The
Liker Health Report
Keeping People Focused on Staying Fit & Healthy
Fall 2022

Too Much Salt, Not Enough Water

A "New" Theory May Help Explain Weight Gain & Obesity

The causes – as well as the solutions – of weight gain and obesity are seemingly elusive because these two conditions are part of a complex puzzle. Excessive salt intake and lack of hydration are two pieces to that puzzle that may not be in the collective consciousness, but are scientifically known to contribute to being overweight or obese. Clues from the animal kingdom are helping to explain the relationship between salt, water, and weight. The environmental conditions and dietary preferences of the desert sand rat expose it to a high-salt diet; this allows the sand rat to convert the small amount of carbohydrates in its preferred food into fructose for energy, whether for immediate use or for future use (fat storage). Essentially, this is a survival mechanism to avoid starvation when food and fresh water sources are limited.

When sand rats live in captivity and eat the common rodent diet (50% carbs), they quickly develop both obesity and diabetes. Conversely, if the sand rats are given low-carb, fresh vegetables, they remain lean. This is the point from which humans can learn and apply the sand rat metabolism theory. The average American gets 15% of daily calories from table sugar and high-fructose corn syrup. Not only do these sugars stimulate people to eat more, leading to weight gain and fat deposition, but increase the risk of pre-diabetes. The human body can make its own fructose from glucose, which is plentiful in rice, white bread, potatoes, and some cereals. Additionally, dehydration can stimulate fructose production; dehydration occurs after eating a salty foods, such as French fries or potato chips, which encourage the conversion of starch to fructose. Fruits contain varying amounts of natural fructose.

Moderation is KEY

LOWER Fructose	HIGHER Fructose
Avocado	Raisins, seedless
Cranberries	Figs, dried
Clementines	Dates
Apricots	Prunes
Nectarines	Peaches, dried
Peaches, yellow	Apricots, dried
Raspberries	Jackfruit
Pineapple	Grapes
Cantaloupe	Bananas
Blackberries	Cherimoya
Oranges, navel	Persimmons
Strawberries	Pears
Currants	Plums
Grapefruit	Kiwi
Tangerines	Mangoes
Honeydew	Cherries

RESEARCH PEARLS:

Reduce Salt Intake to Reduce CVD Risk

Using population data from China, British researchers have determined that a modest 1 gram reduction in daily salt intake can significantly reduce the incidence of cardiovascular events (strokes and heart attacks). The Chinese have one of the highest rates of salt intake in the world – about 11 grams per day. The World Health Organization recommends less than 5 grams per day. In China, this level of salt consumption accounts for 40% of deaths due to cardiovascular disease (CVD). The research team led by Dr. Monique Tan has associated lowering salt intake with a decrease in systolic blood pressure to elicit the cardiovascular benefits. As with many other developed and developing countries, their population's increased consumption of processed and restaurant or take-out food is believed to be one of the primary contributing factors. The good news is that a modest salt reduction can yield great health benefits, regardless of where one lives.

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Feel Good Hormones

Improving Mental/Emotional Health Naturally

Humans have four "happy hormones" that play a role in various aspects of mental and emotional health. These feel good hormones affect the brain and function as neurotransmitters. Dopamine, serotonin, oxytocin, and endorphins work by different mechanisms to influence feelings of pleasure and contentment and positive mood. Individuals who have balanced or elevated levels of these hormones generally have an increased sense of satisfaction with their personal lives.

DOPAMINE

Dopamine has the official nickname of the "happy hormone." It is released when you experience the reward or satisfaction of getting something you want or desire. Dopamine levels can be increased by healthy snacking with almonds or walnuts, or by taking a vitamin B12 supplement.

SEROTONIN

Serotonin is called the "mood hormone" because it controls mood and digestion. Approximately 90-95% of the body's serotonin is manufactured in the gut. Serotonin levels can be naturally increased by eating foods that contain tryptophan (eggs, chicken & turkey breast, cooked white beans, salmon, tofu, edamame, nuts & seeds), or by supplementing with L-Theanine.

OXYTOCIN

Oxytocin is commonly referred to as the "love hormone" and is released during childbirth, breastfeeding, orgasm, and intimate personal contact. The best way to increase oxytocin levels is to engage in bonding experiences, such as hugging, cuddling, and sexual intercourse.

ENDORPHINS

Endorphins are collectively known as the "euphoria hormone" and when released during physical stress (i.e., intense exercise) or discomfort, elicit a feeling of exhilaration. Endorphin levels can be increased by a strenuous workout, eating spicy foods, or taking in some sunlight. Supplementing with vitamin C or B3 (niacin) can also help.

Most people are about as happy as they make up their minds to be.

Abraham Lincoln

Dear Dr. Liker...

Are there any foods or natural supplements that help relieve joint pain?

In general, eating an antioxidant-rich diet should help relieve joint pain. This is because foods that are full of antioxidants – such as vegetable, fruits, and spices – do not promote inflammation in the body and are able to tamp down existing inflammation and neutralize free radicals. Inflammation in the joint causes more than just swelling, tenderness and pain; it contributes to the degeneration of joint tissue itself. Adopting a healthy eating strategy can help minimize future damage or slow down existing damage.

The turmeric plant, which contains a type of polyphenols (plant chemicals) called curcuminoids is well-regarded as a powerful anti-inflammatory substance. It's been used in traditional Indian medicine and cooking for 4,000 years. More recently, Western medicine has "rediscovered" tamarind for its anti-inflammatory action. Tamarind has a long history of use in both Indian and African medicine.

Of course, a joint health strategy should also include avoiding foods that promote inflammation in the first place. These include refined carbs (white bread, sugar-laden desserts); fried and highly processed foods; sodas and sugary beverages; red meat, especially conventionally-raised livestock; processed or cured meats (sausage, lunch meat, hot dogs); saturated and trans fats (margarine, lard, shortening).

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