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Sowkhya

Magazine ™

Salt
It's Time To CUT DOWN.

Aphthous Ulcers
A Real Pain In The Mouth!

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Here Is What To Do.

Low Salt Levels!
Yes, It's Possible.

Message from the Editor

Welcome to yet another edition of **Sowkhya Magazine™**. As always, I hope you are in good health and enjoying our monthly bites on various clinical conditions that we feel are of interest to our patients.

This month's magazine talks primarily about a rather basic ingredient in all the food that we eat - salt. Salt can add flavour to our food, and in the right amounts can transform a dish from bland to delicious. But eating salt comes at a price - one that can include conditions such as high blood pressure and subsequent heart disease.

Salt is present in each and every type of food that we consume. These days, a lot of processed and readymade foods are available in the markets that are convenient to eat. Many of these have high salt levels within them to preserve them for longer. This can be harmful. Nevertheless, salt is part and parcel of human well being and survival. But, there must be a balance.

Our daily requirement of salt is derived from the food we eat and the salt that we add when cooking. Our current consumption is around 7.5 to 10gm per day (of sodium) which is a lot higher than the western world. This is primarily due to the temperature we endure in our country, and the type of food that we eat (curries have high salt content). Adding salt to food despite there being sufficient seems to be normal practice. I do believe this must change... and fast!

We hope you enjoy this month's edition of Sowkhya Magazine™. We have dedicated this entirely to salt, and trust you will find it useful and informative.

Dr B G Baliga
MD FRCP FICC

Editor, Sowkhya Magazine™
Director, Baliga Diagnostics Pvt. Ltd.

Salt - Where Does It Come From?

Salt forms an important part of the Indian diet. We love to make sure that the food we cook has the right amount of salt in it, and sometimes even add a little dab of salt while we eat.

But have you ever stopped to think where salt comes from? We have read about it in school, and even learned everything there is to know about our great Mahatma Gandhiji's Salt March to prevent the British from taxing it in 1930.

There are a number of different types of salt that are currently available - sea salt, table salt and Indian kala namak. The salt that we often use in our food is called table salt, and is derived from rocks. It is basically composed of sodium chloride. Sea salt is derived from the sea and contains other minerals such as calcium, magnesium and iodine.

The basic principles on how salt is made are two - evaporation and mining. The former is what is done with sea salt and the latter with table salt. Our oceans contain around 3.5% by weight of salt in them, making them an enormous source. Large crystals of salt are left behind when the water evaporates from small ponds. Salt is also mined in certain countries, and is derived from dried up underground streams where salty water used to run before. The salt rocks are blasted with dynamite and then crushed to create salt. Though the process is complex, the product is simple. Read on to see why salt can be your worst enemy.

Salt - It's Time to Cut Down

Salt forms an essential part of our daily diet. Without salt added to our food, eating it becomes very difficult. But despite the taste sensation that salt brings with it, salt can in fact be rather harmful to us in the long run. Here, we will highlight some of the long term harmful effects of excessive salt consumption that one must be aware of at all times.

Salt can worsen high blood pressure

Ask any patient who suffers from high blood pressure what their doctor has advised them and you will hear one common answer - 'cut down my salt intake'. This comes as no surprise, as a strong relationship has been established between the amount of salt we consume and the level that our blood pressure rises to. The higher the salt intake, the greater the risk of high blood pressure (or of it getting out of control).

Studies have shown that the sodium in the salt has a direct impact on the release of a compound in the blood called nitric oxide. Nitric oxide helps enlarge the blood vessels and maintains a good blood pressure at all times. A reduction in the amount of nitric oxide causes the blood vessels to become stiff, and this stiffness can in turn result in high blood pressure. Over time, a high blood pressure can cause multiple health problems if left untreated - heart disease, kidney disease, stroke and eye disease are just a few common yet important ones.

Salt causes thinning of the bones

There is some evidence to suggest that excessive intake of salt can cause thinning of the bones - a condition called osteoporosis. This is because the sodium in salt promotes the excretion of calcium from the body, resulting in bones losing their calcium and becoming thinner. While the underlying mechanisms are complicated, it is worthwhile bearing this in mind if you suffer from osteoporosis.

Salt can cause stomach cancer

There have been studies published that a high salt diet or consuming foods that are high in salt content can increase the production of acid in the stomach, making it vulnerable to a change in the structure of the cells and the development of stomach cancer.

It is clear that excessive intake of salt can be harmful to our health in more than one way. Always make sure that you keep your overall salt intake to a limit of around 6 - 8 gm per day. Avoid potassium chloride salt (*'sounderlavan'*). Patients who suffer from high blood pressure must attempt to cut out salt completely from their diet. Avoid junk food, pickles and processed foods - these have extremely high salt levels within them and can place an individual at risk of a number of clinical conditions that we have just mentioned. Keep the salt intake low, and enjoy a healthy and happy life ahead!

Yes - You Can Have Low Salt Level In Your Blood Too!

There is currently much discussion about the amount of salt that we consume in our diet. We admit, we may have also been guilty of doing this in this month's edition of Sowkhya Magazine™.

But it is important to be aware that there does exist a condition where the salt levels in the bloodstream are extremely low. This condition is called *hyponatraemia*. Let's take a look at this in a bit more detail.

Defining hyponatraemia

Hyponatraemia is a clinical condition characterised by low sodium levels in the blood. Our normal sodium levels lie between 135 to145 mg/dL. However, in certain situations, this level can decrease significantly.

Causes of hyponatraemia

The most common cause is the use of diuretic drugs such as furosemide (lasix), aldactone and bumetanide. Sometimes, sodium levels may decrease in the blood just because there is too much fluid in the body (called dilutional hyponatremia). Certain special conditions exist where there is an increase in the production of a hormone called the anti-diuretic hormone. Other conditions include kidney disease and severe gastroenteritis (vomiting and diarrhoea). It is particularly common in elderly patients.

Management

If your blood test results demonstrate a sodium level less than 130mmol/dL, it is important to seek medical attention to ascertain its cause (as previously mentioned). In some cases, patients may be commenced on sodium supplements or may even be asked to consume a bit more salt in their diet.

If the sodium level is extremely low (<120 mmol/dL), patients can become drowsy and disoriented. These patients require hospitalisation and intravenous replacement of sodium. This is to ensure that sodium levels are gradually increased rather than suddenly as this can cause problems. Any underlying hormonal conditions that are causing low sodium levels will be treated.

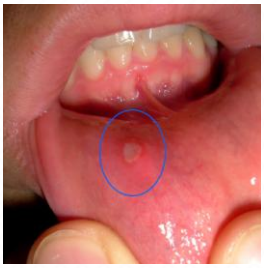
Yes, it is true that one can have low salt levels in their blood! Timely treatment can help manage this condition safely and effectively, and must be done by a trained professional. Follow their advice religiously!

Aphthous Ulcers - A Real Pain in The Mouth!

At some point in our lives, we have all experienced it. We find these small 'boils' within our mouth or on the upper or lower lip. They are painful; they are annoying. And these are aphthous ulcers.

In our practice, we have a large number of patients who attend our clinic complaining of this problem. Let's take a look at this condition in a bit more detail.

What are aphthous ulcers?



Aphthous ulcers are small ulcers that form on the mucus surfaces of the oral cavity. They are often seen on the lower lip, though in severe cases they can be seen in the throat as well.

What causes aphthous ulcers?

On most occasions, no cause can be identified. Typically, aphthous ulcers appear to have a pale centre and a red boundary. Most cases are just minor, with one or two appearing and disappearing within a week to 10 days. Rare cases that lead to ulcer formation include a condition called Herpes Zoster. Smokers are more prone to its development. Allergy to certain foods and even injury can cause them. They tend to occur more in individuals under constant stress. Rarely, medication such as certain painkillers and clinical conditions such as inflammatory bowel disease can cause them.

Managing aphthous ulcers at home

Most cases do not need any treatments, and the ulcers heal by themselves. However, some require supportive treatments, most of which can be done in the comfort of your own home.

Avoid spicy and acidic foods (such as citrus fruits). If the ulcer is painful, anaesthetic gels are now available that can be applied locally to give pain relief. If medication is suspected as a cause, make sure you get the advice of your doctor before stopping the culprit drug. Antiseptic mouthwashes are also helpful in preventing infection and spread of the ulcers. Maintain good oral hygiene, and try not to bite down on the ulcer.

Aphthous ulcers can be a real pain in the mouth. However, simple steps can help manage them easily. If in doubt, see your doctor for further advice.

***Image courtesy Wikipedia.org.*

Low Salt Intake - Tips

Salt forms part and parcel of every food that we consume in the Indian subcontinent. Pickles, papads, curries, ketchups and sauces are all rich in salt - probably a lot more than what we need in our daily diet. On an average, an individual in India consumes around 8 to 10 gm of salt a day, which is a lot more than what is recommended for the Caucasian populations (which is 6 gm per day). This higher intake is related to the weather we have here - we tend to lose a lot of salt in sweat and must replenish what we need to keep us functioning.

But there is a problem. You are diagnosed with hypertension, diabetes, heart failure, kidney failure or liver failure and you have now been told to reduce your salt intake. This is not easy. But there are some simple steps you can follow to make sure you keep your salt intake to the minimum.

Firstly, cut out naturally salty foods such as pickles, preservatives and papads immediately. Avoid adding salt to drinks such as sherbet and buttermilk. It is recommended that when food is being cooked for a family, part of that food be kept aside separately for the person who cannot add salt to their food.

Try and keep total sodium intake to 4 - 5 gm per day (3/4 to 1 teaspoon). Just measure out this salt by weight in a plate and use this salt throughout the day as and where required. This way you can be sure that you are consuming the amount of salt that your doctor has recommended, and nothing more than that.

Finally, try not to use salt alternative such as potassium chloride salt. These can be rather harmful to the kidneys especially if taken regularly in large amounts. Furthermore, certain drugs increase potassium levels and this can be a toxic combination.

Remember, it is not too difficult to keep your salt intake low. It might be hard at first, but in the long run it could save your life!

Contact Us

Baliga Diagnostics Pvt. Ltd

712, 38th Cross, 16th 'A' Main,
Jayanagar 4th T Block,
Bangalore - 560041

Visit
www.baligadiagnostics.com
for a full list of our services.

For appointments, call

(080) 266 46793
(080) 224 43330

Collapsed Family Member? Here Is What To Do!

It is not unheard of – you are sat at home watching the television when a family member starts to feel a bit light-headed and dizzy. They start to stumble and eventually collapse in a heap onto the floor. Undoubtedly and naturally, you panic. You rush straight towards them, sit them up straight away, get them a glass of water, and hope that they recover quickly. Unfortunately this is NOT the way to handle a person who has collapsed. Let us see why.

Why do we collapse?

A collapse onto the floor is a response of the body to a decrease in the blood supply and oxygen to the brain. This can be due to a number of different causes, including -

- A sudden decrease in blood pressure that could be due to medication, irregular beating of the heart (making it an ineffective pump), a heart attack or even a bleed within the stomach.
- A simple faint (sometimes called vasovagal syncope)
- Narrowing of the blood vessels in the neck that results in less blood being pumped to the brain
- An alteration in blood pressure when sitting or standing suddenly from a lying down posture (called postural hypotension)
- Prolonged sitting or standing that leads to pooling of blood in the legs
- An epileptic seizure – though the features associated with these are fairly obvious.

Symptoms

Patients who collapse generally get a sense that they are about to. Symptoms may include a feeling of tiredness, sweating, becoming pale, feeling light-headed, feeling as though the room is spinning around and feeling nauseous. Some patients may experience chest pain or palpitations (like their heart is racing fast). These symptoms occur a few seconds to minutes before they collapse, and may persist for a short while after the patient recovers.

When the patient collapses, they often do not respond for a few seconds though they are awake. This is because the blood supply to the brain has been compromised and they have altered mental states at the time. Once again, these are short lived episodes that subside within no time.

After the episode has concluded, patients can take a few minutes to recover and return to their normal state. Most patients may never experience another episode like this ever again, but it is always worthwhile getting it checked out by a doctor to ensure that there is nothing much to worry about.

What to do

As a family member, it is important to know what to do in the event that a family member collapses. But before you run towards them, make sure it is safe for you to approach them first. Remember, you do not want to put yourself in harm's way at any point, as this can compromise your ability to help your friend or family member, not to mention the injury you can suffer yourself. Here are the steps to adopt once you get to the collapsed patient -

1. Lie them down flat on the ground. Under no circumstances try to sit them up immediately. The reason for lying them down is to increase the blood flow to the brain. This can be further increased by raising their legs to around 30 to 45 degrees. In a few seconds, the brain gets the blood that it needs and this can help then regain consciousness sooner.

2. Sprinkle water on the face, but do not give them water to drink immediately. Patients who have suffered a collapse can be drowsy for a few seconds and feeding them water or any food can result in it entering the lungs and causing a cough, breathlessness and a subsequent chest infection.

3. Wait a while. When the patient feels ready, they will get off the floor themselves. Do not try to encourage them to get up too soon.

4. In cases where patients feel like they are about to collapse, it is a good idea to either sit them down and bend them forward so that their head is below the level of the knees, or just lie down flat till the feeling passes.

5. Once fully recovered and completely oriented, a glass of water can help the patient feel better.

A word of caution

If in doubt, try not to waste time. Call your doctor or get medical help immediately.