Dietary Myths in Infant Feeding

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Objectives

* **A review of children's early experiences with food.**
* **Managing introduction of solids, variety, quantity and texture of food intake.**

Commonly Heard at the Dinner Table

* He doesn't eat enough!
* I make him finish his plate!
* She never eats anything new!
* What's a bit of sugar?
* She almost choked once. I'll keep giving her mush!

"He doesn't eat enough!!"

Energy Intake Regulation

"He doesn't eat enough!"

* **Healthy infants are able to regulate energy intake based on their physiologic needs, reflecting a responsiveness to internal hunger and satiety.**

* **Infants adjust their formula intake in response to differences in the energy density of the formula, consuming greater volumes of formula low in energy density, maintaining a remarkable consistency of energy intake.**

"He doesn't eat enough!"

* **Preschool children also adjust the amount of food consumed in response to changes in the energy density of foods to maintain a relatively constant energy intake across changes in energy density.**

* **Over 24-hour periods, this consistency in energy intake was accomplished as a result of meal-to-meal adjustment.**

"He doesn't eat enough!"

* **This ability to closely regulate energy intake based on physiologic needs appears to be an adaptive behaviour in the prevention of obesity.**

* **Unfortunately, with increasing age, children lose this level of responsiveness.**

"I make him finish his plate!!"

Internal versus external regulation

"I make him finish his plate!!"

* **Children who are encouraged to focus on internal feelings of hunger and satiety are able to adjust their intake to compensate for manipulations in the energy density of the meal to maintain consistent total energy intake.**

"I make him finish his plate!!"

* A child who reports that she is full but is told to clean her plate will learn to ignore her internal feedback signaling feelings of fullness and focus instead on finishing the portion served to her.

* When a child says "I'm hungry", and is told "Not now, wait until mealtime", she will learn that it is the presence of food, not hunger, that should initiate eating.

"I make him finish his plate!!"

* Children in the external regulation context do not adjust their intake in response to energy density changes.
* Instead their internal cues are rather easily overridden by parental feeding practices emphasizing external cues.
* This finding has been consistently pronounced in overweight girls.

"She never eats anything new!!!"

Neophobia

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"She never eats anything new!!!"

* **By nature, children are neophobes, initially rejecting new foods, despite their need for increased dietary variety.**

* **With weaning, all foods are new to the child, and acceptance of these foods is crucial to establishing dietary patterns for life.**

"She never eats anything new!!!"

* Repeated experience (more than 10 times) with a new food is necessary to allow it to become more familiar and more acceptable to the child.

* As a result, food preferences and intake patterns are shaped by the foods parents choose to make available on a consistent basis, even despite early refusal.

"She never eats anything new!!!"

* Genetic predispositions to prefer sweet, fatty, and salty foods means that these foods will always be more readily accepted.

* In case of meats, grains, and vegetables, relatively extensive experience is necessary for acceptance.

"What's a bit of sugar?"

Cereal or candy?

"What's a bit of sugar?"

* Craving for sugar is both innate and learned.
* Taste receptors for sugar exist in all human taste buds and are hooked up to the pleasure centres of the brain.
* Liking for sweet appears to be in a place in newborns.

"What's a bit of sugar?"

* Given solutions of varying sweetness, children are shown to choose the sweetest solution.
* The sweeter the industry made the food, the sweeter children liked the food to be, moving up the "bliss point", steadily over the last 50 years.
* The long-term lesson for the child is an education in how food should taste like and an increase in craving for sugar.

fed mush forever?

* Texture management
* Baby led weaning
* Baby has opportunity to explore taste, texture, aroma.
* Learns texture management, hand-eye coordination, fine motor skills, chewing