

# Healthy Living

## Fact Sheet



### Children and Sugar

Dr John G. Clark, MD

#### How much sugar should we eat in a day?

Refined sugar (cane sugar, corn syrup, brown rice syrup, etc.) is not an essential nutrient, in fact you can live healthier without it.

#### Does sugar have any nutritional value?

Sugar is close to being just pure carbohydrate without any nutrients such as vitamins or minerals. This is referred to as “empty calories”, meaning calories without any other essential nutrients included with them.

#### What foods contribute to the sugar content of a meal?

All refined carbohydrates turn to free sugar during digestion. Refined carbohydrate foods that turn to sugar in the bloodstream include white pasta, white bread, white rice, boxed cereals, juices, chips, and white tortillas.

#### What affect does sugar have on children?

Sugar decreases the blood supply to the frontal lobes of the brain where children discern right from wrong. Children eating more sugar can expect to have lower grades in school and present greater discipline problems for their teachers.

Refined sugar unsettles the blood sugar levels. This in turn unsettles the student’s mood causing increased likelihood for psychological disturbances like bipolar or attention deficit hyperactivity disorder.

Sugar increases the risk for degenerative lifestyle diseases later in life such as cancer, diabetes, rheumatoid arthritis, heart disease, and obesity, etc.

Sugar compromises the immune system making it more likely that they will get illnesses like colds and flus.

#### Encouragement

*“Then you shall delight yourself in the Lord; And I will cause you to ride on the high hills of the earth, And feed you with the heritage of Jacob your father. The mouth of the Lord has spoken.”*

Isaiah 58:14 (NKJV)

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### Healthy lifestyle approach

#### **Dietary Considerations**

Complex carbohydrates provide a steady flow of glucose to the brain with out peaks and valleys (highs and lows). Foods with brain-supporting complex carbohydrates include: fresh fruits and vegetables, whole grains, beans, nuts, and seeds.

A wholesome breakfast of fresh fruit and whole grains like oatmeal, buckwheat, brown rice, granola, or whole meal toast helps students do better on exams and get better grades in school.

#### **Exercise**

Students getting more exercise learn better and have better attention spans.

#### **Water**

A well hydrated brain functions much more efficiently than one that is low on water.



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Jenifer Skues  
Health Psychologist

### Mind–Body Connection

#### How sugar impacts our Blood Sugar Levels (BSL)

Blood sugar levels play a big part in how both children and adults feel and function. When we have ongoing stress, don't get adequate sleep, eat too many sugar-loaded foods, as well as skip breakfast and other meals, our BSL can either skyrocket or plummet. When your BSL is too high (hyperglycemia) it's like having a manic episode and can include nausea, drowsiness, blurred vision, confusion, and dizziness, especially when standing up from a sitting or lying position. Symptoms of low BSL (hypoglycemia) can include shaking, sweating, rapid heartbeat, headache, hunger (especially sugar cravings), weakness, fatigue, blurry vision, anxiety, irritability, nervousness, insomnia, trouble thinking clearly or concentrating and dizziness. Both high and low BSL can cause a sudden change of mood giving a bipolar effect. As you can see, these symptoms are also typical of various diagnosed mental health problems such as anxiety and panic disorders, depression, and mood swings.

#### Encouragement

*“Do not crave that ruler’s delicacies, for that food is deceptive.”*

Proverbs 23:3 (NET)

This is the first area I assess and correct when dealing with anyone who has mental and emotional health problems, especially children. I had the case of a child who couldn't concentrate, was very messy, had emotional outbursts, wasn't able to maintain a routine, and displayed hyperactive behaviors. The first thing I advised his mother to do before I saw him was to remove all sugar foods and drinks from his diet for at least one week, and see how her son went. The mother phoned me back to say that he didn't need to come and see me now because his concentration and behaviors improved markedly with the dietary changes.

#### The effects of sugar on brain function

Apparently our brain uses 65 percent of the body's glucose, and too much or not enough glucose can have a detrimental effect on how your brain functions. Children love soft drinks, however one can has 10 teaspoons of sugar, and when consumed it floods into the blood stream resulting in a total of 4 teaspoons of blood sugar. This rush alerts your pancreas, which then releases a lot of insulin. Furthermore, some of this sugar quickly goes into the cells (including brain cells) while the rest stores in the fat cells. An hour later your blood sugar can fall dramatically creating low blood sugar. As for the brain, these rapid swings produce symptoms of impaired memory and clouded thinking. It actually numbs the brain. So when your children come home from school and have a soft drink and a piece of cake or sweet biscuit, they can be consuming anywhere between 12 to 16 teaspoons of sugar in a very short time. Then you wonder why they are hyperactive, irritable, can't concentrate, won't do their homework and have tantrums. Instead of sugar foods try giving them diluted fruit juice or water to drink, a piece of fruit, or some nuts and dried fruit (very good BSL stabilisers).

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### Balancing BSL Tool Kit

#### How to balance your children's BSL and feel sane again!

##### 1. Stress busters

Life is so much more stressful for children these days, and as stress can affect their BSL balance it's important for both children and adults to be happy and relaxed. I find that children can be very perceptive of their stress symptoms. Educate yourself and your child to recognize the following: rapid heartbeat, muscle tension, sweaty palms, rapid shallow breathing or holding your breath, and acid stomach, as these are good indicators that stress levels are high. When you notice these symptoms you need to put the brake on to stop the adrenaline overload. You can do this by calming the heart down and focusing your brain in the present; then your brain and body will relax. The quickest way to do this is to change your breathing to even out your heart rate. Children can learn to do this and practice with an adult or the family. Put your hand over the area of your heart and focus on taking slow and even breaths into the area where your hand is, into the lungs (count of 5 in and 5 out). At the same time try to think of something you appreciate to generate a good heart connection. Try to make this and other activities fun. Play with your children - another great stress buster.

##### 2. Regular fuel stops!

If you want your children to be more balanced and resilient mentally, emotionally and physically, then regular fuel stop are vital. Skipping breakfast, eating at the wrong times, as well as eating sugar loaded foods and snacks fuel temper tantrums and impair their brain function. Here are a few things you can try in order to make food fun and inviting for your children. Try a platter of fruit kebabs using wooden skewers. Get them to help you make their own smoothies. Smoothies can be used to add nutrient-rich supplements that are very good for the brain as well. Try making your own ice cream. Cut up and freeze 4 ripe bananas (add any other fruits such as mangos, cherries, raspberries etc.). Put in a blender, add 2 tablespoon of coconut milk or cream and blend until smooth, YUM!

##### 3. Tips to balance children's BSL

Help your children to relax and have fun, or it's the all work and no play principle.

Children need a good night's sleep, sleep deprivation and a poor sleep cycle affects blood sugar balance

Make sure they have plenty of fluids (try adding slices of fruit to water and put in the fridge)

Exercise is important as it doesn't only balance the BSL, it also reduces stress levels and grows trillions of brain cells to help them learn and work smarter

**Disclaimer:** This fact sheet presents principles designed to promote good health and is not intended to take the place of personalised professional care. The opinions and ideas expressed are those of the writers. Readers are encouraged to draw their own conclusions about the information presented.