

John Scottus NS, Dublin 4

Menu Nutrient Analysis 2018

Software: Nutritics v4/v5

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### Overall Impression

The school is providing a diverse and nutrient dense menu to its pupils. Attention is given to the nutrient profile of the recipes, and it appears a lot of thought has been given to ensure the children are consuming enough protein, less fat and moderate carbohydrate. As a vegetarian school, concerns may arise regarding protein intake; however, many of the recipes are rich in pulses, beans and lentils. Recipes are most often rich in nutrient dense vegetables, and different vegetables are used in different dishes, providing the children with a range of essential micronutrients such as calcium, vitamin D, vitamin C and iron. No 'junk food' or sugary beverages are provided in school, and there is a good choice of fruit, vegetables and salad options. Most recipes have used healthier alternative ingredients, for example wholegrain/brown carbohydrates or honey. Overall, the pupils of the school are being provided with balanced lunches and snacks whilst at school.

At the present time, it is difficult to assess whether or not each child is meeting its nutritional requirements at school as there is no control over portion size as children are allowed to have multiple servings. This analysis was based on the *Safefood* guidelines on portion sizes for preschool children, so it is therefore reflective of a child's recommended portion. This can obviously vary per child, as one child may consume a smaller/larger portion of food than another. Results from this analysis are therefore estimates. Furthermore, it is worth noting that dietary

guidelines differ at different age groups. A child in junior infants should not be consuming the same amount of food as a child in sixth class. *Safefood's* guidelines are generic for children and do not distinguish between age groups. Teachers/staff monitoring children at lunchtime could benefit from educating themselves on children portion size using the visual *Safefood* guidelines and monitoring how much food each child is consuming.

The school is providing children with healthy, balanced lunches and snacks, but this is of no use unless healthy habits are translated to the home environment. These results only represent a portion of the children's diet, and parents should become more aware of what they provide their children for breakfast and dinner. Healthy breakfast and dinner ideas and tips can be found on the *Safefood*, Health Service Executive (HSE) and Food Safety Authority (FSAI) websites. The FSAI provides an excellent resource on how much food children of different age groups should consume, called "*Healthy Eating Guidelines 2011*" and also provides visual representations on portions e.g. what is a portion of cheese, pasta, fruit, vegetables etc.

This analysis included determining the calorie, carbohydrate (free sugars, refined sugars and fibre), protein and fat (saturated and unsaturated) content of the snacks and meals provided by the school to its pupils. As mentioned previously, results are only estimates and based on national guidelines for portion size. Results can be seen in Table 1.

#### Interpreting Table 1

- The column 'portion size' refers to a child's recommended portion according to Safefood.
- Green – Good, within healthy range
- Orange – Good, but need to be conscious of portion size

- Red – Potentially not healthy, be conscious of portion size and consider altering recipe

Table 1. Nutrient analysis of snacks and lunch meals.

VIP: Multiple portions are available	Portion Size (ml/g)	Photo ID	Calories (kcal)	Carbs (g)	Predominant Carbohydrate Type (g)		Protein (g)	Fat (g)	Prominent Fat Types (g)		Fibre (g)
					Free (natural)	Refined			Saturated (g)	Unsaturated (g)	
Glass of milk	200ml		126	8.8	Lactose 8.8	0	6.6	7.2	4.6	Monounsaturated 0.5 Polyunsaturated 0.1	0
Slice of homemade bread	50g		91	17.6	Starch 14.0 Sucrose 1.1 Lactose 1.2	2.5	3.4	0.5	0.2	Polyunsaturated 0.1	1.3
Slice of homemade bread & butter	54g		110	17.6	Starch 14.0 Sucrose 1.1 Lactose 1.2	2.5	3.4	2.6	1.2	Polyunsaturated 0.3	1.3
Apple portion (¼ large)	44g		25	5.1	Fructose 3.0 Glucose 0.9 Sucrose 1.2	0	0.3	0.2	0	Polyunsaturated 0.2	0.5
Honey	15g		45	12.0	Glucose 4.2 Fructose 5.3	0	0.5	0	0	0	0
Banana portion (⅓ large)	40g		36	8.0	Glucose 3.2 Fructose 3	0	0.5	0.04	0.02	Polyunsaturated 0.2	0.6
Apple (small)	120g		68	13.8	Fructose 8.8 Sucrose 3.2 Glucose 2.6	0	0.8	0.6	0.2	Polyunsaturated 0.2	1.4
Kiwi	60g		36	6.3	Glucose 2.7 Fructose 2.6	0	0.7	0.3	0	Polyunsaturated 0.08	1.4
Clementine (small)	40g		49	9.3	Sucrose 2.3 Glucose 1.6 Fructose 1.6	0	0.8	0.2	0.04	Polyunsaturated 0.04	1.5

Salad portion (carrots, tomatoes and cucumber)	150g		54	8.5	Sucrose 3.2 Glucose 1.8	0	1.0	0.7	0	Monounsaturated Polyunsaturated	4.2
<b>Fortnightly</b>											
Pasta with Pesto	100g		181	29.3	Starch 27.2	1.8	6.5	3.2	0.5	Monounsaturated 1.2 Polyunsaturated 1.2	4.5
Pesto sauce	7g		29	0.2	0	0	0.4	3	0.5	Monounsaturated 1.2 Polyunsaturated 1.2	0
Red pepper sauce	40g		24	3.6	Starch 1.9 Sucrose 0.7	0	1.1	0.3	0	Polyunsaturated 0.2	0.8
Grated cheese	30g		125	0	0	0	7.5	10	6.6	Monounsaturated 2.7	0
Hummus	20g		89	2.5	Starch 0.2	0.1	1.2	0	0	Polyunsaturated 0.2	0.8
Boiled potatoes	50g		145	7	Starch 6.2 Glucose 0.2	0	0.9	0	0	0	0.9
Green beans	30g		35	1.3	Fructose 0.4 Glucose 0.4	0	0.7	0.1	0	0	1.4
Minestrone Soup	250g		215	25.2	Starch 14 Glucose 2.5 Sucrose 0.6	2.7	11.7	5.8	1	Polyunsaturated 0.8 Monounsaturated 0.9	6.5
Broccoli	40g		48	1	Starch 0.2 Fructose 0.3 Glucose 0.3	0	1.3	0.2	0	Polyunsaturated 0.1	1.1
Egg Mayonnaise	30g		53	0	0	0	3.9	4.1	1	Monounsaturated 2.3 Polyunsaturated 0.6	0
Boiled Egg	50g		71	0	0	0	7.1	4.8	1.4	Monounsaturated 1.7 Polyunsaturated 0.7	0
Roast vegetable & lentil soup	250g		74	12.5	Starch 5.2 Glucose 1.2 Sucrose 1.6	0	2.8	0.6	0.1	Monounsaturated 0.1 Polyunsaturated 0.2	3.6

Vegetarian Chilli and Rice	112g		193	33	Starch 27.3 Sucrose 1.9	2.8	9.6	1.6	0.2	Monounsaturated 0.6 Polyunsaturated 0.6	7.2
Massaman Curry	250g		273	19.5	Starch 15.2 Sucrose 2.4	4.7	4.7	18.7	15.5	Monounsaturated 1.5 Polyunsaturated 0.8	4.0
Stir Fry Egg Noodles	170g		250	45	Starch 41.0 Sucrose 0.6	1.5	9.2	2.1	0.3	Monounsaturated 1.3 Polyunsaturated 1.3	5.0
Homemade Pizza (1 large slice)	100g		160	15.1	Starch 13 Glucose 0.7 Fructose 0.8	2.1	6.7	7.5	4.0	Monounsaturated 2.4 Polyunsaturated 0.4	1
Sauce for Pizza	50g		20	3.0	Sucrose 0.9 Starch 1.0	1.0	0.8	0	0	0	0.9
Vegetarian Spaghetti Bolognese	180g		240	38.2	Starch 25.5 Glucose 2.0	0	10g	2.6	0.6	Monounsaturated 1.5 Polyunsaturated 1.2	6.8
Shepherd's Pie	140g		180	19.1	Starch 16.0 Lactose 1.1	3.3	4.3	8.4	5.1	Monounsaturated 2.2 Polyunsaturated 0.4	2.7
Lasagne	150g		446	39.2	Starch 32.1 Lactose 2.7	1.0	17	23	14	Monounsaturated 5.9 Polyunsaturated 0.9	6.0
Celeriac Mash and Baked Beans	140g		116	21.0	Starch 17.5 Sucrose 2.4	3.7	4.7	0	0	0	4.7
Tzatziki	20g		23	0.5	Fructose 0.2	0.2	0.5	0	0	0	0
Coleslaw	20g		135	1.5	Starch 0.5 Sucrose 0.5	1.0	1.0	2.4	0.3	Monounsaturated 0.9 Polyunsaturated 1.0	0.8



### Tips for Improving 'Orange' Recipes

**Glass of Milk:** Cow's milk provides young children with protein and essential vitamins such as calcium, B12 and phosphorus which are needed for healthy brain and bone development. Although the saturated fat content is highlighted in orange, this should not discourage the provision of cow's milk to children, but it is important that excess is not consumed to ensure a balanced fat intake. Alternative milks, such as almond, coconut or soya milk should not be put in place of cow's milk, as they do not provide as much protein and nutrients as wholesome cow's milk. A 200ml glass per day is sufficient for children.

**Bread and Butter:** Homemade bread provides children with energy and fibre to ensure concentration in class as well as maintaining a healthy gut. However, caution should be exercised with bread and butter portions as too much can contribute to excess calories and saturated fat intake (when taken with butter).

**Pasta with Pesto:** Pasta (whole wheat) provides children with energy and fibre, while pesto sauce is rich in healthy unsaturated fats. Exercise caution with portions however to ensure consumption of too much fat is avoided.

**Grated Cheese:** Cheese provides children with calcium for bone development. A portion is recommended per day (size of two thumbs put together) for children, but excess will increase saturated fat intake.

**Boiled potatoes:** Potatoes are an excellent side to any meal, providing fibre and many nutrients. Too many can add to excess calorie intake, so caution on portion size is important when added to the plate.



**Homemade Egg Mayonnaise:** Homemade egg mayonnaise provides a high protein side to any dish. Although it is rich in unsaturated fats, too much can lead to excessive fat consumption.

**Boiled egg:** Eggs are important to provide children with essential protein that they are not getting from meat as this is a vegetarian school. They should be limited to 1-2 eggs per day to ensure fat intake is not too high. Eggs should not be discouraged.

**Vegetarian Lasagne:** Lasagne can contain a lot of pasta, and is often served with additional carbohydrate sources. Portion sizes should be monitored to ensure energy intake from meal is not too high.

**Homemade Pizza:** Cheese pizza most often has a high fat content. One or two slices are okay and provide a relatively healthy treat for the children. Portions should be monitored however to maximum 2 slices, depending on whether or not a side dish is provided or not. Adding vegetables to the pizza would be a great way of increasing vegetable intake on pizza day.

**Shepherd's Pie:** Shepherd's pie, (containing mashed potatoes made with milk or butter) can become high in fat. This recipe contains a moderate amount of fat, however portion sizes should be controlled to ensure fat content does not become too high.

**Celeriac Mash and Baked Beans:** Baked beans provide a great source of fibre and protein, but the tomato sauce can often be high in refined sugars. Portion control is important to ensure refined sugars are kept to a minimum.

**Coleslaw:** Portion size should be monitored with coleslaw as it is an energy dense side.

### Tips for Improving “Red” Recipes

**Massaman Curry:** This recipe is high in fat, particularly unsaturated fat. It provides 80% of the recommended daily allowance for saturated fat.

The recipe could be improved by:

- Using reduced fat coconut milk
- Decreasing the amount of coconut milk and chickpeas and increasing vegetable bulk
- Introducing more variety in vegetables

**Lasagne:** This recipe is quite high in calories and fat. The main fat sources in the recipe are the Bechamel sauce and the cheese on top. The recipe could be improved by:

- Reducing the amount of layers of Bechamel sauce
- Decreasing the amount of butter in the Bechamel sauce
- Increasing the amount of vegetables in the filling
- Discarding the cheese layer on top of the lasagne