

WHAT ARE Probiotics?

Probiotics are live microbes (organisms that are so tiny that one can only observe them under a microscope) that are needed by our body to promote health. In plain language, probiotics are friendly microbes or "good" microbes to humans. I say "good" microbes here because they bring a lot of health benefits to us such as help in digestion, stimulate the immune system and to protect us against the "bad" microbes that will make us sick.



Lactobacillus

This is the most common probiotics bacteria in supplements, yogurt, etc. Lactobacillus is commonly found in our guts and a number of body sites, and plays an important role in maintaining our well-being. The common species of Lactobacillus include *Lactobacillus acidophilus*, *Lactobacillus bulgaricus*, *Lactobacillus rhamnosus*, and *Lactobacillus casei*.

Bifidobacteria

Just like Lactobacillus, Bifidobacteria is also a common probiotics bacteria in supplement and food. Bifidobacteria normally live in our intestines and stomach. They help our body perform important functions such as digestion and competing with "bad" bacteria for food so as to starve them to death. Examples of Bifidobacteria are *Bifidobacterium bifidum* and *Bifidobacterium breve*.





Streptococcus

It is a type of Lactic acid bacteria (LAB). Some of the species of Streptococcus may cause disease in humans, but the majority of the Streptococcus species are not harmful, but live naturally and peacefully in our mouth, skin, guts and upper respiratory tract. Streptococcus is used in the making of Swiss cheese.

ARE PROBIOTICS REALLY GOOD

For Health?

By Dr Chai Lay Ching

Wellous Food & Microbiology Advisor

Probiotics is a huge buzzword in today's modern society. Consumers are spoiled with a huge variety of probiotics products in the market, from supplements such as probiotics drinks, probiotics pill, to probiotics food such as milk and ice cream with probiotics, kombucha, yogurts and to skin care products with probiotics. But what are probiotics and are probiotics really good for our health? Is it scientifically proven?





WHY DO WE NEED Probiotics?

Many people are very afraid of microbes, or some refer microbes as germs. Have you met someone who is so obsessed with cleanliness and personal hygiene that they probably wash and sanitize their hands every now and then? If yes, you may notice that this someone would probably easily develop eczema or have some sort of skin infection. Why? This is because over cleaning would remove and kill the natural microflora on the skin surfaces that protect us from the attack of "bad" microbes in the environment.

Scientific study reveals that there are about as many microbial cells in the human body as there are human cells, which makes us half human and half microbes. These microbes reside on various body sites including the skin, gastrointestinal tract, uterus, lung, oral cavity, saliva, conjunctiva, biliary tract, mammary glands and seminal fluid. Some microbes are commensal (co-exist without causing harm); while others are mutualistic (bring benefit to humans). Research has shown that gut microbiome (the different microbes live in our gut) plays essential functions such as help in food digestion and nutrient absorption, stimulate and train our immune systems, combat diseases like intestinal disorders, regulate bowel movement, improve gut-brain barrier that promote mental health and many more.

So, without a balanced and healthy gut microbiome, we will not be able to properly digest food that may lead to malnutrition, weaken immune systems and deteriorate health. Our gut microbiome develops since birth and stabilises at the age of 3 to 5 years old. Factors such as mode of delivery, diet, environment and genetics all play a role in shaping the gut microbiome. Once the gut microbiome is established, the composition of the gut microbiome is relatively stable. However, this balance can be disturbed due to disease, antibiotic treatment, change in lifestyle, and a long-term change in diet. Shifts in gut microbiome composition have been reported to increase the risk of disease. Therefore, replacing the lost microbes in our gut by consuming probiotics has been shown to bring many health effects.



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WHERE CAN WE OBTAIN Probiotics?

Many Fermented Foods Contain Probiotics.

For Example: Yogurts, Kefir, Kimchi, Kombucha & Sauerkraut.



Yogurt perhaps is one of the most well-known probiotics food to many people. However, not all yogurts are considered as probiotics. Some yogurts are heated after fermentation to kill all the probiotics bacteria to stabilize the product, and therefore the heat-treated yogurt will no longer be considered as probiotics food as it contains no more living microbes. In general, production of yogurts involves two types of probiotics bacteria: Lactobacillus bulgaricus and Streptococcus thermophilus. Other types of probiotics bacteria may be found in yogurts too, such as:

Bifidobacterium bifidum

Bifidobacterium lactis

Bifidobacterium longum

Bifidobacterium faecium

Bifidobacterium acidophilus **Bifidobacterium** casei

Another internationally popular probiotics drink that is believed to be packed with health-benefits is kombucha. Kombucha is a type of fermented sweet tea that is thought to be originated from either Japan or China. During the fermentation process to produce kombucha, bacteria and yeast form a gelatinous mushroom-like film on the surface of the liquid that contains living symbiotic bacteria and yeast (SCOBY). SCOBY can be used to ferment new batches of kombucha and it also serves as the source of probiotics for kombucha.

Apart from the foods mentioned above, taking probiotic supplements is also a good choice for us to maintain gastrointestinal and immune health. Furthermore, in this modern and advanced technology era, taking probiotic supplement can easily obtain various types and high amount of probiotics.

HOW TO CHOOSE THE RIGHT Probiotic Supplements?

Nowadays, probiotics have received a lot of attention as these living organisms have been shown to provide all kinds of health benefits to the human body. They may survive in the human GI tract and temporarily colonize the gut. However, probiotics only survive approximately 1-2 weeks after ingestion and this is why it is significant to make sure that we choose high quality probiotics. Here are a few top things to look for when choosing probiotic supplements:



MULTIPLE STRAINS

Our gut contains about 1000 types
of bacteria and yeasts. Each of
these microbes in our gut play a
specific role and work together
to bring health to humans.
Therefore, the diversity of microbes
need to be maintained for a balanced
gut microbiota. High dosage of
single-strain probiotic may cause imbalance



of gut microbiota. Whereas, multi-strain probiotics may provide more holistic health benefits.

Common probiotic strains used in probiotic products are *B. bifidum* and *L. acidophilus* that can effectively alleviate irritable bowel syndrome (IBS). Meanwhile, for kids, we may consider looking for *B. Breve, B. Longum* and *L. rhamnosus GG* strains that scientifically proven can help children with IBS symptoms, relieve skin allergy symptoms and enhance gut health. On top of that, these strains are generally recognized as safe (GRAS) by USFDA.

HIGH CFU

CFU stands for Colony Forming Unit and this term basically tells us how many good bacteria that are alive within that supplement and have the ability to protect our body from illness. Some of the bacteria are bound to die during transit to our intestines, so the more we ingest, the greater the

it should be.

chance of an effective colonization. So far, the science industry does not have sufficient scientific knowledge to decide the

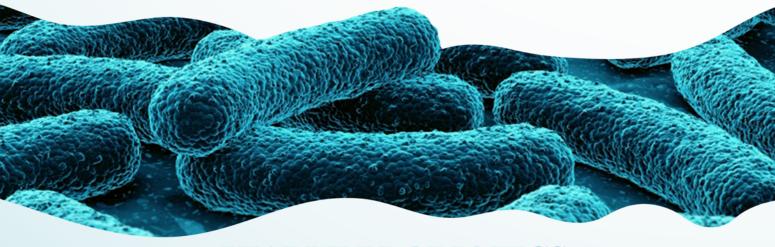
exact daily intake of probiotics. Dosage of probiotics is actually depending on the individual's purpose of taking probiotics. However, most of the clinical trials have shown that a daily intake of 10 to 20 billion CFU of probiotics is sufficient to maintain immune and digestive health. Anything lower than that is not going to be quite as effective as





ADDED WITH PREBIOTICS

The probiotic industry is rising but the benefits of probiotic products and the quantity of viable bacteria they contain can vary. So, apart from looking for the best probiotics products, it is so much better if we add in prebiotics to support our own beneficial bacteria. Prebiotics provide the fuel necessary for probiotics to grow and thrive. High quality probiotic supplements should have both prebiotic and probiotic that are designed to support healthy digestion and immune system function. This condition is referred to as 'synbiotics'. The best synbiotics contain healthy plant starches and fiber rather than sugar to help feed the probiotics and help them grow.



VIABLE PROBIOTICS

Probiotics must be viable, so that it can play its role as beneficial bacteria in the stomach. If most of the probiotics in a product are dead before entering our body, then the effectiveness of the product will be reduced dramatically. Hence, the manufacturing process of probiotics is one of the most important factors. Probiotics are sensitive to temperature as high temperature can kill them. Some probiotic products are in liquid form, hence they are required to be refrigerated to keep the viability of the probiotics. While some manufacturers are using advanced technology to preserve the viability of probiotics, such as freeze drying and microencapsulation. These techniques can help to remove excess moisture from the probiotic cells, making it powder form but do not destroy the viability of the product. At the same time, they are less sensitive to temperature, hence refrigeration is not required. Apart from that, probiotics that use microencapsulation technology are less likely to be destroyed by our stomach acid, so more probiotics can safely reach our intestines.

NUTRIENTS NEEDED TO Maintain a Healthy Gut

DIETARY FIBER

Dietary fiber is a nutrient from plants that is resistant to human digestive enzymes. This nutrient is divided into 2 main groups, called soluble fibers and insoluble fibers. Insoluble fiber is not soluble in water, it functions to bulk up the stool and prevent constipation, this can ensure a healthy bowel movement to the consumer. On the other hand, soluble fiber is soluble in water, it forms a gel-like substance around the digestive system and aids in regulating cholesterol and blood sugar level. American Heart Association (AHA) recommends taking 25-30grams of dietary fiber from food daily. Dietary fiber comes from all plant based foods, hence a person is recommended to take at least 5 servings of fruits and vegetables. Some of the common foods that are high in dietary fiber include spinach, broccoli, beets, apple, banana, guava and more. Taking whole grain rice and bread rather than white rice and white bread is one of the ways to increase intake of dietary fiber in diet.

PREBIOTICS

Most of the dietary fibers are prebiotics. Prebiotics are non-digestible substances that act as food to feed the good bacteria, the probiotics. Prebiotics possess the ability to resist gastric acidity, hydrolysis by enzymes and transport to intestinal tracts. Prebiotics as the nutrient for probiotics, allow intestinal microflora to undergo fermentation and selectively promote the growth of intestinal bacteria, this allow good bacteria to increase in number and increase activity of good bacteria. Some of the common prebiotics include chicory root, resistant maltodextrin, human milk oligosaccharide (HMO) and yeast beta glucan.

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SHOULD CHILDREN Take Probiotics?

By Dr. Amir Farid Isahak

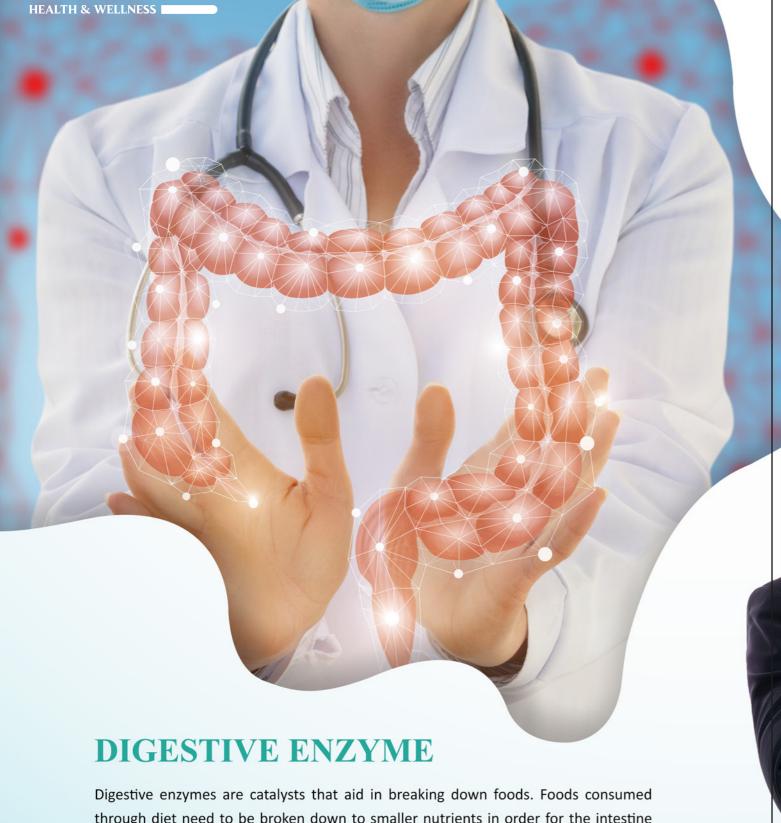
Wellous Medical Advisor

Our children have a whole exciting life ahead of them. They should be able to enjoy growing up in a happy and healthy environment, with much love and care from their parents and family.

But it is not all fun and laughter for them. When we were children, most of us had experienced all sorts of illnesses like mumps, measles, chicken pox, in addition to the cuts and bumps. Fever, runny nose, blocked nose, coughs, earache, toothache, stomach ache, bloatedness, vomiting and diarrhea are very common symptoms experienced by children. They are also prone to allergies, eczema, other skin afflictions and asthma. Actually, getting sick need not be part of growing up. We can help reduce the frequency of our children getting sick by ensuring

that they eat nutritious food, wash their hands often, especially each time before touching food, have adequate sleep, and avoid mixing with other children having fever, coughs and colds who are likely to pass their germs to them.

Of course it is almost impossible to always keep children away from those carrying these germs. Children having runny noses are so common among some communities, that it is regarded as "normal". So how do we improve their health and strengthen their immunity so that they can stay healthy despite being exposed to all sorts of germs? Apart from the nutritious food and good sleep mentioned above, let us take a look at how nature helps the newborn baby defend itself against all these germs.



Digestive enzymes are catalysts that aid in breaking down foods. Foods consumed through diet need to be broken down to smaller nutrients in order for the intestine tract to absorb those nutrients. Macronutrients such as carbohydrates are broken down by amylase, proteins are broken down by protease and lipase digest lipids or fats. Lacking certain enzymes might lead to gastrointestinal discomfort which will cause diarrhea, this medical condition is called food intolerance. Foods that contain high amounts of digestive enzymes include papaya, pineapple, banana, avocado and honey.

MOTHER'S FIRST GIFT

To Her Baby

A baby develops in a sterile environment in the mother's womb. As she is born, she is immediately "contaminated" by the environment in the mother's vagina. Did you know that the healthy vagina has abundant "friendly" bacteria that keep the vagina clean and healthy? Its presence creates the acidic environment that makes other germs and parasites difficult to survive. This good bacteria was first discovered by a gynecologist, Dr. Albert S Doderlein, and so it was called Doderlein's bacilli. Now it is known as Lactobacilli.

So the newborn baby acquires this and other friendly bacteria on her way out at birth, and it becomes her own first protector against unfriendly germs. The Lactobacilli will colonize her intestines, and it will be joined by many other types of good bacteria throughout her life. What if the baby is born by caesarean operation? Well, she will miss this first gift, but wait, her mother has another gift waiting for her. That is her breast milk, which contains many types of good bacteria, the most important of which are the Lactobacillus and Bifidobacterium groups.

Mother's milk also contains human milk oligosaccharides (HMO's) which are needed by the good bacteria as their food (prebiotic, see below). Every mother's milk composition is unique, and this determines the types of good bacteria that will flourish in her baby's gut. So the baby born normally will get both gifts while the baby born by cesarean surgery will get only one.

It is important that newborn babies are breast-fed as soon as possible for this reason. The good germs should get in them before the bad ones do. Unfortunately, some mothers have venereal infections and instead of giving good bacteria to their newborn babies, they give the bad germs. Pregnant mothers should make sure they are healthy throughout pregnancy and any necessary treatments should be completed before giving birth.



THE GOOD OR FRIENDLY Bacteria

These good or friendly bacteria are extremely important for the health of children as well as adults. This fact was only recently appreciated although Doderlein's bacilli was discovered in 1896 and the first serious research on the effects of the good bacteria on health was started soon after that. Recently, their importance has grown tremendously with the discovery that microbes (bacteria and other small organisms) in the gut and the rest of our body influence our overall health beyond what anyone had imagined.

Since a long time ago many cultures recognized the goodness of fermented food. But our forefathers did not know that there were good bacteria fermenting the food and producing substances that add to the health and nutritional value of the fermented food. Several decades ago the science of what is now called microbiome began to be understood. So let us get familiar with the terminology.





Microorganisms are extremely small living organisms like bacteria. They are also called microbes and many different types together are called microbiota. Microbiome actually refers to the sum total of microorganisms that inhabit a certain place. The microbiome includes good and bad (pathogenic) bacteria and other microorganisms.

Probiotics are good and friendly microorganisms that give some health benefits to us when ingested in adequate amounts. Prebiotics are the dietary fiber (eg. inulin) that are used as food by the good bacteria. Synbiotics refer to the combination of probiotics and prebiotics. The probiotics are then expected to be more effective since their food is already provided for them.

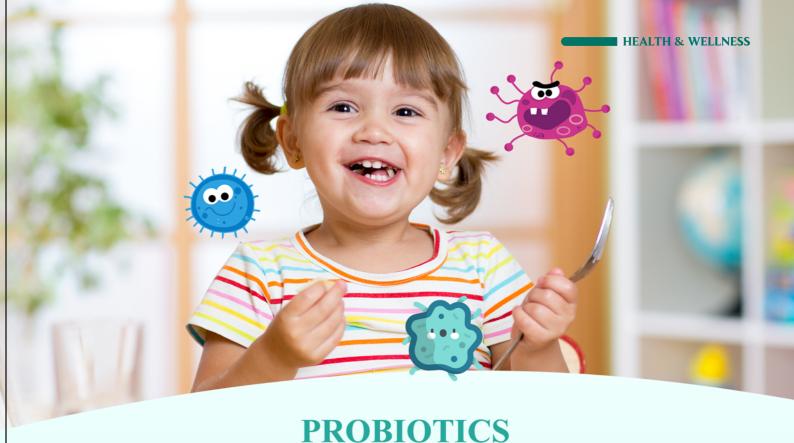
Postbiotics refer to the beneficial products (metabolites) produced by the probiotics. These are known to have a myriad of health benefits. Fermented foods are the products of activity by the probiotics (yeasts and bacteria) on certain foods. In our gut, the good bacteria produce biotin, vitamin B12, folic acid, and thiamine. They also ferment indigestible carbohydrates (dietary fiber) to short-chain fatty acids that are required for our metabolism.



PROBIOTICS IMPROVE The Health of Children

Now that you understand the science behind probiotics, you can appreciate why numerous studies have shown that it is beneficial to children (and adults too, but for now we shall focus on the children only). The health benefits of probiotics for children include improving overall health, reducing the frequency and duration of illness, improving bowel health, and even improving growth.

However, due to poor diets and frequent ingestion of antibiotics to fight infections (often unnecessarily given by doctors), the children's microbiome usually become less healthy (ie. the bad bacteria begin to dominate) as they grow. While the baby's microbiome is almost exclusively good bacteria, by the time they become adults their microbiome is full of bad bacteria. We can restore their microbiome to become healthy by making sure they stick to a plant-based diet (or vegetarian), including consuming plenty of fermented foods. And they must avoid antibiotics.



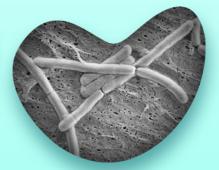
PROBIOTICS Supplement For Kids

However, most of them cannot be that disciplined, and with infections being so common, it is difficult to avoid antibiotics forever. Thus we should consider giving them a probiotic supplement to ensure their healthy microbiome is maintained. Better still, we should give them a complete package of probiotics, prebiotics and postbiotics to give the best and fastest health benefits.

The effective probiotic supplement should contain at least 10 billion CFU of probiotics per dose to ensure there is sufficient viable (living and active) good bacteria. The type or species of probiotics is also important, as they determine the balance of the microbiome (microflora) and give different health benefits. It is best to have the probiotics that have been proven effective by scientific studies. Three of the scientifically-proven beneficial probiotic species are *B. longum BB536*, *B. breve M-16V* and *L rhamnosus GG*. These have been extensively studied, and more studies are currently being done.







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Studies have shown that the 3 probiotic species separately and together are able to reduce the frequency of many symptoms of childhood health problems as described above. *Bifidobacterium breve M-16V* is a strain of bifidobacteria, a predominant species living in the infant intestine. The intestinal flora of a healthy infant is dominated by bifidobacteria, but in low birth weight (LBW) infants, it takes longer for bifidus-flora to establish.

Studies have shown that B. breve M-16V has possible benefits of promoting the healthy growth of LBW infants by improving the intestinal environment and immune system. It also reduces infections, allergies and dermatitis. Bifidobacterium longum subsp. longum BB536 is also a human strain which has been widely researched, with many proven benefits, including improving gastrointestinal health and alleviating allergic disorders, and asthma. Lactobacillus rhamnosus GG has also been extensively researched and proven to reduce eczema; helps restore gut health and a balanced microflora (microbiome) from the harmful effects of antibiotics (which includes bloatedness, diarrhea); helps prevent gastrointestinal infections; boosts the body's immunity to reduce the occurrence of common colds; and speeds up recovery time from the common cold should the child still gets it.

Examples of good prebiotics are inulin, 2'-fucosyllactose and yeast beta-glucan. Probiotic-fermented fruits and vegetables are rich in metabolites, and are among the most popular postbiotics. They are known to be safe, nutritious and healthy.

If we combine probiotics, prebiotics and postbiotics, these are the benefits that can be expected:



LIVEON'S PAR-TEA TIME WITH LYNN

To express the greatest gratitude for the tremendous supports for Wellous's star product, LIVEON Reviving DNA age-reversing beverage, the brand ambassador of LIVEON Lynn had initiated a special event by collaborating with LavieFlo, the renowned preserved flowers florist, in conjunction with mothers' day. The lucky LIVEON supporters who had been selected were jointly attending the preserved flower workshop, other than designing their very own unique flowers, delicate pastries and tea were also served during the event. Lynn shared her sincere thoughts about the consumption experience of LIVEON, and also reminded everyone that "as you show your love to others, don't forget about yourself too". Unlock your secret of youth today, LIVEON Reviving DNA!





8TH APRIL 2021 _____

TIGROX™ SERIES NEW PRODUCT LAUNCHED, HOMEGA, FISH OIL SOFTGELS

Wellous® has successfully launched a new product under the Tigrox™ series, called HOMEGA on 8th April 2021, making it the fourth product parked under it! Consists of Omegavie™ Fish Oil imported from France, HOMEGA is enriched with fish oil extracted only from deep sea fishes like sardine, anchovy and mackerel from three different countries, Peru, Chile and Morocco.

In addition to that, HOMEGA used MenaquinGOLD™ Vitamin K2 that possesses multiple clinical studies conducted and patents to ensure its efficacy which includes cardiovascular disease, muscle cramps, autonomic nervous system and others. HOMEGA, the unbeatable formula & golden combination in ensuring a good blood circulation.

8TH MAY 2021

TIFFIN PROMO: LEBARAN IS MORE MEANINGFUL WITH WELLOUS

Eid Mubarak or Eid al-Fitr is a celebration for Muslims after a month of fasting during Ramadan. In conjunction with the festival, Wellous® has launched a special promo to elevate the happiness among all Muslims Malaysians.

With every purchase of RM750 and above for all Wellous® products, customers will get an exclusive and limited-edition Tiffin. With that, Wellous® has successfully generated RM1.2 million from the sales and all 1,500 sets of exclusive Tiffin have been sold out in just one day! It is definitely an honour and Wellous® is extremely blessed to receive great support from the consumers.





20TH MAY 2021

SECOND PRODUCT UNDER KIDAONE™ SERIES, MICROBIOME – HEALTHY GUT, HAPPY CHILD!

In the second quarter of 2021, Wellous® has launched a new product under the KidAone™ series specially formulated for kids' overall health! Introducing KidAone™ Microbiome, the first and only formulation of [Probiotic + Prebiotic + Postbiotic Formula] in Malaysia, containing 10 billion of CFU probiotics which consists of 3 branded probiotic strains with thousands of scientific studies!

In addition to that, KidAone™ Microbiome also contains 3 types of prebiotics, and postbiotics fermented from 36 types of fruits and vegetables. The unique combination of [probiotic + prebiotic + postbiotic] possesses synergistic effects in reducing gut inflammation and accelerating the growth of new cells in the gut lining, making it a perfect solution to speedy microbiome restoration! KidAone™ Microbiome, an unconventional kid's probiotic with triple actions that can create a perfect childhood for your kids today!

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MAY 2021

WELCOMING DR. DANAR WICAKSONO AS THE WELLOUS INDONESIAN MEDICAL ADVISOR

Wellous® is extremely honoured to welcome Dr. Danar Wicaksono as our first Indonesian Medical Advisor. The medical doctor, Dr. Danar who is in the midst of becoming a dermatologist, graduated from Gadjah Mada University, Yogyakarta, Indonesia specialising in Medical Science.

In 2019, Dr. Danar received the 1st Runner Up in The New L-Men of the Year along with the Best Poster Presenter, Regional Conference of Dermatology in Asia. With the support he obtained over the internet, Dr. Danar always shares his experiences as well as tips and tricks about healthy lifestyle through his social media platforms. Once again, Wellous® would like to welcome Dr. Danar Wicaksono to be part of the Wellous's family in the Medical & Research Board of Advisory! Congratulations!

