
43 factors also include the knowledge and understanding of the definition of physical
44 activity on the part of health personnel and the general public. Other concerns are
45 related to the policy, process, and methods of promoting activities, as well as health
46 determinants, monitoring, evaluation and surveillance systems. In addition, there are
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1 problems of management at every level. For instance, the community cannot use the
2 bike lanes although the lane lines have been drawn or painted.

3 Yet, there are a number of enabling factors in place, including the committee for
4 participatory health regions for the public and district/regional committees for the
5 development of the quality of life. These committees serve as mechanisms to integrate
6 the issue of physical activity into the district health plan. Furthermore, the Ministry of
7 Interior has a "One-Plan" policy that will make it possible to include the issue into the
8 plan of its agencies at every level.

9 The issue presented to this National Health Assembly is intended to drive forward
10 the promotion of physical activity for Thai people at all age groups, involving all sectors
11 concerned. The objective is to synergize the force of the public sector, private sector,
12 local sector, civil society, community and academic sector in the implementation of such
13 promotion. This will eventually lead to the participatory public policy process based on
14 wisdoms at every level, national and local combined. It will also bring about the
15 platform for learning exchange and space for further health advocacy.

17 **7. Issue for consideration of the National Health Assembly**

18 Requesting the National Health Assembly to consider Document HA10/Draft
19 Resolution on Promotion of Physical Activity for Thai People at All Age Groups.

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