

ACTIVITY HANDOUT: GROWTH EXPECTATIONS FOR CHILDREN WITH DISABILITIES (ANSWERS)

[MODULE 3: Nutrition Considerations for Children with Disabilities]

Discuss the following questions:

1. Do you expect this child to grow differently as part of their condition?
2. Are you concerned about the child's growth? Why or why not?
3. What information should you consider when interpreting this child's growth?

Case Scenario 1: Low weight but steady growth

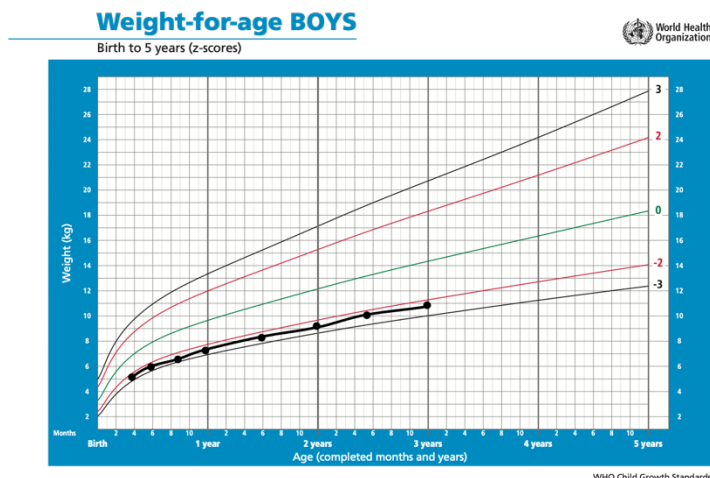
Name: Daniel

Sex: Boy

Age: 3 years

Disability: Cerebral palsy

Daniel has feeding difficulties and primarily eats puréed and mashed foods. He takes nearly an hour to finish each meal. His weight is below the -2 z-score, but it has consistently tracked along that same curve over the past year. He has good energy levels and seems to be doing well overall.



Answers

Do you expect this child to grow differently as part of their condition?

Yes, cerebral palsy can influence both height and body composition. Children with cerebral palsy often have higher body fat and lower lean body mass (muscles, organs, and bones). Because of this, they may be shorter and weigh less. In this case, it is possible that the disability itself (nonmodifiable) and other factors (modifiable) are contributing to the child's weight being below -2 z-score.

Are you concerned about the child's growth? Why or why not?

While the child's weight gain has been consistent over the past year and he is doing well overall – both important considerations, I would still be concerned about his growth due to his feeding difficulties, which means he is still at risk for faltering growth.

What other information should you consider when interpreting this child's growth?

Quality of his diet – does it have enough calories and protein to support his growth?

His energy needs – does he have high muscle tone that increases his needs?

Feeding difficulties – he takes a long time to finish a meal. Has he experienced coughing during feeding or any respiratory illnesses?

Height-for-age and weight-for-height growth charts (if height can be measured accurately) – while he may be low on these growth chart, has he grown consistently in height over the years? How does his weight look relative to his height?

Case Scenario 2: Slow length gain

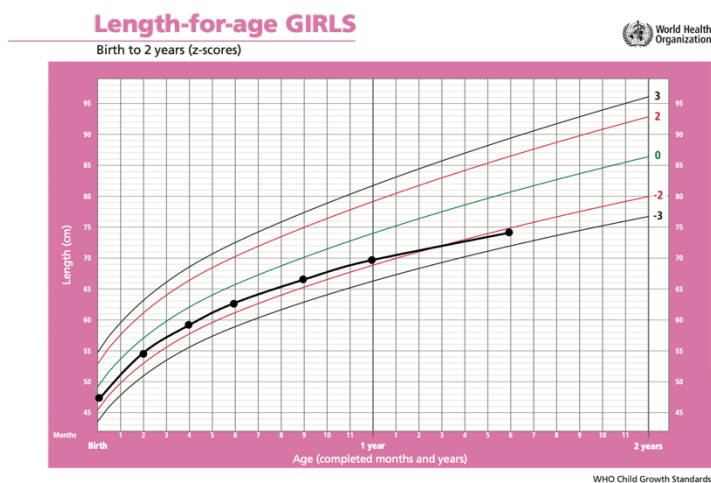
Name: Aisha

Sex: Girl

Age: 18 months

Disability: Down syndrome

Aisha's weight and length were within average ranges for the first year of life. Over the past 6 months, her length has dropped from the -1 z-score line to slightly below the -2 z-score line. She experiences some constipation. She's otherwise healthy, with good appetite and energy.



Answers

Do you expect this child to grow differently as part of their condition?

Yes, Down syndrome is a genetic condition that directly affects stature. As a result, children with Down syndrome are typically shorter than other children of the same age. In this case, the child's condition, which is not something we can modify, most likely plays the biggest role in her linear growth.

Are you concerned about the child's growth? Why or why not?

Given that short stature is a natural part of Down syndrome and that she is overall healthy with good energy, I'm not as concerned about her growth pattern. I would still want to monitor her growth closely and ensure that her weight gain remains consistent over time.

What other information should you consider when interpreting this child's growth?

Weight-for-length growth chart – does her weight gain stay consistent over the years?

Quality of her diet – does it have enough calories and protein to support her growth?

Fiber and fluid intake – is her diet rich in fiber and does she drink enough fluids? While this may not help me interpret her growth, it can inform dietary recommendations to manage constipation before it becomes severe and lead to poor appetite.

Case Scenario 3: Sudden weight loss

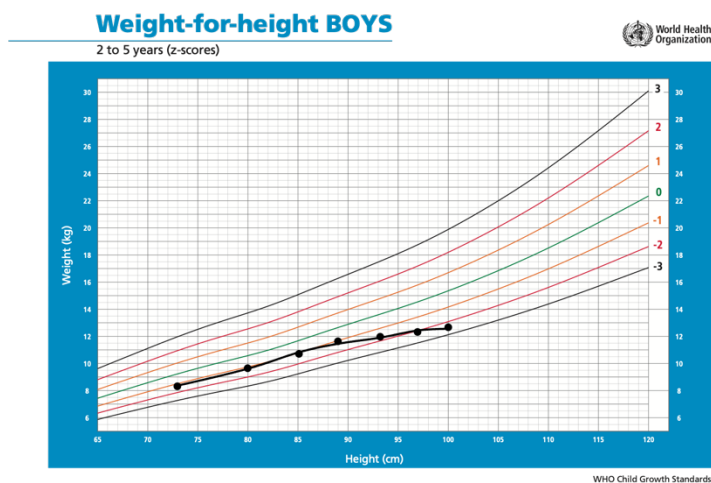
Name: Ziad

Sex: Boy

Age: 4 years

Disability: Autism

Ziad has become extremely selective about food over the past year, eating mostly dry, crunchy foods. He refuses fruits and vegetables and often skips meals altogether. His mother reports that he has lost noticeable weight, and his weight for height has dropped from the -1 z-score line to below the -2 z-score line.



Answers

Do you expect this child to grow differently as part of their condition?

No, while children with autism can have nutrition and feeding concerns that place them at an increased risk for faltering growth, the disability itself does not necessarily alter growth patterns. Therefore, poor growth in this case is something that can be addressed and managed.

Are you concerned about the child's growth? Why or why not?

Yes, his growth pattern shows a sharp decline, which is concerning. According to his most recent growth weight-for-height point (below the -2 z-score line), he has wasting. If his selective eating is not addressed effectively, his growth may continue to falter.

What other information should you consider when interpreting this child's growth?

Height-for-age growth chart – has he grown consistently in height over the years?

Food intake – what does he typically eat? How much? Does his diet contain energy-dense and nutrient-dense foods to support growth?

Illnesses – has he experienced any recent illnesses that are contributing to his poor growth?

Nutritional supplements - is he receiving any supplements (protein/energy, vitamins or minerals)

Medications – is he on any medications that affect nutrient absorption?

Feeding practices – how is his mother addressing his feeding difficulties? What are mealtimes like?

Case Scenario 4: Rapid weight gain

Name: Aya

Sex: Girl

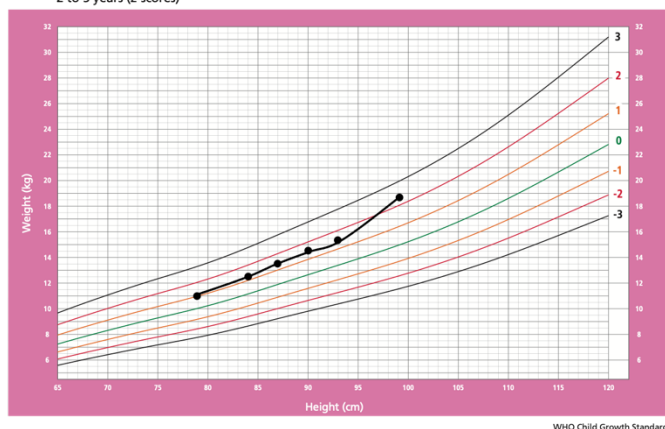
Age: 5 years

Disability: Spina bifida

Aya's weight has jumped from the +1 to the +2 z-score over the past year, though her height has remained around the -2 z-score line. She has limited physical activity and prefers high-calorie, high-sugar foods. Her caregiver says she snacks often and is rarely hungry for lunch and dinner.

Weight-for-Height GIRLS

2 to 5 years (z-scores)



Answers

Do you expect this child to grow differently as part of their condition?

Yes, spina bifida may cause disproportionate growth of the lower body resulting in short stature. It's also often associated with a growth hormone deficiency, which slows metabolism, increasing

the risk of unintended weight gain. In this case, the child also has limited physical activity, which can contribute to unintended weight gain. Also, because of the short stature, we expected to see a growth point that is high on the chart when plotting weight relative to height. In this case, growth is altered in part by the disability itself but there also factors that we may be able to manage – a growth hormone deficiency can be managed medically and the disability – associated limited mobility could be addressed with physical therapy.

Are you concerned about the child's growth? Why or why not?

Yes, her growth pattern shows a sharp incline. If her weight does not stabilize, this can be concerning. Her limited physical activity combined with her preference for high-calorie- and high-sugar foods put her at a high risk for unintended weight gain and potentially overweight/obesity.

What other information should you consider when interpreting this child's growth?

Height-for-age growth chart (if height can be measured accurately), has she grown consistently in height over the years?

Food intake – what does she typically eat? How much? Does her diet contain energy-dense and nutrient-dense foods to support growth?

Growth hormone therapy – is she receiving growth hormone therapy?

Physical therapy - is she receiving physical therapy to help increase her mobility and access to physical activities she enjoys?