

Monthly paediatric update newsletter for all health professionals working with children – put together by Dr Julia Thomson, Paediatric Consultant at Homerton University Hospital, London, UK. Housed at www.paediatricpearls.co.uk where comments and requests are welcome!

How much screen time should your child have?

While technology offers many benefits, too much screen time can negatively impact your child. Check out what the American Academy of Pediatrics recommends for your child!

- None** If your child is younger than 18 months old, avoid all screen time if possible.
- Limited** If your child is 18 to 24 months old, a very limited amount of screen time is recommended.
- Less than 1 hour** If your child is 2 to 5 years old, limit their screen time to less than one hour.
- Flexible** If your child is 6 years or older, set your own screen time limits. Ensure that it does not interfere with sleep time or physical activity.

Patient First

I have been concerned for a while about the effect of screens on the social development of young children.

The American Academy of Pediatrics calls for zero screen time for children 2 years of age and one hour or less per day for ages 2-5 years, due to social development risks. RCPCH is fairly silent on the issue. There is an easy to read, balanced summary of the evidence so far at <https://www.apa.org/monitor/2020/04/cover-kids-screens>.

Dr Connor Brett, paediatric SHO at Homerton currently, has looked at a couple of papers for our journal club recently on social development and screens and social development and lockdown:

Screen time and social isolation impairs child development

Electronic screen time is increasingly central in childhood entertainment; however, [excessive screen time negatively influences child development](#).

A recent study from China investigated the relationship between the screen time of children with autism spectrum disorder (ASD) with their autistic symptoms and development quotients (DQs)¹. Compared with typically developing children, children with ASD have longer screen time 3.34 ± 2.64 h/day vs 0.91 ± 0.93 h/day, with younger age groups having worse outcomes. The longer the screen time:

- ◆ The more severe the symptoms of ASD (especially sensory symptoms)
- ◆ The more obvious the developmental delay, particularly in the language domain

Babies born in the covid-19 lockdown have also showed deficits in social communication². Compared with a historical cohort, babies born in Dublin during the first three months of the lockdown had social communication deficits. At 12-months fewer pandemic born infants:

- had one definite and meaningful word (76.6% vs 89.3%)
- could point (83.8% vs 92.8%)
- could wave bye-bye (87.7% vs 94.4%)

However, more were able to crawl (97.4% vs 91%)

There was no difference between the infants who contracted COVID-19 and those who did not.

These babies saw fewer unmasked faces speaking to them, heard a narrower repertoire of language and 25% had not met a child their own age by their first birthday, which will have led to reduced social peer interaction.

1 - Dong HY, Wang B, Li HH, Yue XJ, Jia FY. Correlation Between Screen Time and Autistic Symptoms as Well as Development Quotients in Children With Autism Spectrum Disorder. *Front Psychiatry*. 2021 Feb 16;12:619994. doi: 10.3389/fpsy.2021.619994.

2 - Byrne S, Sledge H, Franklin R, et al Social communication skill attainment in babies born during the COVID-19 pandemic: a birth cohort study *Archives of Disease in Childhood Published Online First: 11 October 2022*. doi: 10.1136/archdischild-2021-323441

JT signing off.....

After 13 years of writing and/or editing the monthly Paediatric Pearls newsletters, this is the last one. No one has learnt more than me by researching material month in month out. Most of the text boxes arose from something I was asked about the previous month and had to look up the latest evidence for. I am very grateful to the editorial board for their guidance over the last few years, to many junior and senior colleagues who have written articles for the newsletters and especially to Jackie and Nicki for some fantastic child safeguarding editions of Paediatric Pearls.

Thank you to all of you for reading the newsletters too! I hope they have been useful to your practice and in keeping you up to date.

I'll keep the website live for a while as I know many of you use it as a resource, especially the collection of documents under the Primary Care tab.

Season's Greetings to one and all and Best Wishes for 2023!

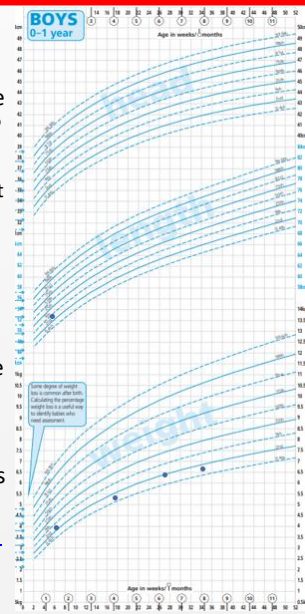
"Did you know?"

☺ The blue writing on this boy's growth chart (and the same for any other growth chart) is written along the 50th centile?

When the WHO growth charts were updated in 2009, the 50th centile was no longer in bold. This was to stop parents thinking that the 50th centile line was "normal". However, as I've got older and my eyesight has got worse, I have found it increasingly difficult to read these charts. I was delighted to find out this month that "weight" is written along the 50th centile to help ageing clinicians like me orientate ourselves.

☺ Growth charts used in the UK can be downloaded for free at <https://www.rcpch.ac.uk/resources/growth-charts>.

☺ If the point marked is within 1/4 of a space of the line, the child is described as being "on the centile". If the point is further away, they are "between the two centiles". https://www.rcpch.ac.uk/sites/default/files/Measuring_and_plotting_advice.pdf. Time for the spectacles again...



I was caught out this week when a 4-year-old with abdominal pain and a bit of bloating and constipation I had been reviewing for over a year, turned out to have coeliac disease. Caught out because she had already had a negative coeliac screen 18 months earlier at a different hospital, so I didn't repeat it.

HOW CAN WE REDUCE FALSE NEGATIVE COELIAC TESTS IN CHILDREN?

Coeliac disease is a common, autoimmune condition that can occur at any age and is treated with a lifelong gluten free diet. When someone with coeliac disease eats gluten (a protein found in wheat, barley and rye), their immune system attacks itself and causes damage to the gut. If left undiagnosed and untreated long term, the disease can cause complications like growth problems, delayed puberty, tooth enamel defects, iron deficiency anaemia, chronic fatigue and, over time, osteoporosis. <https://www.coeliac.org.uk/information-and-support/coeliac-disease/about-coeliac-disease/coeliac-disease-in-children/>

1.1.6 Advise people who have tested negative for coeliac disease, particularly first-degree relatives and people with type 1 diabetes, that:

- coeliac disease may present with a wide range of symptoms and
- they should consult their healthcare professional if any of the symptoms listed in recommendations 1.1.1 or 1.1.2 arise or persist.

<https://www.nice.org.uk/guidance/ng20/chapter/Recommendations#recognition-of-coeliac-disease>

Hats off to this child's GP who was concerned by the lack of energy and pallor and repeated the coeliac screen. The tissue transglutaminase (tTG) result was more than 10 times the normal figure and anti-endomysial (EMA) antibodies were positive. In these cases, coeliac disease can be diagnosed without the need for an endoscopy and biopsy and a gluten free diet should be started immediately. The family need to be encouraged to join [Coeliac UK](#) (£2 per month) to get the appropriate advice on gluten-free foods and medications and for support. GPs can prescribe some gluten free foods; click [here](#) for NHS England's FAQ factsheet.

Reasons for false negative coeliac screens:

1. not eating gluten in at least 1 meal per day for at least 6 weeks before testing
2. IgA deficiency. Please request total IgA when requesting a coeliac screen and if the child is IgA deficient, request IgG EMA and tTG

Resources for families:

Information videos about coeliac disease by one of Coeliac UK's dietitians:

<https://www.coeliac.org.uk/information-and-support/coronavirus-information-hub/new-digital-resource-to-support-you-after-diagnosis/?preview=true>

Information about oats in coeliac disease: <https://www.coeliac.org.uk/information-and-support/living-gluten-free/the-gluten-free-diet/about-gluten/oats/>

Gluten free diet for children (Australian site):

https://www.health.qld.gov.au/_data/assets/pdf_file/0028/835615/paeds-gluten.pdf

American version: <https://celiac.org/eat-gluten-free/meal-plans/pediatric-meal-plan/>