Intro and Warnings

**Beware fluoride fanatics** like me – you can ignore all this and you and baby will be fine. It is just something to be nutty about if you so choose.

**Two times to be extra careful with fluoride**: 7th month of pregnancy and at birth. If you are approaching the 7th month zone ideally be careful about the way teeth will look. Fluoride makes teeth white, which is generally good, but you don’t want a sudden color change in a very visible area. Your baby’s front permanent teeth, the parts that show the most in a sweet smile, start forming about the 7th month of pregnancy. From then until about age 6 months you should start a new fluoride dose slowly to gradually transition to whiter teeth. My guess is something like .25mg F daily for a week, then .5, etc. (If your water is fluoridated, you can get the .25mg from an 8 oz glass of water. Or, twice that from “baby water” from your drug store if you get one with fluoride – it will be half-strength of city water.)

**Beware the fake “pro” fluoride dental lobby** My advice is FAR different from what other people try to tell you is best for kids. If you google “prenatal fluoride” or “infant fluoride” what you will get is 99% negative spooky stuff.

The dental lobby generally treats us like we are a bunch of air heads. But your own dentist will most likely want to help. It is not going to kill their business if ONE kid has perfect teeth, and your dentist would love to see the results.

**Beware the “anti-F’s”** (An “anti-F” paper tries to make an overdose effect look like it could happen at low doses, and minimizes the good effects of low doses.)

The most current “anti-F” is a study in Mexico showing that prenatal fluoride could lower IQ. ( https://ehp.niehs.nih.gov/ehp655/ )

You have to admit that as a new parent (or even as a doctor) this stuff is scary. It makes it look like your child will be a blithering idiot if you take prenatal fluoride. I have not had time to fully digest this report. All I can say now is that in the normal range of F (below 1.0 on the horizontal axis) the numbers look neutral to me. It does look like there is a negative effect at high doses.

(How and why??? I would not be shocked if someday we find some interesting biology. To me it would be a hoot if F slows down the maturing of intelligence. F does slow things down by being a super-strong “glue” – that is how it makes teeth that can resist acid, and how in excess it causes god-awful ugly brown pitted teeth. But for now I am assuming the F is displacing some iodine, and iodine is critical for IQ – see more in the 18 nutrients bit (iodine is #17). )

Below is the chart your doctor has probably seen. Probably 95% of the published papers on fluoride are about as encouraging as this one.

Well, first here is the chart with a few lines I put in – a blue one showing the normal type doses to the left, vs the high doses, and a red line to help see the slope.





**Beware “malware” from my old sites.** This fall I am trying to get my websites corrected but for now they are almost unusable. If you do happen to run into any links to my sites, beware, please see the warning below before clicking. (Below I put an “X” in the URL so you don’t accidently click to it.) (All these things will be covered in a minute, hang on.)

Infant fluoride: Xhttp://raygrogan-ivil.tripod.com/infantfluoride/

Prenatal fluoride: Xhttp://prenatalfluoride.tripod.com/

Early pregnancy fluoride: Xhttp://raygrogan-ivil.tripod.com/osteo/id5.html (straighter teeth, this one not proven)

**Warning:** I would only suggest going to these sites if you have a good security system, like on a university computer. These are free sites that I can no longer edit, and there are malware ads. The most common is a Media Player malware popup. If you get that, the only solution on a home machine is to unplug the power – don't click anything. Put your mouse out of reach! (On a secure system you can just close the bad window.)

**I have zero credibility.** So far, my “technology” has not been accepted. It has been rejected by the patent office and ignored by the recommending organizations (ADA / AAP). However, similar doses have been tested by a rigorous federally sponsored trial, and found to prevent all cavities in 90% of children (Leverett *Caries Res* 1997; 31:174-179).

OK, you made it through the warnings ….

Some parents can “prove” that fluoride in infancy works just by looking in a mirror if you meet a few specs:

Birth year between 1962-1995

In a first world country

Non-fluoridated water

(In this time period it was very common to have been prescribed fluoride as a newborn, up to about 95% if your parents took you to a pediatrician at birth, and if you had non-fluoridated water (about half of the USA). Fluoridated water prevents cavities, too, but you get fewer, smaller cavities in all teeth, not in the specific pattern you get from starting a supplement at a specific age.)

Now for the mirror to find your first permanent molars. These were formed in pregnancy and did NOT get the fluoride that started at birth. (These are the 6th teeth back from the front teeth usually. There is one in each corner of the mouth.) If they had cavities, you can usually see the fillings. If you have only 4 fillings in your mouth, just on these four teeth that formed in pregnancy, you probably did get infant fluoride. All of the rest of your permanent teeth, the ones with zero cavities, formed while you were taking the fluoride. Of all the nutrients that are needed to form healthy teeth, fluoride is by far the most commonly deficient. Also look at your front teeth. Are there any “too white” areas? If not visible, try shining a light in from the sides, you may be able to flash off a deep layer that is white and opaque. If so this is from a little too much F when you were first born.

1962 – 1979 White spots most common – During those years about 90% of pediatricians were using a dose of .5 mg for newborns. In the best study about two thirds of the children had visible fluorosis. Five percent had enough so that the appearance of the teeth was "undesirable". (See Aasenden & Peebles, Arch Oral Biol 19:321 and 23:111. This was generally in areas without fluoridated water, which is about half the country. It should be mentioned that dental caries in these children was reduced by about 80%, and during those years in the early 1960's dental caries was a serious problem.)

1962-1967 Rarest – these births were in the years prenatal fluoride was legal, and about 15% of kids got it. I have a suspicion, but zippo data, that starting PNF late in pregnancy added to the risk of white spots. There were 3 other infant studies that did not report fluorosis. These studies used the same dose, but the children were not born during the PNF window of 1962-67.

1980-1995 Doses were cut in half so white spots should be less noticeable. No great studies on results.

1995 on Starting age shifted to 6 mos. No studies (except NHANES showing across the country caries are increasing in this cohort). My guess is there may still be a few white spots, and if so they should have shifted upward in position about 1/8”. Teeth are thicker and more opaque here anyway, so probably harder to see.

Summary of my opinion – some parts not 100% proven (the longer versions have more of the fudge factors and how to do each age).

Fluoride is an important nutrient and most modern people are deficient. It is the strongest “magnet” of all the elements, so it makes strong teeth, bones, and other rough-tough parts of plants and animals.

Normal adult needs are about 1 mg a day, which your doctor can prescribe. It is very cheap. (There are also “food” ways coming up later.)

As pregnancy happens, the embryo will develop better with fluoride, with straighter teeth being the most noticeable effect. When fetal teeth start growing at the end of the 2nd month of pregnancy, they will develop better, with a lack of pits and fissures and whiter color being easy to see. Better enamel and a lack of cavities are more subtle good effects.

At birth a child needs about .033 mg / kg, which your pediatrician can help you with.

The only important dosage issue is overdosing between the 7th month of pregnancy and about age 6 months, as then too much fluoride will cause white spots on the leading edges of the permanent smile teeth. Start low and slow during this critical time, as a sudden increase from zero is cosmetically the same as an overdose. Best is to start earlier, as an adult before pregnancy, and have no worries.

Good luck!

Ray