

# Toddler nutrition

Nutrition



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Once a child reaches his/her first year, s/he graduates from infancy to become a toddler. Also known as the “terrible twos”, this life stage lasts from ages 1 — 3. During this stage toddlers do not grow as quickly as they did when they were infants; they grow 5.5 — 7.5 inches in height and can gain around 9-10 pounds (Tucker, 2010). It’s during this stage in their lives when toddlers learn how to walk and begin to explore the world around them. Toddlers not only learn how to walk, but they also learn to use other large muscle groups to throw a ball, jump up and down, and peddle a tricycle. Toddlers also develop the fine motor skills needed to stack blocks, scribble, and feed themselves (Malley, 1991). With this newfound independence for toddlers comes a new set of challenges for parents. Among these varied challenges for parents is the task of providing for the toddler’s nutritional needs. The purpose of this paper is to discuss the nutritional challenges associated with toddlers, discuss the specific nutrient needs of toddlers, and suggest a diet that meets the needs of toddlers. The nutritional challenge that toddlers are notorious for is that they are picky eaters. A toddler will insist that a certain food be a part of every meal for a couple of days, and then switch gears on day three and declare a different food her/his favorite. Parents trying to introduce new foods to toddlers may find it difficult to do so, but a little persistence goes a long way. Tucker (2010) offers some tips to help parents with this daunting task: \* Portion sizes of food should equal 1 Tbsp. for every year of the child’s age. For instance, a 2 year old’s portion is equal to 2 Tbsp. \* New foods should be introduced one at a time so that parents can note any allergic reactions. \* Don’t force a toddler to eat when s/he is full. Toddlers should also be discouraged from eating food with little nutritional content. Teaching a toddler good eating habits now will

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influence how your child perceives food in the future, and will help your child avoid obesity and eating disorders later on in life. While it is important to discourage toddlers from eating food with little nutritional content, sometimes a toddler decides that s/he wants a specific food item. When this happens, many parents have found that adding nutritious ingredients to a food item with little nutritional content, like adding peas and/or green beans to white rice, will help to overcome a toddler's objections to eating her/his vegetables. Not only do parents have to overcome toddler pickiness, but parents also need to be aware of the specific nutrient needs of their toddler. According to the American Heart Association (AHA, 2011), a moderately active one year-old needs to consume around 1, 100 kcal a day while a two or three year-old needs to consume about 1, 200 kcal a day. Protein, which should not be considered a primary source of energy for a toddler, should equal approximately 4% of a toddler's kcal consumption per day; this equals 13 grams per day (National Academy of Science, 2011). While adults are urged to reduce fat intake, toddlers need approximately 30-40% of the kcals they consume to be comprised of fat (AHA, 2011). Carbohydrates are the primary source of energy for a toddler to explore the world, and the National Academy of Science (2011) recommends that toddlers consume 130 grams of carbs a day; this is equal to around 43% of the toddler's total kcal consumption. In order to meet those needs, Tucker (2010) advises vegan parents that toddlers are not fully developed enough to follow a strict vegan diet. This is because many vegan diets do not contain enough protein, fiber, Vitamins D & B12, calcium, iron, and zinc to support an active toddler's growth and development. Also, much of the vegan diet consists of soy, wheat, and nuts; all of these are common food allergens, and may not be

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well tolerated by some toddlers. The National Academy of Science (2011) recommends that a toddler consumes these, and some other nutrients, in the following amounts: \* Fiber — 19g/day \* Vitamin C — 15mg \* Vitamin D — 15mcg/day \* Vitamin B12 — 0.9 mcg/day \* Calcium — 700mg/day \* Iron — 7mg/day \* Zinc — 2mg/day is considered the Adequate Intake (AI) for a toddler. While this list does not include all of the nutrients a toddler needs, it does include the specific nutrients that may be of concern for this age group. The following table, Table 1, on pages 5 and 6 of this document suggests a diet that may be appropriate for a toddler's eating habits. This diet is not meant to be consumed every day, but is meant to suggest ways to help ensure that a toddler's nutritional needs are being met. Table 1: Menu for Toddler | Meal | Foods | Calories | Protein (g) | Fat (g) | Carbs(g) | Fiber (g) | Vitamin C (mg) | Vitamin D (mcg) | Vitamin B12 (mcg) | Calcium (mg) | Iron (mg) | Zinc (mg) | Breakfast | 1/4 cup Cheerios | 25.75 | 0.75 | 2.00 | 21.00 | 0.75 | 1.70 | 0.23 | 0.43 | 28.50 | 2.23 | 1.10 | | 4oz. Whole milk | 72.00 | 4.00 | 4.00 | 8.00 | 0.00 | 0.00 | 1.22 | 0.40 | 138.00 | 0.00 | 0.40 | | 1/2 multi-grain English muffin | 10.00 | 3.00 | 1.00 | 13.00 | 1.00 | 0.00 | 0.00 | 0.00 | 54.90 | 0.80 | 0.40 | | 1 Tbsp margarine | 75.00 | 0.00 | 8.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.90 | 0.00 | 0.00 | | 4 oz. fluid: 1/2 apricot nectar 1/2 water | 32.00 | 0.00 | 0.00 | 8.00 | 0.00 | 30.40 | 0.00 | 0.00 | 4.00 | 0.20 | 0.00 | Snack | 1 Tbsp. ranch dressing | 38.50 | 0.00 | 3.50 | 1.50 | 0.00 | 0.00 | 0.00 | 0.00 | 3.90 | 0.05 | 0.00 | | 3 cooked broccoli spears | 39.00 | 3.00 | 0.00 | 9.00 | 3.00 | 72.00 | 0.00 | 0.00 | 44.40 | 0.60 | 0.60 | | 4 cinnamon graham crackers | 59.00 | 1.00 | 1.00 | 11.00 | 2.00 | 0.00 | 0.00 | 0.00 | 3.40 | 0.50 | 0.10 | | 4 oz. water | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | Lunch

| 2-3 Tbsp. black beans | 37. 00 | 2. 00 | 0. 00 | 7. 00 | 2. 00 | 0. 00 | 0. 00 | 0. 00 | 5. 60 | 0. 60 | 0. 20 | | 1 Tbsp. frozen corn (cooked) | 23. 00 | 1. 00 | 0. 00 | 5. 00 | 1. 00 | 1. 00 | 0. 00 | 0. 00 | 0. 80 | 0. 10 | 0. 20 | | 1 Tbsp. frozen peas (cooked) | 22. 00 | 1. 00 | 0. 00 | 4. 00 | 2. 00 | 2. 80 | 0. 00 | 0. 00 | 6. 70 | 0. 40 | 0. 20 | | 1 Tbsp. margarine | 75. 00 | 0. 00 | 8. 00 | 0. 00 | 0. 00 | 0. 00 | 0. 00 | 2. 90 | 0. 00 | 0. 00 | | ½ small orange | 32. 50 | 0. 00 | 0. 00 | 16. 00 | 3. 00 | 63. 40 | 0. 00 | 0. 00 | 60. 60 | 0. 10 | 0. 10 | | 4oz. fluid: ½ apple and grape juice and ½ water | 28. 00 | 0. 00 | 0. 00 | 6. 00 | 0. 00 | 15. 80 | 0. 00 | 0. 00 | 7. 50 | 0. 50 | 0. 00 | All nutrition data taken from nutritiondata. self. com Table 1 continued: Menu for Toddler | Meal | Foods | Calories | Protein (g) | Fat (g) | Carbs(g) | Fiber (g) | Vitamin C (mg) | Vitamin D (mcg) | Vitamin B12 (mcg) | Calcium (mg) | Iron (mg) | Zinc (mg) | Snack | 3 avocado wedges | 47. 00 | 1. 00 | 3. 00 | 2. 00 | 2. 00 | 2. 50 | 0. 00 | 0. 00 | 3. 60 | 0. 20 | 0. 20 | | 2 Tbsp. hummus | 50. 00 | 1. 00 | 2. 00 | 4. 00 | 2. 00 | 0. 00 | 0. 00 | 0. 00 | 11. 40 | 0. 80 | 0. 60 | | 3 - 4 rye crispbread wafers | 28. 00 | 0. 00 | 0. 00 | 8. 00 | 0. 00 | 0. 00 | 0. 00 | 0. 00 | 2. 40 | 0. 00 | 0. 00 | | 4 oz. water | 0. 00 | 0. 00 | 0. 00 | 0. 00 | 0. 00 | 0. 00 | 0. 00 | 0. 00 | 0. 00 | 0. 00 | 0. 00 | 0. 00 | Dinner | Breakfast Pizza | | | | | | | | | | 1 whole wheat pita: | 74. 00 | 3. 00 | 1. 00 | 15. 00 | 2. 00 | 0. 00 | 0. 00 | 0. 00 | 4. 20 | 0. 90 | 0. 40 | | 2 Tbsp. scrambled egg: | 46. 00 | 2. 00 | 12. 00 | 0. 00 | 0. 00 | 0. 00 | 0. 12 | 0. 20 | 22. 10 | 0. 40 | 0. 20 | | 3 Tbsp. spinach (mixed in with eggs) | 96. 00 | 4. 00 | 8. 00 | 4. 00 | 1. 00 | 4. 00 | 0. 35 | 0. 20 | 92. 40 | 0. 60 | 0. 40 | | scrambled in 1 Tbsp. canola oil | 119. 00 | 0. 00 | 14. 00 | 0. 00 | 0. 00 | 0. 00 | 0. 00 | 0. 00 | 0. 00 | 0. 00 | 0. 00 | | 2 Tbsp. turkey sausage | 55. 00 | 7. 00 | 1. 00 | 0. 00 | 0. 00 | 0. 00 | 0. 30 | 6. 20 | 0. 40 | 1. 10 | | 4oz. Whole milk | 72. 00 | 4. 00 | 4. 00 | 8. 00 | 0. 00 | 0. 00 | 1. 22 | 0. 40 | 138. 00 | 0.

00 | 0. 40 | Totals | 1155. 75 | 37. 75 | 72. 5 | 150. 50 | 21. 75 | 193. 60 | 3. 14 | 1. 93 | 644. 40 | 9. 38 | 6. 60 | All nutrition data taken from nutritiondata. self. com To begin discussing the diet, I will take a closer look at calorie and macronutrient needs for a toddler. First, as seen on Table 1, the total calorie intake for the toddler diet is 1155. 75. This falls between the 1100-1200 range that is recommended by the AHA (2011). Secondly, the diet contains 37. 5 grams of protein, or 12% of total kcal consumption. This is almost three times the amount of protein recommended by the National Academy of Science (2011); however the AHA (2011) recommends that children between the ages of 1-8 years old should consume the equivalent of two eight-ounce glasses of milk a day. Given that 16 ounces of whole milk has 16 grams of protein, half of the recommended amount of milk contains more protein than is recommended; this does not count the protein from meat or some green, leafy vegetables. I decided that the other nutrients needed for a child's growth and development outweighed the potential risk involved in eating too much protein. Third, the fat intake at 72. 50 grams may seem high, but it provides approximately 25% of the total kcals consumed. Given that the recommended amount is between 30-40%, this figure is slightly low; however, keep in mind that the menu does not include milk that a toddler may be given during the course of the day. Fourth, the National Academy of Science (2011), recommends that a toddler should consume 130 grams of carbohydrates (carbs) a day. This is equal to approximately 45-65% of a toddler's kcal consumption. As seen on Table 1, the diet provides 150 grams of carbs; while this slightly exceeds the recommended daily amount, the carbs are 52% of the daily kcal consumption, and is within the acceptable range. Fifth, the recommended daily amount of fiber for a toddler is 19

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grams (AHA, 2011), and the toddler diet shown on Table 1 includes 21.75 grams of fiber. While this is a little higher than the recommended amount, it should not affect the toddler's overall health and well-being; considering that toddlers do not always eat everything they are given, and that a toddler's fiber intake may not remain consistent on a daily basis. These macronutrients are essential components in the production of essential amino acids which help in cell repair and maintenance, cardiovascular health, and digestive health. The micronutrients that will be discussed next are also crucial to a toddler's growth and development. The micronutrients, as shown in Table 1 on pp. 5-6 of this document are: Vitamins C, D, B12, calcium, iron, and zinc. These help support autoimmune health, cell repair and maintenance, promote healthy bones, and is needed to ensure oxygen delivery to cells. To begin, the recommended amount of Vitamin C, according to the National Academy of Sciences (2011), is 15 grams a day. The diet shown on Table 1 exceeds this amount with 193.60 grams. While this may seem problematic, the National Academy of Sciences (2011) shows that toddlers can tolerate up to 400 mg of Vitamin C a day without adverse effects. If adverse effects are noticed, a parent could buy juices that are not fortified with ascorbic acid. Next, the recommended amount of Vitamin D is 15mcg per day. The toddler's menu shown on Table 1 has 3.14 mcg of Vitamin D; mostly from the whole milk on the menu. While it seems that this amount is very low, parents should keep in mind that Vitamin D is produced when a person is exposed to sunlight. Unless the toddler is not exposed to any sunlight, the body should produce enough Vitamin D on its own to sustain the health of the toddler. If the toddler is unable to spend time outdoors, or be exposed to sunlight, parents should consult their toddler's

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doctor to see if a supplement is appropriate. Third, the recommended amount of B12 for a toddler is 0.90 mcg/day (National Academy of Science, 2011). The toddler diet consists of 1.93 mcg/day, and is more than the recommended amount; however, the NAS doesn't have any data regarding upper limit intakes since overconsumption of this vitamin is rare. Fourth, the National Academy of Science (2011) recommends that toddlers consume 700 mg of calcium a day. The diet shown on Table 1 has 644.40 mg of calcium, which is less than the recommended daily amount, but does not include fortified juices and milk given to the toddler throughout the day. Fifth, the recommended amount of iron is 7 mg a day (National Academy of Science, 2011), and the toddler diet I've created contains 9.38 mg of iron. Again, these amounts assume that the toddler is eating all the food that is offered, while keeping in mind that toddlers can tolerate up to 40 mg of iron a day without adverse effects (National Academy of Science, 2011). Finally, the adequate amount of zinc for toddlers is 2 mg a day, and the National Academy of Science recommends that the daily amount does not exceed 7 mg a day. The amount of zinc in the toddler diet shown on Table 1 equals 6.60 mg. Surprisingly most of the zinc was consumed in the Cheerios cereal and the turkey sausage. Parents who are concerned about this could find a whole grain cereal with less zinc, or omit the turkey sausage in the breakfast pizza. While I stand by the toddler diet I created, I will admit that I had trouble deciding which nutrients to "trade off" for other essential nutrients. In my research on the Internet, I found contradictory information; for instance, the AHA (2011) says that 1-8 year olds should consume the equivalent of 2 glasses of milk daily, while the National Academy of Sciences (2011) recommends that toddlers consume 13 grams of protein a day. After <https://assignbuster.com/toddler-nutrition/>



sifting through what seemed to be endless amounts of conflicting facts and tips, I came across AskDrSears. com (2011) website that says, “ We now realize that our job is simply to buy the right food, prepare it nutritiously (steamed rather than boiled, baked rather than fried), and serve it creatively. We leave the rest up to the kids. How much they eat, when they eat, and if they eat is mostly their responsibility; we've learned to take neither the credit nor the blame. ” I realized that I had been forgetting one important factor, the toddler; s/he may decide she likes calcium-rich foods early on in the week, and then decides s/he wants carbohydrates for the next three days. The purpose of the assignment wasn't to find the “ perfect" diet for a toddler; it was about trying to figure out the nutritional needs of a toddler, and then trying to find a diet that could meet those unique needs to the best of my ability. I think the diet I created meets a toddler's needs, while allowing for a toddler's inconsistent likes and dislikes. References American Heart Association. (2011). Dietary recommendations for children. Retrieved October 11, 2011 from [http://www.heart.org/HEARTORG/GettingHealthy/Dietary-Recommendations-for-Healthy-Children\\_UCM\\_303886\\_Article.jsp](http://www.heart.org/HEARTORG/GettingHealthy/Dietary-Recommendations-for-Healthy-Children_UCM_303886_Article.jsp). AskDrSears. com. (2011). Feeding the picky eater: 17 tips. Feeding Infants Toddlers. Retrieved October 11, 2011 from <http://www.askdrsears.com/topics/feeding-infants-toddlers/feeding-picky-eater-17-tips>). Conde Nast Digital (2011). SelfNutritionData. Retrieved October 11, 2011 from <http://nutritiondata.self.com/> Malley, C. (1991). Toddler development. Family Day Care Facts, Retrieved October 11, 2011 from <http://www.nncc.org/child.dev/todd.dev.html#anchor172854>. National Academy of Sciences. Institute of Medicine. Food and Nutrition Board. . (2011). Dietary reference intakes: Recommended intakes for <https://assignbuster.com/toddler-nutrition/>

individuals. Retrieved October 11, 2011 from [http://www.iom.edu/Activities/Nutrition/SummaryDRIs/~media/Files/Activity%20Files/Nutrition/DRIs/5\\_Summary%20Table%20Tables%201-4.pdf](http://www.iom.edu/Activities/Nutrition/SummaryDRIs/~media/Files/Activity%20Files/Nutrition/DRIs/5_Summary%20Table%20Tables%201-4.pdf). Tucker, S., Pruitt, J., Stein, J., Cummings, B., Blake, J. S., & Thompson, J. (2010). Nutrition through the lifecycle: Childhood to late adulthood. In Nutrition, Health, and Wellness: An Applied Approach (pp. 740-746). New York, NY: Pearson Learning Solutions.