

Getting the best start: A recipe for healthy children

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Overall, kids in Yukon are doing okay. Rates of smoking during pregnancy, folic acid use, high and low birth weight are similar to Canada. When it comes to breastfeeding, Yukon mothers do even better!

However, these averages hide the most vulnerable children, and there is need for improvement in some areas.

Areas of concern:

- About 40% of single parents experience some food insecurity
- About 30% of lone parents have trouble affording school supplies
- Immunization rates are good early in childhood, but then drop off
- Over a fifth of our kids have one or more vulnerabilities when they enter kindergarten
- There is a significant gap in health and health behaviours of school aged children between rural communities and Whitehorse.

Healthy development is really all about the brain. Between birth and age 4, the brain triples in size, and about 700 connections between brain cells are being made every second. The formation and pruning of connections is shaped by the child's environment and experiences. The early shaping of the brain's architecture shapes the child's future.

What positively influences brain growth?

- Food during pregnancy. A balanced diet, but with slightly bigger portions, a multivitamin and folic acid.
- Activity from birth on influences brain development at the molecular level
- Sleep and lots of it! During sleep, the developing brain recollects information, organizes it, makes sense of it, and puts it into long term storage.
- A nurturing environment. The richer the child's environment, the more brain connections are made. The richness is in human interactions.

- Babies are actively engaged in a two-way conversation with others. They look, smile, grunt, squeal and cry. These communications demand a response, and this response (called serve and return) lays down pathways in the brain.

What influences are negative?

- Screen time. Screen viewing decreases ability to read social cues, ensures passivity, and takes away from the all-important serve and return, human-to-human interactions.
- Poor nutrition during pregnancy. Pregnancy is never a time for dieting or weight loss.
- Hearing difficulties. Hearing is closely connected to language development. That's why all babies born in Yukon are screened.
- Toxins. Alcohol, tobacco smoke, and environmental toxins (like plastics, lead, mercury, pesticides). There is no known safe amount of alcohol during pregnancy.
- Toxic stress as a result of neglect, poverty, violence in the home results in the release of stress-hormones and an excessive inflammation in a number of body systems. The end result is more risky behaviour, higher rates of injury, mental health and substance abuse problems, and in the long run higher rates of chronic disease.

What can we do to improve outcomes for kids?

Preconception:

Planned pregnancies. At least 40% of pregnancies are unplanned. But planning for pregnancy allows time to set up the ideal conditions for a healthy pregnancy - folic acid, fathers ready to participate, no alcohol on board, no drugs.

Prenatally:

Nutritious food, pregnancy supplements (folic acid, iron), prenatal care that includes screening, counselling, and advice, and staying active.

After birth:

- Breastfeeding – it's nutritious, lowers the risk of obesity, and it's a prime environment for serve and return, and maternal-infant bonding. Introduce pablum but also fruits and vegetables at 6 months.
- Serve and return exchanges with moms, dads, aunties, older siblings, grandparents goes directly into building brain pathways.
- Sleep – both parents and child need sleep. 6-7 hours is minimal for parents, and 8 is optimal. 16 hours for newborns.

- Toxin free environment which limits exposure to cleaning products, running car engines, plastics.
- Play and make music to engage emotions and language development
- Regular activity, and zero screen time for the preschool child.
- Screening for early development indicators and milestones.

Throughout childhood: Take care of the family. Screen parents for depression, and other family issues. Provide parenting support.

Conclusions

- We need a robust and sustained early childhood development strategy that pays attention to at-risk children, nutritional needs, parenting support, and a nurturing day care or classroom environment.
- We need to look at services for kids. Is access sufficient? Are services sufficiently coordinated? Are the successful ones being expanded where appropriate? Is there a master plan?
- The recipe for a healthy child is also a recipe for a healthy adult, and a healthy society. With an investment in early childhood, we build healthy adults who are spirited, inspirational, who participate, and take care of one another.