COVID19 IMMUNITY AND IMMUNOLOGY

Subjects: Immunology | Pharmacology & Toxicology | Sociology

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Definition

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 .

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 intoxicification 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 imuunity is the key function of any kind of vaccination

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

Vaccination trial and developement - <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 showcase 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** will review the unexpected of UK pateints -

<https://health.economictimes.indiatimes.com/tag/unexplained+illness>.

For Immunity booster - new formulation based on **Zinc Gluconate and natural Vitamin C coming from Acerola Cherry**

for **boosting immunity** - To accelerate vaccine work - <https://health.economictimes.indiatimes.com/tag/covid-19+drug>

Covid19 Vaccine is totally unpredicted -https://health.economictimes.indiatimes.com/l.php?url=https%3A%2F%2Fhealth.economictimes.indiatimes.com%2Fnews%2Findustry%2Ftaking-the-good-with-the-bad-how-potential-covid-19-vaccines-offered-hope-and-disappointment%2F78069594&mailer_id=0&item_id=3919885&dt=2020-09-12&utm_source=Mailer&utm_medium=ET_batch&utm_campaign=ethealth_news_2020-09-12

[url=https%3A%2F%2Fhealth.economictimes.indiatimes.com%2Fnews%2Findustry%2Ftaking-the-good-with-the-bad-how-potential-covid-19-vaccines-offered-hope-and-disappointment%2F78069594&mailer_id=0&item_id=3919885&dt=2020-09-12&utm_source=Mailer&utm_medium=ET_batch&utm_campaign=ethealth_news_2020-09-12](https://health.economictimes.indiatimes.com/l.php?url=https%3A%2F%2Fhealth.economictimes.indiatimes.com%2Fnews%2Findustry%2Ftaking-the-good-with-the-bad-how-potential-covid-19-vaccines-offered-hope-and-disappointment%2F78069594&mailer_id=0&item_id=3919885&dt=2020-09-12&utm_source=Mailer&utm_medium=ET_batch&utm_campaign=ethealth_news_2020-09-12)

.A venture of Serum

Institute of India -<https://health.economictimes.indiatimes.com/tag/serum+institute+of+india> .

Whether Mask is an equivalent Vaccine - <https://www.webmd.com/lung/news/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 - <https://www.npr.org/sections/health-shots/2020/08/15/902616040/can-testing-students-for-coronavirus-twice-a-week-prevent-campus-outbreaks> .

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> .

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> .

COVIDSHIELD 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> .

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<https://health.economictimes.indiatimes.com/tag/covid-19+fatality> Hyderabad ,India - The Capital of World's vaccine

developement -<https://health.economictimes.indiatimes.com/tag/vaccine>

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

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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> .

Spain to start vaccine trial with Johnson & Johnson -

<https://health.economictimes.indiatimes.com/tag/coronavirus+vaccine> Vaccine trial volunteer around 35 % are infected

with Covid19 - https://health.economictimes.indiatimes.com/l.php?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 .

[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](https://health.economictimes.indiatimes.com/l.php?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)

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[batch&utm_campaign=ethealth_news_2020-09-15](https://health.economictimes.indiatimes.com/l.php?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%2F-covid-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 -

https://health.economictimes.indiatimes.com/l.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=2020-09-15&utm_source=Mailer&utm_medium=ET_batch&utm_campaign=ethealth_news_2020-09-15

Russian 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 - <https://www.nature.com/articles/d41586-020-01221-y> .

Clinical trial has been de-accelerated - <https://nature.us17.list-manage.com/track/click?u=2c6057c528fdc6f73fa196d9d&id=c80db941d1&e=5944515236>.

A few volunteer left **vaccine trial from Johnson & Johnson** -

<https://health.economictimes.indiatimes.com/tag/astrazeneca> <https://health.economictimes.indiatimes.com/tag/volunteers>.

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 - <https://health.economictimes.indiatimes.com/tag/novavax>

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

Vaccine access plan released by NASEM (U.S) -<https://nature.us17.list-manage.com/track/click?u=2c6057c528fdc6f73fa196d9d&id=8a9f1cbf7c&e=5944515236> .

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The first 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>
Liii drugs - 1.7 % patients 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 nucleocapsid protein . " Novel spike crown " . AZ - Under pressure for vaccine safety trial - <https://health.economictimes.indiatimes.com/tag/astrazeneca>
<https://health.economictimes.indiatimes.com/tag/coronavirus> .

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> .

Challenges of Matthew Duchars , CEO of U.K vaccine production centre in large scale - [https://nature.us17.list-](https://nature.us17.list-manage.com/track/click?u=2c6057c528fdc6f73fa196d9d&id=8a9f1cbf7c&e=5944515236)

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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 effectiveness of Covid19 - [https://nature.us17.list-manage.com/track/click?](https://nature.us17.list-manage.com/track/click?u=2c6057c528fdc6f73fa196d9d&id=2ae67ba1fa&e=5944515236)

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The **Gold -standard trial** with a large number of recovery are going on U.K - <https://nature.us17.list-manage.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 -

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Whether Recovered patient having **sufficient antibody** - Preprint Characterization of neutralizing versus binding antibodies a. . . Immunity & vaccine - great query - Without adequate immunity how a vaccine works ?-

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08&utm_source=Mailer&utm_medium=ET_batch&utm_campaign=ethealth_news_2020-09-08 .

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CanSino Covid Vaccine trial - 3RD phase in Pakistan- [https://health.economictimes.indiatimes.com/l.php?](https://health.economictimes.indiatimes.com/l.php?url=https%3A%2F%2Fhealth.economictimes.indiatimes.com%2Fnews%2Fpharma%2Ficansino-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)

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SUMMARY FROM DISCUSSION LINK :

1. AZD1222-A decision is taken by the panel of expert of AZ Pharma will review the unexpected of UK patients -<https://health.economictimes.indiatimes.com/tag/unexplained+illness> For Immunity booster -new formulation based on Zinc Gluconate and natural Vitamin C coming from Acerola Cherry for boosting immunity -To accelerate vaccine work<https://health.economictimes.indiatimes.com/tag/covid-19+drug>.

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3. A venture of Serum Institute of India <https://health.economictimes.indiatimes.com/tag/serum+institute+of+india>
4. Whether Mask is an equivalent Vaccine <https://www.webmd.com/lung/news/20200909/could-your-mask-be-a-kind-of-vaccine-against-covid-19>
5. CPT(Consultant plasma therapy) -Not effective to reduce the 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
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Conclusion : Social consciousness 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 **appropriate clinical safety and efficiency trial** .

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Keywords

Covid19;Immunity;Immunology;Vaccine development;Social consciousness;Vaccine biotechnology;Infectious diseases;Virology;SARS-COV-2;Reproducibility test;Clinical trial and safety;Convalescent plasma therapy

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