



SAFAR 1437

# AT TIBB



DECEMBER 2015

## A probe into the history of

# AASYURA

### MUST READS

- Leptospirosis
- Food Poisoning

Invasion of millipede  
into KMHS

## GH0ST

stories inside...



# from Editor in Chief



السَّلَامَةُ عَلَيكُمْ وَرَحْمَةُ اللَّهِ وَبَرَكَاتُهُ

December is coming very soon! 50 years ago I remembered December as a windy, dry and yellow-coloured month. It was windy because the north-east monsoon started to blow from the South China Sea. It was dry because all the moisture was poured on the east coast and yellow-coloured due to the colors from the paddy field as it was a rice harvesting season. Nowadays, December is raining and gloomy. The continuous rain clear up the haze yet causes flood in other areas.

It has been almost one year since we moved to this new campus from Mergong. Kuala Ketil campus is surrounded by palm oil trees whilst the campus in Mergong was surrounded by rice field. What a drastic change; from wide open field to dark green surrounding. One common thing shared by these two contrasted environments is rat. Both environments are conducive for rat breeding. They eat and breed very fast in rice field due to abundant food supply. In palm oil plantation, similar situation exists. Fruits from palm oil trees are good food for rats. Personally, I think rats in Kuala Ketil are more obese since their main diet is fat (palm oil fruit). From health point of view, rat is a well-known host for leptospira, a bacterium causing diseases known as Leptospirosis and Weil's disease. That is the reason we include article about leptospirosis in this

edition for the benefit of all readers.

Another interesting event occurred during the end of October is outbreak of food poisoning. This embarrassing incident took place right inside of our premise; KMHS. I say embarrassing because food poisoning is a disease usually associated with poor hygiene. Please read a report on this outbreak so we learn some lesson from this outbreak. Hopefully it will not happen in the future.

One peculiar sign I usually notice during my afternoon lecture is most of the students are sleepy. A few brave ones went to sleep without any pretension of paying attention to the lecture. Why do we feel sleepy after afternoon lunch? A brief explanation to this question is inside this edition. We try to be moderately scientific in our explanation for the benefit of our medical students. At the same time we try to be as simple as possible for the benefit of other students. This column will appear as a series of academic discussion to explain common life problems by the will of Allah.

Thank you to everybody who contributes to the success of this bulletin; may Allah rewards us for the good deeds.

Dr Shahidan Hashim  
Chief Editor



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### Design/ Layout

Madam Normaizatul Afizah Ismail

Ms. Noor Azimah Norbidin

### Photographer

Mr. Afiq Zainordin

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To fast on 'Asyura Day (plus a day before or after)



# ASSYURA

Written by: Dr. Suhaidah Ibrahim

In our society, the first month of Hijr; Muharram, is often considered synonymous with "Bubur Aasyura" without realizing that Muharram; in fact, offers a great religious significance to Muslim world over. It is said to be the second sacred month after Ramadan. Although the month of Muharram is a sacred month as a whole, the 10th of Muharram in particular; the day of "Aasyura", is the most significant day of the month. It is one of the most important and blessed days of Allah Ta'ala in the Islamic calendar that holds a deep and significant value in Islamic teachings.

Muharram is so called because it was unlawful to fight during this month; the word is derived from the word 'haram' meaning forbidden as mentioned in Surah At-Taubah : 36.

إِنَّ عِدَّةَ الشُّهُورِ عِنْدَ اللَّهِ اثْنَا عَشَرَ شَهْرًا فِي كِتَابِ اللَّهِ يَوْمَ خَلَقَ السَّمَاوَاتِ وَالْأَرْضَ مِنْهَا أَرْبَعَةٌ حُرْمٌ ذَلِكَ الدِّينُ الْقَيِّمُ فَلَا تَظْلِمُوا فِيهِنَّ أَنْفُسَكُمْ وَقَاتِلُوا الْمُشْرِكِينَ كَافَّةً كَمَا يُقَاتِلُونَكُمْ كَافَّةً وَاعْلَمُوا أَنَّ اللَّهَ مَعَ الْمُتَّقِينَ

Indeed, the number of months with Allah is twelve (lunar) months in the register of Allah (from) the day He created the Heavens and the earth; of these, four are sacred. That is the correct religion, so do not wrong your selves during them. And fight against the disbelievers collectively as they fight against you collectively. And know that Allah is with the righteous (who fear Him).

The tradition was maintained even after the advent of Islam; though provisions to accommodate and accept war in special situations such as threat to the sovereignty of an empire were introduced. The gory battle of Karbala was fought against this law and tradition of Islam.

Syeikh Abdur Rahman Al-Ushfuri (RA) who is a famous historian, researcher of Quran and Hadith states in his book "Nuzhatul Majaalis" that the day of Aasyura is commemorated more as this day holds many historical Islamic events and values. It was on the 10th of Muharram that:

- Allah had created the heavens and universe; the skies, the earth, and the sea.
- the Luh Mahfuz came into existence.
- Nabi Allah Adam (AS) and Hawa were created.
- Nabi Allah Adam's (AS) Tauba was accepted.
- The Ark of Noah came on land.
- Nabi Allah Ibrahim (AS) received the status of Khaleelullah.
- Nabi Allah Yaqub (AS) rejoined Nabi Allah Yusuf (AS) after 40 years of being separated.
- Nabi Allah Idris (AS) was raised into the skies.
- Nabi Allah Ayub (AS) regained his health.
- Nabi Allah Yunus (AS) was released from the stomach of the whale.
- Nabi Allah Sulaiman (AS) received his Kingdom.
- Nabi Allah Musa (AS) and his people, the Bani Israel, were saved from the Egyptian Pharaoh by the miracle in which the Red Sea parted.
- Nabi Allah Isa (AS) was raised into the skies.
- Rasulullah Muhammad Al-Mustapha (SAW) married Sayyidatina Khadijah Khuwailid (RA).
- It is on this day that Qiyamat will occur.

The day of Aasyura also derives its importance from prophetic traditions since in Al-Hadith the following has been mentioned:

### **Fasting**

Rasulullah SAW exhorted and encouraged his Ummah to fast on this day.

*“This fast is a compensation for the (minor) sins of the past year.”*

-Hadith: Muslim

According to Ibn Abbas (RA), Rasulullah SAW, when migrated to Madinah, found that the Jews of Madinah used to fast on the 10th day of Muharram because it was the day on which Nabi Allah Musa (AS) and his followers crossed the Red Sea miraculously and the Pharaoh was drowned in its waters. On hearing this from the Jews, Rasulullah SAW said, “We are more closely related to Musa (AS) than you,” ...and directed the Muslims to fast on the day of ‘Aashura’. (Hadith-Bukhari)

*“Observe the fast of Aasyura and oppose the Jews. Fast a day before it or a day after.”*

- Hadith: Al-Baihaqi

Hence, it is important to either fast on the ninth and the tenth or the tenth and the eleventh of Muharram. Fasting only on the day of Aasyura is undesirable (makruh).

### **The battle of Karbala**

Indeed, on the day of Aasyura the mourning Battle of Karbala took place. This event leaves a great lesson for Muslim world especially at this point in time when the Muslims are being maliciously targeted and persecuted due to their attachment and love for Islam. In this tragedy, the Beloved grandson of Rasulullah SAW; Sayyidina Hussain Bin Ali (RA), was killed. It started when Amirul Mukminin Muawiyah Abu Sufian, appointed his son; Yazid, as Khalifah of the Muslim. The appointment was unprecedented in the history of Islam since Islam had established the rules for mutual consultation (Musyawarah) and had abol-

ished any remnants of monarchy. Opposing this deviation from the Path of Islam; Sayyidina Hus-sain (RA) committed to sacrifice his life and the lives of his family to ensure that the Sunnah (Path of Rasulullah SAW) is upheld. Accompanied by his family members and 72 men, Sayyidina Hus-sain (RA) travelled from Makkah to Kufa where he thought of having stronger support to oppose Yazid.

However, when they reached Karbala, en route to Kufa, the forces of Yazid led by Umar bin Sa’ad with an army of 5,000 men surrounded him and his force of 32 horsemen and 40 foot-soldiers. Shimr ibn Dhiljawshan slit the throat of Sayyidina Hus-sain (RA) and placed it on a spear. Sayyidina Hus-sain, his family and his troops were tortured and killed on 10<sup>th</sup> Muharram 61 Hijr. They received no help from the Shiahs of Kufa. Hussain's head was severed and presented to Yazid. History will always mark this day; 10th of Muharram 61AH (680 AD), as the day the noble grandson of Rasulullah SAW gave his life in defence of the established Path of Islam and left this world at the age of 57.

### **Why is Kichra cooked during Aasyura?**

It is narrated in famous books; Nihayatuz Zain by Syeikh Nawawi Al-Banteni, Nuzhatul Majalis by Syeikh Abdur Rahman Al-Ushfuri, Jam'ul Fawaid by Syeikh Daud Al-Fathoni, that when the Ark of Nabi Allah Noah (AS) came onto land at Mount of Juudi on the Aasyura Day the inhabitants of the Ark disembarked and Nabi Allah Noah (AS) ordered them to gather all types of grains and cooked them into kichra, a type of porridge. That was the first meal cooked on the earth after a huge flood drowned the land for six months. According to Syeikh Ibn Hajar Al Asqolani, there are seven types of grains used to cook kichra; flour, rice, Baqila’ bean (ful), mash bean, adas bean (dal), himmash bean (white bean) and lubia bean. Thus, the current practice of cooking ‘bubur aasyura’ as a mean of celebrating Muharram is based on the instruction of Nabi Allah Noah (AS) to his people as a way of expressing their gratefulness over their survival.



Aasyura Northern's style



Aasyura East Coast's style



Aasyura Southern's style

# FOOD POISONING?

A report of food poisoning outbreak at KMHS  
Written by: Dr. Shahidan Hashim

## Abstract

About 30 staff attended lunch at Medical Faculty, INSANIAH on 27th October 2015 at 1300. Food served are rice, steamed beef, *air asam*, fried chicken, dalca, coconut jelly, cold drink and 4 packs of vegetarian food. Seven hours later the first case of food poisoning was reported. The last case was reported at 0500 on 28th October 2015. Common symptoms are diarrhea, abdominal pain, fever, nausea and vomiting.

Twenty two participants were interviewed and history of illness and food consumption are recorded. Three foods from the above menu were statistically associated with falling sick. They are rice, steamed beef and *air asam*. One person who ate vegetarian food did not develop any illness. No bacteriological investigation is conducted.

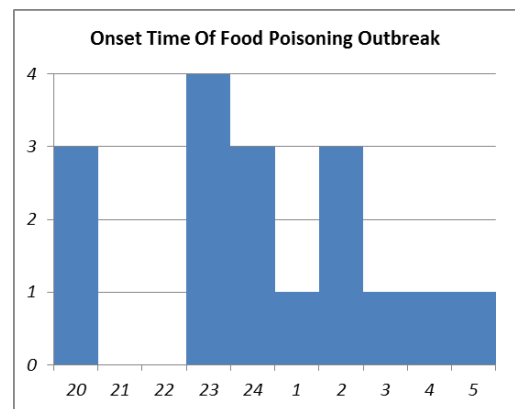
All cases recover fully without complication.

## Introduction

ON 27th OCTOBER 2015, lunch was served at 1.00pm at the dean's office, Kulliyyah of Medicine and Health Science. About 30 staff from various departments were invited. Among food served were rice, steamed beef, *air asam*, dalca, fried chicken, orange juice, coconut jelly and 4 packs of vegetarian food.

The first onset of illness is at 8.00 pm, 27th October 2015. The last case was reported twelve hours after the onset. There were two cases where food was consumed at 8.00 pm on the same day and developed into illness the next morning. 22 individuals were interviewed regarding their illness and food intake from the same lunch.

Table 1: Epidemic Curve



Date: 27 October      Date: 28 October

Table 1: The Incubation Period of Reported Cases of Food Poisoning

incubation period				
	Frequency	Percent	Valid Percent	
Valid	7	3	17.6	17.6
	10	4	23.5	23.5
	11	3	17.6	17.6
	12	1	5.9	5.9
	13	3	17.6	17.6
	14	1	5.9	5.9
	15	1	5.9	5.9
	16	1	5.9	5.9
Total	17	100.0	100.0	

The incubation period range is between 7-11 hours. The mean incubation period is 11 hours.

### Signs And Symptoms

Diarrhea, fever, abdominal pain, nausea and vomiting are signs or symptoms reported by the patients. The summary of the illness is in Table 1:

Table 2: Signs or Symptoms As Reported By Respondents.

Sign or Symptoms	number	%
Abdominal Pain	12	57.1
Nausea	3	14.3
Fever	1	4.8
Vomiting	2	9.5
Diarrhea	17	76.2

A case is defined as anyone who ate at least one of the food served during lunch on the 27<sup>th</sup> October and suffers at least one of the sign or symptoms.

We estimated 30 persons took the lunch but 22 persons answered the questionnaires. Only 16 are classified as cases.

### Food Attack Rate

Eight type of food items are served during lunch. They are rice, steamed beef, *air asam*, dalca, coconut jelly, cold drink, fried chicken and vegetarian food. Food was prepared by a caterer, packed in food trays; kept and served at room temperature.

Table 3: The Food Attack Rate for Each Food Consumed

Food	Attack Rate (%)	Test Of Association (Fischer's Exact Test): P=
Steamed Beef	88	0.028
Air Asam	87	0.063
Rice	84	0.048
Dalca	80	0.45
Coconut Jelly	78	0.557
Cold Drink	73	0.550
Fried Chicken	78	0.557
Vegetarian Food	0	not valid

From Table 2, the food attack rate for steamed beef, *air asam* and rice are the highest and statistically significant.

The statistical analysis will be a guide to identify the most likely food implicated in this outbreak.

Additional to this calculation of attack rate and chi-square test for the test of association, we applied logistic regression analysis as a comparison. The result of this analysis in Table 3.

**Table 4: Logistic Regression Analysis of Food vs Sickness**

	Score	df	Sig.
Step 0			
Variables			
RICE(1)	7.074	1	.008
BEEF(1)	7.138	1	.008
ASAM(1)	4.738	1	.030
DALCA(1)	.420	1	.517
JELI(1)	.131	1	.717
Overall Statistics	12.837	5	.025

The above table implicates eating rice, beef and *air asam* with sickness. This conclusion is similar to the conclusion derived from chi-square analysis in Table 3.

**Discussion**

A few bacteria and virus could be suspected as the cause of this food poisoning. Among them are *Bacillus Cereus*, *Clostridium Perfringent*, *Salmonella sp*, *Vibrio Para-Haemolyticus*, *E coli* and viruses. Incubation period of the agents above matched the onset of this outbreak.

The single most suspected food in this outbreak is

steamed beef. Usually beef is cooked as large piece, left to cool at room temperature and cut into smaller pieces. The bacteria get ample time to grow and multiply at room temperature. The most common bacteria associated with food (meat) poisoning is *Clostridium perfringen* with an incubation period of 8-12 hours. The main symptoms includes abdominal cramp and diarrhea. However, confirmation through bacterial identification is not possible since no food sample was taken for laboratory identification.

**Conclusion**

Food poisoning is one of the public health problems in Malaysia. Most of the reported outbreak was associated with food served in school, office and other learning institutions. However, poisoning caused by hawkers’ or restaurants’ food are not reported. Practices of necessary food hygiene has not been fully adopted and implemented in the country. Traditional food involved lots of handling. Ready-to-eat food is kept at room temperature for long duration. Food handlers are not trained in food hygiene and enforcement from health department is inadequate.

The infographic features a teal header with the text 'HOME REMEDIES FOR FOOD POISONING'. Below the header are six white boxes, each containing an image of a natural remedy and its name: Ginger (a piece of ginger root), Garlic (a head of garlic), Lemon (lemons and lemon slices), Cumin (a pile of cumin seeds), Peppermint (fresh green peppermint leaves), and Honey (a jar of honey with a honey dipper). To the right of these boxes is a photograph of a woman in a white top leaning over a white toilet, appearing to be in discomfort. At the bottom left is the logo for 'Livingeasy.in Daily Tips for Healthy Living!' and at the bottom center is the text 'To explore more, Visit www.LivingEasy.in'.

A simple tips:

Take a handful of sugar, a pinch of salt and stir them in a cup of water. Drink it.



# LEPTOSPIROSIS

Written by: Dr. Shahidan Hashim

## Epidemiology

### The agent

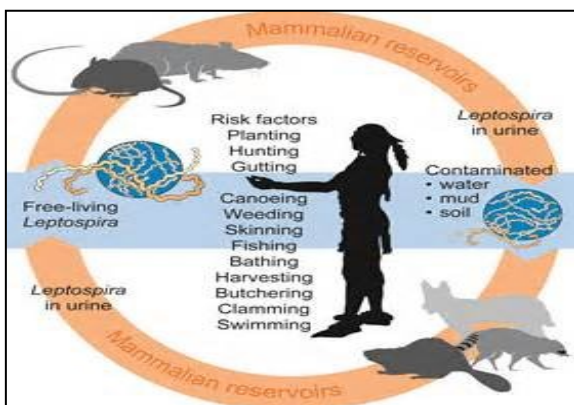
*Leptospira* is a bacterium from the genus *Leptospira*. There are at least 11 known serovar type of leptospira in Malaysia. Leptospirosis was recorded in Malaysia as early as 1932. Several studies showed the disease is endemic in Malaysia. The sero-prevalence rate among Malaysian population is between 12% -25%. *Leptospira* is spread to humans by contact with soil or water contaminated with the urine of certain wild animals including cattle, pigs, dogs and rats. In Malaysia, rat is the main reservoir and main host for leptospira<sup>1</sup>.

### The mode of transmission

The mode of infection is through direct contact of mucous membrane and skin with urine of infected animal. Therefore specific occupations namely army; rubber, palm and rice farmers and sewer workers are at a higher risk of getting the disease.

Seasonal flood-in also contributes to widespread environmental contamination of leptospira. Increase number of reported cases of leptospira infection followed after every episode of flood.<sup>2</sup>

Figure 1: Transmission Cycle of Leptospira



### High risk group

Most of the time leptospira infection presents as isolated case among farmers, army or jungle workers. Large outbreak was reported in 1984 where 16 British explorers in Gunung Mulu, Sarawak were infected with leptospira. The explanation for this large number of infected persons may have to do with their immune status. Since these persons have never been exposed to the infection, they are at higher risk of infection as compared to

local people. The recent re-emergence of outbreak of leptospirosis among trainees who attended Pusat Latihan Khidmat Negara (PLKN) in several states may be due to this reason.

### Disease progression

The incubation period of leptospirosis is between 5 -14 days. The presentation may be mild fever, headache, muscle pain, nausea and vomiting. Mild form of leptospira infection is called leptospirosis. Severe manifestation of signs and symptoms as a result of leptospira infection is called Weil's disease. Invasion of vital organs such as kidney, liver, lung and brain lead to respective organ failure and death.

### Prevention

The best prevention is to avoid contact with contaminated environment. Those who work in high risk job must take special precautions to avoid both direct and indirect contacts with rat. Personal protection in the form of full body clothing, goggle and jungle boot may help minimize the risk of infection. Swimming in stagnant fresh water in jungle or recreational area should be avoided.

### Environmental Control Measures

Several cases of leptospira infection are associated with exposure at recreational activity near the waterfall or river in jungle area caused alarmed to the health authorities. Irresponsible human activities in recreational area through indiscriminate disposal of leftover food contributes to the increase of rat population. The answer to this problem is through systematic disposal of garbage disposal thus depriving the rat of their food supply.

### Treatment

Correct diagnosis and proper antibiotic treatment (penicillin or doxycycline) is very essential in successful management of the disease. Immediate consultation with doctor especially after coming back from high risk activities greatly helps doctor to diagnose and initiate early treatment.

### References:

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3. <http://www.healthline.com/health/weils-disease#RiskFactors3>



Written by: Mdm Normaizatul Afizah Ismail  
& Ms. Ireana Ismail

Medical faculty is often associated with cadavers. It is a given since medical students are trained to cure human diseases not animals or insects. Thus, to ensure they properly learned the structures (anatomy) and workings of the human beings, the lecturers need the cadavers to help them to achieve the above goals.

The arrival of the cadavers from INSANIAH previous campus (Alor Setar) to current (Kuala Ketil) medical faculty have cause some stirs and murmurs between the staff and students of INSANIAH. As words travels around, our faculty received a high number of visitors whom were interested to observe the cadavers. However, there were also some who feels 'afraid' and prefer not to be around the cadavers since it will make them remember their losses (loved ones).

The best part of the stories we heard was about their imagination of ghost that come together with the cadaver. INSANIAH's staff such as cleaners, technicians, guards and students from other faculty feels scared to be at KMHS. If they need to be at this building, they will avoid going to the cadaver room which is located at the ground floor, right wing of the building. Even the guards whom were supposed to look after the building during night shift were hesitating when making rounds at the so called "haunted" area.

Since then, problem arose one by one when cleaners

(three of them) were afraid to clean the cadaver room and our MLT needed to accompany them while they were doing their cleaning tasks. Same thing happen to a technician who wanted to install air-conditioning units in the cadaver room. After explaining, the technician still insisted our MLT to be in the room together with him or else he will just walk away.

KMHS shares the building with Language Centre and Foundation Centre. We noticed that they never work late after office hours. A few incidents were told that sometimes they feels a sudden wind smash onto their face, a screw falling down from the button panel in the elevator and sometimes the elevator move very slow because "too heavy". Anything weird happens; they blame it on the cadaver. Pity the cadaver, they have done nothing wrong.

### THE REAL FACT

As human, we do not fear ghosts. We actually fear the unknown. We do not know what is really there, therefore we are unable to understand and predict on how to deal with a ghost if we met one. In a simpler explanation for example, darkness; we do not fear the darkness but what is hidden in it.

Some says that people who are less religious would be receptive to the idea of ghosts and magic. In the al-Quran, Sura Al-A'raf :27

يَا بَنِي آدَمَ لَا يَفْتِنَنَّكُمُ الشَّيْطَانُ كَمَا أَخْرَجَ أَبَوَيْكُم مِّنَ الْجَنَّةِ يَنزِعُ عَنْهُمَا لِبَاسَهُمَا لِيُرِيَهُمَا سَوْءَاتِهِمَا إِنَّهُ يَرَاكُمْ هُوَ وَقَبِيلُهُ مِنْ حَيْثُ لَا تَرَوْنَهُمْ إِنَّا جَعَلْنَا الشَّيَاطِينَ أَوْلِيَاءَ لِلَّذِينَ لَا يُؤْمِنُونَ

*O' children of Adam, let not Satan tempt you as he removed your parents from Paradise, stripping them of their clothing to show them their private parts. Indeed, he sees you, he and his tribe, from where you do not see them. Indeed, We have made the devils allies to those who do not believe.*

As muslims, we must believe in Allah. Ghost does not exist but Satan and Jins will always be there to tempt and distract us from our belief and away from Allah The Almighty. Only they are able to see, we do not.

## HOW TO OVERCOME THE FEAR OF CADAVERS.

1. Know the fact that cadavers are different from died human being (corpse). Cadaver is a dead human body used in scientific or medical research They have been dead for a long time and will not suddenly wakes up in front of you. Below are few facts to show that actually cadavers are not scary at all.

<b>CADAVER</b>	They have been dead for a very long time .	They have just died.	<b>CORPSE</b>
	Cadavers smell of formalin because they were embalmed and preserved in it.	They smell like rotten meat, becoming worse when decomposition takes place.	
	They will not change form and always look clean and intact.	They will change form and look. Bodily fluid out-flows, discolouration and bloating appears, muscles detach from bone. THIS IS REALLY SCARY!	
	No blood because all blood was drained during embalming process.	Blood is present in the body and sometimes smeared all over in accident cases.	
	They are NOT able to move.	Sometimes movement can be seen at the area of joints because of rigor mortis.	

2. Respect them, regardless of their religion. They had sacrificed their body for medical teaching and learning which is a huge contribution. In United Kingdom, it has become a norm that someone would donate their body after death to selected medical school. In Malaysia, we feel it is a weird concept and most are not familiar with the process.
3. Always bring a partner to accompany you in order to feel secure. Avoid entering dissection hall and cadaver room after learning hours such as late evening, night, and holidays.
4. Always remember Allah. You may get protection by Allah by reading these Sura. Blow to your palm and wipe all over body including face, hands and foot. (Ref: Perubatan As-Syifa Melaka)
  - i. Surah al-Fatihah
  - ii. Ayatul Qursi (Surah al-Baqarah 2: 255)
  - iii. Surah al-Ikhlâs, Surah Al-Falaq dan Surah al-Nas.



# MILLEPEDE

Written by: Ms. Siti Syariah Mamat

The black-and-yellow Millipede, *Anoplodesmus saussurii* (locally known as ulat gonggok) is a commonly encountered species, but is unfortunately an introduced one, believed to be native to the Indian subcontinent. It probably came with imported plants, and now is very commonly seen in parks and gardens. This species often occurs in high densities, sometimes up to a few hundred individuals in the same area.

*Anoplodesmus saussurii* is often found in large aggregations under the cover of decaying litter in the agricultural and horticultural land areas and forests on humid soils in Malaysia. The species feeds on various kinds of leaf litter, rotten vegetables, tree stems, wood, decaying fish, and cow dung. There have been no documented observations to suggest that it feeds on living plants. This species, like millipedes in general, plays an important role in the breakdown of litter in the ecosystems they lives. Populations of *Anoplodesmus saussurii*, which occur often in high densities, can consume and break down up to 1 kg of dry litter per square meter per year.

The life cycle of *Anoplodesmus saussurii* is quite short for a millipede of this size (21–33 mm). 20–25 days after copulation, 100–400 eggs are laid in earthen nests constructed by the females 5–10 cm deep in the soil. One female can lay 2–4 egg masses during its life time. From egg to adult it takes seven moultings to reach maturity in stadium VIII. In the sixth and seventh stadia the larvae can undergo long diapauses to overcome dry periods. Therefore, adults appear in large numbers on the surface after the onset of the rainy season. Depending on temperature, moisture and food supply, *Anoplodesmus saussurii* needs 6–7 months to complete its life cycle. The adults are active on the surface, mate even during daylight hours, and live for 4–6 weeks. There are two generations per year, which overlap one another.

A very interesting fact of *Anoplodesmus saussurii*, besides its short life cycle and high reproduction rate, is its sociability with aggregations of up to nearly 200 individuals per square meter. These aggregations are probably induced by rhythmical secretion of pheromones. This species is

most active at twilight hours and aggregate at midnight and during midday. Like nearly all Polydesmida, *Anoplodesmus saussurii* secretes hydrogen cyanide from the repugnatorial glands for defence against potential predators.

*Anoplodesmus saussurii* is very active on the soil surface during the daytime, and is therefore very conspicuous and easy to recognise. They are sometimes found in places of high densities, with several dozens individuals per square meter, where its presence might become a nuisance to people. They were also found in drainage canals and any type of newly built landscapes, especially where compost has been used. Typical locations are along road curbs, concrete foot paths, under concrete walls of houses, and in all types of human-made structures. This species was even recorded on roof gardens. *Anoplodesmus saussurii* is also frequently found in connection to the compost used as mulch medium around landscape trees; after some weeks, the compost can be totally replaced by millipede faeces. Recently, the species has also been found to have an affinity for the coarse turf of tropical carpet grass. Signs of millipede damage include the stripping of the outer layers of a young plant stem and irregular damage to leaves and plant apices.

As we know, INSANIAH campus in Kuala Ketil is surrounded by palm trees with panoramic views over a large natural pond in front of the Chancellery building. Furthermore, landscape and palm trees have been planted along the walking path that connects all kulliyah's buildings with Chancellery. In addition, tropical carpet grass remedy is used to cover the ground around campus. The surroundings was the main provider of comfortable habitat for *Anoplodesmus saussurii* to reproduce and maintain their generation. We can say HI to this species even at the walking path, in parking lots, in classrooms, tutorial rooms, laboratories, toilets, prayer room and so on. Here we can see the other millipedes,

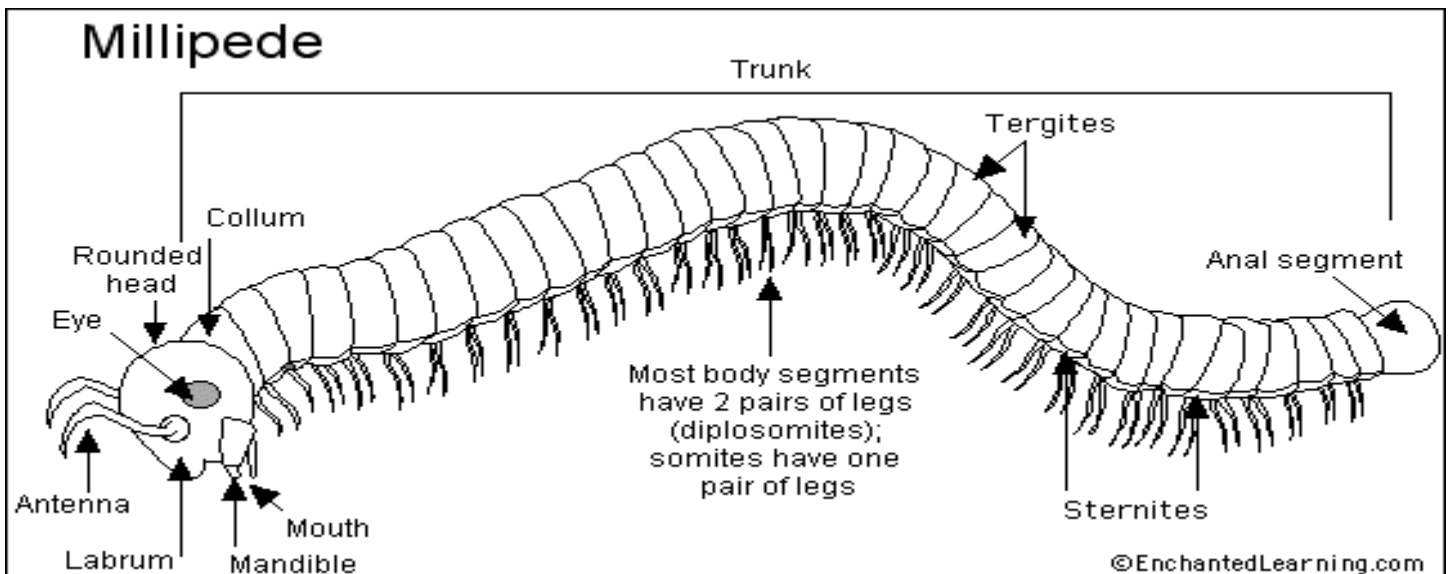
like *Trigoniulus corallinus* (red garden millipede), but *Anoplodesmus saussurii* is the dominant species around campus Kuala Ketil.

Scientific classification and binomial name

Kingdom	Animalia
Phylum	Arthropoda
Superclass	Myriapods
Class	Diplopoda
Order	Polydesmida
Family	Paradoxosomatidae
Genus	Anoplodesmus
Species	<i>A. saussurii</i>
Binomial name	<i>Anoplodesmus saussurii</i>

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# HEALTH

## segment



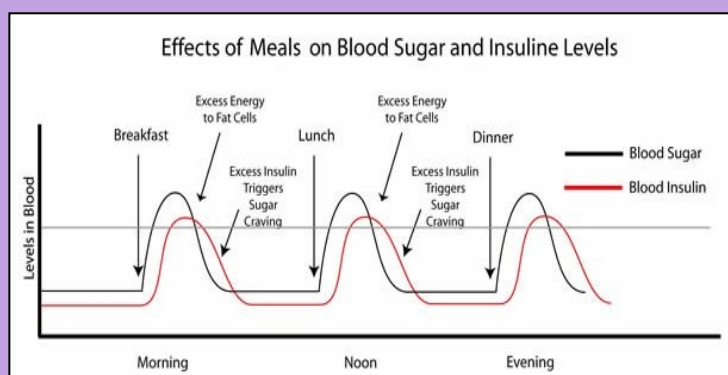
Written by: Dr. Shahidan Hashim

# HEALTHY EATING

## Introduction

Ever wonder why we feel so sleepy after heavy lunch? Instead of feeling energized after a meal, we feel tired and sleepy. This writing is to explain what is happening in our body at molecular and hormonal level related to the above observation.

Figure 1: Effects of meals on blood sugar and Insulin levels



Glucose derived from carbohydrate digested in the intestine will be absorbed into the blood stream. Blood glucose level will increase. The increase in blood glucose level triggers the release of insulin from pancreas. The amount of insulin released into the circulation is dependent on the amount of glucose absorbed into the blood.

Glucose molecule can only produce energy when it is in-

side the cell. The function of insulin is to transport circulating glucose into the cell. Some of the excess glucose will be converted into fat and stored in adipose cells. Increasing insulin level is followed by reducing plasma glucose. Declining glucose level will overshoot the normal level and stimulate satiety center. This satiety center gives rise to hunger feeling. Normally, body reacts to hunger by eating. The cycle is repeated a few times within a day, depending on the number and amount of meal that we consume.

Body is parts which do not suffer from total energy deficit despite episodes of hunger pang. The second line energy source is from glycogen storage in liver. This store amounts to 100-120 grams and is adequate for energy expenditure for 12 hours. Since food is available every time we feel hungry, the glycogen store in the liver is rarely exhausted. The store is replenished after every meal. Food rich is sugar relieves hunger faster. This phenomenon is called sugar addict.

## Eating etiquette

Eating slowly not only is a good etiquette but provides ample time for digestion and absorption to occur subsequently. The signal from blood glu-

cose level to satiety center takes about 20 minutes. Eating in a rush will lead to over-eating since at the time the hunger feeling disappear excess amount of food has entered the body.

### Glycemic Index and Glycemic Load

Nutritionist introduces a guide to select food that does not overstimulate the insulin release known as Glycemic Index (GI). Food with lower GI is digested slower than food of higher GI. Sugar is given the glycemic index of 100 as a referral point. Food is classified into three groups based on GI. Low GI (0-55), Medium (56-69), High GI (more than 70). Refer <http://www.whfoods.com/genpage.php?tname=faq&dbid=32>

The best food usually comes from nature. Highly processed food removes beneficial components such as fibers and vitamins. Sugary drink, highly processed rice, wheat, cake and potato belong to high GI. On the other hand, brown rice, full grain bread belongs to medium GI. Meanwhile, leafy vegetables, nuts, lentil, dairy product, meat and fish belong to low GI.

Another factor that contributes to the insulin over-stimulation is Glycemic Load. Glycemic load measure the quantity of glucose within the food consumed. Higher glucose load lead to overstimulation of insulin. Excess calorie is converted to fat and stored in adipose tissues in the omentum, liver, sub-cutaneous fat etc. Ever notices that raw fruits and vegetables contain more than 75% water? Eating raw naturally occurring food prevents over-eating since water contains zero calorie. Highly processed food contains concentrated sugar, fat or protein. Eating this food lead to over eating and digestion problems.

The best guides come from our Creator;

7. يَا بَنِي آدَمَ خُذُوا زِينَتَكُمْ عِندَ كُلِّ مَسْجِدٍ وَكُلُوا وَاشْرَبُوا وَلَا تُسْرِفُوا إِنَّهُ لَا يُحِبُّ الْمُسْرِفِينَ ﴿الأعراف: ٣١﴾

O' son of Adam, take your adornment at every masjid, and eat and drink but be not excessive; indeed Allah likes not those who commit excess. (7:31)

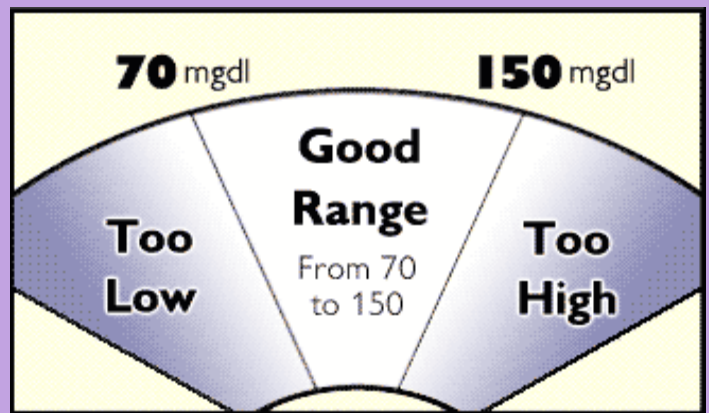
From hadith: Allah's Messenger (pbuh) said: "We are a people who do not eat until we are hungry. And if we eat, we do not eat to our fill."

Our prophet correctly advised us on eating habit by saying, "Allah's Apostle said, "A believer eats in one intestine (is satisfied with a little food), and a kafir (unbeliever) or a hypocrite eats in seven intestines (eats too much)." Volume 7, Book 65, Number 306 : Narrated by Ibn 'Umar

.....to be continued

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3. [http://sahih-bukhari.com/Pages/Bukhari\\_7\\_65.php](http://sahih-bukhari.com/Pages/Bukhari_7_65.php)



**Normal Blood Sugar Numbers**



# GENETIC DIVERSITY OF SELECTED COMMERCIAL FRESHWATER FISHES BASED ON PHOSPHOLIPASE C ZETA EXPRESSION AND MUSCLE PROTEIN PROFILING

Egg activation is important to help releases the egg from meiotic arrest and blocks polyspermy. It is linked with an increase in intracellular egg calcium ions ( $Ca^{2+}$ ) in almost all species studied and current studies imply that the mammalian sperm factor involved is a sperm-specific phospholipase C zeta, PLC $\zeta$ . Here, we first reported the identification of PLC $\zeta$  in the testis and egg of Lampam Jawa. Our findings provide the evidence that PLC $\zeta$  is present in the species of male and female Lampam Jawa (*Barbonymus gonionotus*). For this study, six types of commercial freshwater fish were selected i.e. Red Tilapia (*Oreochromis sp.* Red Tilapia), Black Tilapia (*Oreochromis mossambicus*), Catfish or Keli (*Ictalurus punctatus*), Silver Catfish or Patin (*Pangasius pangasius*), Snakehead Fish or Haruan (*Channa striata*) and Silver Barb or Lampam Jawa (*Barbonymus gonionotus*). The objectives of this study were to isolate the mRNA from the gonads of freshwater fishes, to identify and amplify the phospholipase C zeta (PLC $\zeta$ ) gene fragments, to sequence the purified DNA fragments and to compare the PLC $\zeta$  sequence to other PLC $\zeta$  sequences available in NCBI database, to characterize muscle protein of selected commercial freshwater fish and lastly, to compare phylogenetic trees of 16S rDNA generated. In addition, protein profiles can be used as indicators of evolutionary relatedness. The differences and similarity aspects of fish muscle protein were measured and the relatedness based on protein profile was compared with the relatedness of fishes obtained from 16S rDNA sequences

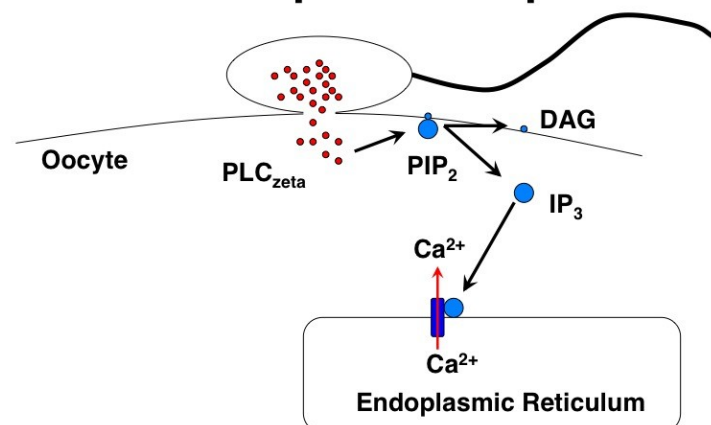
alignment using dendrogram. The methods used for the expression of PLC $\zeta$  were RNA extraction, spectrophotometric quantitation of RNA, Two-Step RT-PCR reaction, agarose gel electrophoresis, gel documentation, gel extraction, sequencing and dendrogram. The methods used for muscle protein profiling were sodium dodecyl sulphate polyacrylamide gel electrophoresis (SDS-PAGE), gel viewing, muscle's protein banding profile analysis, genetic diversity and lastly comparison of protein profile and 16S phylogenetic tree generated by using dendrogram. For the study of PLC $\zeta$  expression, male and female Lampam Jawa showed bands at around 420bp in agarose gel electrophoresis that indicated the presence of PLC $\zeta$  gene and no significant bands were found in other types of fishes used in this study. For muscle protein profiling, the multiple bands of proteins obtained from SDS – PAGE showed similar protein contents among different fish species used in this study. The dendrogram with highest percentage of similarity is between Tilapia Hitam and Tilapia Merah which is 84% followed by Haruan and Patin which exhibited less than 84% similarity. Keli had 67% similarity with Haruan, Patin, Tilapia Merah and Tilapia Hitam while Lampam Jawa showed less than 60% similarity with Keli, Patin, Haruan, Tilapia Merah and Tilapia Hitam.

— Noor Azimah Norbidin, MSc. UPM, 2014



*Channa Striata* or locally known as Haruan.  
Source: Google

## Initiation of Calcium Pulse by Soluble Sperm Component





# UPCOMING EVENTS

mark your calendars

## 2015

January	February	March	April
S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
May	June	July	August
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September	October	November	December
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## GUIDES FROM AL-QUR'AN

وَلَا تَلْبِسُوا الْحَقَّ بِالْبَاطِلِ وَتَكْتُمُوا الْحَقَّ وَأَنْتُمْ تَعْلَمُونَ

“And do not mix the truth with falsehood or conceal the truth while you know [it].”

*Al Quran, Surah Baqarah (2:42)*

### 6 December 2015

- Final Examination for Medical Course

### 28 December 2015

- Professional examination
- Bengkel Penerapan Nilai-Nilai Islam by Associate Prof Dato' Dr. Azmi Hashim
- Strengthening the Teaching in Clinical Skills by Prof Dr. Ropilah & Dr. Farooqui

وَاعْتَصِمُوا بِحَبْلِ اللَّهِ جَمِيعًا وَلَا تَفَرَّقُوا

AND HOLD FIRMLY TO THE ROPE OF ALLAH ALL TOGETHER

AND DO NOT BECOME DIVIDED.

Quran [3:103]

# Happy Birthday

DECEMBER

24 Dec 2015



Siti Norazura  
bt Mohamad

28 DEC 2015



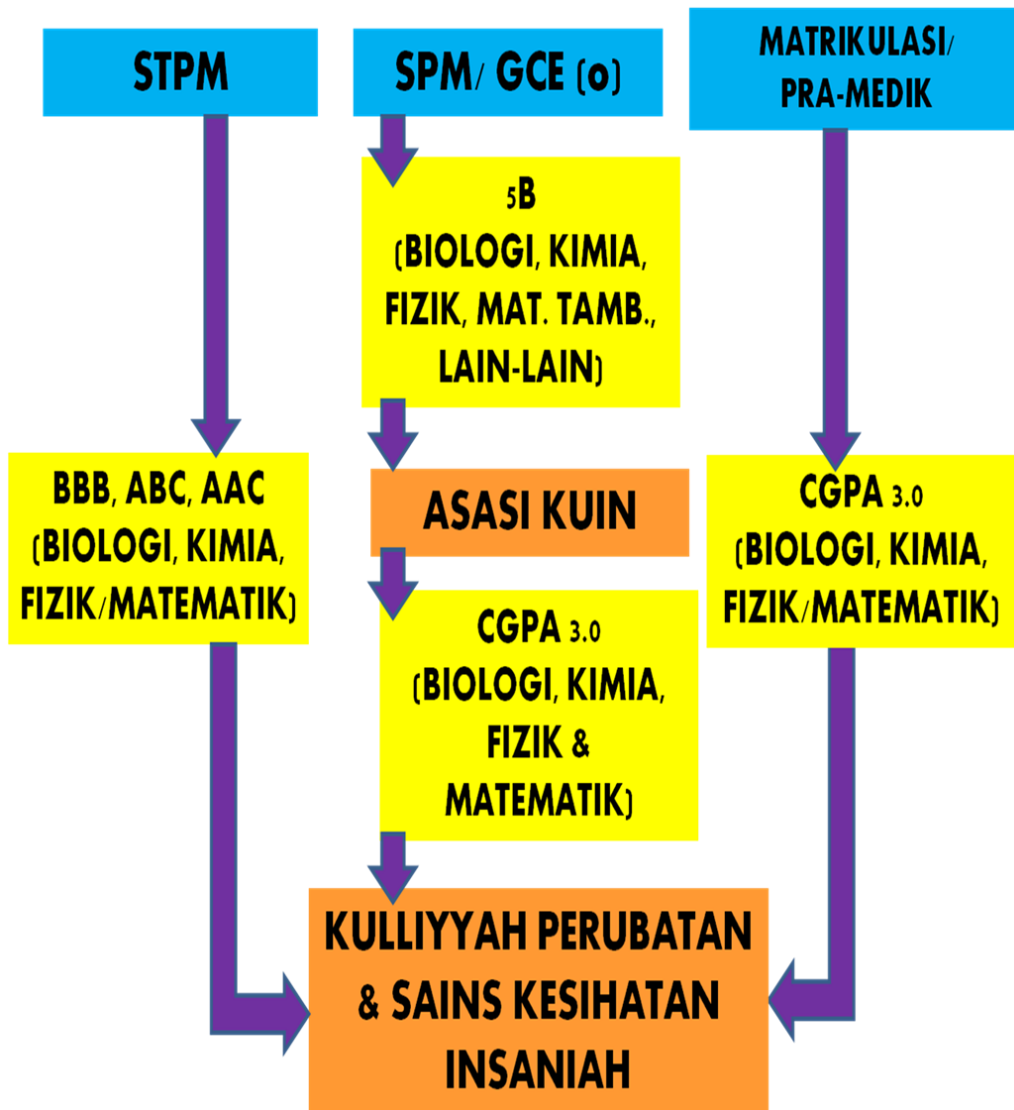
IRA FADDILA  
BT MOHD YUSOFF

Birthday is the time of celebration; We hope you have a wonderful day with loads of love and surprises. May your birthday gives you the best memories till the next one, may you have success waiting ahead.

## Special Thanks!

Thank you very much to Prof Dr. Aruljoethy Ratnasingam, Mr. KSV Angubala Ganesh & Madam Nirmala Palayathan for your kind effort to organize a Deepavali Celebration Party on 16 November 2015.

# How to enroll into MBBS Insaniah



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