# **COVID19 Immunity To Immunology**

Subjects: Immunology | Pharmacology & Pharmacy | Sociology

Contributor: JAYDIP DATTA

Immunity is an important term directly related to prevent any kind of infection spreading -particularly Covid19 under this pandemic situation . The specs of immunity depends on various factors like Foods & Diets , Environment / Ecology , Good Habits , Natural Remedies like Herbs & Anti-Oxidant therapy. Now we will discuss the every aspects of Immunity for boosting it up for a natural prevention of Covid19!. It is our sociological consiousnrss to maintain strictly our immune system will be strong enough to fight against this Viral Curse .In the Pandemic world of Covid19 there are 300 types of vaccine-evelopment works are ongoing . In india also we have seen SII ( Pune ) are under trial of Phase2-3 trials . AstraZeneca - Oxford university , Cansino , Pfizer are trying under trial vaccine . As we are all aware that it is a long way to nd out the ethical trial ( Clinical eciency ) universally U.S.S.R has been under claim stage . We the common people are in good hope that the vaccination will get in success to stop such Spike Crown . Without the term immunity vaccination will not be effective to irradicate the viral infection .

Keywords: Covid19; Immunity; Immunology; Vaccine developement; Social consiousness; Vaccine biotechnology; Infectious diseases; Virology; SARS-COV-2; Reproducibility test; Clinical trial and safety; Convalesent plasma therapy

*Immunity* greatly depends on the following good habis and social consiousness that "Prevention is better than cure".

## 1. Balanced and hygienic Diet

As per **nutritional biochemistry** a balanced diet is nothing but a appropriate combination of Protein ,Carbohydrate & Fats . Intake of animal & vegetable protein is a matter of our interest . An healthy as well as healthy drinks should be an additional interest . The Diet factor also includes a great issue ie malnutrition - As we are all aware that Malnutrition is a great curse even in 21st century due to Poverty , under-nutrition as well as heavy intake of fast foods causing some nutrition related

disorders like **Rickets**, **Scurvy**, **& musculoskeletal disorders** like Rh. Arthritis even neurological disorders – this type of patients are in high risk zone in spreading the Corona Virus . The second component of Food is adulteration - it is a fact against the above three phenomenon as well as deterioration of Health even death . Adulteration is a great curse of Society by some intoxification of harmful chemicals as well as pathogenic contaminants . This is probably the greatest enemy of

Immunity ie indirectly a friend of Corona attack .

## 2. Anti-Oxidant / Therapeutic Anti-Oxidant

It include Balanced diet combined with Health Supplements, Herbs, Green Vegetables and Citrus food. The most important activity of antioxidant is to prevent the attack of Corona Virus as well as spreading of the Infection by quenching free radical also known as free radical scavenger. Green Tea as well as Black Coffee within specified limits helps the Patient for quick recovery.

### 3. Good Habits & Wellness

Smoking damages the lungs through a coating of nicotine directly and the patient is rapidly near the death by Pneumonic attack followed by sepsis ie death . The key point of wellness is to maintain a good mental health to relief stress during prolonged Lockdown period / under Quarantine condition . **Sound SLEEP** is a good secret of wellness ie to minimize the recovery time during attack of Covid19 .

## 4. Environment & Ecology

Now we will look back the most important factor the SUSTAINABILITY of Environment or Ecology ie probably the major cause of the spreading of the virus through the weak Immune system! . The excessive stress of GREEN HOUSE GASES , OZONE HOLE – damage through UV attack , Heavy metal pollutants like lead ( Pb ) ,Arsenic in waste water as well as air pollutants . Higher SUSPENDED PARTICULATE MATTER ( SPM ) content will spread this infection through aerosolised .

**IMMUNOLOGY AND VACCINATION** - Firstly it is needless to say that immunity is the key function of any kind of vaccination

including Covid19 .Detaied discussion along with necessary links are as follows :

Vaccination trial and development - https://www.nature.com/articles/d41586-020-02400-7 Nasal Spray as Corona Vaccine - approved by China - https://health.economictimes.indiatimes.com/l.php?

url=https%3A%2F%2Fhealth.economictimes.indiatimes.com%2Fnews%2Findustry%2Fchina-approves-

first-nasal-spray-covid-19-vaccine-for-trials%2F78050740&mailer\_id=0&item\_id=3917954&dt=

 $2020-09-11 \& utm\_source=Mailer \& utm\_medium=ET\_batch \& utm\_campaign=ethealth\_news\_2020-09-11.$ 

Covid vaccination trial is paused by Serum Institute ,India - DGCA has put a showcause notice

- https://health.economictimes.indiatimes.com/tag/serum+institute+of+india

Eu Comission has planned to order **200 million doses of Covid -vaccine from BioNTech- SE** & Pfizer -US - https://health.economictimes.indiatimes.com/tag/european+commission

**AZD1222-** A decision is taken by the panel of **expert of AZ Pharma** willreview the unexpected of UK pateints - https://health.economictimes.indiatimes.com/tag/unexplained+illness.

Whether Mask is an equivalent Vaccine - <a href="https://www.webmd.com/lung/news/">https://www.webmd.com/lung/news/</a> 20200909/could-your-mask-be-a-kind-of-vaccine-against-covid-19 .

**CPT( Consultant plasma therapy )** - Not effective to reduce thre mortality of severe Covid-infection - https://www.webmd.com/lung/news/20200909/could-your-mask-be-a-kind-of-vaccine-against-covid-19

" Variolation "of SARS-COV-2 - Waiting for a vaccine - 10.1056/NEJMp2026913 Immunological response of Covid Vaccination - SARS , MERS Epidemic .

**Chemist Martin Brooke** has developed an unique test of Covid for student of Illinois University but the infection of the Spike protein can't be stopped - <a href="https://www.npr.org/sections/health-shots/2020/08/">https://www.npr.org/sections/health-shots/2020/08/</a> 15/902616040/can-testing-students-for-coronavirus-twice-a-week-prevent-campus-outbreaks.

Please look back on **Gam-COVID-Vac -** https://www.raps.org/news-and-articles/news-articles/2020/3/covid-19-vaccine-tracker.

The third trials of AZ resumes trial in U.K-https://www.hindustantimes.com/world-news/suspension-of-astrazeneca-covid-19-vaccine-trials-showed-fallacy-of-approach-rdif-ceo/story-rw09PX3WZQAKo1onyT6WEL.html .

COVISHIELD trial - https://www.timesnownews.com/health/article/covishield-update-oxford-covid-19-vaccine-likely-to-be-the-first-shot-for-indians-says-report/639290 .Volunteers of Covishield - https://www.news18.com/news/india/vital-signs-normal-for-volunteers-who-were-administered-oxfords-covid-19-vaccine-covishield-pune-doctor-2823689.html .Although Plasma Therapy is not approved by ICMR but as per Doctors it is viable in Stage - 3 Pateint to control the CFR - https://health.economictimes.indiatimes.com/ tag/covid-19+fatality Hyderabad ,India - The Capital of World's vaccine

-https://health.economictimes.indiatimes.com/tag/vaccine

.https://health.economictimes.indiatimes.com/tag/global+vaccine+supply.

**Dr. Seth Barkley - A Ceo of GAVI ( Geneva ) -** The vaccine alliance funded by **Bill Gates** talking about the urgency of vaccine can't be compromised at the cost of vaccine trial safety - https://health.economictimes.indiatimes.com/tag/dr+seth+berkley.**Animal Trial is successful for COVAXIN** - Bharat Biotech https://health.economictimes.indiatimes.com/tag/vaccine .

https://health.economictimes.indiatimes.com/tag/bharat+biotech .

developement

**Spain** to start vaccine trial with Johnson Johnson https://health.economictimes.indiatimes.com/tag/coronavirus+vaccine Vaccine trial volunteer around 35 % are infected with https://health.economictimes.indiatimes.com/l.php? Covid19 url=https%3A%2F%2Fhealth.economictimes.indiatimes. com%2Fnews%2Fdiagnostics%2F35-of-vaccine-trial-volunteers-found-infected-with-covid-19%2F78102298&mailer\_id=0&item\_id=3923783&dt=2020-09-15&utm\_source=Mailer&utm\_medium=ET\_ batch&utm campaign=ethealth news 2020-09-15.

Pfizer - BioNtech trial expands to phase -3 trial -https://health.economictimes.indiatimes.com/l.php? url=https%3A%2F%2Fhealth.economictimes.indiatimes.com%2Fnews%2Fpharma%2Fcovid-19-vaccine-pfizer-biontech-to-expand-phase-3-trial%2F78102193&mailer id=0&item id=3923777&dt=2020-09-15&utm source=Mailer&utm -medium=ET batch&utm campaign=ethealth news 2020-09-15 .

The HOD - WHO urgently request the rich nations to join vaccine scheme by Friday - <a href="https://health.economictimes.indiatimes.com/">https://health.economictimes.indiatimes.com/</a>
Il.php?
url=https%3A%2F%2Fhealth.economictimes.indiatimes.com%2Fnews%2Fdiagnostics%2Fwho-head-urges-rich-nations-to-join-vaccine-scheme-by-friday-deadline%2F78106353&mailer\_id=0&item\_id=3924062&dt=2020-09-

Russiun vaccine Sputnik V - Covid19 vaccine - REF : Credit: Natalia Kolesnikova/AFP/Getty - Nature news Letter ( 16.09.20 ) - nature.com ( Image Source ) d41586-020-02619-4 18 369638.jpg.

**38 Scientists** has signed for full verification - <a href="https://www.nature.com/">https://www.nature.com/</a> articles/d41586-020-01221-y . Clinical trial has been de-accalerated - <a href="https://nature.us17.list-manage.com/track/click?u=2c6057c528fdc6f73fa196d9d&id=c80db941d1&e=5944515236">https://nature.us17.list-manage.com/track/click?u=2c6057c528fdc6f73fa196d9d&id=c80db941d1&e=5944515236</a>.

15&utm\_source=Mailer&utm\_medium=ET\_batch&utm\_campaign= ethealth\_news\_2020-09-15

A few volunteer left **vaccine trial from Johnson & Johnson -** https://health.economictimes.indiatimes.com/tag/astrazeneca <a href="https://health.economictimes.indiatimes.com/tag/volunteers">https://health.economictimes.indiatimes.com/tag/volunteers</a>.

Probability of Vaccine potency from 3-6 top vaccines - https://health.economictimes.indiatimes.com/tag/vaccine https://health.economictimes.indiatimes.com/tag/bill+gates .

**Novavax Inc ,U.S** has planned to 2 Billion Tons Vaccine ( **NVX-CoV2373** ) mfg agreement with SII India - <a href="https://health.economictimes.indiatimes.com/tag/novavax">https://health.economictimes.indiatimes.com/tag/novavax</a>

Scale up is different issue - The ist focus should be to standardise the vaccine under efficiant clinical trial safety . Most of the vaccine trial are **resulting I/II trial** . III- Stage are very dicultly mentioned .Vaccination - a hope .REF : Copyright Satish Bate/Hindustan Times/Getty (doi:10.1038/nindia.2020.136 Published online 3 September 2020).

 $\label{eq:vaccine} \textbf{Vaccine} \quad \textbf{access} \quad \textbf{plan} \quad \textbf{released} \quad \textbf{by} \quad \textbf{NASEM} \quad \textbf{(U.S.)} \quad \textbf{-https://nature.us17.list-manage.com/track/click?} \\ u = 2c6057c528fdc6f73fa196d9d&id = 8a9f1cbf7c&e = 5944515236 \; .$ 

Allocation of vaccines **for approved safety clinical safety trial** .REF : Copyright - Natalia Kolesnikova/AFP/Getty - Nature newsletter - nature.com( Image Source )

The firrst batch of Russian -vaccine released into public - https://health.economictimes.indiatimes.com/l.php? url=https%3A%2F%2Fhealth.economictimes.indiatimes.com%2Fnews%2Findustry%2Ffirst-batch-of-russian-covid-19-vaccine-released-into-public%2F77988598&mailer\_id=0&item\_id=3911367&dt=2020-09-08&utm\_source=Mailer&utm\_medium=ET\_batch&utm\_campaign=ethealth\_news\_2020-09-08.

**35** % of Volunteers infected during trial -Randomly selected .https://health.economictimes.indiatimes.com/tag/vaccine Liiiy drugs - 1.7 % pateints had to hospitalised -6% of placebo groups -Clinical trial of antibody -https://health.economictimes.indiatimes.com/tag/eli+lilly https://health.economictimes.indiatimes.com/tag/antibody .

High probability of mutation of RNA necleocapsid protein . " Novel spike crown " . AZ - Un-der pressure for vaccine safety trial - <a href="https://health.economictimes.indiatimes.com/tag/astrazeneca">https://health.economictimes.indiatimes.com/tag/coronavirus</a> .

**Covishield - Oxford vaccine will** undergo III rd phase human trial in pune from coming week - https://health.economictimes.indiatimes.com/tag/human+clinical+trial

https://health.economictimes.indiatimes.com/tag/covid-19+vaccine .Trial of Covishield vaccine around 150 -200 number of Volunteers - https://health.economictimes.indiatimes.com/tag/covishield R& D by Oxford University - https://health.economictimes.indiatimes.com/tag/covishield https://health.economictimes.indiatimes.com/tag/oxford+university .

Challanges of Matthew Duchars , CEO of U.K vaccine production centre in large scale - https://nature.us17.list-manage.com/track/click?

u=2c6057c528fdc6f73fa196d9d&id=f0b734c7c1&e=5944515236.

The most important part of **reliability study - Randomized Control trial test about safety** and clinical effectiveness of Covid19 - clinical e effectiveness of Covid19 - https://nature.us17.list-manage.com/track/click? u=2c6057c528fdc6f73fa196d9d&id=2ae67ba1fa&e=5944515236 NIH does not warrant to recover from Covid19 by convalescent plasma therapy - https://nature.us17.list-manage.com/track/click? u=2c6057c528fdc6f73fa196d9d&id=5fc39912ba&e=5944515236 .

The **Gold -standard trial** with a large number of recovery are going on U.K - https://nature.us17.list-anage.com/track/click?u=2c6057c528fdc6f73fa196d9d&id=ce9facdafd&e=5944515236 .

Due to suspected untoward effect in U.K .- Oxford - Astrazeneca - Vaccine trial stopped -https://nature.us17.list-manage.com/track/click?u=2c6057c528fdc6f73fa196d9d&id=3936dcb3a8&e=5944515236.

Serum Institute of India ( SII ) get noticed to continue vaccine trials for Phase-2&3 -DGCA -https://health.economictimes.indiatimes.com/tag/serum+institute+of+india The criticism of AZ vaccine trial is not transperant - https://nature.us17.list-manage.com/track/click? u=2c6057c528fdc6f73fa196d9d&id=810df3b059&e=5944515236 .

Whether Recovered pateint having **sufficiant antibody** - Preprint Characterization of neutralizing ver-sus binding antibodies a. . . Immunity & vaccine - great query - Without adequate immunity how a vaccine works ?-https://nature.us17.list-manage.com/track/click?u=2c6057c528fdc6f73fa196d9d& id=7e971950ba&e=5944515236 .

**James Hamblin** (Physician Scientists) - about **Herd Immunity** - https://nature.us17.list-manage.com/track/click? u=2c6057c528fdc6f73fa196d9d&id=a4e83f0894&e=5944515236.

Antibody B & T-cells can kill SARS-COV-2 REF: Credit: KTDesign/SPL ( nature.com ) d41586-020-02400-7 18 278162.jpg Russiun Vaccine ΕT Health world safe as per Lancet study https://timesofindia.indiatimes.com/india/coronavirus-india-vaccine-and-cases-news-live-updates/liveblog/77921726.cms . Covid Vaccine round corner https://health.economictimes.indiatimes.com/l.php? url=https%3A%2F%2Fhealth.economictimes.indiatimes.com%2Fnews%2Findustry%2Fis-covid-19vaccine-round-the-corner%2F77868522&mailer\_id=0&item\_id=3897740&dt=2020-09-06&utm\_source= Mailer&utm\_medium=ET\_batch&utm\_campaign=ethealth\_news\_2020-09-06.

Al-though the **trial of AZ vaccine in UK** has been **stopped but Moderna Inc**. and the other by **Pfizer** and Germany's **BioNTech.** have carried out the vaccine trial of nal stage tests in U.S - https://health.economictimes.indiatimes.com/tag/astrazeneca.

CanSino Covid Vaccine trial - 3RD phase in Pakistan - https://health.economictimes.indiatimes.com/l.php? url=https%3A%2F%2Fhealth.economictimes.indiatimes.com%2Fnews%2Fpharma%2Fcansino-phase-3-covid-19-vaccine-trial-in-pakistan-expected-to-begin-this-month%2F78019075&mailer\_id=0&item\_id=3914322&dt=2020-09-10&utm\_source=Mailer&utm\_medium=ET\_batch&utm\_campaign=ethealth\_news\_2020-09-10.

#### SUMMARY FROM DISCUSSION LINK:

- 1. AZD1222-A decision is taken by the panel of expert of AZ Pharma willreview the unexpected of UK pateints <a href="https://health.economictimes.indiatimes.com/tag/unexplained+illness">https://health.economictimes.indiatimes.com/tag/unexplained+illness</a> For Immunity booster -new formulation based on Zinc Gluconate and naturalVitamin C coming from Acerola Cherry for boosting immunity -To accelerate vaccine workhttps://health.economictimes.indiatimes.com/tag/covid-19+drug.
- $2. \quad Covid19 \quad Vaccine \quad is \quad totally \quad unpredicted https://health.economic times.indiatimes.com/l.php? \\ url=https://3A%2F%2Fhealth.economic times.indiatimes.com/l.php? \\ url=https://3A%2Fw2Fhealth.economic times.indiatimes.com/l.php? \\ url=https://3A%2Fhealth.economic times.tml.economic times.com/l.php? \\ url=https://3A%2Fhealth.economi$
- $3.\ A\ venture\ of\ Serum\ Institute\ of\ Indiahttps://health.economic times. indiatimes.com/tag/serum+institute+of+indiahttps://health.economic times.indiatimes.com/tag/serum+institute+of-indiahttps://health.economic times.indiatimes.com/tag/serum+institute+of-indiahttps://health.economic times.indiatimes.com/tag/serum+institute+of-indiahttps://health.economic times.indiatimes.com/tag/serum+institute+of-indiahttps://health.economic times.indiatimes.com/tag/serum+institute+of-indiahttps://health.economic times.indiahttps://health.economic times.indiahttps://health.eco$

- 4.Whether Mask is an equivalent Vaccine -https://www.webmd.com/lung/news/20200909/couldyour-mask-be-a-kind-of-vaccine-against-covid-19
- 5. CPT( Consultant plasma therapy ) -Not effectiveto reduce thre mortality of severe Covid-infectionhttps://www.webmd.com/lung/news/20200909/could-your-mask-be-a-kind-of-vaccine-againstcovid-19" Variolation "of SARS-COV-2 -Waiting for a vaccine -10.1056/NEJMp2026913
- 6.Immunological response of Covid Vaccination -SARS, MERS Epidemic.
- 7.Article Immune responses in COVID-19 and potential vaccines: Lessons.Activated Vit-D for better Immunity .
- 8.Military Growing policy through vaccineresearch in Chinahttps://www.nature.com/articles/d41586-020-02523-x .
- 9. Chemist Martin Brooke has developed an unique test of Covid for student of Illinois University but the infection of the Spike protein can't be stopped <a href="https://www.npr.org/sections/healthshots/2020/08/15/902616040/can-testing-students-for-coronavirus-twice-a-week-prevent-campusoutbreaks">https://www.npr.org/sections/healthshots/2020/08/15/902616040/can-testing-students-for-coronavirus-twice-a-week-prevent-campusoutbreaks</a>.
- 10 .Please look back on Gam-COVID-Vac -https://www.raps.org/news-and-articles/newsarticles/2020/3/covid-19-vaccine-tracker
- 11. The third trials of AZ resumes trial in U.K-<u>https://www.hindustantimes.com/worldnews/suspension-of-astrazeneca-covid-19-vaccine-trials-showed-fallacy-of-approach-rdif-ceo/story-rw09PX3WZQAKo1onyT6WEL.html</u>
- 12.COVISHIELD trial -<a href="https://www.timesnownews.com/health/article/covishield-update-oxfordcovid-19-vaccine-likely-to-be-the-">https://www.timesnownews.com/health/article/covishield-update-oxfordcovid-19-vaccine-likely-to-be-the-</a>

#### 5. Conclusion

Social cociousness to be developed for better lifestyle more immune to us against viral attack or antibody generation . Immunity is surely surely correlated for vaccination or immunological biotechnology of SARS-COV-2 infection . The above discussion links are showing a great effort of a potent Covid -vaccination with **appropiate clinical safety and efficiacy trial**.

#### Reference (Including self Citation):

- 1. Covid19: The specs from Immunity Datta Jaydip https://encyclopedia.pub/1427.
- 2. Datta J, researchgate.net (RG)
- 2.1)Do We belive that spreading & death of people by Covid 19 is due to severe damage of Environmental Sustainibility?

  (Started April 7).
- 2.2) How Drugless therapy helps us to Improve our health as well as to prevent Viral attack ?( Started February 28 ) .
- 2.3 )Shall we beleive that the Covid19 has a asymmetric characteristics of Malaria and Crown virus? (Started May 1). What is Malnutrition Do You agree it is a Global Problem particularly in the Third world countries? (Asked December 11,2019).
- 2.4) What is GREEN HEALTH? (Asked December 1, 2019).
- 2.5)What is Food adulteration Is it a Big Problem ? (Asked November 11, 2019) What is balanced diet Will You support that it is essential to fight agaist COVID-19? (Asked November 7, 2019).
- 2.6)What do you prefer to take ANIMAL or VEGETABLE protein under attack of corona virus? (Asked October 28, 2019). Mental Frustation during LOCKDOWN period of Covid19 is more prone towards infection Share your feelings? (Asked December 19, 2019).
- 2.7)What is SLEEP? (Asked October 9, 2019) Your favourite food as Anti-Oxidant Let us discuss? (Started September 27, 2019) TEA or COFFEE Which one is good for heath? (Started October, 29, 2019).
- 3.HEALTH & ENVIRONMENT: A SOCIOLOGICAL CONCIOUSNESS ( Preprint ) ,researchgate.net ( RG ) -Datta J . November 2019.
- 4.BALANCED DIET & ADULTERATION : An Impression ( Experimental Findings ), researchgate.net ( RG )-Datta J,

ebruary 2020.

- 5. Nature@newsletter.nature.com.
- 6. newsletter@ethealthworld.com.
- 7. https://www.researchgate.net/post/Covid19 Vaccination-How far How long Datta Jaydip .
- 8. https://www.researchgate.net/post/What is fate of Clinical Ethics in case of Final trial of a New Drug Datta Jaydip .
- 9. https://www.researchgate.net/post/Whether Bio-Technological Research is essential to develope our nation including the threats of Corona Virus-How Datta Jaydip .
- 10. https://www.researchgate.net/post/Let us Discuss something about Reproducible research technique including COVID 19 Datta Jaydip .
- 11. https://www.researchgate.net/post/What is our Knowledge or Updates about Covid19-It s source development measurement Datta Jaydip.
- 12. Covid19 Vaccine development (?) { News updatate ( Preprint article ), Datta Jaydip, figshare.con, Sept, 2020
- $13. \ https://www.researchgate.net/post/What_is\_fate\_of\_Clinical\_Ethics\_in\_case\_of\_Final\_trial\_of\_a\_New\_Drug \ , \ Jaydip Datta$

Retrieved from https://encyclopedia.pub/entry/history/show/7423