



**A Grouped  
Knowledge Presentation**

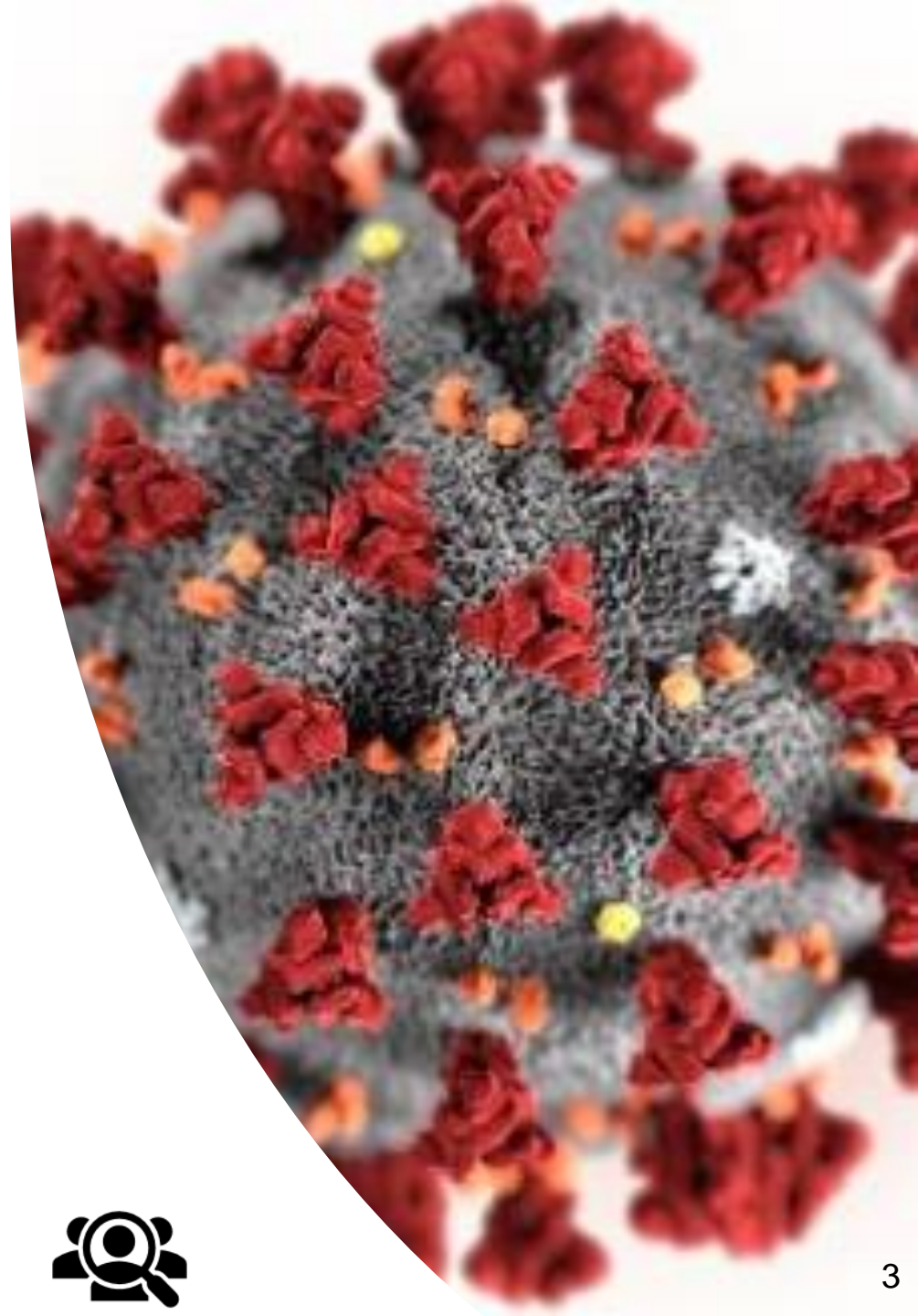
# In Defense of the Coronavirus

What you need to know.

By Mark L. Gordon, M.D.  
Millennium Health Centers, Inc.  
[www.TBIHelpNow.org](http://www.TBIHelpNow.org)



# Topics



- 
1. Covid -19 an old nemesis.
  2. Virology Refresher – YouTube.
  3. The Illness
  4. Laboratory Testing
  5. Treatment – Ionophores
    1. Hydroxychloroquine.
    2. Zinc
    3. Quercetin, EGCG, Curcumin, Bismuth
  6. Vitamin D
  7. Vitamin C
  8. Vaccines
  9. **The Post-Covid Syndrome** (coming soon to your neighborhood).



# Covid-19: An Old Nemesis .

- **Background and summary of NOVEL coronavirus infection – as of 21 December 2012**
- Over the past three months, WHO has received reports of nine cases of human infection with a novel coronavirus. Coronaviruses are a large family of viruses; different members of this family cause illness in humans and animals. In humans, these illnesses range from the common cold to infection with Severe Acute Respiratory Syndrome (SARS) coronavirus (SARS CoV).

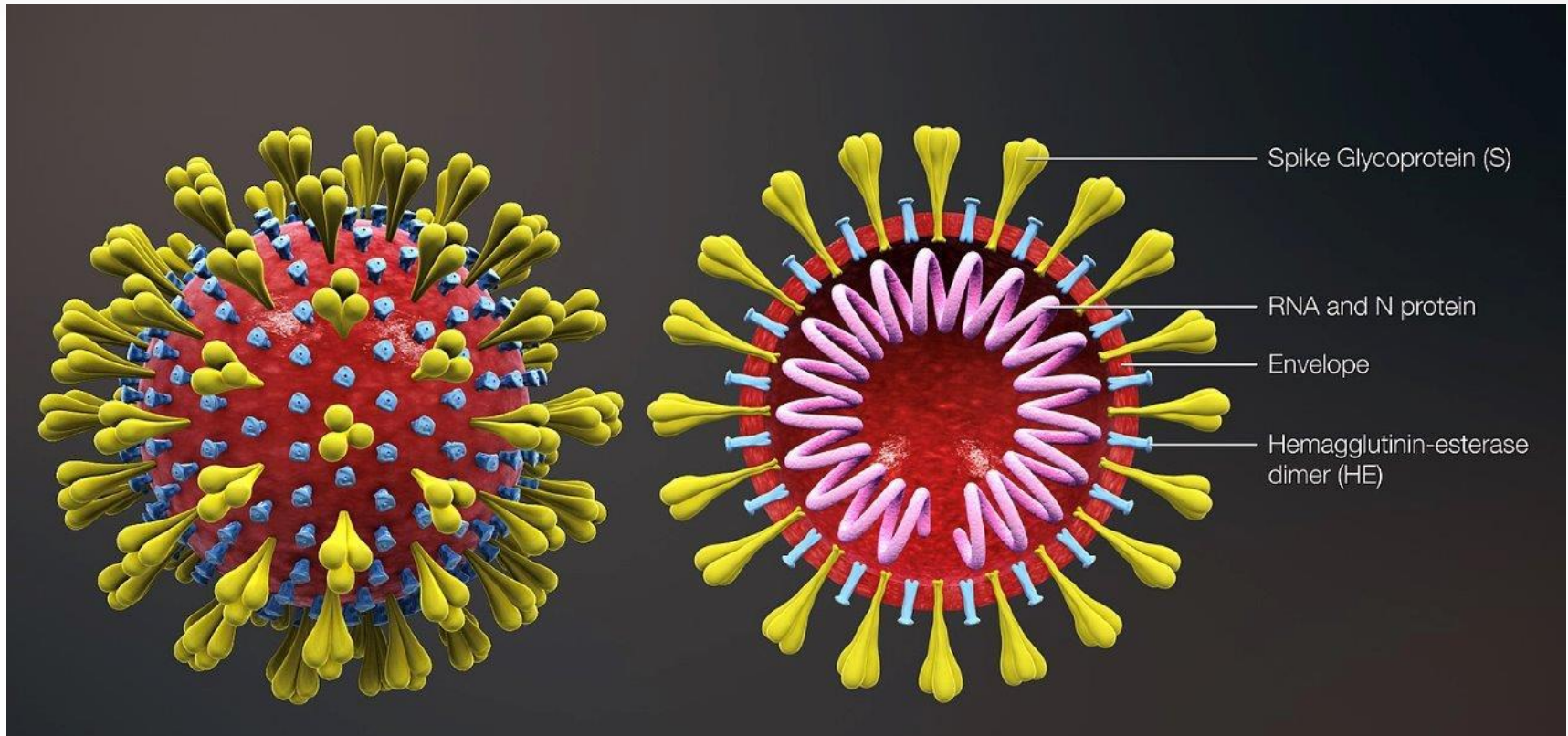


JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
		RHINOVIRUS									
CORONAVIRUS					ENTEROVIRUS						
ADENOVIRUS											
		PIV-3					PIV2,3				
RSV											RSV
INFLUENZA											
MPV											
GROUP A STREPT											

Coronavirus is not a new virus it is a seasonal virus where many have previously been exposed without symptoms and have already developed the protective IgG.



# Coronavirus Epidemic Update 34:



# The Illness

- Asymptomatic.
- Mild flu-like Symptoms. URI
- Moderate illness with GI and pulmonary involvement.
- Severe illness with respiratory compromise apparently due to “**Cytokine Storm**” precipitated by the virus – hyperbolic immune response.
- Severe inflammation in the lungs. Initial use of respirator with positive pressure blew out lungs causing death.

# Laboratory

RT-PCR – Nasal Swabs

Serum IgM & IgG

1. If PCR + and Serum Negative = Carrier
2. If PCR + and Serum Positive = Carrier
3. If PCR – and Serum Negative = not exposed or did not produce protection (IgM then IgG)
4. If PCR - and Serum Positive = exposed and immune but when??



# Laboratory - False Positives

- Recent studies of present Covid-19 blood testing show a high false Positive rate.
- They show that in their internal calibration, 30 out of 30 known negatives tested negative. In the manufacturer's calibration, however, 369 out of 371 known negatives tested negative. If we follow the authors and just combine these, **they had 2 false positives out of 401 total.**
- As Jeffrey Spence observed, this is actually a high enough rate to potentially mess up the whole study.



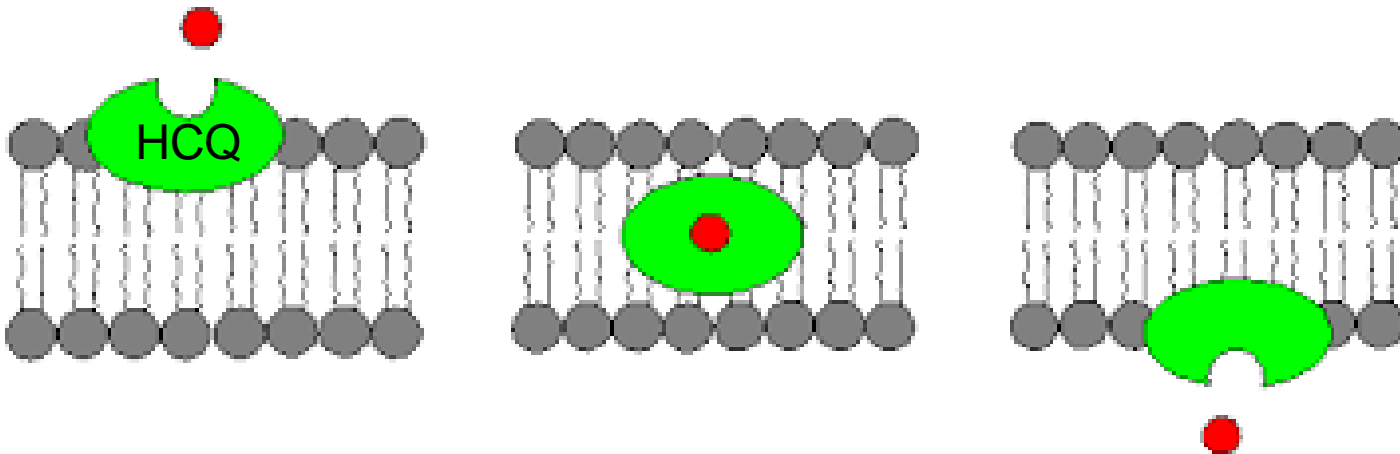
# Hydroxychloroquine

- It is an anti-malarial drug also used for Lupus and Rheumatoid arthritis.
- So how does it work against Covid-19?

## Ionophore

# Chloroquine Is a Zinc Ionophore

- Chloroquine enhanced zinc uptake in a concentration-dependent manner, as assayed using a fluorescent zinc probe.



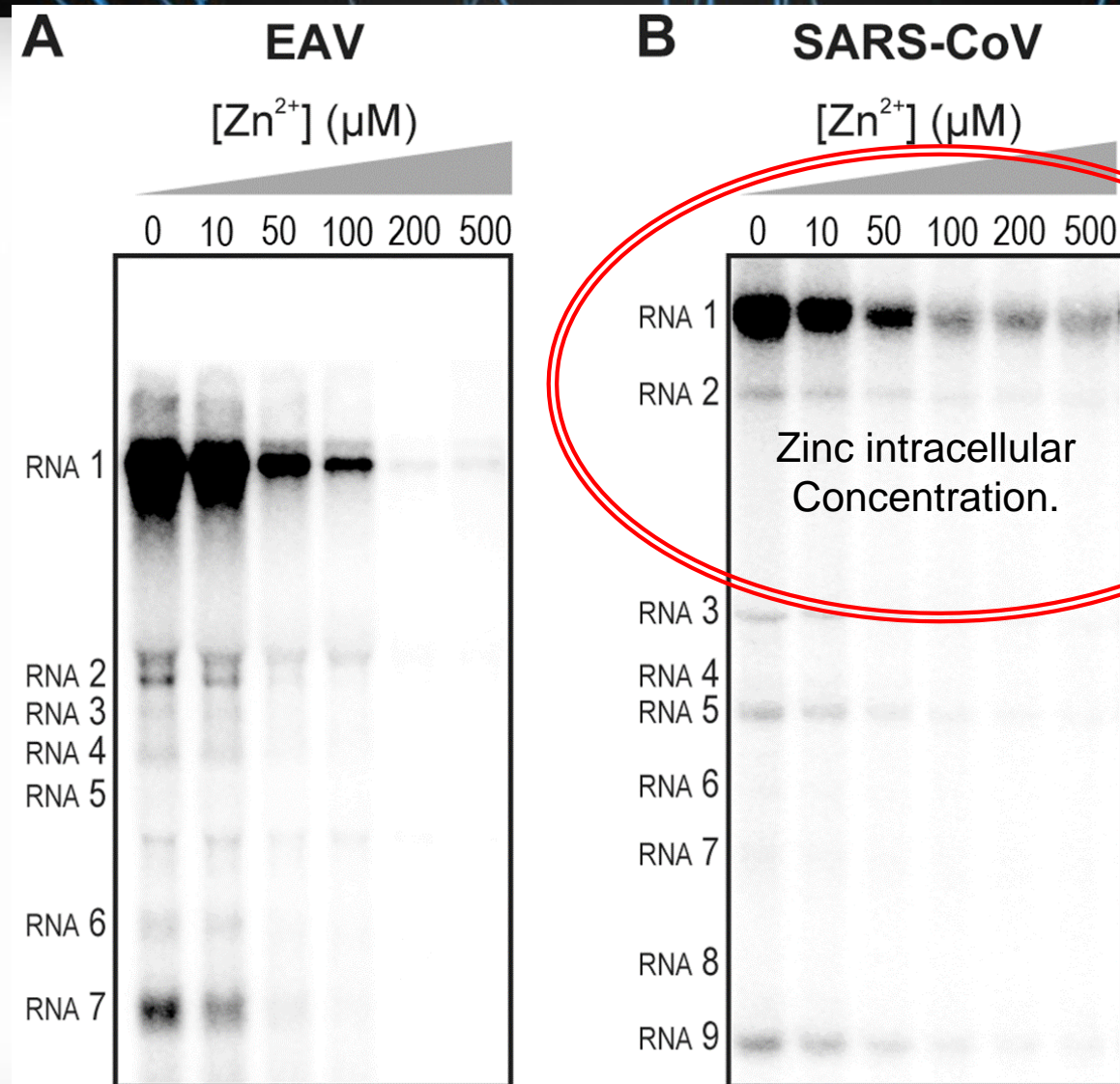


Zn(2+) inhibits coronavirus and arterivirus RNA polymerase activity in vitro and zinc ionophores block the replication of these viruses in cell culture.

- Increasing the intracellular Zn(2+) concentration with zinc-ionophores can efficiently impair the replication of a variety of RNA viruses.
- Inactivation of the Replicase protein which controls the ability of the coronavirus to replicate itself.

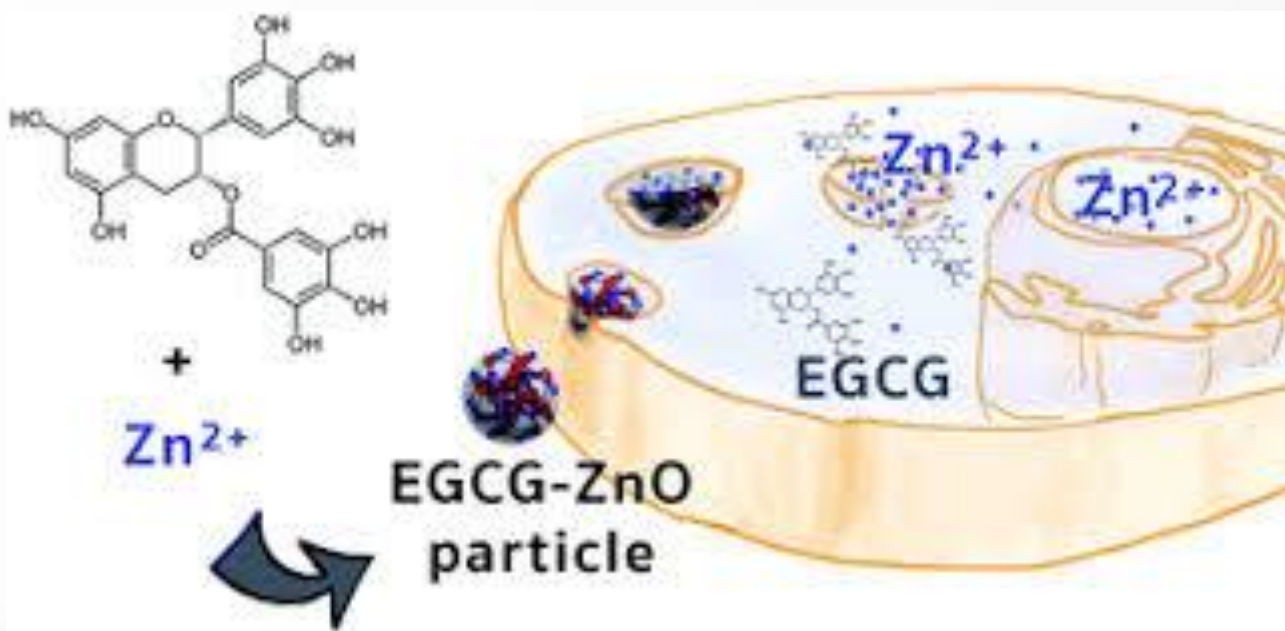


Increasing Intracellular Zinc concentration reduces the production of Replicase (RNA1) in a proportionate manner.



# Zinc Ionophore Activity of Quercetin and Epigallocatechin-gallate: From Hepa 1-6 Cells to a Liposome Model

## Zn Acetate, Citrate, Picolinate

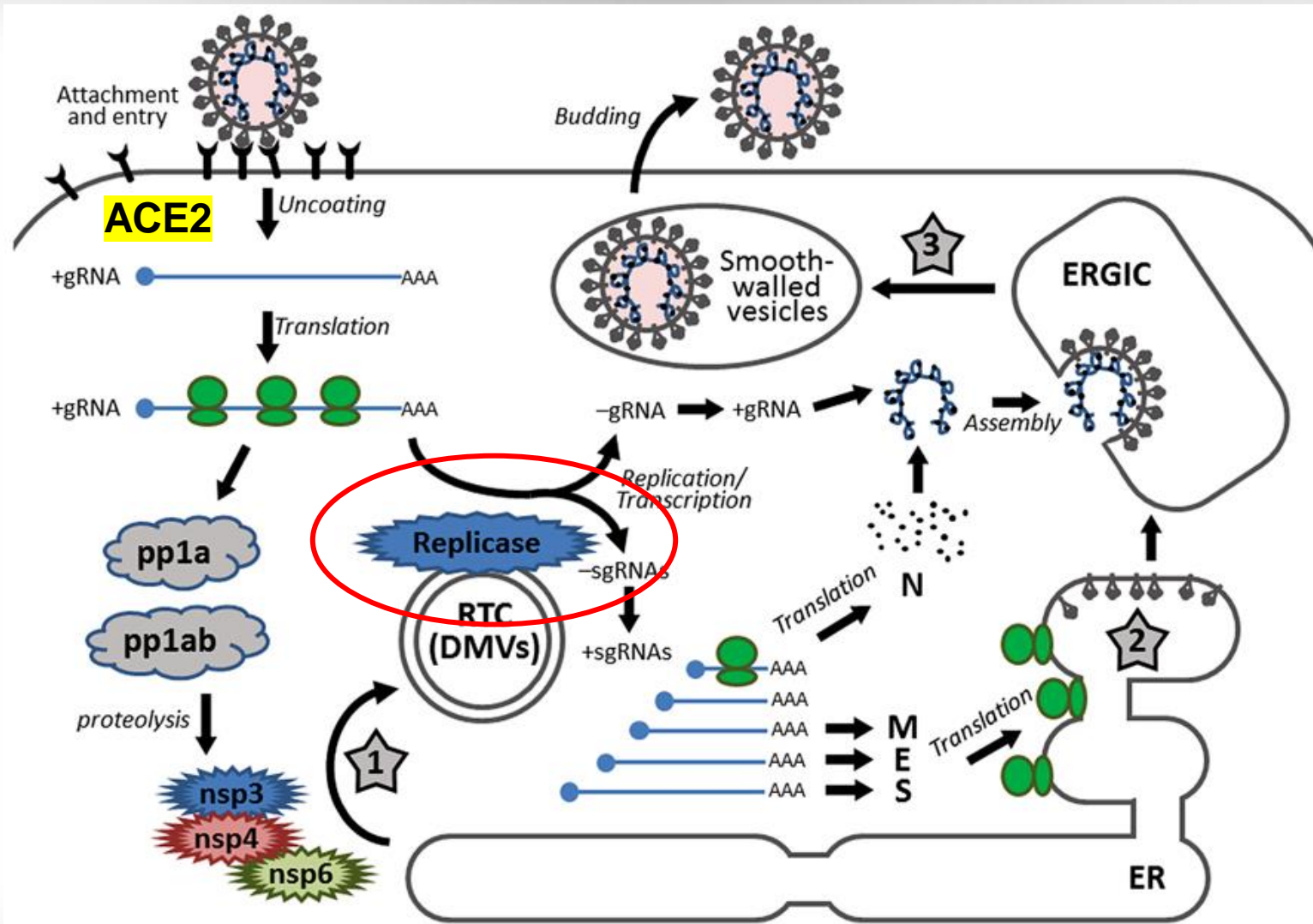




# Ionophores

- **Quercetin**: Mitc, BP-3, NF-kB down-regulation,
- **EGCG**: Neuro protection, improve dementia and neuroplasticity in stroke patients.
- **Curcumin**: NF-kB down regulation. The India Story. 1.6B people as of 4/20/2020 = 686!!
- **Bismuth**:

# The Coronavirus Replicase



# Vitamin D – Tissue Benefits

- Vitamin D has numerous effects on cells within the immune system. It inhibits B cell proliferation and blocks B cell differentiation and immunoglobulin secretion[[31-32](#)]. Vitamin D additionally suppresses T cell proliferation[[33](#)] and results in a shift from a Th1 to a Th2 phenotype[[34-35](#)]. Furthermore, it affects T cell maturation with a skewing away from the inflammatory Th17 phenotype[[36-37](#)] and facilitates the induction of T regulatory cells[[38-41](#)]. These effects result in decreased production of inflammatory cytokines (IL-17, IL-21) with increased production of anti-inflammatory cytokines such as IL-10 ([Figure 1A](#)). Vitamin D also has effects on monocytes and dendritic cells (DCs). **It inhibits monocyte production of inflammatory cytokines such as IL-1, IL-6, IL-8, IL-12 and TNF $\alpha$** [[42](#)].



# Vitamin C – Peripheral Defense

- **Vitamin C accumulates in phagocytic cells, such as neutrophils, and can enhance chemotaxis, phagocytosis, generation of reactive oxygen species, and ultimately bacterial and viral killing.** In monocytes, vitamin C has been documented to concentrate 80-fold (8,000%) above plasma levels (Evans et al., 1982). Actions seem to be the **increased production of Alpha and Beta Interferon** to specifically attack viral replication
- **Vitamin C (ascorbic acid) possesses anti-viral activity.** It has been shown that vitamin C is an essential factor in the production of the anti-viral immune response during the early phase of viral infection through the production of type I interferons (Kim et al. 2013), which up-regulates Natural killer (NK) cell and cytotoxic T-lymphocyte activity (Madhusudana et al. 2004). Also, studies have indicated that **ascorbic acid can be used as an inactivating agent for both RNA and DNA viruses, lessening viral infectivity** (Jariwalla and Harakeh, 1996; Byun and Jean,2011). In addition, ascorbic acid can detoxify viral products that produce pain and inflammation (Harakek et al .1990). High dose IV Vitamin C has been shown to be effective against viral infections such as the common cold **rhinovirus** (Hemila and Herman,1995); avian virus **H1N1** (Ely,2007;) Chikungunya (Gonzalez et al. 2014; Marcial-Vega et al,2015); **Zika** (Gonzalez et al 2016) and **influenza** (Zarubaeva et al.2017). **Also, oral supplementation with vitamin C (doses over 3g) appears to be able to both prevent and treat respiratory and systemic infections** (Carr and Maggini, 2017).

# Vaccines

- On April 5<sup>th</sup> there were 19 companies working on a Vaccine.

# Are we facing a crashing wave of neuropsychiatric sequelae of COVID-19?

**Post-Covid-19 Syndrome:** Already seeing neurological complaints of the brain (CNS) and peripheral nervous system – hypogeusia, anosmia,, neuralgias, arthralgias, seizures, micro-infarcts, cerebral hemorrhages, strokes, altered levels of consciousness.

In time mood disorders, akin to those in veterans, will become progressively more apparent. Greatest fear they will treat them in the same manner with polypharmacy.





# In Defense of the Coronavirus

1. Brain Care II – 1 tsp pre-breakfast with
2. B is for Brain 1 tsp pre-breakfast.
3. Quercetin 500mg BID
4. Zinc citrate 30mg BID

## Ancillary:

1. Amantadine 100mg QD prophylactic.
2. Amantadine 100mg TID therapeutic

INTRODUCING

# The Tri-Pak for Brain Health\*



Call Today to Place  
Your Order

**818-990-1166**

Proceeds from sales go to support our Veterans' with TBI/PTS Program.  
For more information visit [www.TBIHelpNow.org](http://www.TBIHelpNow.org) and [www.dhpUSA.com](http://www.dhpUSA.com)

A total of **16** different components blended into **3** unique brain health products.

**Brain Care II:**  
(BC2) Protecting the  
brain from Inflammation\*

**Composition:**  
DHA  
Tocopherol  
Ascorbic Palmitate  
Quercetin  
N-Acetyl-Cysteine  
EGCG

**Clear Mind & Energy:**  
(CME) Stimulate the  
brain to its full potential\*

**Composition:**  
Lepidium meyenii (Maca)  
Guarana  
Rhodiola rosea  
Quercetin  
Vitamin B12  
EGCG

**B is for Brain:**  
(B4B) Fueling the brain  
to optimize functioning

**Composition:**  
PQQ  
Vitamin CoQ10  
Vitamin B1  
Vitamin B2  
Vitamin B5  
Vitamin B12

Most common combinations:

1. Pre-breakfast: 1 teaspoon of CME and one teaspoon BC2.
2. Pre-breakfast: 1 teaspoon of BC2 and one teaspoon B4B.
3. Pre-breakfast: 1 teaspoon of CME, 1 teaspoon BC2, and ½ to 1 teaspoon of B4B.

Note: Any ONE of these combinations can be mixed in 4oz(120cc) of water or carbonated water and then consumed. We have found that the on-set of effects is faster.

\*US FDA Data on file.

For More Information Contact:  
818-990-1166  
[Reception@millenniumhealthcenters.com](mailto:Reception@millenniumhealthcenters.com)

Dr. Mark L. Gordon  
16661 Ventura Blvd, Suite 716  
Encino, California 91436

## Product Availability

1. [www.dhpUSA.com](http://www.dhpUSA.com)
2. [www.TBIHelpNow.org](http://www.TBIHelpNow.org)
3. [AMAZON](http://AMAZON)
4. Wholesale for our partners  
please call the office and  
speak with Candice: 818-  
990-1166 or use the email  
below and to the left.
  - Quercetin
  - EGCG
  - Ascorbic Palmitate

# Questions ? ? ?



Slide Deck available at : [www.tbihelpnow.org](http://www.tbihelpnow.org) under THE SCIENCE