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Regular Health Screening: A Lifesaving Practice

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Health screenings are the unsung heroes of preventive care. They comprise a series of health tests designed to detect potential health disorders or diseases before symptoms arise, allowing us to take action early for an improved health outcome. In essence, they serve as vital checkpoints for our well-being. However, despite their paramount importance, the National Health and Morbidity Survey 2019 reveals that only 49% of Malaysian adults have attended a health screening. This situation is worrying, as many individuals, particularly those at high risk of non-communicable diseases (NCDs) like diabetes, hypertension, and heart disease, remain unaware of their health status.

In Malaysia, where 1 in 12 adults have all three major NCD risk factors (hypertension, high blood glucose, and high blood cholesterol), the urgency for action becomes undeniable. Fortunately, through these health screening tests, identifying your chances of developing these risk factors of NCDs has never been more accessible. Knowing your numbers can differentiate between proactive wellness and reactive treatment, whether it's high Body Mass Index (BMI), blood pressure, or cholesterol levels.

Physical Examinations

Physical examinations involve assessing various aspects of your body's health and composition. This primarily involves body mass index (BMI), waist circumference, body fat percentage, and blood pressure measurements. Here are explanations of these different parameters and what you should know.

(1) Body Mass Index (BMI)

One key metric for physical examination is the Body Mass Index (BMI). As a simple index of weight-for-height, BMI is a handy tool used to categorise individuals into different weight groups (i.e. underweight, normal, overweight, and obese). Contrary to popular belief, BMI is not a direct measurement of body fat, but is an approximation of body fat. Therefore, it is more accurate than measuring body weight alone.

Striving for a normal BMI range (between 18.5 and 24.9 kg/m^2) is recommended. However, individuals should be cautious if they find themselves straying into the higher range of between 25.0 and 29.9 kg/m^2 (classified as overweight) and surpassing ≥30.0 kg/m^2 (landing in the obese category). Being overweight or obese signifies an abnormal or excessive fat accumulation, which can pose a risk to one's health, increasing the risk for the development of various NCDs such as heart disease, diabetes, strokes.

(2) Waist Circumference

Waist circumference is defined as the distance around your waist. This measurement can be easily taken using a measuring tape around one's abdominal region where the end of your ribs meets the top of your hip bone. As simple as the measurement may seem, this small measurement can provide significant insight into your health. Waist circumference measurement offers information about how fat is distributed in one's abdominal region.

Aim for less than 90 cm for men and less than 80 cm for women. If waist circumference measurements exceed these values, it could mean that you are at risk for developing NCDs.

(3) Body Fat Percentage

Body fat percentage is a part of body composition measurement. It refers to the proportion of one's body weight composed of fat tissue, including both storage and essential fat. This information is crucial for assessing overall health status and identifying potential risks for various health conditions such as obesity, diabetes, and cardiovascular diseases. Several methods (i.e. bioelectrical impedance analysis, skin-fold techniques, anthropometric methods, etc.) are available to measure body fat percentage. While the accuracy may vary, these methods provide a comprehensive picture of an individual's health, fitness, and nutritional status, allowing for personalised interventions and improved outcomes.

For optimal health, males should aim for a body fat percentage of less than 25%, while females should target less than 35%. This is particularly important as exceeding these recommended percentages is associated with an increased risk of developing NCDs like heart disease, diabetes, and hypertension.

(4) Blood Pressure

This parameter refers to the pressure of blood coursing through your arteries, which is a crucial indicator of your cardiovascular health. It is measured in two numbers: systolic pressure, the pressure when your heart beats, and diastolic pressure, the pressure when your heart rests between beats.

For optimal health, aim for a blood pressure reading of less than 120-129 mmHg for systolic pressure and less than 80-84 mmHg for diastolic pressure. These levels signify a healthy cardiovascular system. However, readings above 140 mmHg for systolic pressure and 90 mmHg for diastolic pressure may indicate a condition that significantly increases the risk of NCDs like hypertension, stroke and heart diseases.

Blood Test Profile

The blood test profile assesses important health markers in the blood. While many parameters are measured, this article will concentrate on explaining two key indicators: blood glucose level and lipid profile. Below are explanations of these essential indicators.

(1) Blood Glucose Level

Blood glucose, derived from our foods, is our body's primary energy source. When we consume food, our bodies break it down into glucose, which is then released into the bloodstream. Insulin is the vital hormone that helps transport this glucose from the blood into the body cells. As such, disrupting this process can result in high blood glucose levels. For example, diabetes is a disease characterised by blood glucose levels consistently exceeding normal ranges.

For optimal health, it is advised to aim for blood glucose levels below 7.8 mmol/L for random blood glucose tests and below 5.6 mmol/L for fasting blood glucose tests. Monitoring your blood glucose levels is essential as exceeding these ranges may indicate a risk of developing NCDs like diabetes.

(2) Lipid Profile

Lipids are another term that refers to fats in our body, and they play a crucial role in our health. However, they can cause significant health problems when out of balance. Hence, a lipid profile refers to a comprehensive blood test that measures various components, including total cholesterol, HDL cholesterol (good cholesterol), LDL cholesterol (bad cholesterol), and triglycerides.

For a healthy lipid profile, it is advised to aim for the following:

- **Total Cholesterol:** Less than 5.2 mmol/L
- **HDL Cholesterol:** Above 1.45 mmol/L (male), above 1.68 mmol/L (female)
- **LDL Cholesterol:** Below 2.6 mmol/L
- **Triglyceride:** Under 2.26 mmol/L

High blood cholesterol levels can be a red flag for potential NCDs like diabetes and heart disease. Therefore, individuals must attend health screening and monitor their lipid profile regularly.

Action plans

Ensuring your health is as easy as marking your calendar and committing to attending regular health screenings, including body composition measurements. Generally, everyone should attend a health screening once every two years. However, for those above 40 years old and with a family history of any NCDs and their factors, it is recommended to schedule annual health screenings or more regularly following your doctor's advice.

However, taking action on your health is not just about attending regular health screening appointments but also making necessary lifestyle choices to ensure that your health screening parameters remain within the "normal" range. This involves incorporating healthy eating habits, engaging in daily physical activity, ensuring sufficient sleep, managing stress levels, and quitting smoking.

For readers who wish to assess their risk towards developing NCDs, you may visit the following sites:

Body Mass Index Calculator

While not specifically a risk calculator for NCDs, calculating your BMI can be a valuable indicator of potential health risks associated with weight.

Link: https://www.nhlbi.nih.gov/health/educational/lose_wt/BMI/bmicalc.htm

Type 2 Diabetes Risk Test

This simple tool helps estimate your risk of developing type 2 diabetes based on age, weight, family history, and physical activity level.

Link: https://www.cdc.gov/diabetes/takethetest/

Framingham Risk Score Calculator

This tool estimates your 10-year risk of developing cardiovascular disease (CVD) based on factors such as age, gender, cholesterol levels, blood pressure, smoking status, etc.

Link: https://reference.medscape.com/calculator/252/framingham-risk-score-2008

Conclusion

Health is our greatest wealth, and attending regular health screenings, including body composition measurement, cannot be overstated. In the modern world, the risk of developing NCDs is increasing alarmingly. Yet, armed with the simple act of attending regular health screening, we possess the power to detect and deter these silent threats before they escalate.

Therefore, attending a health screening at least once every two years (or yearly for those above 40 years old) at a nearby hospital or clinic is important. However, it is also crucial that we take the right steps in our daily lives to augment our health-conscious efforts. Hence, it is also important to consult with a nutritionist or dietitian to decode the nuances of healthcare screening tests and the different lifestyle changes you can make to enhance your wellness journey. Taking care of our health today, keeping a vigilant eye on our health parameters and making the necessary lifestyle adjustments, we pave the way for a healthier future. Prevention, after all, is the ultimate cure.

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This article is contributed by Nutrition Month Malaysia (NMM) 2024, an annual community nutrition education initiative jointly organised by Nutrition Society of Malaysia (NSM), the Malaysian Dietitians' Association (MDA) and the Malaysian Society of Body Composition (MSBC).

Nutrition Month Malaysia is back with an exciting Food-Fit-Fun Fair in Pavilion Bukit Jalil this Coming 22 – 26 May 2024! Bring your family and join us for fun engaging activities, free nutrition screening and dietary advice from nutritionists and dietitians and grab goodies from our exhibitors. Find out how everyone in family can realise their health and wellness goals for a healthier life. For more information visit, https://www.nutritionmonthmalaysia.org.my/