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Sowkhya

Magazine™

Honey!! Golden Goodness?

Message from the Editor

Welcome to the September edition of Sowkhya Magazine™. I hope you are well and in great health!

The human body needs proteins, fats, carbohydrates and trace elements and minerals for life to go on. In addition, we also need vitamins for proper development of body functions. The origin of vitamins dates back to the early 1900s where it was just considered a compound required to maintain normal health. Almost every food that we eat contains vitamins, and low levels of vitamins in the body can lead to diseases such as beri-beri (vitamin B1), scurvy (vitamin C), rickets (vitamin D) and night blindness (vitamin A). This month, we have briefly discussed the discovery of vitamins, their sources, role in the human body and problems when their levels are low in the body.

Included in this month's edition is a brief discussion on honey – a miracle substance produced by honey bees and eaten in abundance by human beings.

This is the 12th edition of Sowkhya Magazine™ and we thank you for making it a real success. Our October anniversary edition will be a book that will include all 12 past issues, along with expert interviews and health tips that we know will help you! Until next time.....

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Editor, Sowkhya Magazine™

Honey: Golden Goodness?

At some point in our lives or another, we have tasted and enjoyed honey. We spread it on toast, add it to cakes or even just eat it plain as it tastes so good. But did you know that honey actually has a number of different health benefits? Let's take a closer look.

Honey is made by bees from the nectar of flowers. It mostly contains within it a high amount of glucose and fructose which gives it the sweet taste. It also contains vital minerals such as iron and calcium along with sodium and potassium.

Medicinal benefits

The uses of honey as a medicine dates back to the Egyptian civilisation. It was used in dressing wounds so that they would heal quickly. Honey was also offered as a gift to the Gods.

Over the years, more and more attention is being paid to the medicinal properties of honey, and not just its taste. It is believed to have anti-bacterial and anti-inflammatory properties. In fact, clinical studies that have looked at the benefits of honey also confirm some use in the management of illnesses such as a cough and cold. But these effects are more limited to experiments in a laboratory, and are rarely seen when individuals take honey.

Studies have been conducted looking at the effects of honey in acid reflux disease (a condition where there is increased acid production in the stomach). It is believed to have some benefit in treating this condition. When applied directly onto a wound, it can promote healing, though this has been argued tremendously in the scientific community.

Manuka honey

Recently, a newer kind of honey has emerged in the market called *Manuka honey*. This honey originates from New Zealand, and is derived from the honey bees that pollinate the manuka bush plant.

Manuka honey contains high levels of hydrogen peroxide, which imparts to it the antibiotic quality. It also has methylglyoxal which possesses antibacterial properties. This is present in varying quantities in different kinds of Manuka honey, and the more the concentration of methylglyoxal, the more powerful the antibiotic effect. It appears to be particularly effective against the deadly MRSA bacteria. However, more studies are needed to confirm this benefit.

It should come as no surprise that nature would have a product such as honey with such great health benefits!

Probiotics – What Are They?

In the recent years, the Western world has seen an increasing use of products called 'probiotics'. They are advertised on television as products that can help maintain a healthy gut and normal bowel motion. They are also help in fighting infections.

Now, before we jump into what probiotics are, let's understand a little bit about the normal bacteria within the bowel. In the bowel, there are present over 500 kinds of bacteria that help breakdown food, aid digestion and build up immunity. These are sometimes called 'good bacteria'.

In times of illness or after the use of antibiotics, these 'good bacteria' can die and are replaced by 'bad bacteria'. These bad bacteria are responsible for increased bloating, gas production and at times diarrhoea.

How probiotics help

Probiotics are basically concentrates of 'good bacteria'. They can help improve the function of the intestine and aid breakdown of food. There is some evidence that they can also help build up the immunity of the body. A better immune system means the body can fight infection effectively.

Studies conducted in reputable universities in the Unites States have suggested that probiotics can help treat childhood diarrhoea, diarrhoea due to antibiotics and certain bowel conditions such as ulcerative colitis and infective diarrhoeas (caused due to bacteria). It may also be of some use in patients who suffer from irritable bowel syndrome (IBS).

It has been suggested that probiotics can be used to treat a number of other conditions, but since the scientific studies supporting these are extremely limited, we decided not to mention them here.

But a word of caution – while probiotics may have benefits, they may cause harm in individuals who already have a low level of immunity or those who have a serious infection or illness. If you are considering using probiotics on a regular basis, please consult your doctor first to make sure it is safe for you to do so!

Vitamins – Essential Elements for a Healthy Life

The human body requires a complex cocktail of essential nutrients to function normally. Amongst these, vitamins are important as they help nourish the cells and are in charge of certain enzyme reactions that are important to sustain life.

There are a number of different vitamins that the body needs, and each of these serve a different function. But before we look at what vitamins can do for you, have you ever wondered why vitamins are called A, B, C, D etc.? Let's take a look.

Vitamin names – Why are they called so?

Many years ago, scientists started looking for reasons as to why animals did not grow to be healthy adults. They found out that these animals were low in certain essential nutrients, though they were unable to figure out what exactly they were.

As research progressed, new claims and discoveries were made. In 1905, Cornelius Adrianus Pekelharing recognised that milk contained within it certain essential elements in very small quantities that helped maintain good health and normal growth. In 1912, Casimir Funk, a scientist who was studying rice, discovered a factor that he described to be similar to a protein building block called amino acid. He called these 'amines', and since they were vital to human life, they were called 'vital amines'. Eventually, these two words were joined together to form 'vitamines'. The 'e' was ultimately dropped as the subsequently discovered vitamins were not amines. Hence the name 'vitamin' was born.

Between 1910 and 1920, vitamins that were discovered in chronological order were called A, B, C, D etc. Vitamins with the same property as vitamin B were called vitamin B1, B2 etc. (together they are called B complex). Vitamin E was then discovered, as was F, G and H, though the latter three were discarded and are now renamed (vitamin F is omega 3 fatty acid, vitamin G is B2 and vitamin H is biotin). Vitamin K is called so as it is responsible for blood clotting. Blood clotting is called *Koagulation* in German, hence the name vitamin K. Vitamins A, D, E and K are fat soluble, while the B and C vitamins are water soluble.

Role and sources of different vitamins

Instead of discussing all the vitamins in great detail, the table below gives you all the information that you need.

Vitamin	Role	Sources	Deficiencies
Vitamin A	Maintain normal vision and cell health and integrity.	Milk, butter, cheese, eggs, carrots, chicken, mackerel.	Night blindness
B_1 (Thiamine)	Role in carbohydrate breakdown.	Asparagus, broccoli, spinach, bananas, potatoes, apricots, eggs. Other sources include cheese, yogurt, milk, nuts, pulses, fish, brown rice, whole grain cereals and red rice. Additional sources include avocado, sunflower seeds, herring, salmon and walnuts. B12 is present in breakfast cereals, yeast extract, soya milk and margarine.	Beri – beri – heart failure
B_2 (Riboflavin)	A powerful antioxidant.		Ariboflavinosis – Mouth ulcers, cracks.
B_3 (Niacin)	Important role in cell metabolism.		Pellagra – Scaly skin, vomiting, swollen mouth.
B_6 (Pyridoxine)	Synthesis of haemoglobin.		Anemia, oral cavity inflammation
B_{12} (Cyanocobalamin)	Maintains nerve health and hemoglobin.		Anemia, nerve inflammation.
Vitamin C	Powerful antioxidant. Maintains normal cartilage health. Aids iron absorption.	Citrus fruits like orange, grapefruit, kiwi fruit and Indian gooseberry. Green peas.	Scurvy
Vitamin D	Maintain normal calcium and phosphate levels in the bones.	Naturally synthesises through sunlight exposure. Oily fish and cod liver oil are good sources.	Osteomalacia (thinning of bones), rickets in children.
Vitamin E	Powerful antioxidant.	Tomatoes, sweet potato, spinach, sprouts, mango, olive oil, salmon, nuts, wholegrain.	Nerve and muscular problems. Vision impairment.
Vitamin K	Synthesis of proteins that help in blood clotting.	Naturally produced in the large intestine.	Clotting problems – rare.

Omega 3 Fatty Acids – The Facts

The foods that we eat contain a variety of nutrients in them. Vitamins, minerals, fats, carbohydrates and proteins are all part and parcel of good, nourishing food. In recent years, a lot more attention is being paid to omega 3 fatty acids and the health benefits associated with them. In fact, if there is one fat that you would want to consume every day, it is omega 3 fats. And there are reasons for this.

Benefits

Omega 3 fatty acids consumed daily can help reduce the level of triglyceride fats in the blood stream. This in turn can reduce the chances of you developing a heart attack. In addition, omega 3 rich foods consumed regularly can decrease your chances of developing depression, rheumatoid and osteoarthritis and bronchial asthma. It is believed that omega 3 fats can also reduce the chances of developing Alzheimer's disease (memory loss). Clearly there are a number of different benefits.

Sources

Unfortunately, the best sources of omega 3 fatty acids are fish such as sardines, mackerel, salmon and tuna. It is recommended that every individual eat at least 3 portions of fish a week – a task that is highly under performed. Vegetarians can get omega 3 fats from walnuts, flax seed oil, olive oil and canola oil. But these are high in calories, and consuming large amounts is not advisable. In such situations, finding a good omega 3 supplement is a good idea.

Always consult your doctor before taking any kind of supplements.

Amazing Facts About.....Your Nails!!!

Many of us take our nails for granted. While we do trim it and polish it regularly, we rarely stop to think what nails actually are. Here are some interesting facts about nails.

1. Fingernails grow around 3.5mm every month. The nails on your dominant hand (the hand you use most of the time) grow faster than the opposite hand. Toenails grow around 1.6mm every month.

2. Nails and hair are made out of the same material – keratin.

3. Nails can sometimes indicate the presence of a disease in the body. For e.g.: blue nails may indicate lung disease, brittle nails may indicate low iron levels in the blood.

4. Nails grow faster in the summer months than any other month.

5. The nails rely on a good blood supply to grow and survive.

6. Stress can affect nail growth and can slow it down.

History of the Endoscope

The endoscope is an instrument used to peek inside the human body, particularly the food pipe, stomach and bowel loops. The first endoscope was invented by Philip Bozzini who in 1805 made a tube-shaped instrument called Lichtleiter, or 'light guiding instrument' to look into the urinary tract and bowel loops. In 1853, Antoine Jean Desormeaux of France invented an instrument to look into the urinary tract and the rectum – an instrument he called 'endoscope'.

As science advanced, so did the endoscope. In 1868, Dr. Adolph Kussmaul of Germany finally looked into the stomach using the endoscope. As it was a rigid metallic tube, it was tested on a sword swallower and not on a regular patient! As time progressed, newer technologies were used to improve upon the endoscope, and the more flexible ones that we now use was born. The flexible gastroscope – the endoscope used to look into the stomach - was developed by Dr. Rudolph Schindler in 1932, and to this day we use the same design with just a few technological upgrades!

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"If opportunity doesn't knock, build a door."

- Milton Berle