

YOUR IMMUNE SYSTEM

What IS Your IMMUNE System?

You probably only think about your Immune System when those COLDS - and the FLU Bugs - are doing the rounds.

But it is working ALL the time, to guard you against ANY “foreign invaders”, by mounting constant ATTACKS on them - to defend your body, without you (us) even noticing it! 😊

It’s a huge, complex network of - Cells - Organs - Proteins - and Antibodies - known as IMMUNOGLOBULINS - designed to prevent your body from invasion, by - BACTERIA + VIRUSES + PARASITES, and the evils of >>> Rx [BIG PHARMA!](#)

In fact, it acts to SAVE YOUR LIFE - on a daily basis - because it launches that attack whenever it detects something (anything) that should NOT ever be there.

WILL SAVE YOUR LIFE

Proper NUTRITION is the KEY to providing us with a healthy IMMUNE SYSTEM - “not” [doctor, over- prescribed] **P-I-L-L-S** from Big Pharma! Your Immune System also shifts dead or faulty cells out of the body, and, if it is working correctly, it recognizes normal, HEALTHY tissue, and leaves that alone. While we usually think of our Immune System when we feel ILL - it’s actually working for us - every single day => to keep us SAFE.

FOR YOUR PROTECTION

It “protects” your body from harmful substances / germs / cellular changes - all of which that could make you SICK. That is - it fights DISEASE causing GERMS (pathogens) and FUNGI, and removes them from the body - it recognizes, and neutralizes, harmful substances we get from the environment – it helps us to cope with “changes” in the body, such as CANCER cells.

Dr Jenna Macciochi, Immunologist, and author of “Immunity, The Science of Staying Well” - and Holland & Barrett Senior Nutritionist, Emily Rollason, tell us the following ...



“Many different factors play a role in our own immunity - and no two people’s Immune Systems are the same” - says Emily Rollason. “For example, certain hereditary factors - environmental impacts - how balanced and nutritious our diet is - hydration status, and lifestyle factors [like lack of sleep, stress, smoking and alcohol] all impact our immunity.”

They Both Advise: “Get plenty of SLEEP: if you miss out on sleep, your entire Immune System can’t release enough protective proteins [called cytokines]. And your production of antibodies, which fight infection, also declines. And getting a poor night’s sleep can really jeopardise your Immune System the next day”, says Dr Macciochi.

“That makes us much more susceptible to picking up germs and it takes us much longer to recover, so it’s important to prioritise sleep. It is a “signal” to the Immune System that it’s time for rest, whereas in the day, it’s more about being on standby. Getting enough REST daily and SLEEP nightly - can be the difference between staying healthy or not.”

GUT

Your G-U-T [the 9-Meter-Long DIGESTIVE System] ...

IT Comprises => 80% - 85% of Your IMMUNE System!

In fact, it's very often the first place where bacteria and viruses attack, so it's important that your GUT is in good condition - and has plenty of "friendly bacteria" at its disposal - within a diverse community of trillions of gut bacteria living in your gastrointestinal (GI) tract.

These microbes not only help with your critical DIGESTIVE health, they also influence your overall => HEALTH & WELLNESS.

Because your Immune System - and Digestive System - are so inter-connected - the problems in your GUT could "also" quickly make you more susceptible to feeling RUN DOWN, or picking up other nasty illnesses. It's not an easy link to get your head around.

PROTECTION - But the simplest way to think of it is that a healthy GUT greatly "protects" - and "supports" - the Immune System - by preventing the infiltration of pathogens (or germs) into the body.

A Simple Breakdown of how GUT HEALTH - and IMMUNITY - interact:

A healthy DIGESTIVE Tract allows the microscopic particles of "digested food, and nutrients" to pass through the GUT wall. But with the right balance of bacteria, it can also keep out larger food particles and potential pathogens.

Look at this - - -



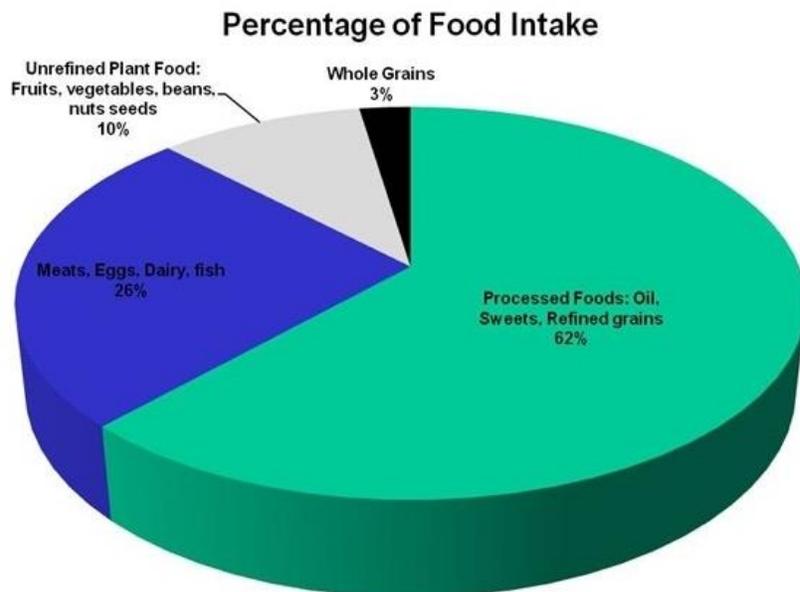
This Chart Tells the FULL STORY! ...

26% of the people are in **BLUE**
[Meat - Eggs - Dairy - Fish Poultry]

62% are in the **TURQUOISE**
[Processed Foods: Oil - Sweets - Refined - etc]

This means => **88%** of the World's Total POPULATION is Eating the WRONG foods!

They're **Jeopardizing** Their **G-U-T** - and Thus, their Vital **IMMUNE SYSTEM!**





If conditions within the **GI Tract** are not optimal, the **GUT** 'wall' could be damaged. This in turn, may allow "large food particles, and pathogens" to escape into the rest of the body - and when such 'invader' particles do permeate the GUT wall - it "triggers" an Immune System response - including pain and inflammation in the GUT. But - it can also affect other parts of the body too!

Support Your Immune System => with **HEALTHY F-O-O-D ...**

Yes - your **D-I-E-T** [although not the ONLY factor] - has the most critical part to play in your overall WELLNESS - and so, if you can, you should really try to eat some immune-boosting, Whole Food Plant Based Nutrition (WFPBN), and ... lots of Fruits & Veggies - every single day!

You can take them in "liquid" form - by making JUICES and SMOOTHIES - if you'll find this easier. "We're looking for a balanced diet - getting a lot of nutrients - from different types of foods", says Rollason. "The main nutrient everyone thinks of, when we think of immunity, is VITAMIN C - which can be found in fresh fruits and vegetables [like bell-peppers, oranges, etc]. Then there's VITAMIN A, which can be found in apricots and green leafy vegetables, etc. And try to eat lots of whole grains."



Yes, HEALTHY NUTRITION ... plus a HEALTHY DIGESTIVE SYSTEM ... is "Essential" in SUPPORTING a Strong, HEALTHY, **IMMUNE SYSTEM!**

The immune system needs certain NUTRIENTS to work effectively, and to defend your body against pathogens. So, what GUT-friendly F-O-O-D-S should you eat?

Superfoods - Mention IMMUNITY, and DIET - and 'superfoods' instantly come to mind. This collection of foods earned their heroic label due to the density and richness of their nutrient content. They're packed full of vitamins, fibre and antioxidants. Their impressive NUTRITION credentials offer some high benefits to **immunity** and your overall **health**.

Blueberries - Kale - Sweet Potatoes - Beans - Whole Grains - Nuts - Acai Berries

PRObiotics - to boost the balance of **good bacteria** in the GUT. These are well known for aiding digestion problems, such as "bloating" and "constipation" - for helping reduce IBS symptoms - and for supporting Immune System function. These are a critical! More:

Probiotics are found in certain types of food ... such as “cultured dairy products”, and “unpasteurized, fermented” foods. They also come in the form of SUPPLEMENTS.

Popular Probiotic FOOD Sources - Live Yoghurts - Kefir - Sauerkraut - Kimchi - Pickles Tempeh - Natto - Miso – Kombucha. But, in order to get all the probiotic “benefits”, this good bacteria must be ALIVE when you eat it. So, it’s important that, for example, your yoghurts are ‘live’, or contain ‘active’ ingredients ... and again, choose unpasteurised and fermented versions of these foods.

PREbiotics - If you want PRObiotics to do their job, you need to “nourish” them - and so, PREbiotics are “non-digestible” food ingredients that can fuel helpful bacteria. They are most commonly found in some FIBER-RICH foods.

For example - Onions - Garlic - Leek - Jerusalem Artichokes - Asparagus - Bananas - Jackfruit ... all being good PREbiotic food stuffs.

So, to make the distinction clear ... PRObiotics introduce “new bacteria” into your GUT, and PREbiotics fuel the bacteria “already in” your GUT. And together, they are a highly compatible duo! 😊

HIGH FIBER Foods - These help keep your digestive system healthy, by encouraging “regular bowel movement”. It’s also a good source of PREbiotics, for the good bacteria in your GUT, to feed off.

However, it’s important not to “go overboard” with your fiber consumption - as this can lead to “negative” effects on your GUT health. The NHS advises a daily intake of around **30g** of FIBER + drinking plenty of WATER.

BENEFITS of Fiber - Reduces Cholesterol - Promotes Healthy Weight - Adds Bulk to the Digestive Tract - Promotes Blood Sugar Control - Reduces Colon Cancer Risk.

Major VITAMINS

VITAMIN A - supports the “normal functioning” of the Immune System, as it’s thought to help develop a type of WHITE BLOOD CELL that produces antibodies. Some sources of vitamin A include - Eggs - Dark Green Leafy Vegetables - Cod Liver Oil.

VITAMIN B-6 (Pyridoxine) - helps support our Immune Systems, as well as nervous system function, protein metabolism, and red blood cell formation.

It’s usually found in ANIMAL products, like Pork, Fish, and Eggs - and also in PLANT foods, like Chickpeas, Whole-Grains - Bananas – Squash, and more.

VITAMIN B-9 (Folic Acid) - Water-Soluble, vitamin B9 plays an essential role in the forming of Red Blood Cells in the body, that affect our Immune System. Good sources of Folic Acid include - Broccoli - Leafy Green Veggies - Brussels Sprouts.

VITAMIN B-12 - helps make Nucleic Acid and Cell Proteins, both associated with our immune system. You can find it in - Meat - Fish - Dairy - Eggs - Enriched Nutritional Yeast - Fortified Milks - Mock Meats.

It is needed to help your body convert food into ENERGY, and since it is only “naturally” found in ANIMAL products - Vegans and Vegetarians ‘are’ at RISK of low intakes.

NUTS and SEEDS tend to be the main “plant-based” source of minerals - but **B12** is difficult to get - so if you’re fully Vegan you can take a SUPPLEMENT, or get it from things like Nutritional Yeast and supplemented Plant-Based Milk (with added iodine).

VITAMIN C - help support “cellular functions” needed by the Immune System. Sources of Vitamin C include - Oranges - Orange Juice - Broccoli - Tomatoes - Strawberries - Red & Green Peppers.

VITAMIN D - Between October and April the sun is NOT strong enough for us to be able to “synthesise” our own vitamin D - and we need to take around **10 micrograms** a day. It help to keep your Immune System strong, with the ability to fight off infections quickly.

As most vitamin D is received from SUNLIGHT , Nutritionists recommend taking a daily SUPPLEMENT between October and March.

VITAMIN E - important for strong immune function and helps maintain healthy skin and eyes. It’s also an **antioxidant**, so it protects the body from damage due to dangerous FREE RADICALS (oxidation).

Plant oils, like Olive Oil, are a rich source of Vitamin E. Soya, nuts and cereal are good sources too.

Major MINERALS

ZINC - contributes to the “normal function” of the Immune System. You can find it in - Seafood - Red Meat - Chickpeas - Eggs - Sunflower Seeds - Pumpkin Seeds. Zinc does help immune cells - and a “deficiency” of zinc leads to troubled cell functioning. MORE:

However, you need to be careful not to consume more than the recommended daily allowance, which is **25mg**. This trace mineral functions as one of the essential nutrients to boost the immune system.

Zinc helps in restoring the “defense” of the Immune System, and relieves colds, sore throats and heals wounds.

IRON - needed for making HAEMOGLOBIN, a “protein”. It is one of the most important minerals for our bodies, especially when it comes to our Immune System. In fact, being “deficient” in iron can have negative effects on the Immune Systems and potentially leave us vulnerable.

You can find it in - Red Meat – Fish - Leafy Green Vegetables – Beans - Chickpeas - some Fortified Foods. The most important function of iron is that it helps in “transporting oxygen” throughout the body. It promotes the production of hemoglobin, the carrier of oxygen present in red blood cells.

A “deficiency” of red blood cells not only leads to anemia, it also increases exhaustion, and reduces the ability of the Immune System to fight infection - causing viruses and bacteria. Iron is also required for proper functioning of immune cells – “neutrophils” and “lymphocytes”.

MAGNESIUM - is an extremely important mineral that helps in proper functioning of vital organs, such as the HEART and KIDNEY. Deficiency of magnesium leads to impaired immune functions, and triggers chronic inflammation that increases the risk of Cancer - Multiple Sclerosis - Diabetes, etc.

Magnesium also “regulates” the level of other nutrients, such as Vitamin D - Calcium - Zinc - and therefore, it is important to have enough of it to metabolize these nutrients.

SELENIUM - an ANTIOXIDANT, is another mineral essential for Immune System function - as well as Thyroid Function - Hair - Nail Maintenance - Normal Sperm.

Selenium is the “ultimate” immunity boosting nutrient, and the survival of patients suffering from AIDS depends on the presence of this mineral, in serum.

A “deficiency” of Selenium has been shown to increase the risk of various **CANCERS**, such as Breast Cancer - Colon Cancer - Prostate Cancer.

It improves the defense mechanism of the Immune System ,and helps in keeping away disease-causing “pathogens”. The best way to maximize the benefits of Selenium is to combine it with Vitamin E supplements. Get your fill from foods like - Brazil Nuts – Tuna, Eggs - Prawns - Oats - Spinach.

COPPER - plays a very important role in improving immunity - by “destroying foreign microbes”. It promotes the functions of immune cells that attack and destroy foreign bacteria and viruses.

Copper is essential for “optimum utilization of” IRON in the body. It also improves “enzymatic” reactions and functions of “connective tissues”. But too much of this metal is harmful to health - and therefore it is best to take copper supplements as per your physician’s instructions.

CALCIUM - is the mineral most often associated with healthy BONES and TEETH - although it also plays an important role in - Blood Clotting - in helping Muscles to Contract – in regulating normal Heart Rhythms and Nerve Functions. Dried or Fresh FIGS provide your body with **135 mg** of Calcium. Papayas and Oranges are two other fruits high in Calcium

BOTTOM LINE



A HEALTHY => G-U-T!

NUTRITION (the FOOD we eat) is THE single **M-O-S-T IMPORTANT** factor for maintaining => a **HEALTHY IMMUNE SYSTEM** [up to **80%--85%**]!

BUT ...

Here’s an overview of other TIPS as well, on **HOW BEST** to support your **critical IMMUNE SYSTEM**:

Get a good night’s sleep - Exercise regularly - Maintain a healthy weight - Reduce stress
Follow good hygiene practices - Cut your nails (it may sound strange, but long finger-nails can become a breeding ground for bacteria) - Avoid smoking - Limit your alcohol intake - Cough and sneeze into a tissue, away from other people (don’t reuse tissues) - While COVID is rampant, avoid public places if you can - Clean surfaces - Wash hands!