

Alaska Maternal Child Health & Immunization Conference



September 26-28, 2018
Advancing Wellness Across the Lifespan



They're Just Baby Teeth, What's the Big Deal?

Dr. Heidi Ostby, DDS

alaskaMCHconference.org



The Alaska MCH & Immunization Conference is a partnership between the Alaska Native Epidemiology Center and the State of Alaska.

They're Just Baby Teeth, What's the Big Deal?



DR. HEIDI OSTBY, DDS
JUST KIDS PEDIATRIC DENTAL CENTER

Meet the doc

- ▶ Born in Arlington Hts, IL and raised in Kildeer, IL
- ▶ B.S. in Biology and 4 year scholar-athlete at East Carolina University in Greenville, NC
- ▶ D.D.S. from the University of Iowa
 - ▶ Met husband Dr. Jesse Ostby, dentist here in Anchorage
- ▶ Pediatric Dental Residency at ANMC in Anchorage, AK
- ▶ Private practice at Just Kids since 2013 (became the new owner in 2016)
- ▶ AK Mission of Mercy Pediatric Dental lead 2013 and 2015
- ▶ OH2020 Grassroots rep for AK
- ▶ Two (and a half) kids and two dogs
 - ▶ Samantha (4 in October), Griffin (2 in November), Baby #3 due December 7
 - ▶ Sasha & Louie (Rhodesian Ridgebacks)



Pediatric dental offices for reference

Just Kids Pediatric Dental Center: 700 Muldoon Rd, 333-5437

Dr. Ostby & Dr. Roalofs

Aurora Children's Dentistry: 3340 Providence Dr #552, 336-1234

Dr. Barnes

Denali Pediatric Dentistry: 2600 Denali St Ste 500, 334-9543

Dr. Foster & Dr. Rabatin

Kids Dental Tree: 1310 E Dimond Blvd, 336-7337

Dr. Keller & Dr. Etter

Anchorage Pediatric Dentistry: 4200 Lake Otis Pkwy #2, 562-1003

Dr. Warnick, Dr. Darby & Dr. Jen

Pediatric Dental Associates: 330 E Tudor Rd, 522-1991

Dr. Slezewski & Dr. Walsh

Kidsmile: 625 E 34th Ave #302, 272-1144

Dr. English



*I have created a flyer with this list, as well as listed them all on my office website for your convenience
<https://justkidsak.com/boardcertifieddentists.html>

Why is a dentist speaking?

- ▶ I am a private pediatric dentist without any published research or articles
- ▶ I am not an expert in education, public speaking, or public health, nor am I claiming to be the absolute expert in pediatric dentistry...
- ▶ However I am in the trenches every day and see the damaging effects of lack of education and lack of early intervention on the most vulnerable population...our children!
- ▶ I have become passionate about spreading the word to anyone and everyone who will listen to me in order to help these at risk babies...and cavities don't discriminate, everyone is susceptible
- ▶ I've made it my job to tackle this disease on the front line, before babies are even born in hopes that one day every child will be cavity free...I'm trying to "MAKE AMERICA GREAT AGAIN"!!!



Day One

The most precious, perfect baby!

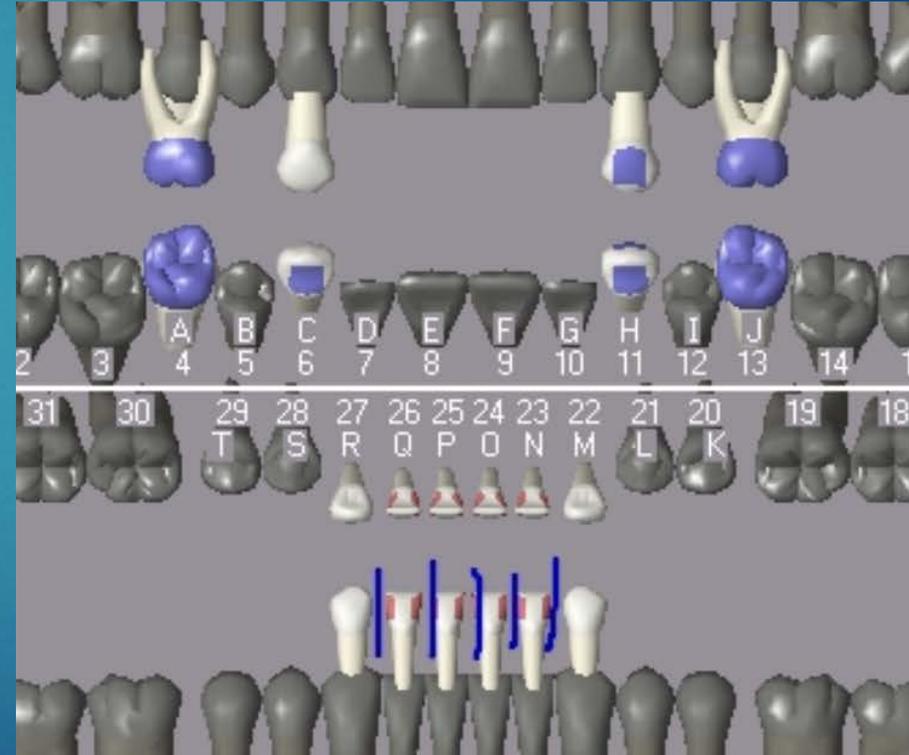
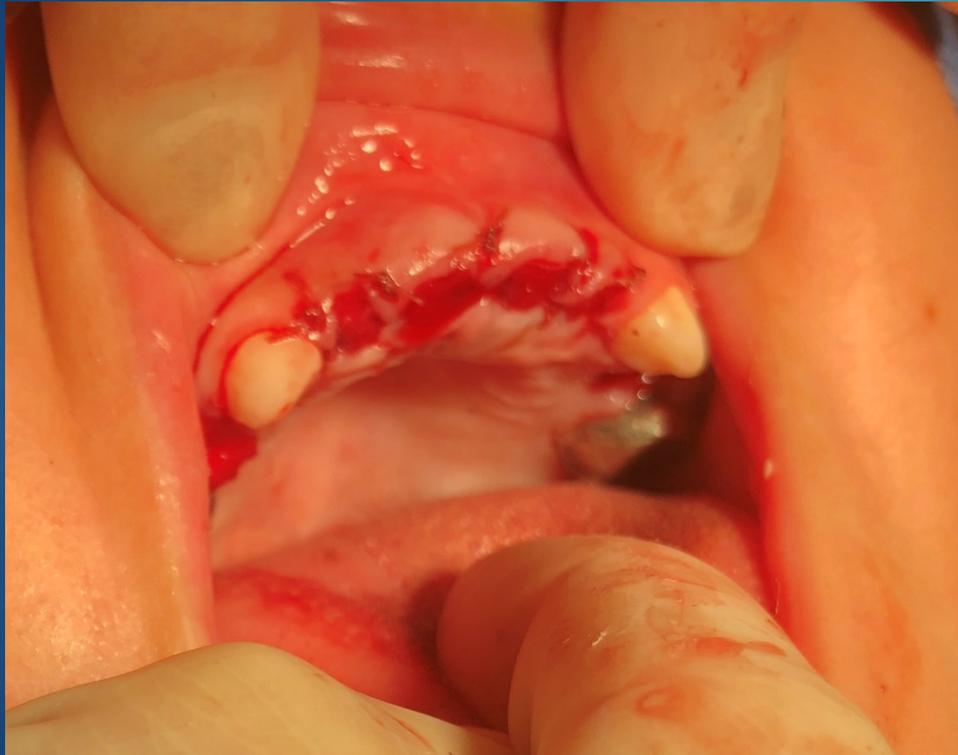


Day Nine Hundred One

Where did things go wrong??



10 out of 20 teeth were non-restorable and were removed



Was that a rare case?

- ▶ Unfortunately cases like this are a normal occurrence in my office (and every pediatric dental office in AK) every day
 - ▶ On average my office sees 40 children/month for full mouth dental rehab under general anesthesia...along with the other pediatric dentists that's roughly 300 kids per month!
- ▶ Childhood caries (cavities) is one of the most prevalent chronic diseases of childhood...and it is preventable
- ▶ Rare cases like **amelogenesis imperfecta** or **dentinogenesis imperfecta** are genetic and the dental complications cannot be avoided...however the majority of people who claim to have "weak teeth" actually have perfectly adequate teeth that have cavities due to poor dietary and hygiene habits
- ▶ Many moms say "the teeth came in like this" when in reality they never really looked closely in the mouth because they weren't brushing, and didn't realize the teeth were getting cavities until it was grossly obvious



ECC is devastating...
How can we stop it??

TEAMWORK!!!!



Early Education and Prevention

- ▶ The first prenatal exam typically occurs around the 8th-10th gestational week (baby teeth have already begun to form)
- ▶ The first pediatrician check-up is typically during rounds at the hospital on day 1 or day 2...babies have several check-ups within the first year
- ▶ Unfortunately, the first visit to the *pediatric dentist* often happens too late and the child already has several cavities
 - ▶ General dentists often won't see kids for a thorough exam with x-rays until they are 5 years old! I know firsthand...my husband is a dentist!

We're looking to you for help!



How Can You Help???

- ▶ Medical community is already aware of the importance of oral health on overall health
- ▶ Specifics are often misunderstood...that's where I come in to help educate YOU to properly educate your patients
 - ▶ Myth 1: Cavities are genetic
 - ▶ Myth 2: Pregnancy rots your teeth
 - ▶ Myth 3: It's not safe to have dental treatment or x-rays while pregnant
 - ▶ Myth 4: Breast milk doesn't cause cavities
 - ▶ Myth 5: Baby teeth will fall out so they don't need to be brushed or fixed



- ▶ **Midwives, OB/GYNs and pediatricians can begin implementing prenatal oral health screenings and education:**
- ▶ Provide prenatal referrals to general dentists for mom, and provide referrals to pediatric dentists for the upcoming baby
- ▶ Pediatricians can discuss dietary risk factors for ECC during 1st year of life, discuss brushing teeth ASAP, apply fluoride varnish, and refer to pediatric dentist by 1st birthday

Prenatal Care

- ▶ As we all know, mother's health is directly related to baby's health.
- ▶ The foods and drinks she consumes, the chemicals she's exposed to, and her overall health affect the developing fetus, including facial structures and teeth
 - ▶ Drugs and alcohol can cause cleft lip/palate
 - ▶ Drugs, illness/fevers can cause hypoplastic teeth
- ▶ Moms are the number one source of caries inoculation, spreading bacteria that cause cavities to baby (*s. mutans*)
 - ▶ Moms should establish a dental home for herself if she doesn't already have one, and find a pediatric dentist prior to delivery
 - ▶ Mom's untreated cavities almost double the risk of their child having severe cavities



Prenatal tips

- ▶ Consume dark leafy greens, fruits & vegetables, and fluoridated water for optimal mineralization of developing permanent teeth
- ▶ Avoid alcohol for overall health of the baby, but also to minimize risk for developmental anomalies like cleft lip/palate
- ▶ Minimize frequent consumption of refined carbohydrates, which puts mom at risk of cavities
- ▶ Rinse mouth with water (may also add $\frac{1}{2}$ tsp baking soda) if experiencing hyperemesis with morning sickness
 - ▶ Wait 20 min before brushing after emesis
- ▶ Maintain good oral health by brushing 2x day with fluoride toothpaste and flossing, especially since pregnancy hormones can increase susceptibility to gingivitis (~60-75% women report pregnancy gingivitis)
 - ▶ Pregnancy epulis/ pyogenic granuloma
 - ▶ Periodontal disease has been associated with preterm birth



Prenatal Tips continued

- ▶ Continue routine dental care including x-rays and fluoride treatment, and treat dental decay prior to delivery to prevent the spread of carious bacteria
 - ▶ Local anesthetic is safe during pregnancy
- ▶ Establish a pediatric dental home similar to choosing a pediatrician...pediatric dentists are helpful for newborn anomalies (congenital epulis, natal teeth, latch issues), and diet/hygiene education to prevent early childhood caries
- ▶ Health issues and complications during pregnancy can alter the mineralization and calcification of the developing baby teeth- if mom takes antibiotics, abuses drugs/alcohol, or has bacterial/viral infections with associated fevers the teeth may not form with adequate mineral
 - ▶ Hypomineralized teeth are more prone to cavities



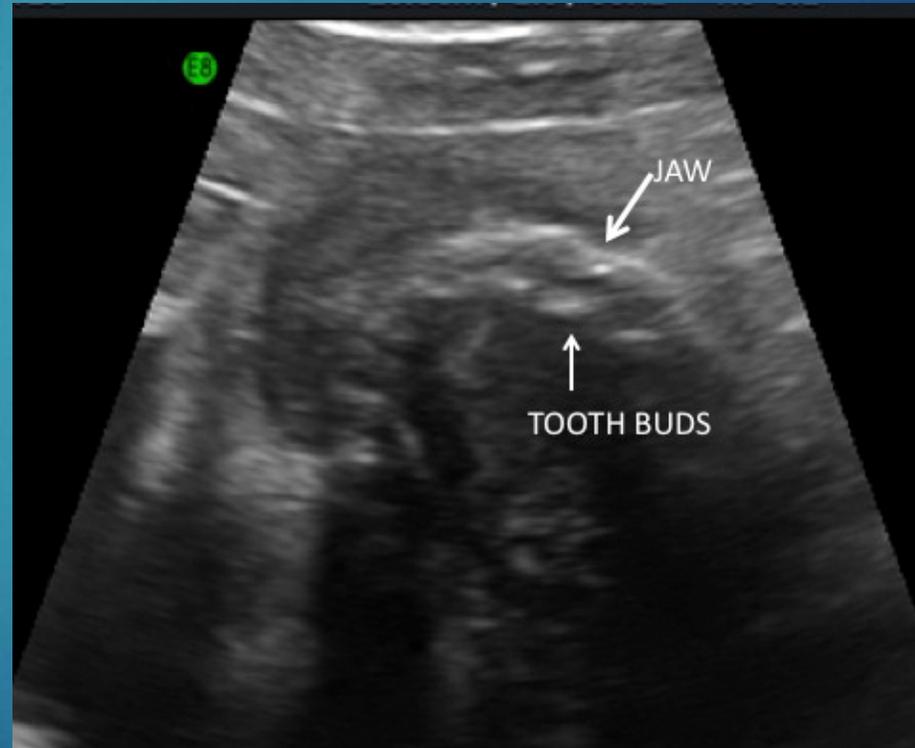
Lip Closure 5th-6th Week

- ▶ The first two months of embryonic growth are integral to the early formation of many facial structures including the jaws, nose, eyes, ears, and mouth.



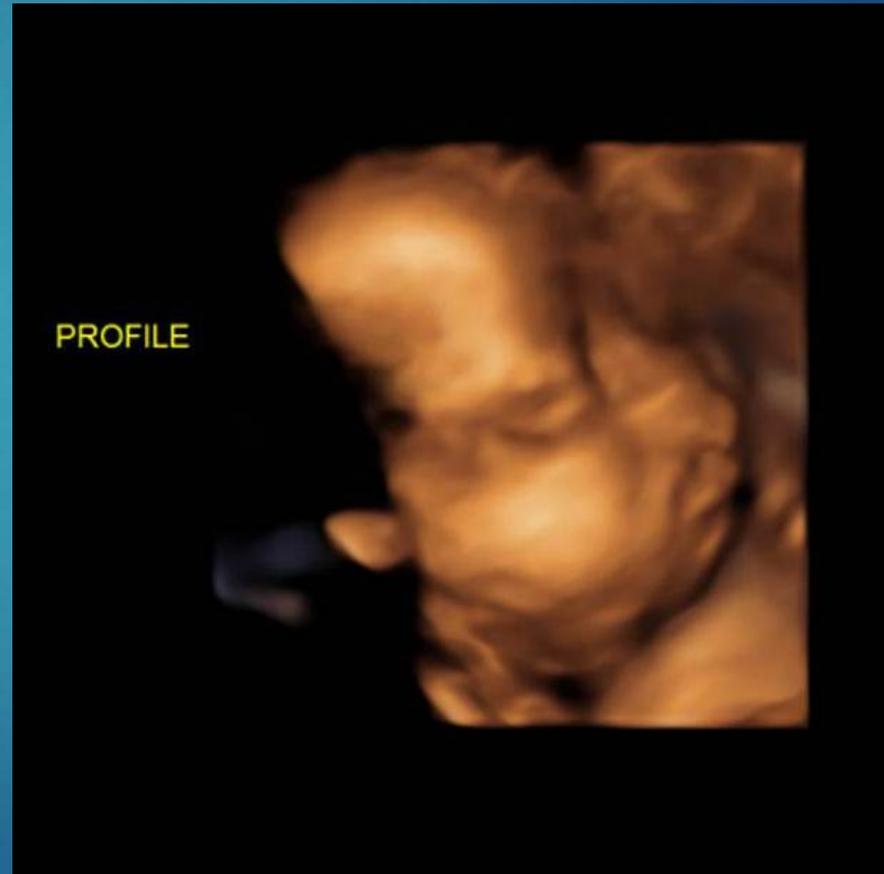
Tooth Development 6th week

- ▶ A child's first set of 20 teeth are called the primary, or baby teeth. Dental development of the primary teeth begins around the 6th week of pregnancy.



Palate closure 7th-11th weeks

- ▶ The closure of the embryonic palate occurs rapidly starting at the 7th week of development. This fusion completes at approximately the 11th week in utero. Improper closure of the palate causes cleft palate. Cleft lip or palate occurs in approximately 1 out of 700 live births with variation among different ethnic groups.



Primary tooth formation and calcification

- ▶ Baby teeth will continue to form and calcify throughout the pregnancy and even after the child is born. During this time, the crowns and roots of the primary teeth will begin to take shape, and by 32 weeks, the enamel crowns of the primary teeth are fully formed. Proper nutrition, including a diet rich in Vitamin D, calcium, and fluoride will help support proper tooth development.



Postpartum Care

- ▶ Encourage moms to have a pediatric dentist lined up before delivery in case there are any dental issues
 - ▶ Gingival cyst of the newborn
 - ▶ Congenital Epulis
 - ▶ Natal/neonatal teeth & Riga Fide
 - ▶ Eruption cyst
 - ▶ Tongue tie (lip tie?)
- ▶ Educate mothers about oral hygiene practices before teeth erupt so that baby is used to oral manipulation
- ▶ Educate moms about nursing/bottle feeding through the night once teeth erupt



Gingival Cyst of the Newborn

- ▶ Keratin nodules, derived from remnants of the dental lamina
- ▶ Solitary or multiple nodules on the edentulous newborn ridges
- ▶ Self-limiting, shed on their own, no treatment necessary
- ▶ Similar to Epstein's Pearls or Bohn's Nodules (EP on the palate, BN on the ridges)



Natal/Neonatal teeth

- ▶ Natal teeth are present at birth
- ▶ Neonatal teeth erupt within the first month of life
- ▶ These are the primary incisors, not extra teeth
- ▶ Might cause feeding issues
 - ▶ Can be smoothed if sharp to alleviate pain for mom
 - ▶ Nipple shield can help
- ▶ Sometimes they are very mobile and need to be extracted to prevent aspiration (usually done knee-knee without numbing)



Lip/Tongue tied?!?

- ▶ Some providers in town are becoming "frenectomy happy"
- ▶ Please stress eval by a PEDIATRIC DENTIST or pediatrician prior to frenectomy
- ▶ Latch issues that are truly dentally related are due to a tight lingual frenum...extremely rare to be due to labial frenum (class 4, <1%)
- ▶ Lingual frenectomy usually indicated within first few weeks of life and the feeding almost immediately improves
 - ▶ if a parent tells you their *toddler* is lip-tied and needs it snipped PLEASE refer them for second opinion
- ▶ Labial frenectomies can actually worsen a diastema/gap between front teeth if done too early (scar tissue)



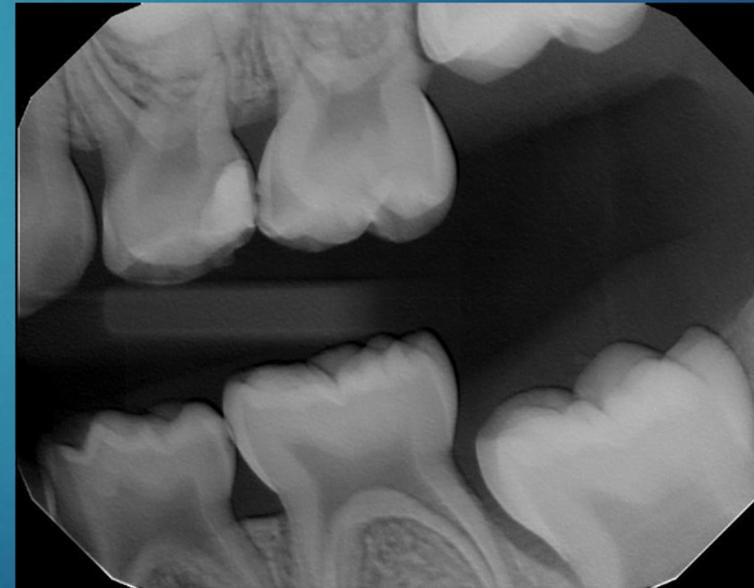
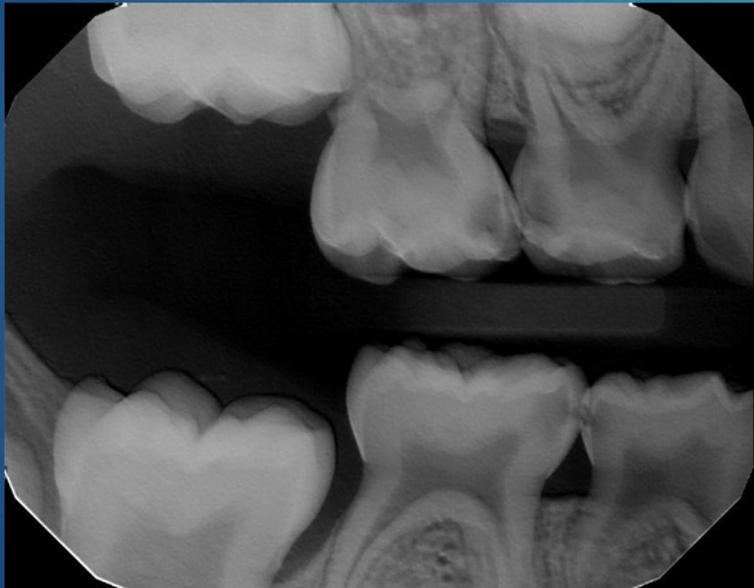
Early childhood caries (ECC)

- ▶ White spot lesions are the first sign of decay, and can quickly become frank cavitations
- ▶ When caught early (especially with dental visits by age 1) the need for treatment can be prevented
 - ▶ SECC usually requires oral sedations or general anesthesia
- ▶ Very closely associated with lack of proper hygiene and bottle/sippy cup habits at night *and during the day** diet discussed later
 - ▶ On demand nursing/bottle strongly associated with ECC, should be stopped when teeth erupt



Case: 5 yr old female

- ▶ Had been seeing general dentist since age 3
- ▶ GD visualized cavity upper left at age 4.5 and GD placed filling *without taking x-rays* to verify presence/absence of other caries
- ▶ Took first set of x-rays at age 5.5, mom came to us for 2nd opinion because there were 6 more cavities...ended up needing GA. Parents were devastated because she had always had 'great' dental checks
 - ▶ GA might've been prevented with pediatric dentist at age 1 and earlier X-rays



The F word and S word



FLUORIDE

- ▶ According to the CDC, water fluoridation is one of the top 10 leading public health benefits of the 20th century!
- ▶ Topical fluoride (daily toothpaste and professional applications) helps to remineralize your erupted teeth
- ▶ Systemic fluoride (water, food, Rx) helps the developing, unerupted teeth
- ▶ Similar to parental resistance to immunizations, many parents resist Fluoride despite its safety and benefits

The struggle is real...



Fluoride

- ▶ Fluoride Toothpaste: Begin using fluoride toothpaste when the first tooth erupts (as young as 6 months old!) to mature the newly erupted enamel and begin the remineralization process
 - ▶ Smear/ grain of rice size
- ▶ Professional Fluoride: Routine applications give demineralized areas a boost and also help newly erupting teeth mature with fluoroapatite
 - ▶ 20x stronger than OTC toothpaste
- ▶ Silver Diamine Fluoride: Great way to delay or even avoid treatment (antibacterial), especially very young or limited access (villages)
- ▶ Fluoride supplements: Due to the "halo effect" fluoride supplementation has become less common
 - ▶ Halo effect is the sum of all F exposure even if your home doesn't have fluoridated water (fruits/veggies, infant formula, school water, etc)



Sugar...not so sweet after all



- ▶ The medical community is already very aware of the effects sugar has on overall health and development
- ▶ High sugar diet during pregnancy increases the risk for gestational diabetes, increased pregnancy weight gain, pre-eclampsia, pre-term delivery
- ▶ High sugar diet increases the risk of type 2 diabetes, childhood obesity, poor attention, and *dental caries*
- ▶ Sugar is sugar, no matter what kind...so when considering diet recommendations it is important to account for all sugar exposures
 - ▶ Processed, refined sugars are worse than natural sugars
 - ▶ Sugar hides in unlikely sources (chips, crackers, milk)
 - ▶ Breast milk ~17g sugar, Cow's milk ~15g sugar per serv
 - ▶ *I have postcards and brochures available for quick diet recommendations

Where do we go from here?

Jump in and get your feet wet!

- ▶ Now that you are armed with information about the importance of prenatal and early infant oral health, fluoride, and dietary risks, what are **YOU** going to do???



Baby Steps

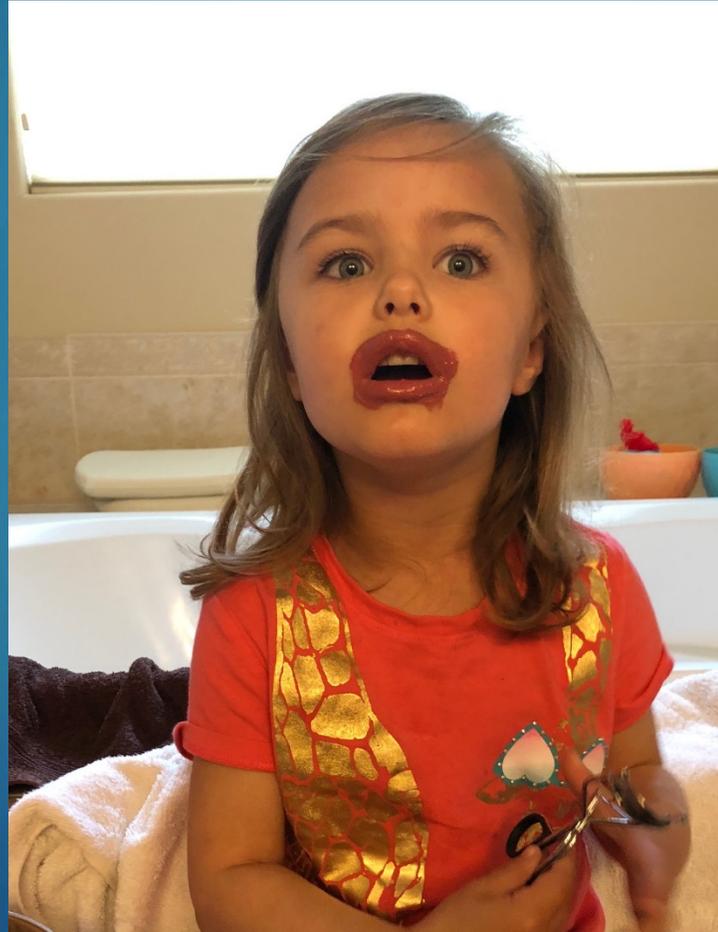
- ▶ Begin planting the seeds about the importance of oral health at prenatal visits
 - ▶ *I have brochures and board certified pediatric dentist provider lists that can be part of new-mommy goody bags
 - ▶ www.prenataloralhealth.org
- ▶ Make sure mom starts/continues her dental care
- ▶ Encourage infant dental exams at/before age 1...Educated mothers with *appropriate* providers can avoid unnecessary treatment (lip/tongue tie surgery) and can totally prevent early childhood caries



Prevention is Key to be Cavity FREE!



Questions?
Comments?



THANK YOU!!!

