"Yuck, I'm not eating that!" Fostering Healthy Eating in Unresponsive Eaters

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Abstract: This research project was conducted in order to endeavour to increase our team's effectiveness of fostering healthy eating in unresponsive eaters. It asks: "How can teachers effectively foster young children to eat healthy food, when they do not want to eat it?" The participants were three and four year olds in an early childhood centre situated in a low socio-economic area of South Auckland.

This action research examines the beliefs of the centre's teachers in fostering healthy eating in young children; their beliefs were was collected through the means of a questionnaire. These beliefs, along with literature review findings, were collated into "healthy food expectations" for the centre, the teachers and the children and parents. Two strategies from these expectations were implemented, observed by the researcher and evaluated by four teachers, to examine the effectiveness of the strategies. Findings from the intervention show the importance of praise and encouragement along with positively encouraging children to try food.

Key words: unresponsive eaters, nutrition, healthy choices, early childhood education, action research

Introduction

Healthy eating ideologies and habits formed in the early years of childhood help individuals to make healthy food choices throughout their life. Good nutrition is very important in order to maintain a healthy body weight and prevent illness, and so it is vital that teachers promote healthy eating in their early childhood setting.

The research was situated in a community that includes a wide range of ethnicities. Food, both snacks and lunch, is provided by the early childhood centre. During the duration of the research I was the centre's chef as well as a student teacher. As the centre chef I was in the position to be able to implement the research and make positive improvements.

As the chef, I endeavoured to provide nutritious meals for the children. However, children are not always thrilled with the prospect of eating vegetables, fruit and other nutritious foods. In order to foster healthy eating in unresponsive eaters, teachers at the centre had tried different approaches to encourage the consumption of healthy food. I believed that as a teaching team, we could improve the consistency in our approaches of fostering healthy eating in unresponsive eaters. With consistency, the messages would be clearer to the children and more likely to be effective and achieve results. Therefore, my research question was: "How can teachers effectively foster healthy eating in young children, when they do not want to eat it?

The research explores this question though an action research methodology. I collated the opinions of the teachers about the implementation of healthy food expectations, and then four teachers implemented two of the strategies and recorded the children's responses.

Literature Review

The early childhood years are foundational for developing healthy eating habits that set a child up for life (Matheson, Spranger & Saxe, 2002). A healthy diet reduces the risk of malnutrition, obesity, cardiovascular disease, diabetes, cancer, skin problems and a range of other health risks (Horodynski, Stommel, Brophy-Herb, Yan & Weatherspoon, 2010). It has been shown that children who consume healthy food and drinks have improved learning, concentration and behaviour (Ministry of Health, 2008). Therefore it is vital to foster a healthy approach to eating at the start of life to improve bodily function, both now and for the future (Saab & Kalnins, 2010; Sears & Sears, 2001).

Fruit and vegetables are an integral part of a human's diet, as these foods contain many vitamins and minerals as well as dietary fibre that improve overall health and help to prevent disease (Bowden, 2012b; Horodynski et al., 2010). An adult is more likely to eat a wide variety of fruit and vegetables if they have been exposed to them as a child (Bowden, 2012b).

Fostering healthy eating in early childhood education.

With the increase of children in early childhood education, teachers have an important role in the lives of young children to foster healthy eating habits (Sellers, Russo, Baker, & Dennison, 2005). When young children are unresponsive to healthy food, teachers need to consider different techniques and strategies to foster healthy eating. All children are different, and the same applies in their approach to food (Pantley, 2012). Knowing the child, their interests and observing why they may not be eating is important as this knowledge will enable the teacher to more effectively foster the child's attitude towards healthy food (Wood & Kidman, 2009).

Teachers should model and encourage children to eat the food that is best for optimum body function (Project Nutrition, 2012; The National Heart Foundation of New Zealand, n.d.). Role-modelling is influenced by Albert Bandura (1925–) who theorised that children learn through "observational learning"; learning through watching people influences children's thoughts and behaviour (Santrock, 2009). When teachers role-model healthy eating, children usually observe this, and may be more willing to try the food (Horodynski et al., 2010).

Providing children with healthy food choices.

One positive approach to fostering healthy eating food is to offer children a range of nutritious food to choose from, as this approach also caters for the children's developing autonomy (Saab & Kalnins, 2010). According to Project Nutrition (2012), offering a variety of vegetables on a regular basis helps foster an acceptance of new foods. Pantley (2012) recommends gradually introducing foods, by putting a small amount of an unfamiliar food alongside accepted healthy food.

Children are textural eaters and a child often prefers a particular type of texture (Wood & Kidman, 2009). Preparing foods in a way that the child prefers can encourage the child to try a new food (Bowden, 2012b). It is important that food is presented well, is creative and looks appetising (Wood & Kidman, 2009).

Are food battles necessary?

Young children generally reject a new food when given it for the first time (Saab & Kalnins, 2010). In fact, it may take up to fifteen occurrences on the plate, before the child accepts the new food, but with a little patience and persistence they can often be tempted to try it (Bowden, 2012a). Project Nutrition (2012) advises adults to take a firm approach to unresponsive eating with lots of patience and perseverance. Pantley (2012) suggests that adults should expect a child to try two bites of a food before they are allowed to say that they do not like it. Those two bites may convince the eater that the food is edible and flavoursome. Firm encouragement also needs to be communicated in a positive manner. Wood and Kidman (2009) propose aiming for realistic goals and being happy with any progress. They emphasise using praise as an effective strategy when a child is trying a food for the first time.

Sears and Sears (2001) stress that you cannot force a child to eat, so it is best not to make it a battle. Pantley (2012) believes that food battles should be avoided and meals should be positive experiences. She also states that some battles should be ignored while other battles are worth fighting and winning. For example, if a child refuses to eat all their green vegetables, there needs to be procedures in place to ensure the child eats some green vegetables; however, if the child loves broccoli but not peas, then the battle is not worth fighting. Pantley suggests primarily serving the favourite vegetable and slowly reintroducing the other vegetable (2012).

Levin (2000) believes in the strategy of "reality discipline". This is when the child is given the choice whether they eat their dinner and is held accountable for this choice. He suggests that if a child refuses to eat, then the adult should put the rejected food in the rubbish and excuse the child from the table. Levin believes that when the child experiences hunger and is not given extra food, the child will learn about reality from this experience, and this will have a positive impact on future mealtimes.

Although a child may learn from reality discipline, it is not a very positive approach. Pantley (2012) recommends a more balanced approach. She suggests providing a healthy snack an hour after the meal – this is long enough for the child to be a little bit hungry but also it does not appear that the adult is caving in. Levy (2004) emphasises that the aim is not to starve the child in order to eat, and so suggests providing a new chance to eat every two hours.

In summary, exposing children to a wide range of healthy food daily is vital for children's health. Frequent appearances of favourite and unfamiliar healthy foods help to develop children's repertoire of healthy food. Teachers can foster healthy eating in unresponsive eaters by role-modelling, educating, being creative, and having positive and encouraging interactions with children at mealtimes.

Methodology

Nutrition is a topic that I believe is important and I wished to improve my own and other teachers' practice in fostering children's healthy eating habits. I aspired for my practice to closely reflect my beliefs (Holly, Arhar, & Kasten, 2005), and so I chose an action research methodology for my study. This methodology is reflected in how I have formulated my question to imply a change (Cardno, 2003). The research question was: "How can teachers effectively foster young children to eat healthy food, when they do not want to eat it?"

The eight teachers in the over-two's area were given a questionnaire to fill out which included five questions about their beliefs and practice on healthy eating for children. The staff's responses to these questions were condensed into common themes and collated, along with the literature review findings, to come up with a list of healthy food expectations. The draft was put in the staffroom for staff to read and make comments about. The staff's comments were taken into consideration when I consulted with the centre manager to come up with the final expectations.

Four teachers volunteered to take part in the implementation of the expectations and to self-reflect on the effectiveness of the expectations. The four teachers each chose a child to mentor and voted on which of the two healthy food expectations we should implement. The teachers implemented these strategies and I observed the teachers' strategies and how the children reacted (Arthur, Beecher, Death, Docket, & Farmer, 2007). In the final examination phase, the four teachers gave written feedback about how they felt the implementations of these expectations went. The findings were examined and discussed based on the observations and the teachers' written feedback.

Findings

Phase One – Summary of the findings from the teachers' initial questionnaire.

The questions and analysis of responses	A sample of the teachers' responses
Question One Please tell me about your beliefs about fostering healthy eating in young children. Analysis: Differing views but largely about respecting children but balanced with education and encouragement to eat healthy food.	 Food should be an enjoyable experience and given choices. Children should be educated about healthy eating. Encouragement is needed when children try food; however, do not force children to eat. Children should try one mouthful. Adults should respect likes/dislikes. Sweets should only be given to children under five on special occasions.
Question Two What teaching strategies do you think are effective in fostering healthy eating when children are unresponsive to eating (especially in regards to vegetables)? Analysis: Emphasis on encouragement but with boundaries.	 Teachers role-modelling healthy eating. Verbal encouragement and positive guidance. Instructing - "One mouthful so you know what it tastes like." "You can have more [favourite food] if you try" Involving children in food preparation.
Question Three Do you agree with withholding sweet treats or afternoon tea from a child if they do not eat lunch? Why or why not? Analysis: The majority of the teachers believed that children should not miss out on treats, although one teacher had a contrasting view that a child will learn to eat lunch if treats are withheld.	 No, trying lunch is sufficient. No, rather the child ate something than nothing. No if it is one off; for example, the child is sick, has a dislike for that food. But yes if they continuously refuse to eat and will not try it. No, but yes if they continuously refuse to eat lunch; give fruit instead. Yes, the child will not starve. They will learn to eat lunch even if it is a small quantity.
Question Four How can we work with parents to provide consistency in how we encourage the consumption of healthy food in both settings? Analysis: Open communication with parents and education were common threads.	 Parent partnership – communication from both parties. Sharing with parents our healthy food expectations. Educating families on healthy and unhealthy food options through food demonstrations and written information. Educating with the healthy food pyramid and discussions with children. Providing healthy eating books in parents' and children's libraries.
Question Five What do you believe is important to take into consideration when developing guidelines for healthy eating, especially in unresponsive eaters? Analysis: Respect of children and creating a positive and attractive atmosphere.	 Respecting cultures, beliefs and religion and what children eat at home. Respecting children's strong dislikes for food. Eating should be an enjoyable social experience. Food is presently attractively and creatively. Educating and serving healthy food as per the healthy food pyramid.

When summarising the responses to the questionnaire, I found some commonly held opinions as well as some contrasting ones. The majority of the teachers believe that encouraging children to eat a healthy diet from a young age is important. Creating a positive atmosphere was featured amongst the top ways of fostering healthy eating in young children. Having plenty of encouragement and praise and role-modelling healthy eating were both highly ranked as effective teaching strategies. Education of what foods are good for our bodies was also found throughout the teachers' responses. It appears that the teachers generally feel there needs to be firmness at times when encouraging children to eat healthy food but they do not believe in forcing children to eat the food and turning mealtimes into a food battle.

The findings from the teachers' questionnaire were combined with those from the literature review to create a set of "healthy food expectations" for the centre. These expectations included the assurance that food provided by the centre adheres to the Heart Foundation recommendations and that the centre's menu is displayed for children and parents to see. To us it was important that age, culture and individuality is taken into account when encouraging children to try food. Also included in these expectations were educational strategies for both the children and parents. Key strategies for encouraging healthy eating were identified and recorded (see Figure 1).

Figure 1. Strategies to support unresponsive eaters

- Teachers eat with the children and role-model healthy eating.
- Teachers use praise and encouragement when a child makes progress in their eating (Wood & Kidman, 2009).
- Children who are three and four are encouraged to try two mouthfuls of a food before saying that they do not like it. Those two bites may convince the eater that it is edible and flavoursome (Pantley, 2012).
- Teachers have high expectations of children: "When you have tried this you can have more of..."
- Teachers teach children that eating the main meal is important. They use the slogan "We need to eat grow foods before sometimes foods".
- If there is a treat food on offer at morning and afternoon tea, extra servings will only be offered if the fruit has been tried.

Phase Two: Implementation of Strategies

The four teacher participants focused on the two teaching strategies from the new healthy food expectations: encouraging children to try two mouthfuls before they say they do not like a food (Pantley, 2012) and when the child tries the food, using praise and encouragement to build a positive atmosphere (Wood & Kidman, 2009).

The intervention phase showed that true to the literature and to my beliefs, each child is unique and this uniqueness extends to their eating responses (Pantley, 2012). The findings showed that the children in this research reacted in different ways to the implementation of the expectations. Three of the children responded positively to being encouraged to try the food. It is acknowledged that a range of different factors influence these responses, such as time away from the centre, the food eaten at home, personality traits and positive experiences at the table.

Discussion

Implementing the two strategies of instructing a child to try the food combined with praise and encouragement helped to keep a balanced approach. Praise and encouragement appeared to be a factor that was effective in encouraging children to eat food that they originally did not want to eat. Consistency from teachers helps to provide clear boundaries for and expectations from children (Arthur et al., 2007). Having the team working together with clear goals appeared to help to encourage the children to try food and eat more of it.

Findings from the questionnaire suggested that we use the strategy "Try one mouthful". I originally liked the idea from Pantley (2012) to encourage the children to try two mouthfuls. Pantley's suggestion of encouraging children to eat two mouthfuls in order to have a fuller taste of the food intrigued me and therefore this was included in the centre's healthy food expectations. Pantley also strongly emphasises throughout her book that children should not be forced to eat food; however, in practice this suggestion seems to contradict her other suggestion because I found when implementing the "two mouthfuls" strategy that the suggestion appeared to create food battles.

Responses from the teachers implementing the expectations of two mouthfuls were that although it was harder to promote than one mouthful, generally children did take two mouthfuls. Three of the teachers were supportive of this strategy and gave feedback that it usually worked well. When asked to take two mouthfuls, one child tried one mouthful and then proceeded with many more mouthfuls.

While most children had a positive response to the "two mouthfuls" strategy, the teachers reported that they sometimes found it hard to insist that a child eat two mouthfuls when they were refusing to eat at all. One teacher commented that if the food was not going anywhere near the child's mouth, then this strategy can feel very negative and the battle of the food war begins. One boy appeared to be annoyed with the teacher's persistence that he had to have two mouthfuls of the food when he had no intention of eating any at all, and he let his annoyance be known through his facial expression as well as abusive words. In consulting the teachers involved in the research, we reflected that sometimes two mouthfuls was too high an expectation and that this strategy easily could lead to a food battle. We needed to make sure we knew each child and tried to take all factors of the child's behaviour into account (Wood & Kidman, 2009). We decided that in cases such as an extreme dislike for a certain food, two mouthfuls may become more like force than encouragement.

Discussing my findings with the centre manager, she agreed that two mouthfuls did seem like a lot to expect a child to have when they clearly did not want to try the food.

Furthermore, she considered even one mouthful to be a sufficient for a child to gag on if they really did not like it. The manager suggested changing it to "You need to try it before you can say you do not like it". In discussion with other teachers, the general consensus was that the wording should be changed. Therefore, it is recommended that this expectation be revisited in a second cycle.

Conducting this research has been useful in defining my thoughts on acceptable effective strategies in fostering healthy eating in young children. Creating a positive environment was a key element throughout the literature and in the teachers' responses to the initial questionnaire, and was evident in the implementation of the two healthy food expectations strategies. Implementing the expectation that mouthfuls proved to be a challenge. For this reason it is recommended that teachers ask children to try food before they say they do not like it, keeping in mind the individual child and the meal they are being asked to eat. It is necessary to have communication and consistency from all teachers in requesting children to taste food. By doing this coupled with a range of healthy food choices to children in a positive eating environment, children generally learn to widen their scope and become more willing to try new foods.

Conclusion

This article, based on a small action research project, has discussed the issue of how teachers can foster healthy eating in unresponsive eaters in the early childhood education context. Strategies for teachers' practice were identified and then two of the strategies were implemented and evaluated by four teachers. The strategies that were examined were: encouraging children to try two mouthfuls before they say they do not like a food (Pantley, 2012), and using praise and encouragement when a child tries a food they do not usually eat (Wood & Kidman, 2009).

Findings from this intervention included three of the children responding to the request of the teacher to try the food, as well as the encouragement and praise that was received. However, negative responses from some children were also evident. Through discussions with staff and the centre manager, we decided that requiring two mouthfuls is too high an expectation for all three and four year olds. Therefore, I recommend that this expectation be changed to "You need to try it before you can say you do not like it".

Ideally having an extended implementation time of a couple of months would help give more accurate information about the effectiveness of the healthy food expectations developed at this early childhood centre; thus, I would recommend that teachers conduct their own research over a longer period of time. Future research could include implementing a different one of the healthy food expectations strategies and evaluating its effectiveness.

A final word.

Next time there is a potential food battle coming your direction, remember to be firm and yet positive, and to give lots of encouragement as well as praise when progress is made.

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