

# Population Attitude to Personal Health in Thailand

Health Systems Research Institute (HSRI)

Pharmaceutical Researcher and Manufacturer's Association (PReMA)

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Thailand is an emerging economy facing a rising burden of NCDs that threatens its economic development and the future well-being of its people. To address this, data collection on main risk factors for NCDs is an important stepping stone towards the design of adequate prevention policies. A partnership approach is needed to prevent and control NCDs expansion, with raising awareness for citizens as critical component.

We believe that the progress made in global health over recent years has demonstrated that a progressive, collaborative multi-stakeholder partnership approach must be pursued to effectively address this growing concern. The extent of the NCD challenge requires, more than ever, the sharing of our collective expertise and strengths, as well as coordination and commitment to sustain the wide range of actions needed.



**Tadaharu Goto**  
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The research-based pharmaceutical industry committed in 2011 to a ten-point framework for action and an ongoing program of research as a contribution to the WHO's Action Plan for the Prevention and Control of NCDs, and in support of the Political Declaration adopted in New York in 2011. Under this framework, PReMA, IFPMA and JPMA joined forces with Health System Research Institute to conduct a study to better understand the attitude of Thais to their personal health and their views on the impact of smoking, harmful drinking and obesity on their health. We believe this study could contribute an important set of data for further discussion on adequate prevention policies in the country. It is a timely piece of research, following a similar exercise conducted in Russia in 2011.

Many issues which have been highlighted by the study are expected to be the focus of the global health community in years to come. First and foremost, there is a need to tackle effectively the four main unhealthy lifestyle choices which significantly increase the risk of NCDs - the use of tobacco, excessive alcohol intake, unhealthy diet and physical inactivity. By avoiding these behaviors, individuals can radically reduce their risk of developing NCDs.

Indeed, unlike with other diseases, the fight to prevent NCDs begins on the personal level. It is therefore extremely important to understand population's perceptions of health and how key risk factors play a role in developing effective prevention measures. It is estimated that 50% of deaths and disability from NCDs are preventable.

It is for this reason that IFPMA and JPMA strongly advocate that considerable focus should be put on prevention programs. The benefits reaped would not limit themselves to improved health for individuals and avoiding the suffering that often accompanies NCDs. There would also be an alleviation of the mounting pressure on health care systems and the economic burden of such diseases on society as a whole. The experience of high-income countries in the European Union (EU) shows that basic tobacco and alcohol risk factor awareness-raising and prevention policies have been successful in reducing the consumption of these products.

The research-based pharmaceutical industry plays a key role in discovering and improving therapeutic options for patients for both prevention and treatment of NCDs. A key commitment of IFPMA and JPMA member companies is to continue their engagement in partnerships to address NCDs in low and middle income countries. However, to deliver sustainable progress this engagement must also go hand in hand with the economic development of these countries. Combating NCDs needs to be a shared commitment, involving effective multi-stakeholder strategies at the global, regional and national levels. Last but by no means least, it requires each and every one of us to take our own health seriously and lead healthier lifestyles.



Professor.  
Somkiat Wattanasirichaigoon,  
Director, Health Systems  
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In these days Nowadays, a group of Non-Communicable diseases (NCDs) isare an increasingly important public health problem that isand is likely to increase steadily. NCDs are It is a silent diseases that often leadaffects to disability and premature death which, were affecting the quality of life of patients worldwide in suffering from chronic non-communicable diseases, whether rich or poor. What's more, NCDs significantly And it also impact on the overall national health expenditurespending.

There are several studies that have demonstrated the severity of the impact on patients and the governmentscountries;, all are pointing in the same direction, about how important is to take actions to reduce the risk factors that cause the NCDs before it's too late.

"Population attitude to Personal health in Thailand" is a continuation from the research of International Federation of Pharmaceutical Manufacturers & Associations (IFPMA), which has been used to collect data from the population in many countries as a representative of the populations in different continents. And Thailand has been selected as a sample of the population in the Asia-Pacific region.

The Pharmaceutical Research and Manufacturers Association (PReMA) and the Japan Pharmaceutical Manufacturers Association (JPMA) have requested comments from the Health Systems Research Institute (HSRI) to help converted questionnaires and data collection applied to the context of Thailand in order to collect the data to be conformed to the objectives of this research.

The results from this research is one piece of important information that will allow policy makers and implement persons who are doing health prevention program could picked as a knowledge to control the disease to achieve as the expected target. And at this point it is held to be a joint collaboration between the public and the private sector (Public Private Partnerships) in the Health Promotion campaign activities to strengthened Thailand health systems even further.



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Chief Executive Officer (CEO)  
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At present, Non-Communicable diseases (NCDs) have become important issues of public health in Thailand, according to the WHO found that the NCDs have become a major cause of death over 60 percent of all causes. They compose of death from heart disease, Stroke, diabetes, cancers and chronic respiratory diseases. The data showed that the incidences of this disease in Thailand are increasing exponentially every year. If no control measures to reduce the risk of diseases, this problem is becoming increasingly severe. This will affect the quality of life of the population and the economy of the country.

During the past year The Pharmaceutical Research and Manufacturers Association (PReMA) is supported by International Federation of Pharmaceutical Manufacturers & Associations (IFPMA) and Japan Pharmaceutical Manufacturers Association (JPMA) to study “Population attitude to Personal health in Thailand” and get insight into the views on smoking. Harmful consumption of alcohol consumption and obesity affect the health of Thailand. The results of this research will be useful to policymakers, project implementers to reduce the incidence of NCDs successfully in Thailand.

In order to reduce the incidence of NCDs in general, there is a great need to start on a personal level. Therefore, it is important to understand the perception of Thai in personal health care and risk factors that could affect spur these diseases. After we understand people's behaviors, it could be used to develop effective measures to prevent NCDs. There are estimates show that more than 50 percent of the rate of death and disability due to NCDs are preventable. Such numbers call for a broad collaboration between pharmaceutical industry, PReMA, IFPMA, JPMA civil society, and government agencies to participate in the on activity for the disease prevention programs of disease. To help eliminate address the risk factors that lead to disease. The end result will not only be limited to the better health of Thai people but it will also lead to a reduction in the budget for the treatment of disease NCDs care due to NCDs in the future.

The fight against NCDs requires the cooperation and coordination at both of regional and national levels. Both government agencies and private sector hold the key. Finally, we all should work in order to empower expect that the Thai people will people to take better care of themselves and could also adopt apt for healthier habits and a better lifestyle.

## EXECUTIVE SUMMARY

The purpose of this research study was to get a better understanding of the Thai population's attitudes and perceptions to personal health across the age, sex, and socioeconomic spectrum. Specifically, this study looked at how Thais viewed various behavioral risk factors and their correlation to non-communicable diseases. In doing so, it also helped identify the motivations behind both beneficial and harmful behaviors to health. These results can help to identify the gaps and obstacles to better population health, and to inform Thai policymakers of the steps that they can take in order to create new or improve on existing health interventions for the amelioration of Thai population health.

Non-communicable diseases (NCDs) such as cardiovascular disease and cancer are a growing concern worldwide, from low-income countries to high-income countries. Policymakers are quickly taking notice, and are eager to reverse this trend before it is too late. Thailand is no exception from this. With a universal health coverage (UHC) system in place, it is utmost importance for the sustainability of its UHC and its continued development that Thailand's populace remains as healthy as possible.

Results from this study show that Thais place high importance on their health. They are also aware of the main causes of NCDs, and that smoking and alcohol consumption are negatively correlated with health outcomes. This high level of awareness suggests that Thailand's health education campaigns have been successful. However, this increased knowledge is not perfectly correlated with the levels of healthy behavior adoption. Part of the reason is because most Thais are more ambivalent concerning risky health behaviors until it becomes an imminent and substantial concern.

Moving forward, the Thai government and its policymakers should continue its health education campaigns. However, they should pair these with interventions that focus more on behavioral change, specifically ones that appeal to the population's emphasis on health, family, and happiness. Additionally, policymakers should look more into interventions that also affect environmental factors that influence behavior change, instead of only instigating campaigns that ask individuals to change.

## Part I: International context

### Global disease trends

Non-communicable diseases (NCDs) are the leading cause of death worldwide, in low-, middle-, and high-income countries<sup>1</sup>. Of the 57 million global deaths in 2008, 63% were attributable to NCDs. Once considered to be the diseases of the rich, NCDs now disproportionately affect low- to middle-income countries more than high-income countries. Almost 80% of the NCD deaths in 2008 occurred in these countries. When stratified by sex, 65% more men and 85% more women in low- to middle-income countries will succumb to NCD-related deaths compared to their counterparts in high-income countries<sup>1</sup>.

The leading cause of NCD-related mortality is cardiovascular diseases (48%), followed by cancer (21%), chronic respiratory diseases (12%), and diabetes (4%)<sup>1</sup>. Behavioral risk factors such as tobacco use, lack of physical activity, and poor diet contribute to 80% of coronary heart disease deaths and cerebrovascular deaths<sup>1</sup>.

With an increasingly aging population, NCDs are projected to cause even greater mortality and morbidity in the coming years. Annual NCD deaths are expected to rise from 36 million in 2008 to 52 million in 2030, a 44% increase<sup>1</sup>.

The World Economic Forum estimated that over the next 20 years, NCDs will cost more than US\$ 30 trillion, representing 48% of global GDP in 2010, and pushing millions of people below the poverty line. If mental diseases come in the picture, macroeconomic simulations suggest a cumulative output loss of US\$ 47 trillion over the next two decades<sup>2</sup>.

### Regional disease trends

Southeast Asia is currently experiencing a double whammy OR DOUBLE BURDEN: rates of communicable diseases are increasing, as are rates of non-communicable diseases. However, there are currently more deaths attributable to NCDs than communicable diseases, and maternal, perinatal, and nutritional diseases combined. The World Health Organization (WHO) projects that by 2020, Southeast Asia will experience a significantly increase in number of NCD-related deaths, growing by over 20%<sup>4</sup>.

<sup>1</sup> World Health Organization [WHO]. (2011). Global status on noncommunicable diseases 2010. Retrieved from [http://www.who.int/nmh/publications/ncd\\_report\\_full\\_en.pdf](http://www.who.int/nmh/publications/ncd_report_full_en.pdf)

<sup>2</sup> The global economic burden of NCDs, A report by the World Economic Forum and the Harvard School of Public Health, September 2011

<sup>3</sup> WHO. (2013). Estimates for 2000-2012: Disease burdens. Retrieved from [http://www.who.int/healthinfo/global\\_burden\\_disease/estimates/en/index2.html](http://www.who.int/healthinfo/global_burden_disease/estimates/en/index2.html)

<sup>4</sup> Health in Thailand. (2014, May 18). Retrieved July 1, 2014 from Wikipedia: [http://en.wikipedia.org/wiki/Health\\_in\\_Thailand](http://en.wikipedia.org/wiki/Health_in_Thailand)

## Part II: Thailand context

### Country profile<sup>4</sup>

Thailand is a country located in Southeast Asia. It borders Myanmar and Laos in the north, Malaysia in the south, and Laos and Cambodia in the east. To its west is the Andaman Sea, and to its southeast is the Gulf of Thailand. It has a population of 66.7 million in 2011 estimates, with approximately one sixth of this population in its capital city, Bangkok, and surrounding areas.

Thailand is considered to be an upper-middle income country. Its economy continues to be robust, despite the 1997 Asian financial crisis. Thailand is considered to be the fourth richest nation in Southeast Asia, behind Singapore, Brunei, and Malaysia. Half of its labor force is engaged in the agricultural sector, followed by 37% in the service sector, and 14% in industry. Agriculture constitutes a significant portion of the economy. However, Thailand also has a robust automobile manufacturing industry, energy industry, tourism industry, and banking and financial services industry.

In 2002, Thailand launched a national universal health coverage scheme that now covers 99.5% of the population. It is one of the few middle-income countries to successfully implement a comprehensive scheme. Health expenditures constitute 4.3% of its total GDP.

Thailand enjoys favorable health indicators, such as low mortality infant and maternal mortality rates. Average life expectancy is 70 years as of 2009. Mortality rates are expected to continue decreasing steadily, while life expectancy is expected to continue increasing steadily<sup>5</sup>. Indirect health indicators include literacy rate, which is over 90% in Thailand due to a strong network of schools across the country.

### Disease trends

In Thailand, the burden of disease is shifting from communicable diseases to non-communicable diseases. **Nine out of the ten leading causes of death and disability-adjusted life years (DALYs) are from non-communicable diseases.** The number of years of life lost due to NCDs has increased to 55%, while account for 24% in 2008. In 2009, the leading cause of DALYs among men was alcoholism, while in women it was diabetes. This replaced HIV/AIDS, which was the number one cause of DALYs in both men and women in 2004. Chronic disease rates such as cardiovascular disease and diabetes have increased consistently since 2001. In 2001, the rates for cardiovascular disease and diabetes were 278 per 100,000 and 288 per 100,000 respectively. By 2009, these rates were 793 per 100,000 and 736 per 100,000 respectively.

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<sup>5</sup> Kanchanachitra, C., Podhisita, C., Archanvaitkul, K., Chamchan, K., Siriratmongkol, K., Tipsuk, P., & Thapsuwan, S. (2011). Thai Health 2011. Institute for Population and Social Research, 378, 1-123.



## Part III: Research results

### Methodology

This quantitative study was conducted via in-person interviews with structured questionnaires between 1 October to 13 November 2013. The questionnaire was adapted from a previous population attitude's questionnaire IFPMA used to conduct a similar study in Russia in 2011.. It was pre-tested before this study to ensure that respondents would thoroughly understand the question so as to minimize skewed results. Most of the answers given were available options presented to the respondents on the questionnaire.

420 Thais of varying age, sex, socioeconomic class, and locations participated from this study in order to get a sample that best represents the Thai population. There was an even split between male and female respondents. A majority of respondents were farmers, and whose median age was between 35 and 44. Many were married, and had a household income in the lower 45.5% (approximately 7,000-23,000 baht per month).

Thailand is composed of five main regions: north, northeast, central, south, and Bangkok. Researchers selected a province in each of these regions (except for Bangkok) that was a good representation of the region. These provinces are Chiang Rai, Khon Kaen, Suphanburi, and Suratthani respectively. Within these regions, they selected a municipal area and a non-municipal area in order to decrease location bias as much as possible. Throughout the study, the data are primarily stratified by municipality.

Interviewers who received extensive training prior to the beginning of the study conducted in-person interviews. Additionally, a field supervisor present at all interviews. After the interview was conducted, a quality control personnel from the Research Matters office called respondents to validate over 60% of the results obtained from the field interviews in order to ensure accuracy.

### Health as a value

Respondents indicated that (1) happy family life, (2) health, and (3) an active, strenuous life were the top three most important values for them. When their answers were stratified by municipality, this descending order of importance held for those in rural areas. However, in urban areas, respondents said that they valued health, then happy family life, then an active, strenuous life more. Despite this, significantly greater number of respondents ranked happy family life as number one, with 25.4% of participants doing so, while only 17.1% of the 420 participants ranked health as number one. This holds true in both municipal and non-municipal areas.

92.1% believe that good health will result in positive impacts in other aspects of their life, such as normal living, earnings, happy family life, happiness, and savings from medical treatment. This was a belief shared among those from both urban and rural areas.

When asked what they associated with the word “health”, most respondents answered they associate this word with a healthy life, and an idea of what leads to good health. A healthy life includes having a healthy life and being physically strong, mental well-being, and being able to work effectively. What leads to good health includes having a proper diet, exercising, taking care of oneself, and getting enough sleep. Many respondents would call an individual healthy if they were free from illness, had a happy disposition, regularly exercised, and had good nutrition. Good nutrition includes consumption of vegetables and fruits.

**Almost all respondents indicated that they themselves are healthy, primarily because they are not suffering from any illnesses.** Slightly more respondents from non-municipal areas considered themselves to be healthy compared to their urban counterparts (94.3% vs. 91.3%).

When asked about their tolerance of unhealthy behaviors, more respondents stated that they were more tolerant of unhealthy eating and less active behavior. They found drinking some alcohol consumption more tolerable than cigarette smoking. For example, over 50% said drinking 0.5 liters of beer or 50 g of liquor once a month was permissible, but only 48% said smoking one or more cigarettes a month was acceptable. This trend holds true among both urban and rural respondents.

**Over 95% of participants answered that healthy lifestyle is a personal responsibility, and a good investment for the future.** In non-municipalities, 98% of respondents said that a healthy lifestyle was linked to success in work, whereas only 94% of those in municipal areas indicated this. However, almost half of respondents indicated that to do so require significant monetary investment, while 78% said that it required significant amount of time. Both urban and rural respondents echo these sentiments.

### Healthy status and healthy lifestyle practices

Approximately 60% of respondents responded that they had good health. Additionally, over 70% stated that they felt full of life, had more energy, and felt happy. More participants from municipal areas responded that they felt happier than their non-municipal counterparts.

When asked whether they knew their basic health statistics, over 95% answered that they knew their height and weight. Three quarters were aware of their blood group. Roughly 40% were aware of their blood pressure, and less than 20% knew whether or not they suffered disease in their childhood. Those from urban areas were more aware of their basic health data than their rural counterparts.

Of those who were aware of their present height and weight status, 22% of them were considered overweight per Asia’s body mass index (BMI) standards. 7% of them were obese. More people in municipal areas were overweight or obese when compared to those from non-municipal areas.

The survey found that the most common diseases and ailments plaguing the respondents include gastric ulcer, allergies, lumbago, and arterial hypertension. Allergies are less common in non-municipal areas, while arterial hypertension is significantly more common in municipal areas. However, only 66% of cases of gastric ulcer were diagnosed by a physician, compared to 50% of lumbago cases reported by respondents.

While over 50% said they opted not to visit a physician at their own volition in the past year, if they did, most of them visited their primary care physician first instead of going directly to a specialist.

More participants from rural areas had their blood sugar levels measured in the past year compared to their urban compatriots. Despite this, most participants from both rural and urban areas were unable to recall their blood sugar measurements. Approximately one third of all participants had their blood cholesterol measured in the past year.

### Tobacco/Smoking

**Approximately 22% of respondents are currently smoking.** However, those from non-municipal areas have a significantly higher percentage of those who have quit smoking compared to those from municipal areas.

In Thailand, the most popular tobacco product is factory-made cigarettes, with 65% of smokers smoking this everyday. 23% smoke handmade cigarettes. Significantly more people in urban areas smoke factory-made cigarettes, while significantly more people in rural areas smoke self-made cigarettes.

60% of respondents have attempted to quit smoking at least once, with the majority trying at least two to five times. There were a slightly larger percentage of respondents from municipal areas who have tried to quit smoking compared to those from non-municipal areas. **When they tried to quit, many participants did not use tobacco replacement products. Instead, 57% of them quit cold turkey.** This percentage is significantly higher among urban respondents than rural respondents. 80% of those who have attempted quitting said they managed to abstain from tobacco products for up to eight weeks before relapsing. Again, those from urban areas were able to abstain for a longer period of time than those from rural areas.

The biggest factor that prompted smokers to think about quitting was health concerns. More people from non-municipal areas cited this as the main reason compared to those from municipalities. The second main factor that influenced their decision to quit smoking was their family and/or significant others. Once they start, smokers are not very price sensitive to the cost of cigarettes.

Witnessing the effects of smoking are the strongest motivators to get smokers to quit. The more immediate and severe the health effects of smoking are to the smoker (as told by a physician), the more willing they are to try and quit. The onset of difficult breathing, family members with lung diseases, and health disorders are listed as the top three reasons that people quit smoking.

Overall, smokers are in favor of anti-tobacco campaigns, particularly warning labels on cigarette packs, lack of visible tobacco product placement in shops, and prohibition of sales on the Internet. However, they are less in favor of campaigns that raise prices of tobacco products.

Many smokers are aware of the negative health impacts of smoking themselves and on others. Most, if not all, are in favor of smoking prohibition inside buildings and public areas. This includes homes shared with others, such as family members, young children, and the elderly. Additionally, many respondents are aware that cigarettes are equally noxious, despite differing flavor, nicotine levels, and tar levels. Over 95% know that smoking is correlated with increased risk of chronic disease development, such as cancer, lung diseases, and respiratory diseases. Fewer are aware that it can also increase the risk of oral diseases, hypertension, and congenital diseases in children.

## Alcohol

Of the 420 participants, approximately 40% indicated that they drink alcohol, while 60% say they do not drink it at all. More participants consume beer more often than hard liquor. However, if they are drinking five or more portions per time, more respondents drink hard liquor compared with beer. Few of those who drink consume wine.

In general, those who drink would consume one to two servings of alcoholic per time. When stratified by alcoholic beverage, respondents said that they generally have three to four servings of hard liquor per time, while they would only have one to two servings of beer per time. Those who drink wine would generally intake two glasses of wine.

Respondents indicated that the two biggest motivators that would prompt them to quit drinking are health concerns, and motivation from loved ones. Those in non-municipals cited health concerns are a significantly greater motivator to quit drinking, compared to those in municipal areas. Health problems, such as onset of alcohol withdrawal symptoms, and hand tremors are the strongest symptoms that would prompt alcohol cessation. Also, having alcoholics in their family circle, and seeing the negative health effects of alcohol affecting their loved ones are also strong motivators. Respondents from urban areas placed more importance on onset of health problems as reasons to quit smoking compared to their rural counterparts. The closer the risk of disease onset is to the drinker, the more likely they are to quit. If their physician were to say that continued drinking would trigger late stage chronic disease, 74% respondents indicated that they would most likely quit immediately.

Most drinkers agree with measures to decrease alcohol consumption, such as prohibition of alcohol sales to those under the age of 18, random blood alcohol content tests, and prohibition of alcohol advertisements. Approximately 89% were also in agreement with the warning labels on alcohol bottles.

Those who consume alcohol do not seem to be price sensitive: 25% increases or decreases to alcohol prices would not prompt most to buy more or less alcohol.

Almost all individuals (including those who drink and those who do not) believe that protecting the population from alcohol-associated harm is a matter of personal responsibility. The government should not have to protect people from this kind of harm.

Approximately 96% of respondents are aware that alcohol consumption can lead to elevated risk of chronic disease development. Most knew that alcohol consumption could lead to liver diseases, cancers, and cardiovascular diseases. However, fewer knew that it could cause congenital disorders, asthma, and depression. Those in urban areas have a greater awareness of alcohol's negative health effects compared to those in rural areas.

### Physical activity

Approximately 58% of respondents indicated that they engaged in some form of physical exercise once a week. 27% of people from rural areas said they never engaged in exercise compared to the 18.6% from urban areas. 47% responded that they exercised at least three times a week, with significantly more respondents from municipal areas claiming to do so.

Of those who exercise, almost all said they did so in order to improve their health. 99% of people from cities indicated this, compared to 94% from rural areas. Other commonly stated reasons for exercising include for relaxation, and for pleasure. The biggest factor preventing respondents from exercising is lack of time, a reason that an overwhelming 93% cited, particularly in non-municipal areas. Lack of options for exercise was not a limiting factor, as at least 60% reported that their respective districts provided many options for sports and physical activity.

### Diet

When choosing foods to eat, the most important factor was the freshness of the food, closely followed by price, and taste. The caloric intake and nutritional value of the food was the least important factor. These beliefs hold true in both municipal and non-municipal areas.

56% of respondents stated that they consumed fruit at least once a day. This figure is significantly higher among those from non-municipal areas: approximately 60% vs. 50% in municipal areas. Similar trends are found in vegetable consumption. Two-thirds of participants indicated that they consumed vegetables at least once a day. More from rural areas reported eating vegetables than those from urban areas. Fruit or vegetable juice is not a popular product in either areas, with almost half stating that they drink it less than once a week, if at all.

In terms of diet and consumption, the biggest concern among respondents was the food quality and freshness. Other concerns were pesticides used in agriculture that could contaminate their food, and food poisoning caused by bacteria. There was a significant lack of knowledge in terms of genetically modified foods or beverages in both urban and rural settlements.

When respondents were educated more on unsafe food items, over 85% altered their habits in accordance to this new information: either they avoided the foodstuffs or changed their eating habits. This new information had a significantly greater impact on those from urban areas.

The most significant factor that would prompt respondents to adopt healthier eating habits is the onset of health concerns associated with diet. 84% participants indicated this as their main motivator for change. The more immediate and the severe the chronic disease is, the more motivated they are to alter their lifestyle. However, personal and environmental influences such as having a close family member adopt healthy dietary changes or witnessing a loved one experience nutrition-related health problems are also strong stimuli for dietary behavior change.

### Non-infectious diseases

When asked about the acuteness of chronic diseases, 90% said that cardiovascular disease is acute, while only 75% found respiratory diseases to be acute. 60% found cancer to be severe, and 50% found diabetes to be concerning. This view is similarly shared between both settlements.

40% believed that improper diet was the biggest factor in triggering the onset of cardiovascular disease, with smoking and alcohol consumption trailing at a distant second or third. For cancer, almost half attribute it to smoking, distantly followed by improper diet. Approximately 34% believe air pollution and smoking are triggers for respiratory diseases, while over 69% believe that diabetes is a result of poor diet. Almost all agree that smoking triggers cancer and respiratory diseases. Over 90% indicate that malnutrition increases the risk of metabolic diseases and diabetes.

Around 81% of respondents believe that physicians can identify a person's predisposition towards a chronic disease. Significantly more in municipal areas believe this to be true compared to those in non-municipal areas. Many are in agreement that preventative treatments allow for early stage diagnosis of non-infectious diseases.

### Factors for change

Almost all respondents indicated that they have considered reducing their consumption of fatty foods, increasing their consumption of fruits and vegetables, and increasing their frequency of exercise in order to improve their health. Very few were willing to give up their consumption of alcohol. This is similar across both settlements. However, in non-municipal areas, significantly more have considered reducing their sugar intake: 60% have considered this vs. 31% in municipal areas.

Health concerns are the number one impetus for behavior change for all health-related behaviors: from diet, to physical exercise, to alcohol consumption.

In terms of successful behavior change, over 53% of respondents indicated success with increasing fruit and vegetable intake, increasing frequency of getting fresh air, and/or increasing duration of daily walks. People had the most difficult time successfully giving up hard liquor, beer, and smoking. Over 90% of respondents found it easier to increase the duration of their walks, frequency of getting fresh air, and their fruit and vegetable consumption. Many cited abstaining from hard liquor, beer, and smoking to be the most difficult.

## Part IV: Results synopsis

Overall, health is considered to be very important to Thais, ranking among the top three values when surveyed. They generally consider good health to mean getting adequate exercising, and eating an abundance of fruits and vegetables. Many view health as a personal responsibility, but a fair number noted that this is a responsibility that takes up a considerable amount of time, effort, and monetary resources.

Approximately 60% of respondents indicated that they were in good health. Almost all are aware of their height and weight, but fewer were aware of their latest blood sugar and blood pressure readings. In terms of health-seeking behavior, over 50% did not visit a doctor at all in the past year unless they absolutely needed to. When they did see a doctor, most visited their general practitioner first. Fewer opted to directly to a specialist.

In terms of tobacco consumption, most respondents – both non-smokers and smokers – are aware of the negative health impacts of smoking on themselves and on others. Those who attempt to quit smoking do so without the aid of tobacco replacement products. The biggest motivators to smoking cessation are experiencing the negative health effects of smoking first-hand, and the development of smoking-related health issues among family members. This is very similar to alcohol consumption: many are aware of its negative health impacts, and would only be motivated to stop this behavior if they experience health issues, or at their family's urging. The main difference between alcohol and tobacco consumption is that many still view alcohol consumption as more socially acceptable than tobacco consumption. As a result, there are higher numbers of regular alcohol drinkers than tobacco smokers.

Over half of respondents indicated that they engaged in some sort of physical exercise once per week. A little less than half exercise at least three times per week. Most people exercised in order to improve their health. However, **the biggest factor that impedes people from exercising more frequently is lack of time.**

The freshness and quality of food is very important among Thais. When they were educated about unsafe foodstuffs, almost two thirds immediately set about altering their behavior in order to avoid these unsafe items. Similar to tobacco and alcohol consumption, health concerns are also the main motivators for change cited among respondents in order to motivate the adoption of healthier dietary habits.

Many respondents found cardiovascular disease to be the most severe chronic disease, followed by respiratory diseases, cancer, and diabetes. Almost all indicated that smoking led to respiratory diseases and cancer, while improper diet can lead to metabolic diseases and diabetes. Additionally, many see the merits of preventative treatment in the early detection of chronic disease onset.

Health concerns are the main motivator for any kind of health-related behavior change. Not surprisingly, what respondents found to be the easiest alterations in behavior, such as increasing vegetable and fruit intake, were also the health behaviors that were most successfully adopted. The most difficult health behaviors, such as abstaining from beer and hard liquor consumption, were the ones where respondents had the least amount of success doing.

## Part V: Moving forward

Health is a major concern among all Thai citizens surveyed. The onset of health issues remains to be the biggest motivator to instigate the adoption of healthier behavior. Family and loved ones are also frequently cited as a significant impetus for positive change.

Health education campaigns in Thailand appear to have been successful. Many are aware of the risks and triggers for chronic diseases, such as diabetes, respiratory diseases, and cancer. However, the biggest gap that remains is the translation of acquired health knowledge into positive behavioral change. This is especially evident for tobacco smoking. Most are aware of the negative health impacts of smoking. The fact that even most smokers are aware of this shows that health education campaigns in Thailand have been successful. However, this has not been successful in preventing or stopping smokers from smoking. There is a gap between health education and behavior adoption. As such, future anti-smoking campaigns by the Thai government should start focusing on 1) preventing young people from taking up smoking in the first place, and 2) tapping into health and family motivators to inspire smokers to quit. However, these cessation interventions should be done in conjunction with existing health education campaigns and tobacco taxation measures.

The recommendations suggested for smoking are relevant for alcohol consumption, as results for these two health behaviors are similar. Many are aware of the negative health effects of alcohol consumption, but not to the same degree as they are aware of the negative effects of smoking. Similarly, drinking alcohol is not frowned upon as severely as smoking is. While campaigns for smoking focus more on absolutely abstaining from the behavior, these types of absolute abstaining interventions may be more difficult to employ for alcohol consumption behavior. Instead, it may be more effective for the Thai government to employ interventions that first employ a harm reduction approach: in other words, interventions to curb harmful drinking behaviors, not to abstain from it. This is because it will require broad social and cultural shift to move towards a society where alcohol is abhorred as strongly as smoking. However, this does not mean the government should relent on their health education campaigns on the negative effects of alcohol consumption.

Thai people are increasingly aware of the importance of adopting healthy behaviors, such as eating well and engaging in physical activity. It is easier to adopt simple eating behavior changes, such as incorporating more fruits and vegetables into their diet. However, it is harder to incorporate more physical activities into their daily-life and awareness of calories intake which seems not very high in Thais. While it is possible to continue advocating the positive health effects of exercise in order to inspire more people to be more active, future interventions and policy on this behavior should focus on creating an environment that encourages more physical activities. This is more of a challenge in urban areas that have more limited space, but if the Thai policymakers are committed to having their constituents be as healthy as possible, then investing in green spaces and campaigns that stimulate more physical activity also with Fostering health at the workplace through creation of space or time for employees to do physical activity should be plausible interventions.



# Research result: Population Attitude to Personal Health in Thailand

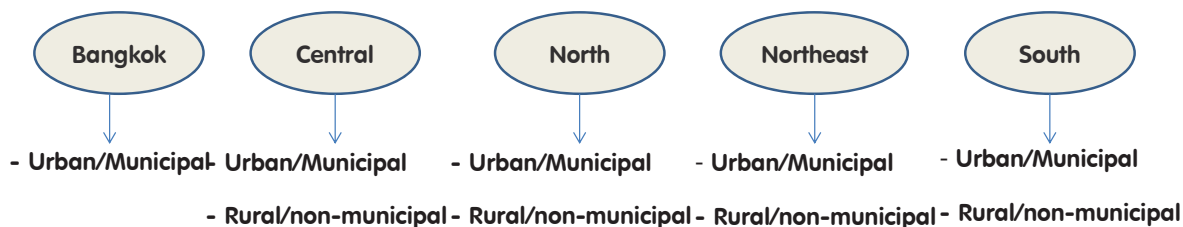
## Research Approach

**Methodology** : Quantitative study via in-home face-to-face interview with the given structured questionnaire

**Data Collection** : Random sampling within the specified areas

**Sample Size** : 420

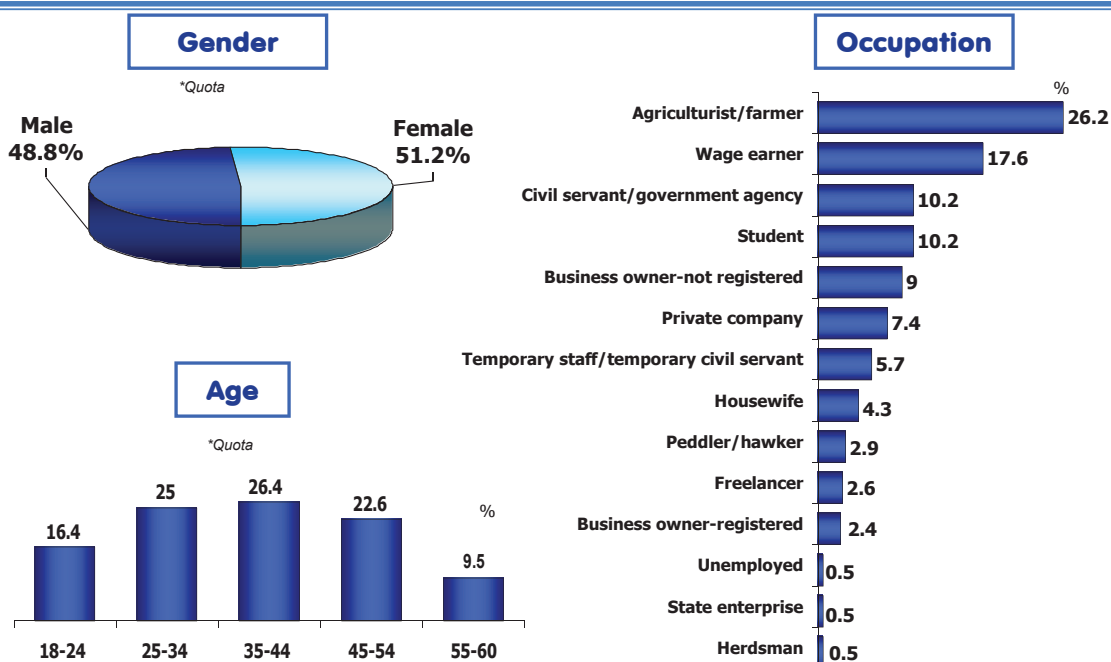
**Sampling Area** : All regions of Thailand including Bangkok, Central, North, Northeast, South



**Respondent's qualification** :

He/she is a Thai citizen who lives in the specified areas for more than 6 months

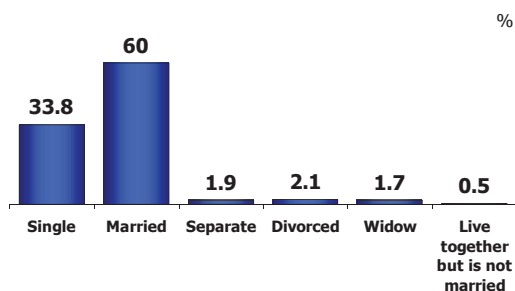
## Respondent's Profile



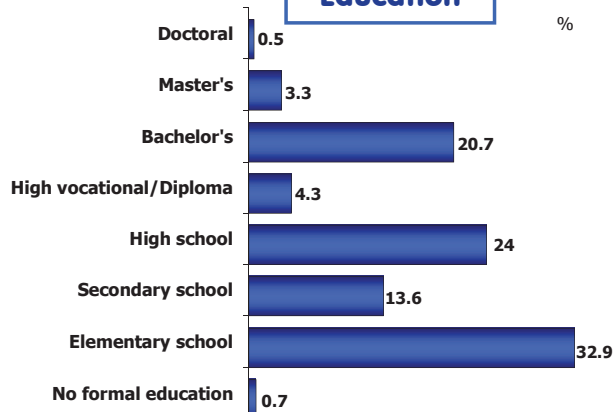
Base : 420

## Respondent's Profile

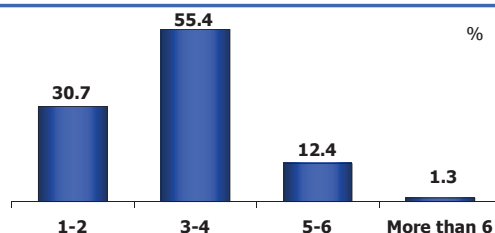
### Marital Status



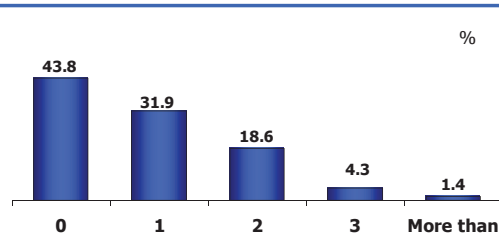
### Education



### No. of Family Member Aged 18 Years or older



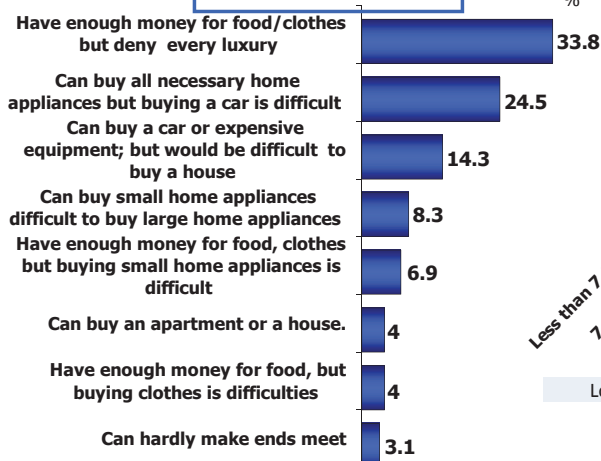
### No. of Family Member Aged Below 18 Years



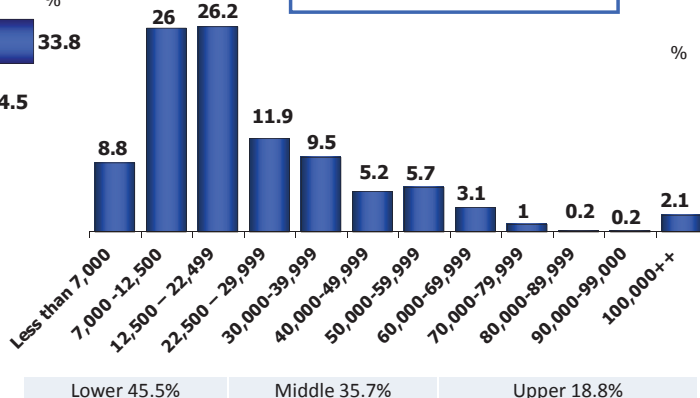
Base : 420

## Respondent's Profile

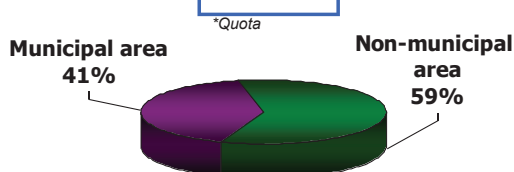
### Financial Status



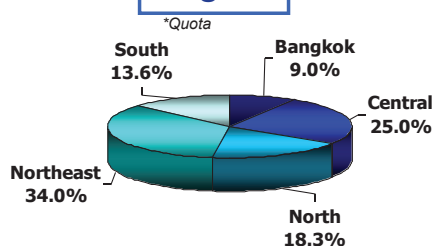
### Household Income



### Area



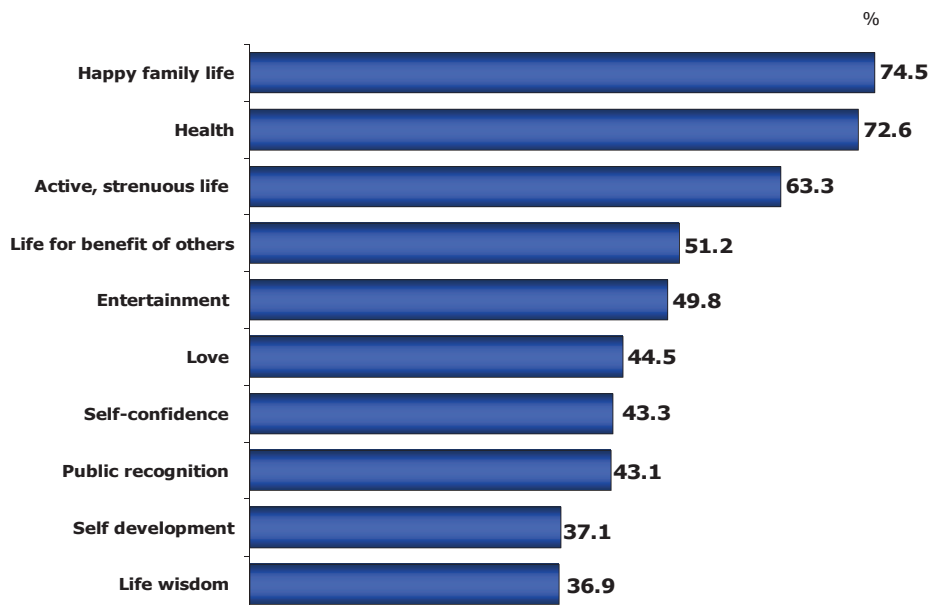
### Region



Base : 420

## Thai Value

### Total



Base : 420

**Key point :** “Happy family life” is the value held by the largest percentages of Thai respondents. While, “health” has a slightly lower percentage.

## What Place Health Occupies Among the Proposed Values

|   | <b>Total</b><br><b>Base=420</b><br><b>%</b> |
|---|---|
| <b>Good health will result in other things</b>            | <b>92.6</b>                                 |
| Good health will result in normal living                  | <b>48.1</b>                                 |
| To earn a living, one needs to have good health           | <b>33.8</b>                                 |
| Good health will result in a happy family                 | <b>12.6</b>                                 |
| Good health will result in happiness/mental well being    | <b>4.5</b>                                  |
| Good health will save them from medical treatment expense | <b>2.4</b>                                  |
| <b>Other things will result in good health</b>            | <b>7.7</b>                                  |

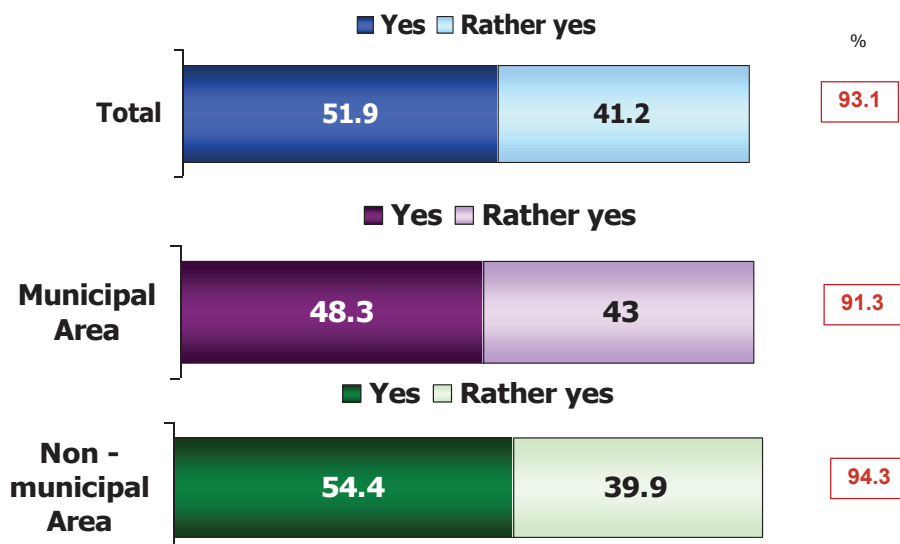
## What Is Associated with the Word “Health”

|  | <b>Total<br/>Base=420<br/>%</b> |
|--|---------------------------------|
| <b>Healthy life</b>                        | <b>42.1</b>                     |
| Having healthy life/physically strong      | <b>36.4</b>                     |
| Mental well being                          | <b>6.2</b>                      |
| Work effectively/successfully              | <b>3.6</b>                      |
| <b>What leads to good health</b>           | <b>41.2</b>                     |
| Having proper diet/good nutrition          | <b>19.8</b>                     |
| Having exercise                            | <b>15</b>                       |
| Taking care of oneself to have good health | <b>11.9</b>                     |
| Having enough sleep                        | <b>1.2</b>                      |
| Others such as illness, treatment          | <b>19.3</b>                     |

## What Persons Can Be Called “Healthy” Persons

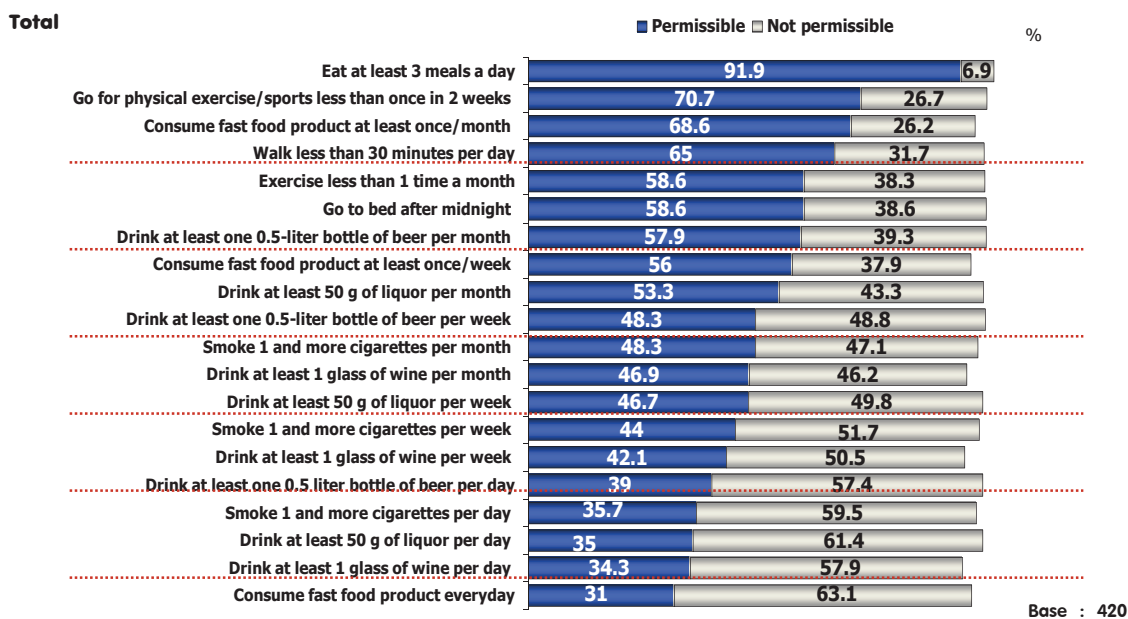
|   | <b>Total<br/>Base=420<br/>%</b> |
|---|---------------------------------|
| <b>How they are/how they look</b>           | <b>70</b>                       |
| No illness                                  | <b>49</b>                       |
| Happy/cheerful/sane persons                 | <b>15</b>                       |
| One with good shape/beautiful muscle        | <b>7.1</b>                      |
| Active/good personality persons             | <b>6.2</b>                      |
| Athlete                                     | <b>5.5</b>                      |
| Those who can work hard/effectively         | <b>2.1</b>                      |
| Long life persons                           | <b>1</b>                        |
| <b>Their healthy lifestyle/What they do</b> | <b>37.9</b>                     |
| Those who have regular exercise             | <b>24.3</b>                     |
| Those who have proper diet/good nutrition   | <b>13.3</b>                     |
| Those who take good care of their health    | <b>8.1</b>                      |
| Those who do not smoke                      | <b>2.4</b>                      |
| Those who abstain from alcoholic beverage   | <b>1.9</b>                      |
| Those who have enough sleep                 | <b>0.5</b>                      |
| Those who have proper excretion             | <b>0.2</b>                      |

## Whether They Consider Themselves “Healthy”



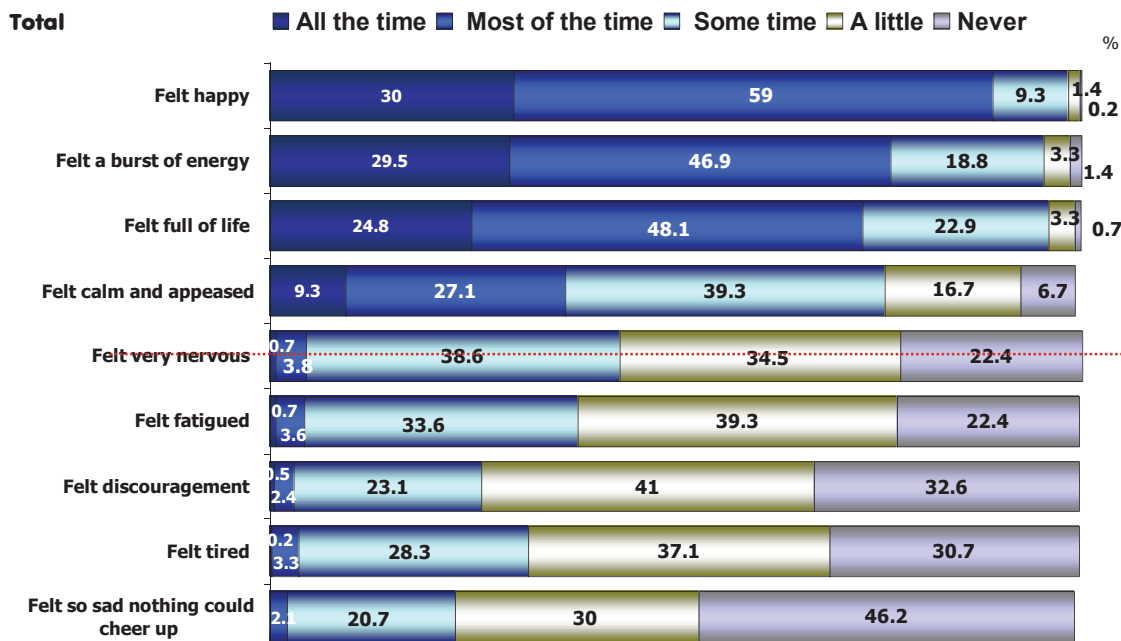
**Key point :** Majority of respondents consider themselves healthy.

## Tolerant of Unhealthy Condition



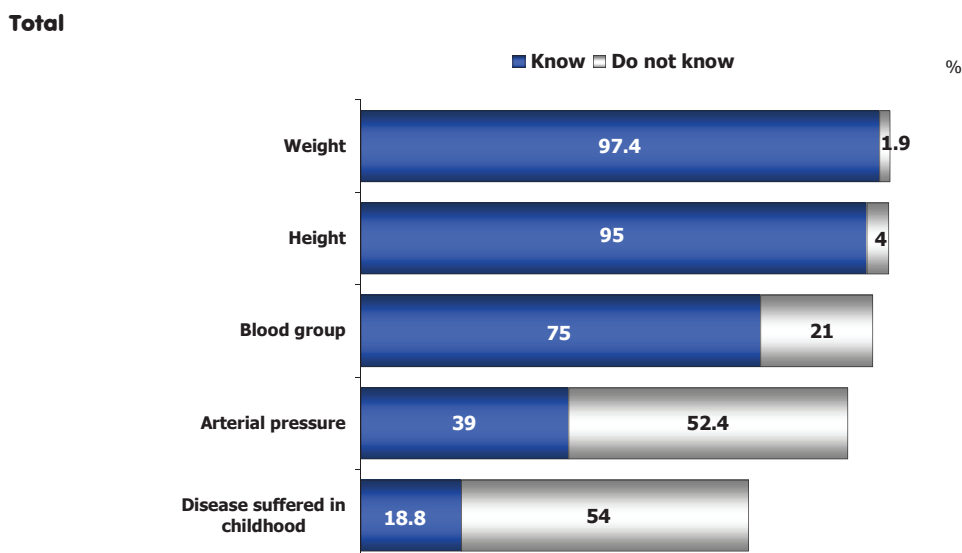
**Key point :** This are less tolerant with cigarettes smoking when compared with alcohol drinking.

## Portion of Time for the Past 4 Weeks



**Key point :** Mostly, respondents hold positive mood in their lives. They have happiness, energy, and liveliness. Calmness obtains the least percentage among all the positive mood.

## Whether They Know Their Basic Health-related Data

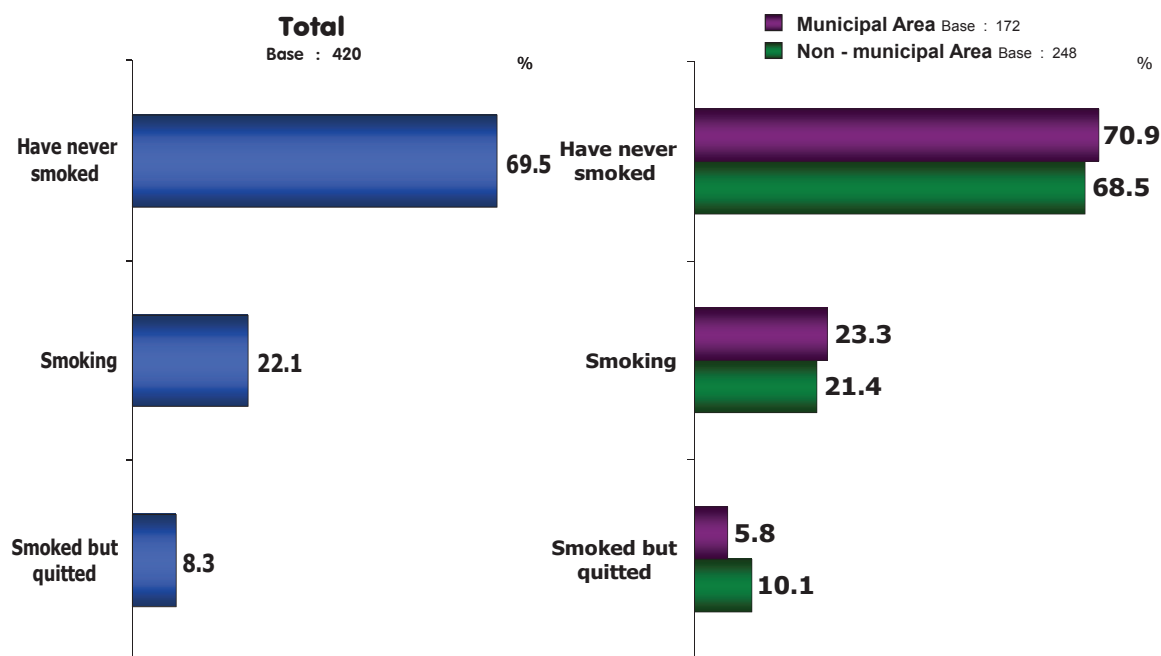


Base : 420

**Key point :** Most respondents do not know their arterial pressure and disease suffered in childhood.

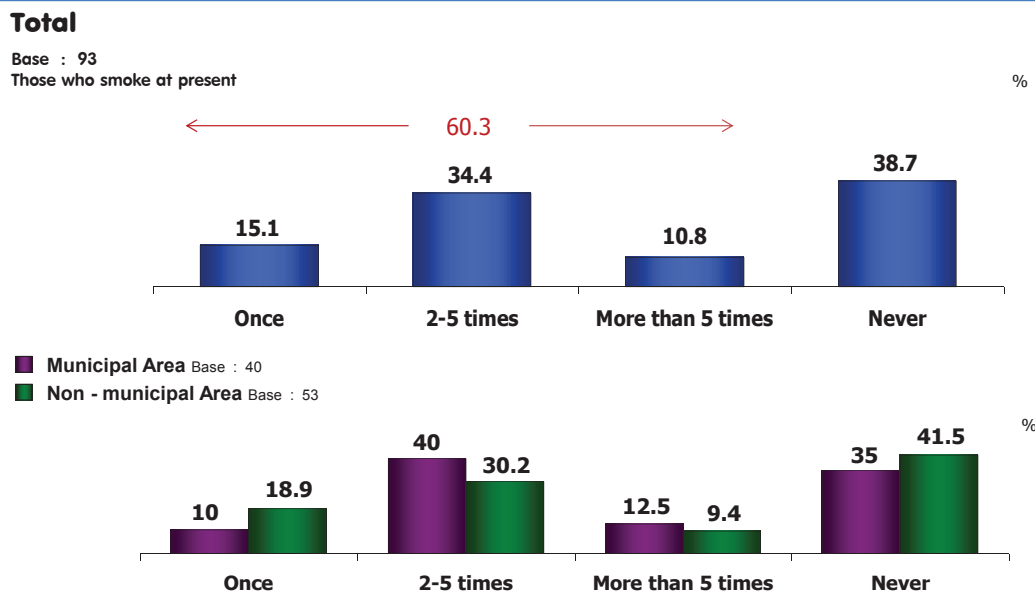
# Smoking

## Present Smoking Status



**Key point :** 22% of Thais are smokers

## Attempt to Quit Smoking



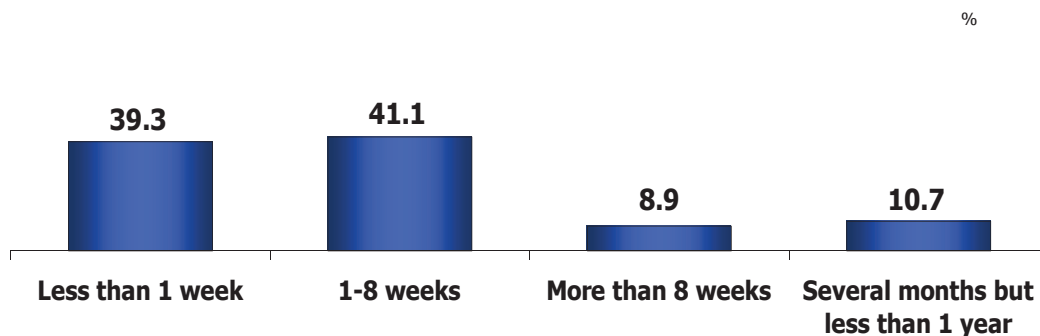
**Key point :** Sixty percent of the overall respondents have tried to quit smoking.

## How Long They Could Abstain from Smoking during the Last Attempt

**Total**

Base : 56

Those who smoke at present  
and had an attempt to quit



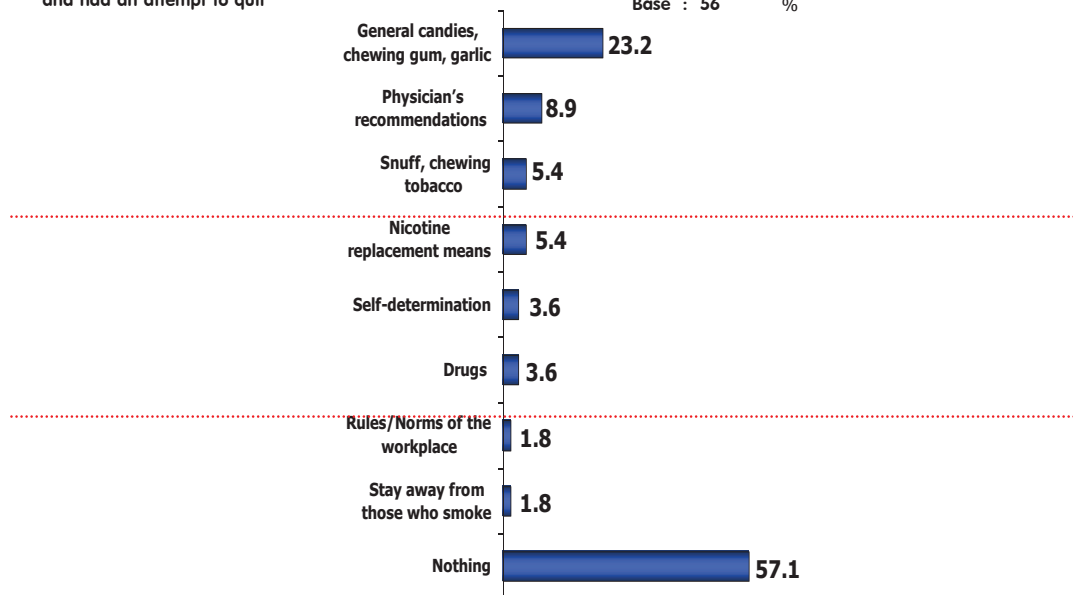
**Key point :** Mostly, those who have attempted to quit smoking can abstain their smoking for 1-8 weeks.

## What Means They Turned to during the Last Attempt at Quitting Smoke

Those who smoke at present  
and had an attempt to quit

**Total**

Base : 56 %



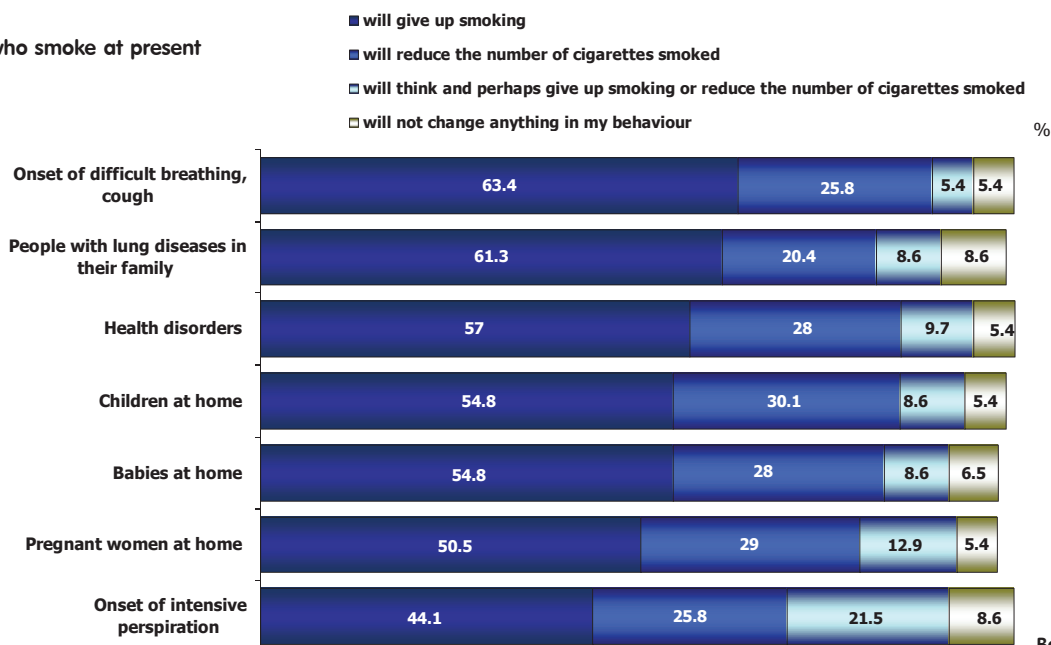
**Key point :** Mostly, respondents do not use any means to help with their attempt to quit smoking. If something is used, it is likely to be basic stuff like general candies and chewing gum.



## What May Prompt Them to Give Up Smoking

### Total

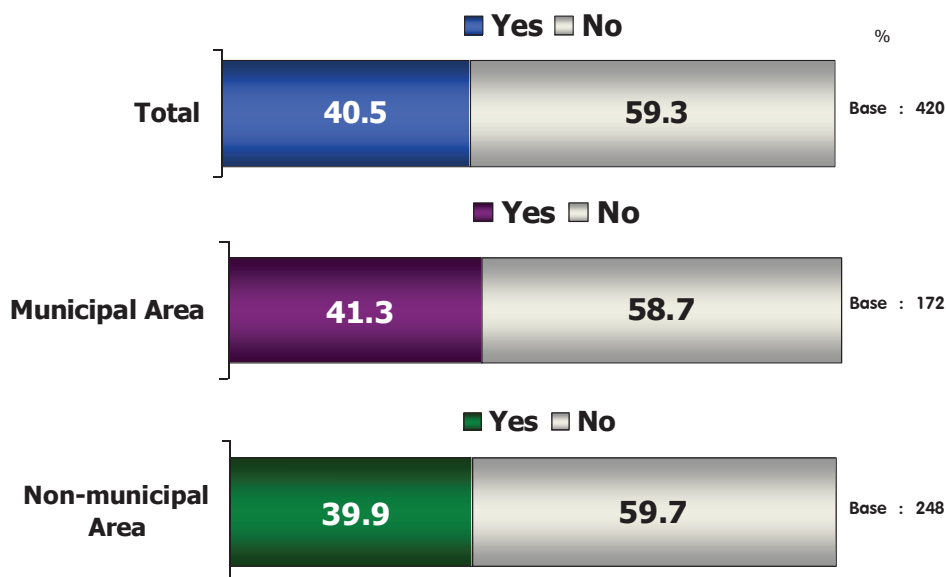
Those who smoke at present



**Key point :** Although onset of difficult breathing, cough would influence the largest percentage of respondents to give up smoking, family member is also influential for smokers to give up smoking. As we can see, more than half of the respondents will quit smoking if they have people with lung diseases, children, baby, or pregnant women at home.

# Alcohol consumption

## Whether They Consume Alcoholic Beverages



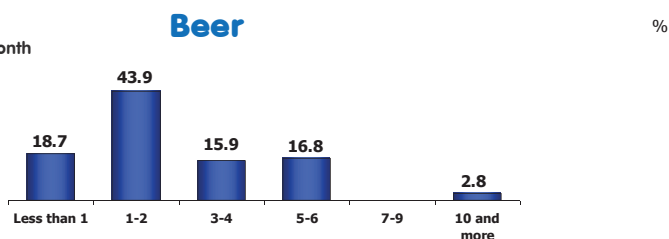
**Key point :** Forty percent of respondents drink alcoholic beverages.

## How Much Alcoholic Beverage They Consumed at a Time

### Total

Base : 107

Those who consume beer in the past 1 month



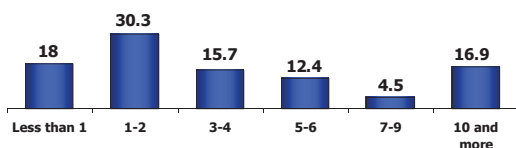
Unit : 630 ml bottle

### Liquor

#### Total

Base : 89

Those who consume liquor in the past 1 month

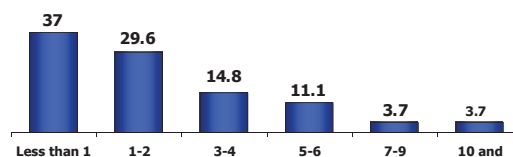


Unit : 100 ml serving

### Wine

#### Total

Base : 27\* Small n



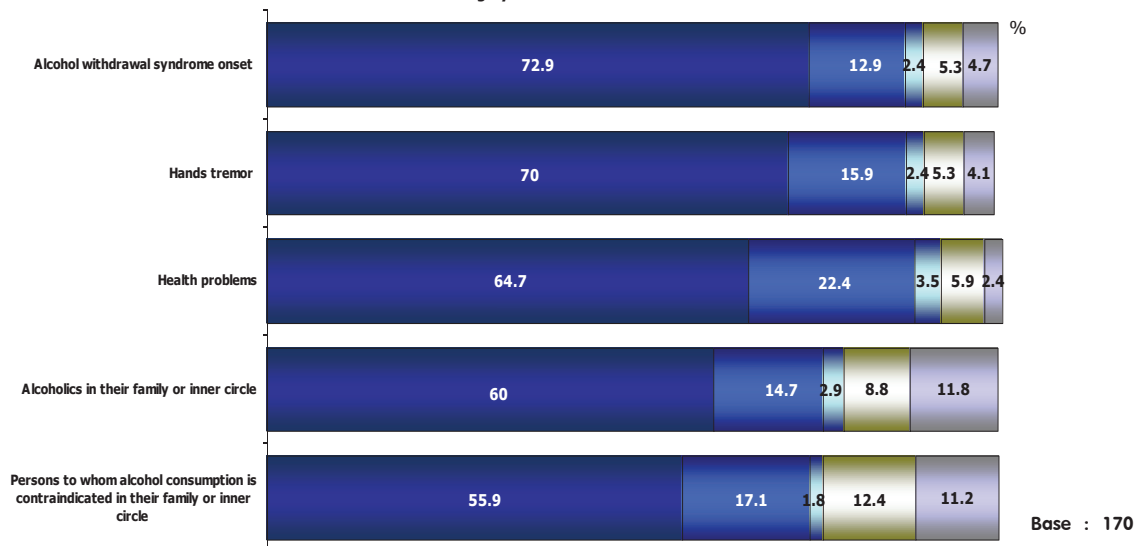
Unit : Glass

## What Can Prompt Them to Give Up Alcohol Consumption

### Total

Those who drink alcohol beverage

- will give up any alcohol consumption
- will reduce the quantity of consumed alcoholic beverages (servings)
- will consume light alcoholic beverages (such as beer and wine) only
- will think about the possibility to give up or reduce alcohol consumption
- will not change your behaviour



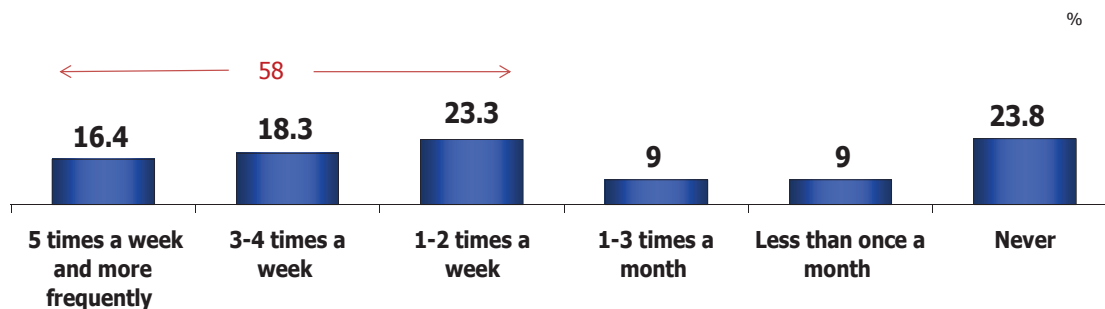
**Key point :** Primarily, alcohol drinkers will be prompted to give up alcohol beverage when they start having certain health symptom.

# Physical exercise

## How Often They Go in for Sports or Other Physical Exercise

### Total

Base : 420



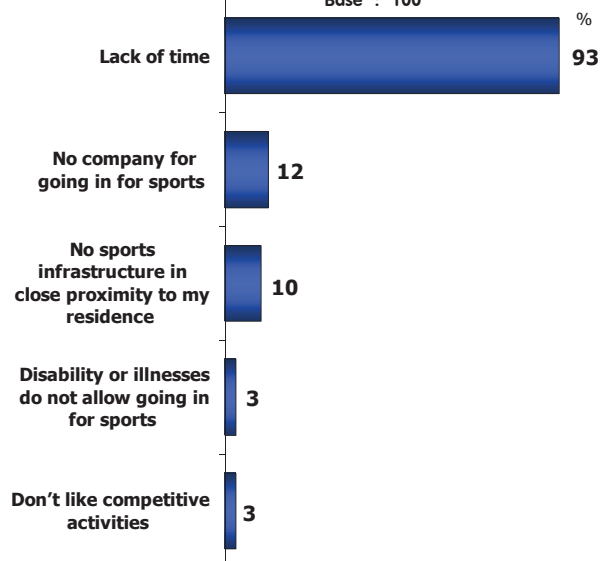
**Key point :** More than half of the respondents go in for sports or other physical exercise 1-2 times a week or more often. And there is almost 24% who have never exercise.

## What Prevents Them from Going in for Sports / Physical Exercise

Those who do not go in for sport or other physical exercise

### Total

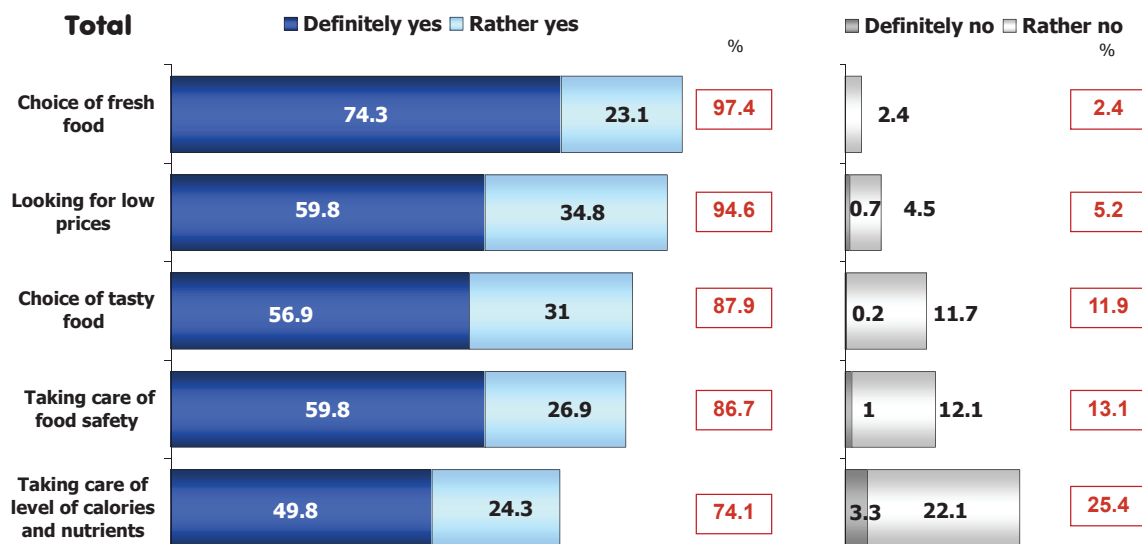
Base : 100



**Key point :** Basically, those who do not go in for sport or physical exercise claimed that they do not have enough time.

# Dietary behavior

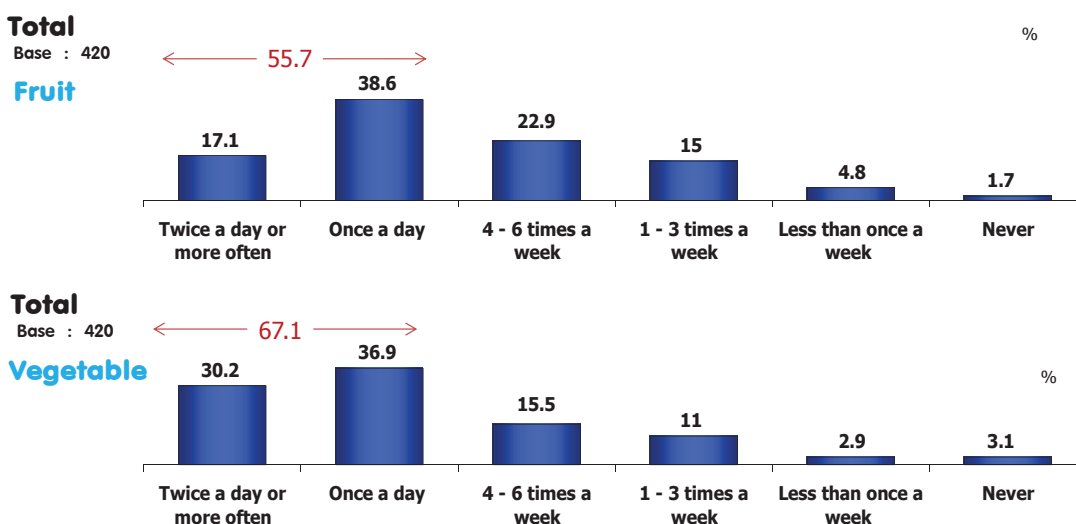
## Dietary Behavior



Base : 420

**Key point :** Most of respondents incline to the proper dietary behavior particularly selection of fresh food. However, taste and price become concerns for larger proportion of respondents than calories.

## Fruit & Vegetable Consumption

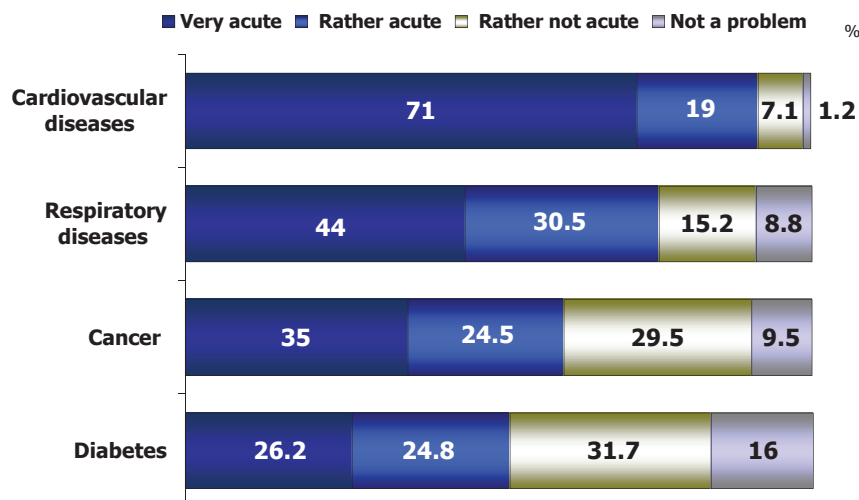


**Key point :** Most respondents consume fruit at least once a day. About 6% of the respondents very seldom or never consume fruit. Vegetable is consumed more often than fruit. Majority of respondents consume vegetable once a day or more often.

# Non-communicable diseases

## In Their Opinion, How Acute Each Chronic Disease Is

### Total

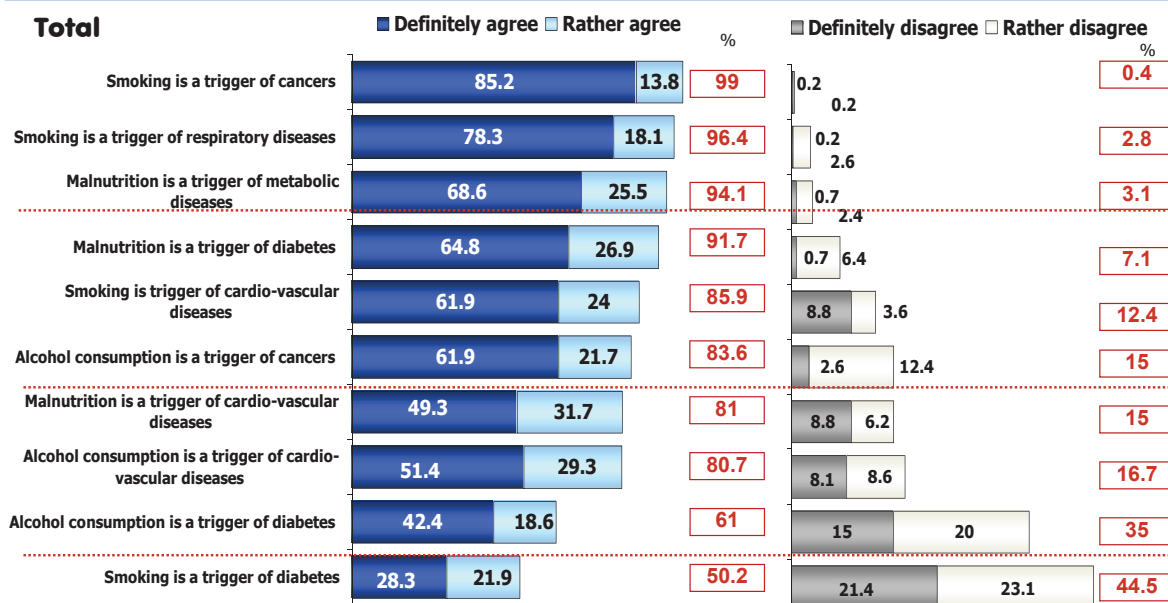


Base : 420

**Key point :** Comparing with other diseases, we can see that much larger percentage of respondents think cardiovascular disease is acute.

## Their Opinion Regarding a Trigger of Each Disease

### Total

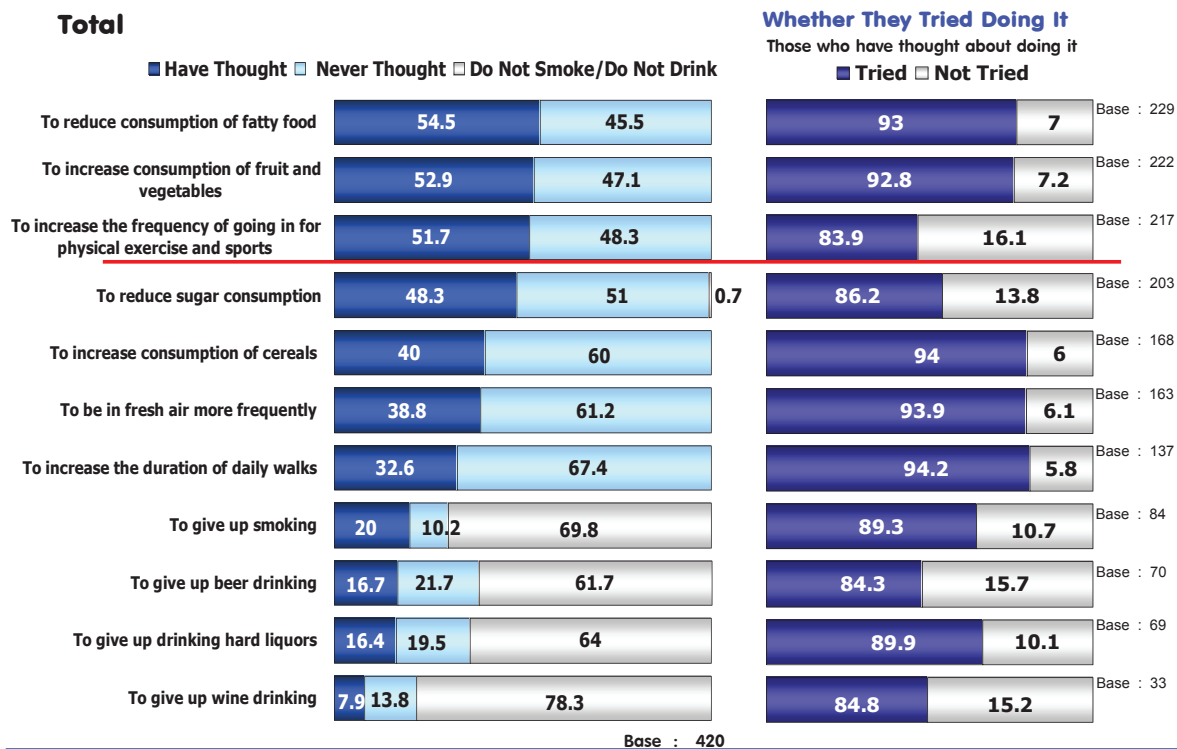


Base : 420

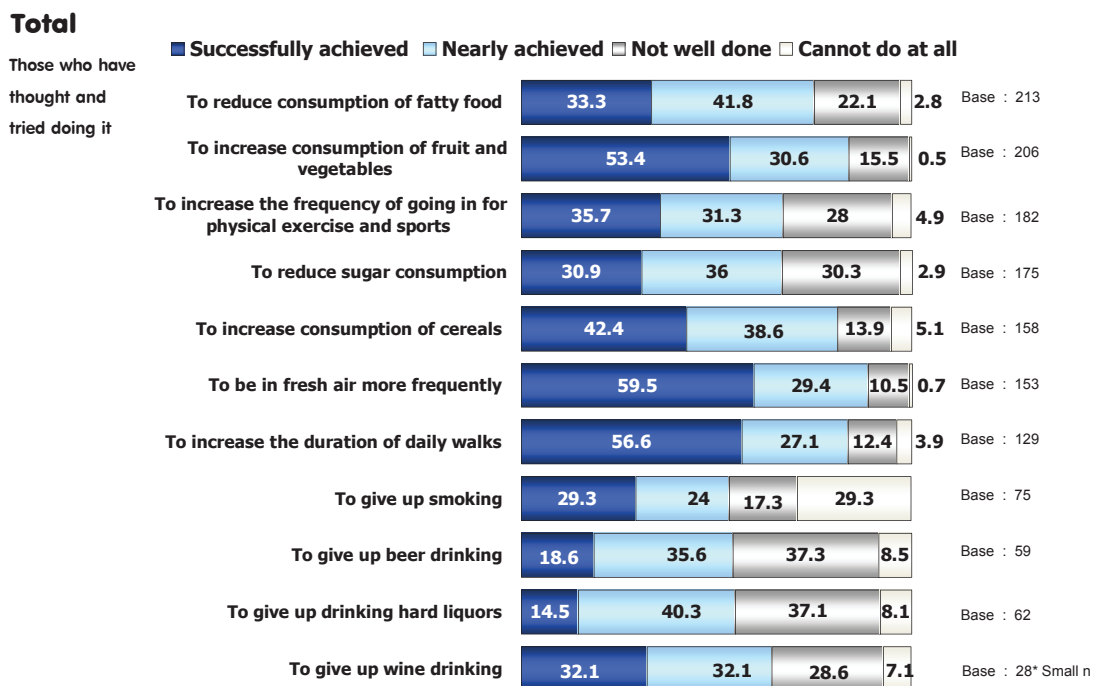
**Key point :** Basically, respondents think that smoking is a trigger of cancers, respiratory diseases, and cardiovascular disease. However, only 50% of them agree that it is a trigger of diabetes.

# Factors for change behaviors

## Whether They Have Thought about Doing Following Things



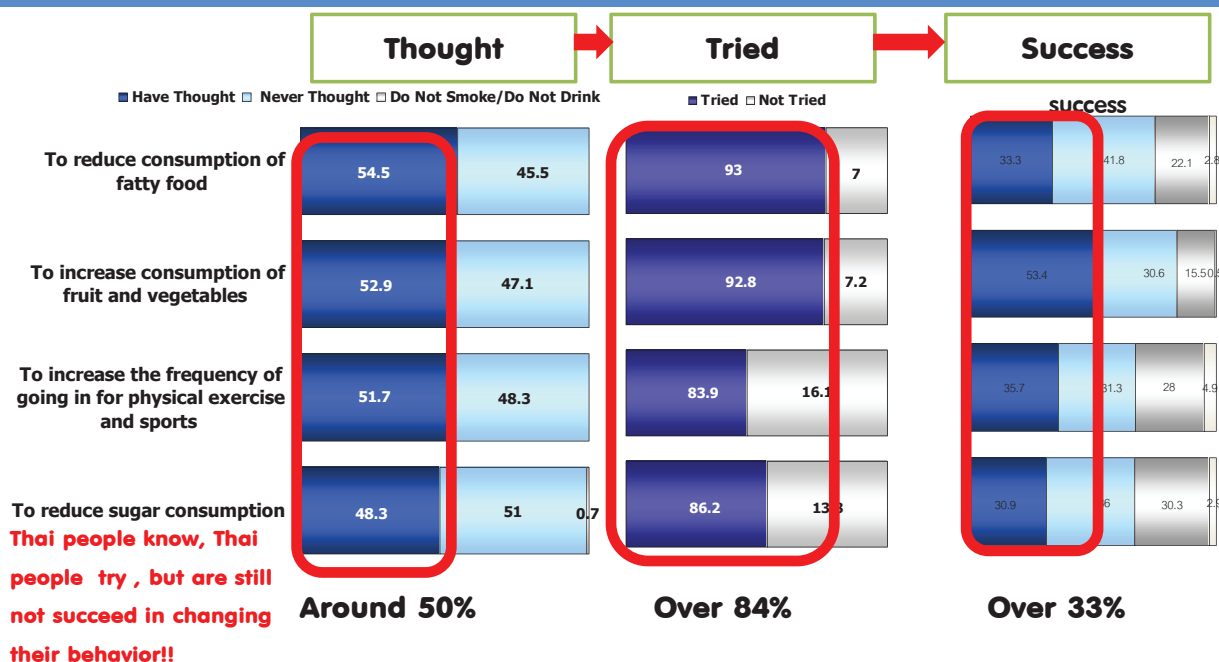
## What Results They Achieved



# Recommendation from research

## Finding from the Research!

### FACTORS OF CHANGE IN POPULATION PRACTICES ASSOCIATED WITH THE RISK FACTORS



Thai People need measurements!!

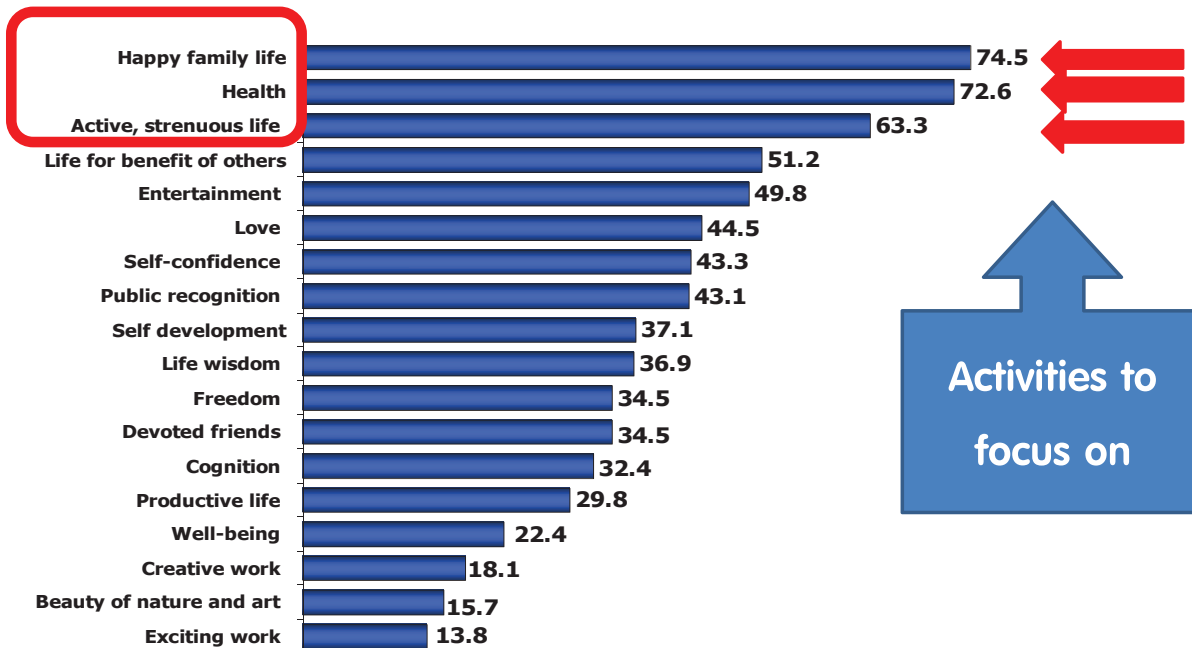


**To take action!**



# 1

## Focus on Thai People Values



# 2

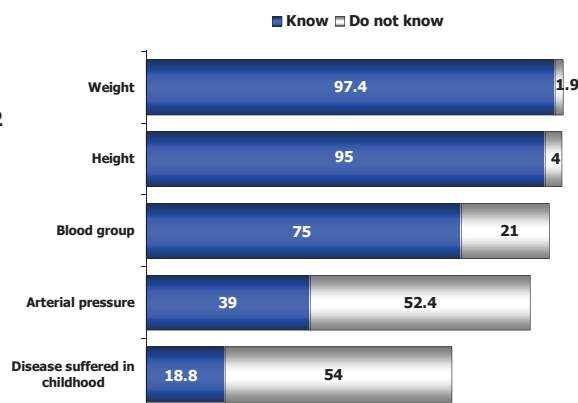
## Thai think they are healthy but they don't even know their basic health related data!

Their Present Health Status

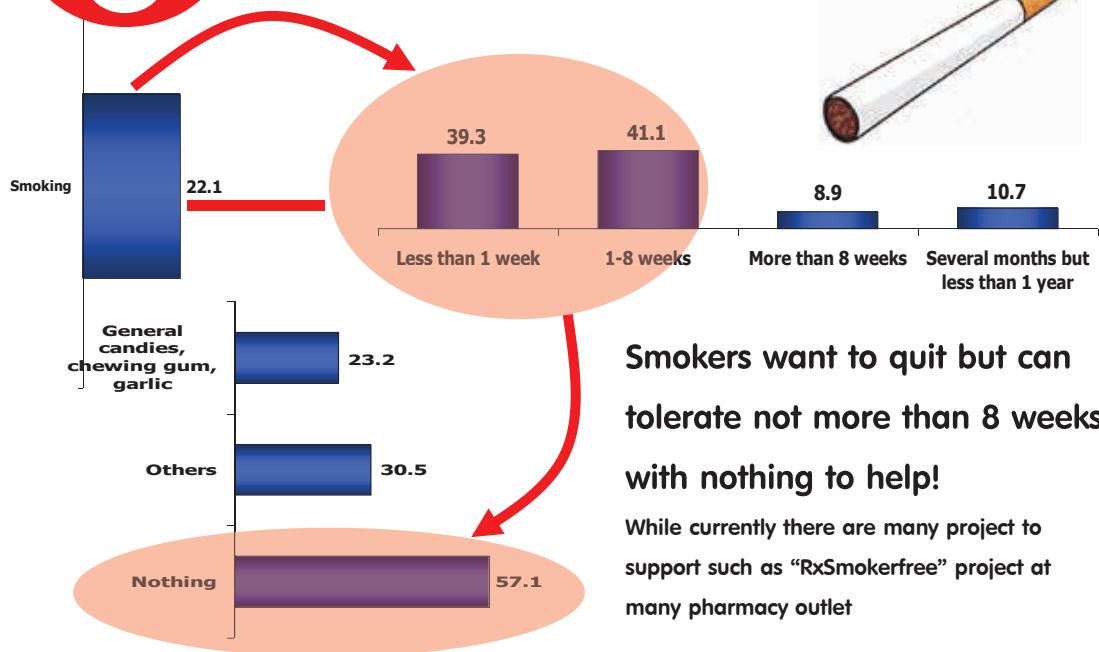


We have to promote self health status measurement & records

Basic Health-related Data they know



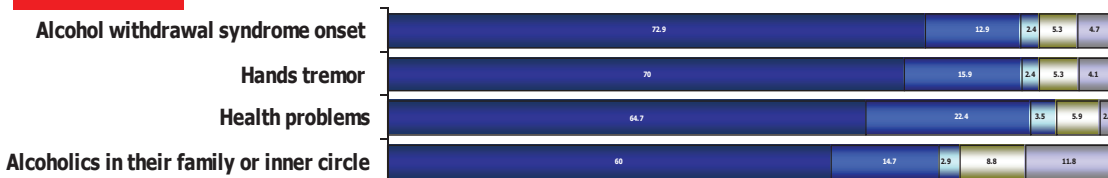
# 3 Smokers need Tools to quit



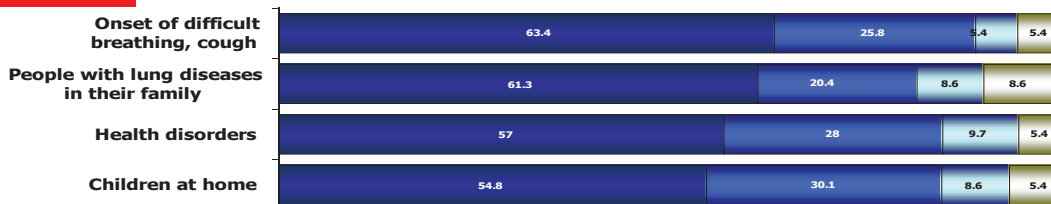
# 4 Smokers & Drinkers are the same ... they have to experience illness by themselves or by family members

How to make them has 2<sup>nd</sup> hand experience without being sick by themselves?

## Alcohol

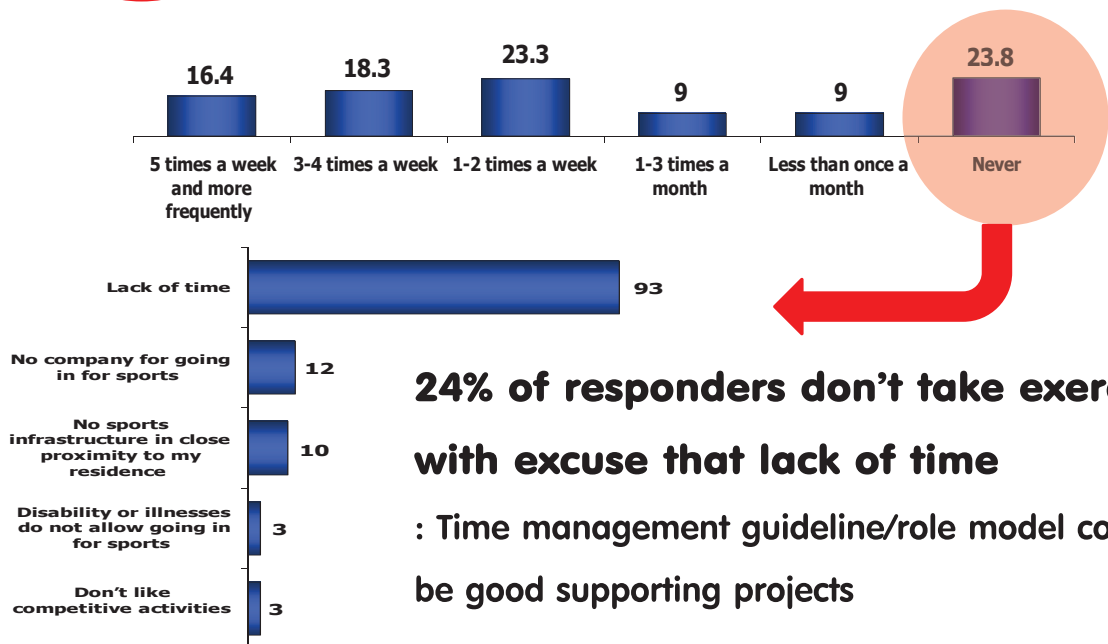


## Tobacco



# 5

## Time management: to Physical exercise

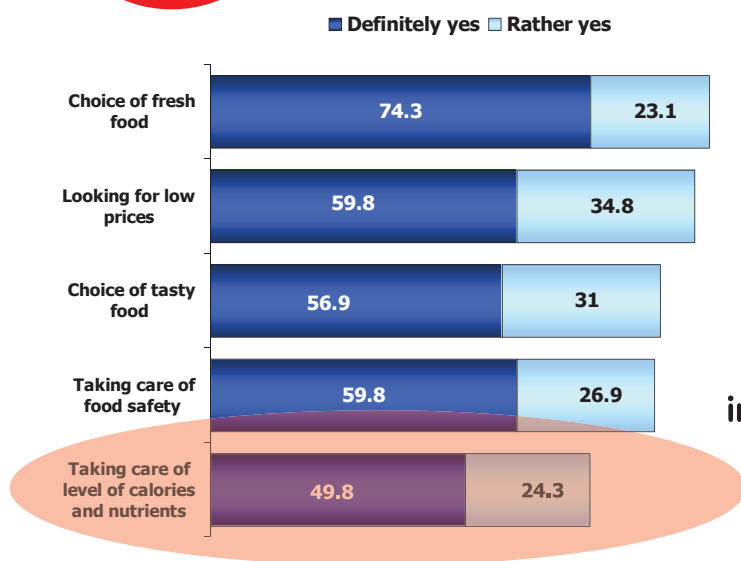


**24% of responders don't take exercise with excuse that lack of time**

: Time management guideline/role model could be good supporting projects

# 6

## Dietary behavior



**The selection food based on “ nutrition facts ” is low in Thai people:**

We have to educate on important of Nutrition fact in healthy food.

# From research to action

