



WHO Growth Chart Assessment and Counselling – Key Messages and Actions



Measure length/height, weight and head circumference as per local/provincial protocols.

Plot on WHO growth chart as per local/provincial protocols.

Review ALL plotted growth measurements on client's record. If growth is outside of expected parameters or an unexpected shift in growth has occurred, check age calculation, measurements and plotting, and if necessary, re-measure and re-plot.

Growth measurements At or above the 3 rd to at or below the 85 th percentile (97 th for head circumference) and consistent with previous percentiles	Head circumference-for-age (0-2 years) Below 3 rd percentile and growing slowly OR Above 97 th percentile and growing rapidly	Shift in percentile (any sharp changes) and / or Growth line is flat	Below 3 rd percentile		Above 85 th percentile	
			0 - 2 years Weight-for-age Length-for-age Weight-for-Length	2 – 19 years BMI-for-age Weight-for-age Height-for-age	0 – 2 years Weight-for-length	2 – 19 years BMI-for-age

Key Messages for Families				
“Growth pattern appears normal. Child’s own pattern may change.”	“Head circumference is ‘small’ or ‘large’.”	“Growth pattern may be changing.”	“Weight may be low.” “Length/height may be low.”	“Weight may be ahead of length/height.”

Examine all measures of growth collectively.
Review standard discussion points with families. (See reverse)
May recommend follow-up visit to track growth sooner than next scheduled appointment.
Discuss relevant community programs.

Reinforce the positives!

This MAY be a normal growth pattern, however it signals a need for assessment and monitoring. Arrange for follow-up. Consider appropriate referrals to other health professionals for more detailed assessment and counselling - dietitian, family physician, lactation consultant or pediatric specialist (informed consent required).

CORE GROWTH MESSAGES

- Measurements are health SCREENING tools.
- Growth is one of the signs of GENERAL HEALTH.
- Growth patterns are assessed for the INDIVIDUAL.
- Growth may reflect FAMILY growth patterns.
- Growth pattern OVER TIME is more important than one single measurement.

COUNSELLING: STANDARD DISCUSSION POINTS

- | 0-2 years | 2-19 years |
|--|---|
| <ul style="list-style-type: none"> • BREASTFEEDING pattern and technique • Formula feeding – pattern; technique; preparation; etc. • Age-appropriate milk, beverages and introduction to solid foods | <ul style="list-style-type: none"> • Intake of foods high in fat, sugar or salt • Body image issues • Disordered eating pattern • Eating well with Canada’s Food Guide |
| <ul style="list-style-type: none"> • Child’s overall health • Presence or recent history of acute illness • Presence of chronic illness or special health care needs • Stress or change in child’s life • Family growth patterns • Family meal patterns • Sleep pattern | <ul style="list-style-type: none"> • Feeding relationship • Family physical activity routines • Food and activity routines in child care or school • Screen time • Amount of juices and/or sweetened beverages • Food security concerns: availability and access to healthy foods |

Recommended Cut-Off Criteria Using the WHO Growth Charts

Cut-off points are intended to provide guidance for further assessment, referral or intervention. They should not be used as diagnostic criteria.

Growth Indicator	0 – 2 years	2 – 5 years	5 - 19 years	Growth Concern
Weight-for-age	< 3 rd	< 3 rd	< 3 rd	Underweight
Height / Length-for-age	< 3 rd	< 3 rd	< 3 rd	Stunted
Weight-for-length	< 3 rd			Wasted
Weight-for-length	> 85 th			Risk of overweight
Weight-for-length	> 97 th			Overweight
Weight-for-length	> 99.9 th			Obese
Head Circumference	< 3 rd or > 97 th			Head circumference
BMI-for-age		< 3 rd	< 3 rd	Wasted
BMI-for-age		> 85 th		Risk of overweight
BMI-for-age		> 97 th	> 85 th	Overweight
BMI-for-age		> 99.9 th	> 97 th	Obese
BMI-for-age			> 99.9 th	Severely obese

Resources available at www.whogrowthcharts.ca

- A Health Professional's Guide to the WHO Growth Charts
- 2014 WHO Growth Charts Adapted for Canada
- BMI Tables and Calculator
- Self-Instructional Training Program on the WHO Growth Charts Adapted for Canada
- Is My Child Growing Well? Questions and Answers for Parents
- Tips to Help Your Child and Teen Grow Well



Other resources

- Nutrition for Healthy Term Infants: Recommendations from Birth to 24 months available at <http://www.hc-sc.gc.ca/fn-an/nutrition/infant-nourisson/index-eng.php>
- Find a Dietitian www.dietitians.ca/find
- Healthy eating/active living resources available at www.dietitians.ca, from Health Canada and provincial government web sites and local public health centres.