COMMON SENSE
Is not that common.
We don’t really know as much as we think we do.
According to the American Academy of Pediatric Dentistry, pregnant women and children should follow the recommendations below as an oral health guideline:

<table>
<thead>
<tr>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prenatal</strong></td>
</tr>
<tr>
<td>Have an oral evaluation, be counseled on proper oral hygiene, and be referred for preventive and therapeutic oral health care.</td>
</tr>
<tr>
<td>Use xylitol gum at least 2 to 3 times per day, evidence significantly decreases the future child's caries rate.</td>
</tr>
<tr>
<td><strong>Newborns</strong></td>
</tr>
<tr>
<td>As soon as first tooth erupts, brush twice daily with small soft brush. For children at moderate to high risk of caries, use a smear of fluoridated toothpaste. Begin flossing when adjacent tooth surfaces cannot be cleansed with a toothbrush.</td>
</tr>
<tr>
<td><strong>Child's First Dental Visit</strong></td>
</tr>
<tr>
<td>First visit by first birthday, within 6 months of eruption of first tooth and no later than 12 months of age.</td>
</tr>
<tr>
<td><strong>Professional Application of Topical Fluoride</strong></td>
</tr>
<tr>
<td>For children at moderate caries risk, apply once every 6 months; for children at high risk, apply once every 3 to 6 months.</td>
</tr>
<tr>
<td><strong>Primary Teeth</strong></td>
</tr>
<tr>
<td>Apply sealants on pits and fissures. For caries-susceptible primary molars, place as soon as possible after eruption.</td>
</tr>
<tr>
<td><strong>Permanent Teeth</strong></td>
</tr>
<tr>
<td>Apply sealants on pits and fissures. For permanent molars, premolars, and anterior teeth with deep pits and fissures, place as soon as possible after eruption.</td>
</tr>
</tbody>
</table>
Why do cavities form?
It’s not just WHAT?
But HOW?
And HOW OFTEN?

After a sticky and sugary meal, BACTERIA in the mouth make ACIDS that last up to 20-40 minutes after.

The more often we eat or drink sugary foods, the greater the risk for cavities to form.
Parents, are your children receiving the Dental Care they need?

Increased use of preventive dental services can improve the health of infants, children, and adolescents.

For more information about this report, visit: www.cdc.gov/childpreventiveservices

Centers for Disease Control and Prevention
National Center for Chronic Disease Prevention and Health Promotion
“It is paradoxical that the hardest of all tissues is so susceptible to lesions in living humans, while it is the most indestructible in the dead.”

Dental treatments only repair the missing parts, BUT NOT PREVENT NEW CAVITIES...
Healthier Kids Foundation
Dental Screening
Exámenes de detección dental

Undetected dental problems can lead to difficulty with learning and social development.

Healthier Kids Foundation (HKF) uses a licensed dentist to conduct dental screenings.

If a child needs further follow up, then HKF will contact the child's parent/guardian.

Please completely fill out the back side of this flyer and return it to your childcare provider or teacher.

Los problemas dentales que no son detectados pueden llevar a dificultades en aprendizaje y un desarrollo social lento.

Utilizando un dentista licenciado, Healthier Kids Foundation (HKF) realiza exámenes de detección.

Si un niño necesita atención de seguimiento, entonces HKF se pondrá en contacto con el padre/tutor del niño.

 Favor de llenar en totalidad el formulario al reverso y devuélvelo al director de su centro de cuidado o su maestra.

For more information, please call
Para más información favor de llamar al
408.564.5114 x210

This program is based on a screening process. The purpose of the screenings is to identify children with possible cavities. The children identified with possible cavities are scheduled with the school nurse and a licensed dentist for a follow-up appointment within a week. The process to be performed free of charge will be confirmed. HKF is a screening not a replacement for a full examination by a qualified oral health professional. HKF is an nonprofit organization. All information collected will be kept confidential. HKF is not affiliated with any health care, dental agency, or similar provider.

Este programa esta basado en un proceso que es evaluación. El propósito de la evaluación es identificar a los niños con posibles caries. Los niños identificados con posibles caries son programados con la enfermera y un dentista licenciado para una cita de seguimiento dentro de una semana. El proceso para ser hecho de forma gratuita se confirmará. HKF es una evaluación no una reemplazo de un examen por un profesional calificado. HKF es una organización sin fines de lucro. Todo la información recopilada será confidencial. HKF no está afiliado a ningún tipo de salud, agencias dentarias o similar proveedor.
• 2. (    ) Urgent Dental Care Needed/ Cuidado Dental Temprano es Necesario ___
  A) Mild to moderate cavities (caries)/ Caries leve a moderada ___
  B) Gum disease/ Enfermedad de las encías ___
  C) Soft tissue lesion/ Lesiones de tejidos blandos ___
  D) Recent trauma/ Trauma reciente ___
  E) Ectopic eruption (tooth entering the mouth in an abnormal way, e.g. crowding of baby teeth with adult teeth)/ Erupción ectópica (dientes saliendo en posición incorrecta. Ejemplo: dientes infantiles amontonando con dientes adultos)

• 3. (    ) Emergency Care Needed/ Atención de Emergencia Necesaria ___
  A) Infection/ Infección ___
  B) Pain/ Dolor ___
  C) Severe cavities (caries)/ Caries profundas
COMMON SENSE

• 1. Brush your teeth
• 2. Don’t eat sweet
• 3. Use fluoride toothpaste
• 4. See your dentist
Universal Indicator pH Color Chart

<table>
<thead>
<tr>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acid</td>
<td>Neutral</td>
<td>Base</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Bacteriology of Dental Caries

- Major organisms responsible for caries are:
  - Strep mutans
  - Lactobacilli
  - Other strains of streptococci
The Caries Imbalance

DISEASE INDICATORS
- White spots
- Restorations < 3 years
- Enamel lesions
- Cavities/dentin

RISK FACTORS
- Acid bacteria
- Absence of saliva
- Dietary habits (poor)

PROTECTIVE FACTORS
- Saliva & sealants
- Antibacterials
- Fluoride
- Effective diet

Caries Progression

NO CARIES
The common myths about Children’s Dental Health.

• Children lose all of the baby teeth at age 6.
• Cavities are caused by genetics or “weak enamel.”
• If my child never has candy, soda, or juice and brush their teeth, they won’t get cavities.
What is in the lunch box?

“Everything should be made as simple as possible. But not simpler.”

Albert Einstein
Kids love these, but their teeth don’t.
How does a CAVITY form?

CARBOHYDRATES (starches and sugars) + Bacteria (from plaque) = ACID

ACID + HEALTHY TOOTH = CAVITY!!!
DENTAL DECAY PROCESS

Bacteria / Germs + Food, Drink, Sugars, Sweets = ACID Produced

Healthy Tooth + ACID = Cavity
100% NATURAL JUICE = 100% SUGAR

Even in 100% natural juice with no added sugar, there is still sugar.

Fruits naturally contain sugar. WATER IN BETWEEN MEALS IS THE BEST.
Dry cereal has BAD carbohydrates.

• SUGAR in Cereals.
• Some have more sugar.
Sticky Foods to Avoid

Crackers and dried fruits aren’t all bad, but they just get stuck in your teeth.
Cookies contain both starch and sugar; which can lead to high acid production by plaque in our mouth and more cavities.

Dried fruit may sound like a healthy snack, but the stickiness makes it linger longer than a healthier choice such as fresh fruit.

Dried flour products such as crackers are an easy, go to, no mess snack. Just like chips they also contain high levels of starch.

Chips are really sticky, and while one wouldn't think they cause cavities, the starch eventually breaks down to sugar in our mouths.

Most cereals that appeal to children contain high levels of sugar and starch. Try to limit snacking on this sticky food.

Fruit snacks and gummy vitamins are loaded with sugar. They're also really sticky and more likely to remain in our mouth even with thorough brushing.
What's your pH?

pH control without a science degree
pH 5.5

The Stephan Curve

“The impact of saliva in neutralizing plaque pH was illustrated as early as 1940 by Dr. Robert Stephan, who measured the changes in plaque acidity following sugar intake. He used indwelling antimony microelectrodes to monitor changes in plaque pH in situ following a sucrose rinse, and plotted the result on a graph, which has become known as the Stephan Curve.”
### Acidity Levels of Soda

<table>
<thead>
<tr>
<th>Beverage</th>
<th>pH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7.0</td>
</tr>
<tr>
<td>Milk</td>
<td>6.5</td>
</tr>
<tr>
<td>Black Coffee</td>
<td>6.3</td>
</tr>
<tr>
<td>Dr. Pepper</td>
<td>3.4</td>
</tr>
<tr>
<td>Sprite</td>
<td>3.3</td>
</tr>
<tr>
<td>Mountain Dew</td>
<td>3.2</td>
</tr>
<tr>
<td>Coke, Pepsi</td>
<td>2.5</td>
</tr>
<tr>
<td>Battery Acid</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Enamel begins to erode at pH 5.5.

- Remineralization
- Critical pH level
- Demineralization
pH 7 being neutral (like most water).

pH 6.8 is ideal for salivary enzymes

pH 6.6 carciogenic bacteria love this pH

pH below 5.5, teeth begin to dissolve or break down

pH 4.5 Fluor-apatite begin to break down
Critical pH 5.5

- If the pH on the surface of teeth drops below 5.5, teeth are susceptible to decay and cavities.
How important is pH?

It controls:

- Bacterial growth patterns
- Intrinsic enzymes within teeth
- Salivary protein functions
- Enamel dissolution
- Nutrient intake by oral bacteria
The effect on plaque pH when sugar is consumed at mealtimes only compared with sugar between meals.

**Sugar at meal times**
- Breakfast
- Lunch
- Dinner
- Supper

**Plaque pH**
- 7
- 6
- 5
- 4

**HOURS**
- 8
- 10
- 12
- 14
- 16
- 18
- 20
- 22

**Sugar between meals**
- Breakfast
- Lunch
- Dinner
- Supper

**Plaque pH**
- 7
- 6
- 5
- 4

**HOURS**
- 8
- 10
- 12
- 14
- 16
- 18
- 20
- 22

- Coffee and chocolate biscuits
- Cola Drinks
- Sweets watching TV
"An ounce of prevention is worth a pound of cure." ~Benjamin Franklin~

- "Children should be fed and put to bed - NOT, put to bed and fed"
- Do make sure that your child does not sleep with a bottle in his or her mouth
- Do avoid all sugar-containing liquids in nap or bedtime bottle
- Do encourage drinking from a cup
- Do discontinue bottle feeding by your child's first birthday
- Do avoid dipping a soother in sugar, honey or anything sweet before giving to your child.
“You got a problem, buddy? Huh? Huh? Do ya, do ya, do ya?” Dory
Water with fluoride builds a foundation for healthy teeth.

- Brush with fluoride toothpaste.
- Visit the dentist regularly.
- Drink water with fluoride.

[Image of a boy drawing water from a stream]
Saliva provides calcium and phosphate ions that inhibit demineralization while facilitating remineralization. Calcium phosphate raises the buffering ability of the plaque, allowing for the neutralization of plaque acids at the same time that its calcium and phosphate ions are rapidly released to remineralize areas of the teeth.

Xylitol is a natural sweetener. It tastes sweet but, unlike sugar, it is not converted in the mouth to acids that cause tooth decay. It reduces levels of decay-causing bacteria in saliva.

Arginine is a common amino acid found in saliva and many foods. On teeth surfaces, arginine helps produce sustained base or alkali generation. This sustained buffering helps support pH levels on surfaces already in the normal range. Calcium is a very important mineral found in the human body that coats and helps support healthy tooth structure. Bicarbonate and carbonate are also naturally found in saliva and provide additional buffering, and support the benefits of arginine and calcium.

basicBITES contain arginine, calcium, carbonate and bicarbonate.
We can put these together the night before.
“Let food be thy medicine and medicine be thy food.”

Hippocrates, 460 B.C.

1. **Chocolate**: cocoa beans contain tannins, polyphenol and flavonoids (antioxidant). Help neutralize bacteria from turning sugar into acid.

2. **Cheese**: Eating cheese after a meal can counteract the acid left behind by a meal, making it a great choice for dessert! It contains **CASEIN** protein which strengthens tooth enamel.

3. **Wild Salmon**: Fatty fish is a fantastic source of vitamin D, which allows your teeth and gums to get the full disease-fighting benefits of calcium.

4. **Xylitol**: populate your mouth with the correct ratio of bad to good bacteria, aiding in digestion and overall oral health.

5. **Tea**: Polyphenols in tea also have cavity-fighting properties. You may have heard that tea contains **fluoride**, which is true, but not enough to make a difference for your teeth or health.

6. **Nuts**: contain high phosphorous, magnesium, potassium, zinc and most importantly, calcium.
Kids Are More Than What They Eat

Moderation, Not Avoidance!

MommaAddict.com
If you MUST have DESERT, have THIS instead...

**Dark Chocolate** is better than crackers
(70% cacao or more)

**Smoothie**
Use a straw
Drink quickly
Don’t brush teeth right away
Drink water

**Ice cream**
(It’s not healthy. Ice cream has lots of sugar.)
Cavities are caused by time simple carbohydrates touch teeth.
Bacteria won’t tell the different from GOOD (in an apple) or BAD sugar.
Sugar from ice cream does not stick to your teeth as bad as from candy, dried fruits.
Ways to Keep Your Teeth Healthy

- **WATCH WHAT YOU EAT FOR SNACKS.**
- Don't go to bed without brushing your teeth.
- Brush properly.
- Don't neglect your tongue.
- Use a fluoride toothpaste.
- Treat flossing as important as brushing.
- Don't let flossing difficulties stop you.
- Consider mouthwash.
- Drink more WATER.
Caries risk assessment

Caries lesion charting by tooth surface and activity

Self-management goals

Effective communication

Remineralization modalities

Recare intervals based on caries risk

Treatment based on patient’s clinical needs and caregiver’s or patient’s desires
Dentist: Can you see the black hole?

- Mom: he ate some Oreo cookies on his birthday.

- (His birthday is in June and it is now December)
It’s a partnership between PARENTS and US.

Cavities can be repaired, but FIXING THEM ALONE DOES NOT PREVENT NEW ONES!
pH of 4.5 will break down teeth even in the presence of Fluoride

FACT: A Lack of Fluoride Is Not a Cause of Cavities
“The only mistake you can make is not asking for help.”

Sandeep Jauhar

- Some parents don’t have cars
- Can’t take time off from work
- Don’t understand clearly the effects of sugars
- Family members pass the bacteria to one another
- The emotional transmission of dentist fear among family members
- Don’t have insurance
Please Be safe.

Do not stand, sit, climb or lean on zoo fences.
If you fall, animals could eat you and that might make them sick. Thank you.
Common sense is not so COMMON.

- Voltaire
Thank You

for your time

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you don't have to

Brush all your teeth—

just the ones you want to keep.

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They sure are handy when you smile.
So keep your teeth around a while!

-Dr. Seuss

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Tracy Dao Filler D.M.D