### THE PHILIPPINE - AMERICAN



# **OUR RESPONSE TO COVID-19**

### AGHAM AT KAALAMAN PARA SA BAYAN!

### OFFICERS

Gisela P. Concepcion, PhD PRESIDENT

> Edsel A. Peña, PhD VICE-PRESIDENT

Lourdes Herold, PhD SECRETARY

Anna Kristina Serquiña, MD PhD TREASURER

#### **BOARD OF DIRECTORS**

Carlito Lebrilla, PhD CHAIRPERSON

Rigoberto Advincula, PhD Diana Aga, PhD Joel Cuello, PhD Alvin Culaba, PhD Lawrence Ilag, PhD Marjorie Peña, PhD Mariano Sto. Domingo, PhD Eizadora Yu, PhD

MEMBERS

## PAASE

hosted by

PAASE Philippines, Inc.

A SUBSIDIARY OF PAASE

Marine Natural Products & Biotechnology Laboratories The Marine Science Institute Velasquez St. University of the Philippines Diliman, Quezon City

## E-MAIL

gpconcepcion@gmail.com paase2020manila@gmail.com

### WEBSITE

www.paase.org

#### ON PAASE STRATEGIC ACTION GROUP 1: CONTAINMENT & MITIGATION

Addressed to: DOH Key Decision-Makers

#### HEALTHY DIET TO COMBAT COVID19

PAASE BULLETIN #7

PAASE supports the promotion of a healthy and balanced diet among Filipinos as a way to combat covid19 infection.

This position is based on the fact that a strong immune system generally can reduce complications in the event of a viral infection. It is to be noted however that no direct clinical evidence thus far establishes that the following recommendations will specifically boost immunity against COVID19.

- (1) An anti-inflammatory diet (1) may be helpful to circumvent or reduce complications arising from COVID19 infection, given that underlying conditions such as diabetes, cardiovascular disease, arthritis, high blood pressure associated with high-risk individuals have been associated with inflammation, a process that triggers the cytokine storm that can be fatal.
- (2) An anti-inflammatory diet can include (a) foods rich in omega-3 fatty acids found in oily fish (such as sardines and tuna) and seaweeds; (b) fresh fruits and vegetables rich in polyphenols and Vitamin C; (c) reduced amount of omega-6 fatty acids such as corn oil; and (d) foods rich in fiber to maintain regular bowel movement (1-4).
- (3) Foods rich in zinc such as oysters, mussels, eggs and milk are recommended, since zinc plays a role in immunity (5), and stop the COVID19 virus from multiplying (6).
- (4) Coconut oil (7) is recommended, as it contains anti-viral components that may apply against COVID19.
- (5) Full cream dairy products are recommended, as fatty acids in milk can inactivate viruses
  (8), and lactoferrin, a protein found in milk, stimulates the immune system and can prevent cellular entry of related coronaviruses in vitro (9-11).
- (6) Vitamins and supplements including zinc (5), vitamins C (12) and D (13-18), and omega-3 fish/algal oil (19-24) are recommended, since they reduce inflammation and boost immunity especially if one has allergy to certain food sources.

#### References:

- 1. http://epadruginitiative.com/files/Inflammation\_Medical\_Brochure.pdf
- 2. https://www.ncbi.nlm.nih.gov/pubmed/18408140
- 3. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3144295/
- 4. https://openheart.bmj.com/content/5/2/e000946
- 5. https://academic.oup.com/advances/article/10/4/696/5476413
- 6. https://journals.plos.org/plospathogens/article?id=10.1371/journal.ppat.1001176
- 7. http://ateneo.edu/ls/sose/sose/news/research/potential-coconut-oil-and-itsderivatives-effective-and-safe-antiviral

### THE PHILIPPINE - AMERICAN

8.



**OUR RESPONSE TO COVID-19** 

## AGHAM AT KAALAMAN PARA SA BAYAN!

#### OFFICERS

Gisela P. Concepcion, PhD PRESIDENT

> Edsel A. Peña, PhD VICE-PRESIDENT

Lourdes Herold, PhD SECRETARY

Anna Kristina Serquiña, MD PhD TREASURER

#### **BOARD OF DIRECTORS**

Carlito Lebrilla, PhD CHAIRPERSON

Rigoberto Advincula, PhD Diana Aga, PhD Joel Cuello, PhD Alvin Culaba, PhD Lawrence Ilag, PhD Marjorie Peña, PhD Mariano Sto. Domingo, PhD Eizadora Yu, PhD

MEMBERS

## PAASE

hosted bv

#### PAASE Philippines, Inc.

A SUBSIDIARY OF PAASE

Marine Natural Products & Biotechnology Laboratories The Marine Science Institute Velasquez St. University of the Philippines Diliman, Quezon City

E-MAIL gpconcepcion@gmail.com paase2020manila@gmail.com

WEBSITE www.paase.org

- https://www.ncbi.nlm.nih.gov/pmc/articles/PMC174645/
- 9. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5198036/
- 10. https://www.ncbi.nlm.nih.gov/pubmed/18573312
- 11. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3161750/#!po=10.6061
- 12. https://www.mdpi.com/2072-6643/9/11/1211
- 13. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6305614/
- 14. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3194221/
- 15. https://pubmed.ncbi.nlm.nih.gov/21527855/
- 16. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4776550/
- 17. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2759054/
- 18. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5491340/
- 19. https://academic.oup.com/ajh/article/27/7/885/158919
- 20. https://www.ahajournals.org/doi/10.1161/CIR.00000000000000709
- 21. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6338947/
- 22. https://www.lipidjournal.com/article/S1933-2874(18)30061-8/fulltext
- 23. https://www.nejm.org/doi/full/10.1056/NEJMoa1812792
- 24. https://www.sciencedirect.com/science/article/abs/pii/S0955286316308117

Larry L. Vilag & Vic L. Vilag E-mail: vilag2001@yahoo.com