

GIPOMONIC



LABUAN
MATRICULATION
COLLEGE

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Why we STARTED ?

- **Cellular respiration** is the topic with the **highest mark weightage (18%)** in Semester 2 Matriculation Programme Biology Examination
- Students had **problems remembering** the **names** and **correct order of the intermediates** formed in glycolysis (= first stage of cellular respiration)

OBJECTIVES

- To help students memorize the **names of all glycolytic intermediates**
- To help students remember the **correct order of intermediates** formed along the glycolytic pathway

UNIQUENESS of Gipomonic

- The mnemonic sentence only contains **11 words** which can be directly linked to **11 glycolytic intermediates**
- The mnemonic words include information about the **position of phosphate group in the intermediates** (a.k.a **the number in the names**)
- The mnemonic is **illustrated by a picture** to help students *recall the mnemonic*

ADVANTAGES of mnemonics

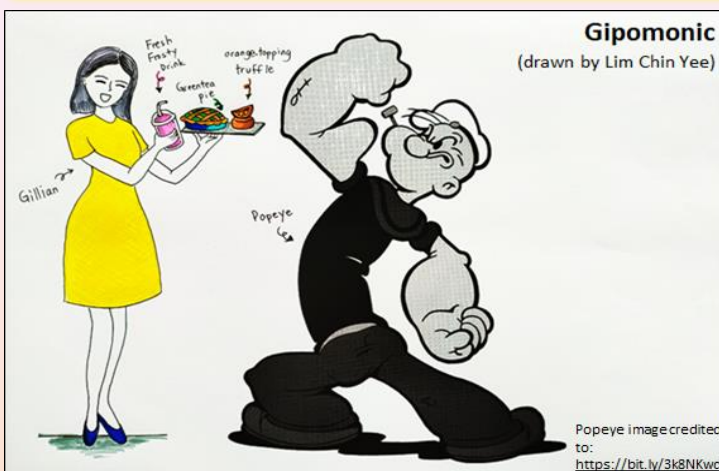
- Fun learning
- Memory bridge
- Time-saving

A glycolysis mnemonic
It is used as a **teaching aid**
It is illustrated by a **picture**

What is GIPOMONIC ?

Gi – Gillian
Po – Popeye
Monic – Mnemonic

Gillian gives fresh frosty drink, Green-tea-pie, orange-topping truffle to peppy Popeye



Gillian
gives
fresh
frosty
drink
green tea pie
orange-topping
truffle
to
Peppy
Popeye

Glucose
Glucose-6-phosphate
Fructose-6-phosphate
Fructose-1,6-bisphosphate
Dihydroxyacetone phosphate
Glyceraldehyde-3-phosphate
1,3-bisphosphoglycerate
3-phosphoglycerate
2-phosphoglycerate
Phosphoenolpyruvate (PEP)
Pyruvate

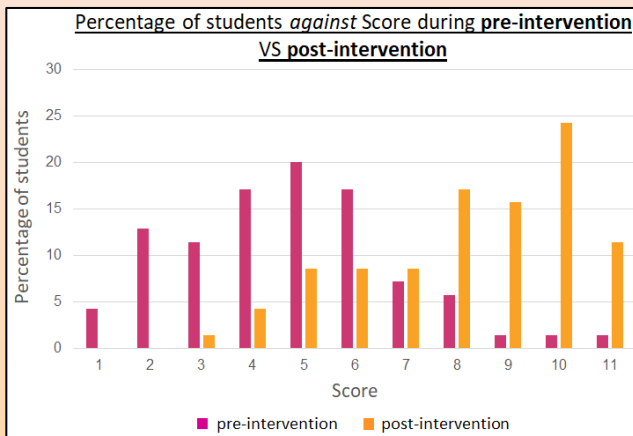
Students' perception on using Gipomonic

"I find it **absolutely helpful** and it's **very creative**..."

"The **mnemonic** is **not too long** and **easy to remember**..."

"I can **easily remember** the **sequence and the name of the compounds** using the mnemonic ..."

I
M
P
A
C
T



Students' level of mastery in glycolysis

Students' perception on learning time efficiency



PROMOTION

- Gipomonic was shared with **18 biology lecturers, LMC**
- **23/7/2021**

POTENTIAL COMMERCIALIZATION

- Matriculation colleges
- Form 6
- Biochemistry BSc course