

# NATIONAL HEALTH AND MORBIDITY SURVEY (NHMS) 2017:

**Key Findings from the Adolescent Health and Nutrition Surveys** 

Infographic Booklet April 2018



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## In 2018, there are about

# 55 M adolescents in Malaysia.

More than half of them are in schools. Adolescents are valuable assets to the country as they will become future leaders who will continue to drive and sustain the development of the nation. They are perceived as the healthiest population group however they do have their own set of unique problems and healthcare needs.

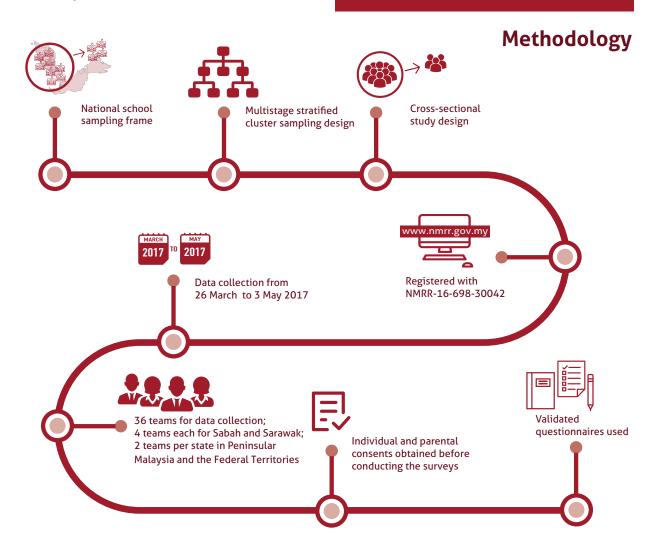
Nationwide school-based surveys were conducted among adolescents in Malaysia were in 1996, 2012, and most recently in 2017 - the findings of which are presented in this booklet.

The objectives of this study were to identify health risk behaviors and protective factors among secondary school students, and to determine nutrition-related components among adolescents in Malaysia.

There were three major scopes in this survey:

- Adolescent Health Survey (AHS)
- Adolescent Mental Health (DASS-21)
- Adolescent Nutrition Survey (ANS)





**AHS & DASS** 

13-17 years

Target population



**ANS** 

10-17 years

**Anonymous** self-administrated questionnaire with scannable answer sheet

Instruments



1. Face-to-face interview for habitual food intake, dietary intake and nutritional status

2. Anonymous self-administrated questionnaire with scannable answer sheet

212 secondary schools were randomly selected

(30,496 students)

Study sample



212 secondary schools and 99 primary schools were randomly selected

(40,087 students)

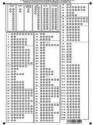
89.2%

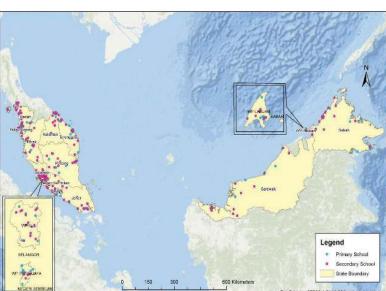
Response rate



89.5%











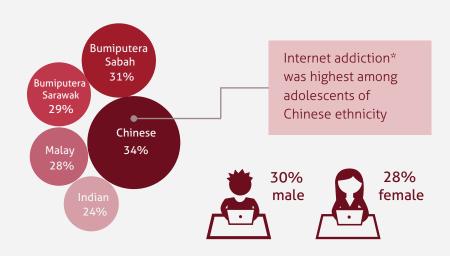
Distribution of Schools for Adolescent Health and Nutrition Survey, 2017

# Internet use and addiction among Malaysian adolescents

# 6 in 7 2 in 7

secondary school adolescents were active internet users in Malaysia

secondary school adolescents were addicted to the internet in Malaysia

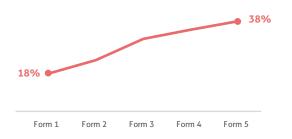


# Why should we worry about adolescents engaging excessively in online activities?

- Excessive online gaming, gambling, shopping, chatting
- Viewing pornographic websites
- Strangers online, data insecurity
- Cyber-bullying environments

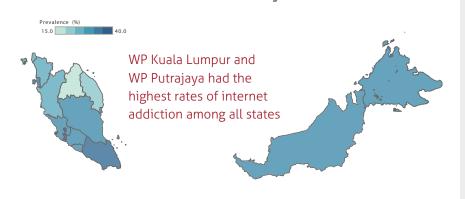
\* Internet addiction among adolescents was measured using Malay Version Internet addiction Test Chong Guan, Ng, et al.

## Prevalence of internet addiction by form



The prevalence of internet addiction seemed to increase with age, rising up to 38% among Form 5 students

## Prevalence of internet addiction by state



## Devices used by internet addicts:









## Definition of Drug use:

Taking of heroin, morphine, glue, amphetamine or methamphetamines (ecstasy, syabu, ice), marijuana/ganja (except prescribed medicine).

# Teenagers and illicit drugs in Malaysia



secondary school students in Malaysia claimed to have ever used drugs.

**3.4**%

Are current drug users



17%

Initiated drug use at age 7 years or younger



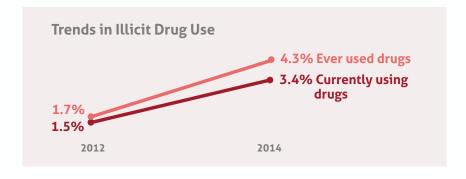
2.4%

Ever used amphetamines or methamphetamines

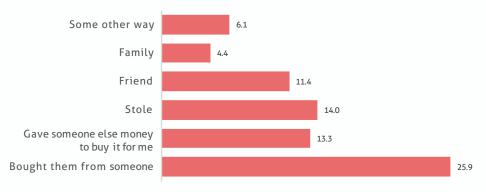


2.8%

Ever used marijuana



## Source of getting drugs (%)





## Bullying victimisation among adolescents in Malaysia



# adolescents was a recent victim of bullying\*

\* defined as being on the receiving end of "bad and unpleasant" actions, such as "teasing a lot in an unpleasant way", or being "left out of things on purpose"

**Boys were bullied more** than girls, most frequently among those of Indian ethnicity



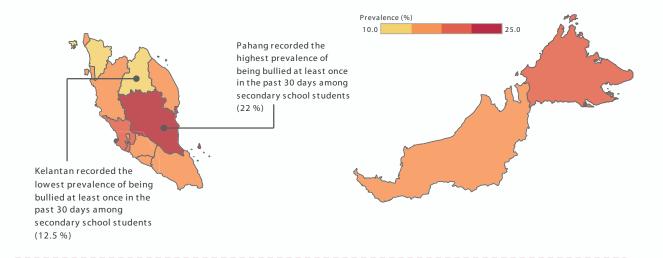
19%

VS

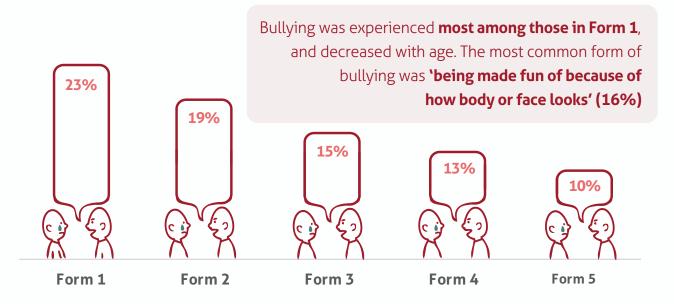


14%

## Prevalence of bullying by state

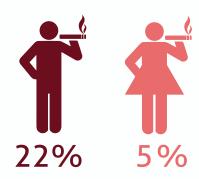


## Prevalence of bullying by form

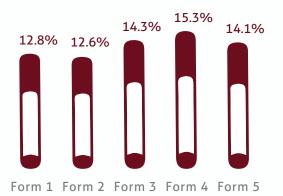


## Pattern of current cigarette use among Form 1 to Form 5 students in Malaysia

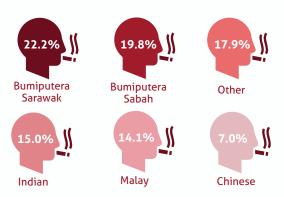




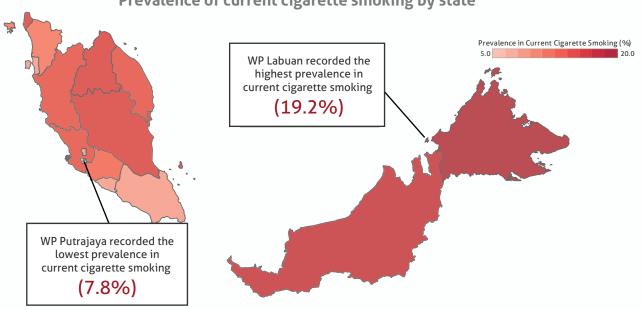
## Prevalence of current cigarette smoking by form



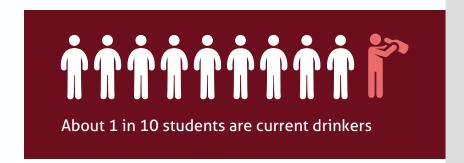
## Prevalence of current cigarette smoking by ethnicity

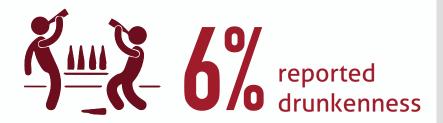


## Prevalence of current cigarette smoking by state



## Alcohol use among adolescents





had their first alcoholic beverage before the age of 14 years



About 1 in 5 students ever consumed alcohol

### **DEFINITIONS**

### Ever drinkers:

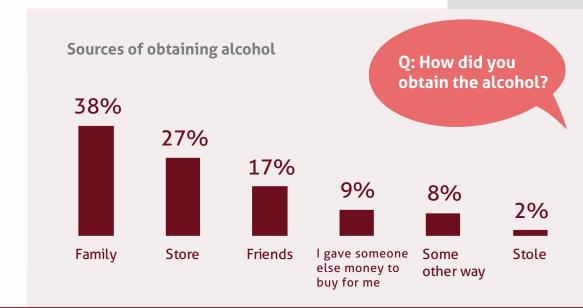
Those who had a history of alcohol consumption in their life time.

### **Current drinkers:**

Those who had at least a "drink" of alcohol in the past 30 days

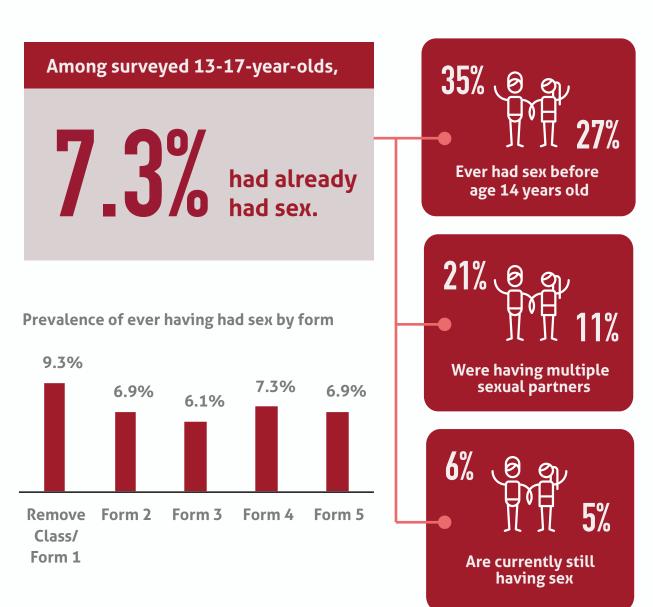
### **Drunkenness:**

When someone demonstrates signs such as staggering when walking, not being able to speak right and throwing up after consuming alcohol in a lifetime.





## Sex & teens: What is going on in Malaysia?



The prevalence of ever having had sex was highest in Pahang, and lowest in WP Kuala Lumpur



## Safe sex: What was used?

Among those surveyed who had ever had sex, **only** 

120/ said they used condoms



used condoms when they had sex



**21%** of the students who used condoms were Indian

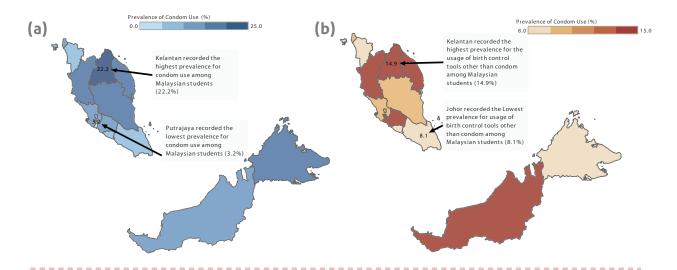


**17%** of remove class / Form 1 students used condoms



**16%** of the rural students used condom

## Prevalence of using (a) condoms and (b) other forms of birth control by state



Among those surveyed who had ever had sex, **only** 

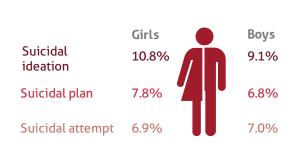
said they used other forms of birth control

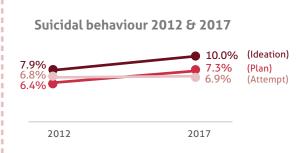


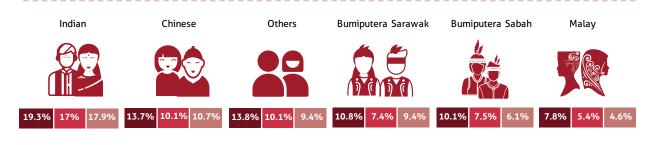
used other forms of birth control

## Adolescent suicidal behaviour: A mounting crisis?

Suicidal behaviour encompasses suicidal ideation, plan and/or attempt







## Suicidal behaviour was highest among Form 1 students

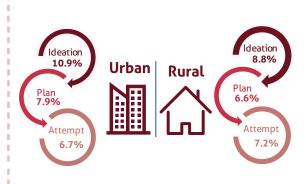


Suicidal plan

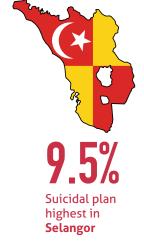
9.0%

Suicidal attempt

10.1%







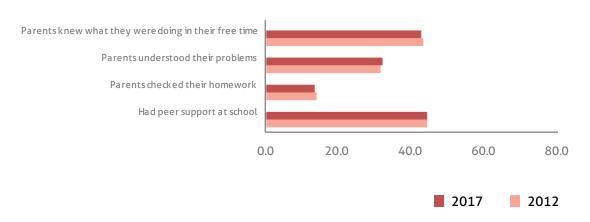




## Care for adolescents: Peer and family support



## Prevalence (%) of protective factors among adolescents (2012 and 2017)





## **Definition of** Truancy:

Missed class or school without permission for at least one day in the past 30 days

## **Truancy among Malaysian adolescents**



Rural

32.6%



Urban



Boys



Girls

27.6%

32.6%

27.6%





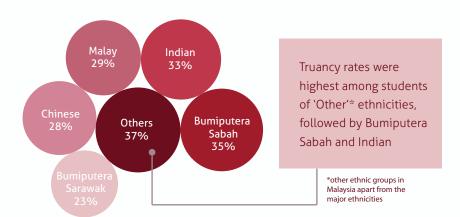
FORM 1 26.6%

FORM 2 27.8%

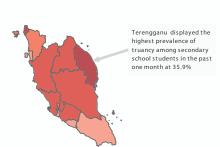
FORM 3 27.5%

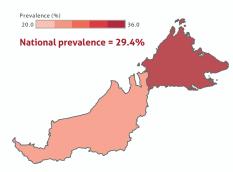
FORM 4 34.5%

FORM 5 30.8%



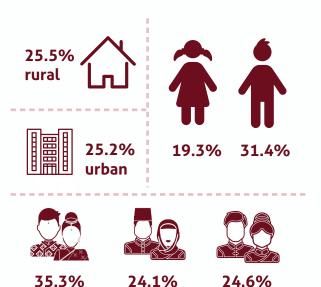
## **Prevalence of Truancy by State**

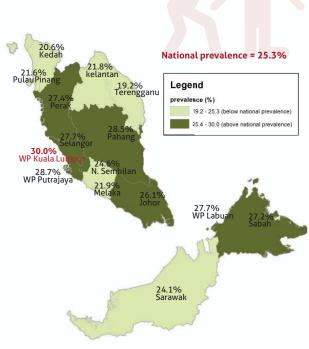


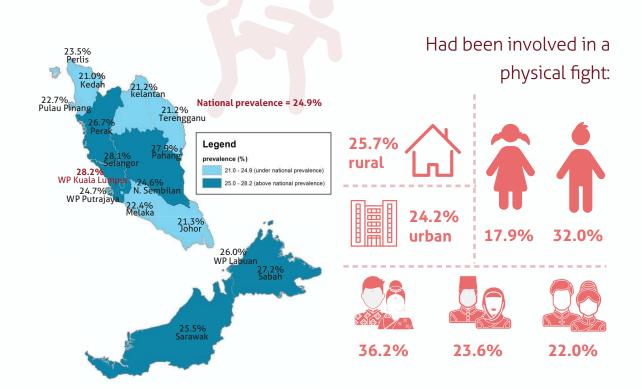


## Physical attacks and fights

Had been physically attacked:







## Physical and verbal abuse at home among teenagers

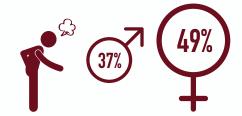


4 in 10 teenagers are verbally abused



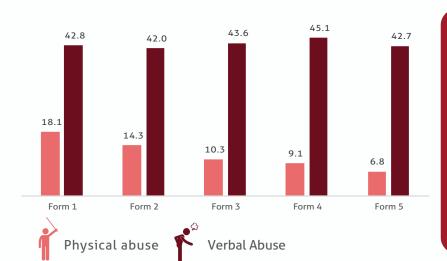


Boys suffer more physical abuse



Girls suffer more verbal abuse

## Abuse among teenagers by form (%)



The incidence of physical abuse is low and reduces as teenagers grow but verbal abuse is high and remains constant with age

# 1 Unintentional injury among Malaysian adolescents

30%

**22%**Cut / Stab

Cut / Stab Wound

İ

14%

Broken bone / Dislocated joint

**7%** 

Concussion, Head/Neck Injury, Knocked out

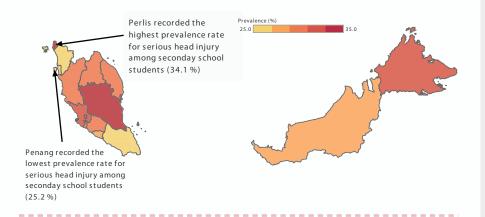


3% Bad burn

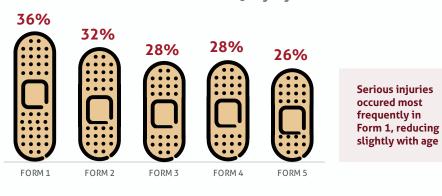
had been seriously injured in the past 12 months



## Prevalence of recent serious injury by state



## Prevalence of recent serious injury by form





Falls (35%) were the most common cause of unintentional injuries sustained among adolescents

## Unintentional injury:

A serious injury in the past 12 months which makes the student miss at least one full day of usual activity (such as school, sports or a job) OR requires treatment by a doctor or medical personnel

## **DEFINITIONS**

### **Breakfast:**

First food consumed after waking from sleep (6am-8am)

### Lunch:

Foods consumed between 11am to 3pm

### Dinner:

Foods consumed between 6pm to 10pm

# Meal skipping behaviour among Malaysian adolescents

Trend of main meal intake (%) among Malaysian Adolescents



## In 2017, approximately:





74% of obese adolescents skipped breakfast



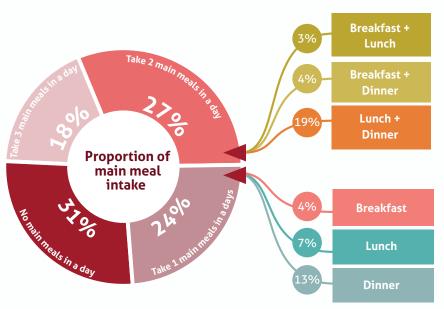
32% adolescents skipped breakfast because they "had no time"



breakfast because they had "no appetite"

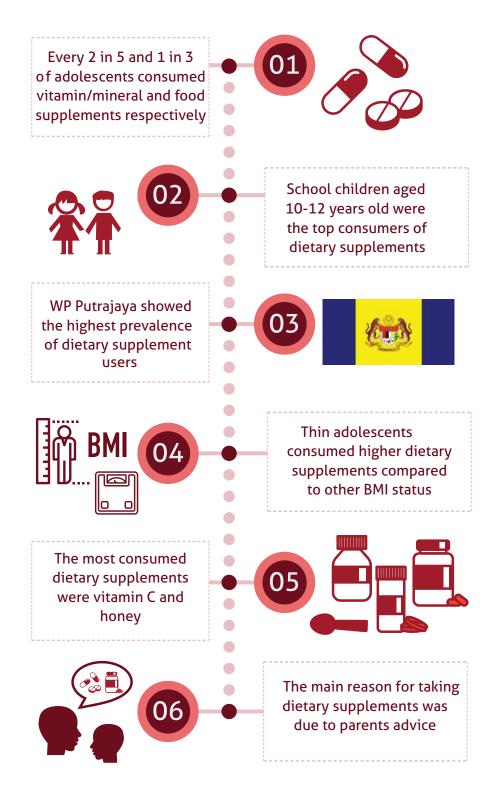


9% adolescents skipped breakfast because "no food was available"





# Dietary supplement consumption among adolescents in Malaysia





# Alarming facts on carbonated soft drinks consumption among Malaysian adolescents





34%





Adolescents living in rural areas consumed carbonated soft drinks more frequently than their urban counterparts



of Malaysian students had carbonated soft drinks at least once daily





Girls 32%



Male adolescents consumed carbonated soft drinks more frequently than girls

32%
Upper secondary school level

## Intake of carbonated soft drinks by ethnicity



Sarawak



Others





Indian

4U/o
Lower secondary school level



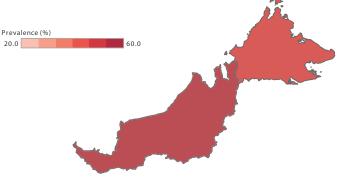


Lower secondary school students consumed carbonated soft drinks more frequently

Prevalence of carbonated soft drinks intake by state

Sabah





# Accuracy of body weight perception among adolescents in Malaysia

of adolescents with NORMAL hody weight correct

body weight, correctly perceived their weight to be normal

**Primary** 







Rural





Secondary

70%

of adolescents with

## THIN

body weight, correctly perceived their weight to be thin

**Primary** 





Urban



Rural





Secondary

44%

of adolescents with

## **OVERWEIGHT**

body weight, correctly perceived their weight to be overweight











14%

of adolescents with

## OBESE

body weight, correctly perceived their weight to be obese

**Primary** 



15%

Urban

12%

Rural

9%

17%

Secondary

**DEFINITION** 

## Body weight perception

Body weight
perception refers to
the personal
evaluation of one's
weight as
"underweight" or
"normal weight" or
"overweight",
irrespective of actual
body mass index (BMI)

## **DEFINITIONS**

## Always:

Reads food labels every time when buying or receiving food/drinks

### Sometimes:

Occasionally or once in a while reads food labels when buying or receiving food/drink

### Never:

Does not read food labels at all

Type of macronutrient noted from labels (%):



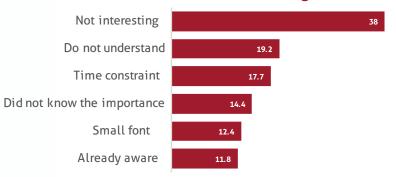


Total energy	42	34
Total carbo- hydrate	33	40
Total fat	33	49
Total protein	25	18

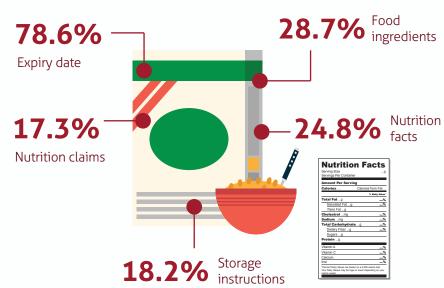
# Do adolescents in Malaysia read food labels?



## Reasons for not reading food labels:



## Type of information read from food labels



## Malaysian adolescents: How active are they?

# **About 45%** of Malaysian students are physically active

Primary school students are more active than secondary school students

Prevalence of physical activity among urban and rural school children was similar Boys are more active than girls

**57.0%** Primary school

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名

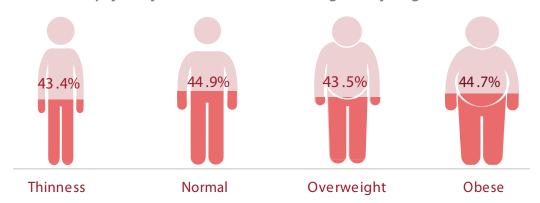
Rural 46.4%

Urban 43.2%

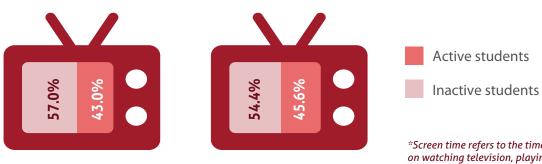
Boys 4 4.1%

Girls 35.2%

Prevalence of physically active adolescents according to body weight status



Screen time **more than 2 hours** over weekends and on schooling days



Schooling days

Weekends

\*Screen time refers to the time spent on watching television, playing video games and using the computer or surfing the internet

## Dietary patterns and heavy meals after dinner among adolescents in Malaysia





adolescents ate inadequate cereals/ grains/ tubers/ related products daily







adolescents ate inadequate legumes daily





adolescents ate inadequate fish daily





adolescents ate excessive poultry & meat & eggs daily





adolescents ate inadequate fruits daily





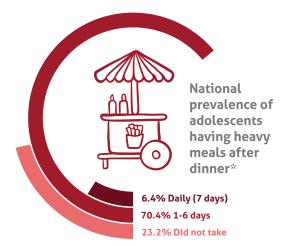
adolescents ate inadequate milk & dairy product



23 in 25 🔑 🛈 🎉 🦃



adolescents ate inadequate vegetables daily



\*Meals taken after 10pm, consisting of 'heavy food' or high calorie food such as nasi lemak, roti canai, fried noodles, burger, fried chicken and etc. It does not include light snacks for example 2 biscuits and/or one glass of milk.

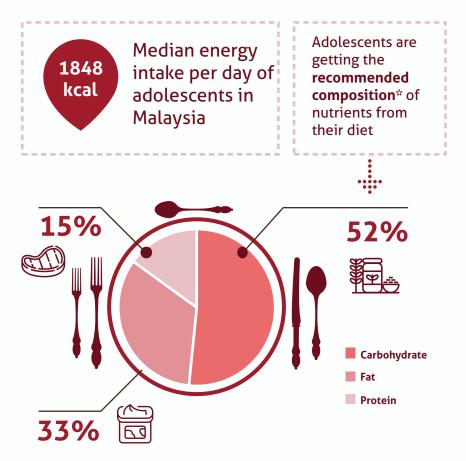
Demographic breakdown of respondents who eat heavy meals after dinner on a daily basis





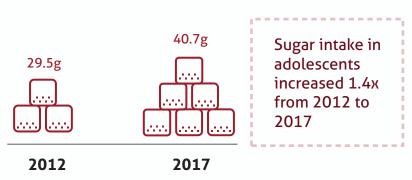


## **Dietary intake among adolescents**



## Median energy by ethnicity





## Dietary intake:

Daily eating patterns of an individual including the quantities and the calories consumed as well as the intake of **macronutrients** (nutrients that is required in large amounts) and **micronutrients** (nutrients that is required in small amounts)

\*Recommended Nutrient Intake (RNI) 2017:

Carbohydrate: 50-65%

**Protein:** 10-20%

**Fat:** 25-35%

## State of Adolescents' Mental Health in Malaysia

(Based on DASS-21 scoring)





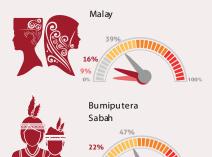




















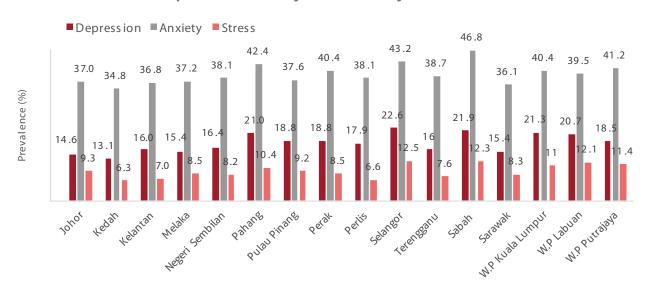






**Speedometer colour legend:** ■ Depression ■ Anxiety ■ Stress

## Prevalence of depression, anxiety, and stress by state





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