Stocksbridge High School

Hospitality and catering controlled assessment

Waste not want not

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Brief analysis

Traditional British- If something is traditionally British it means that the product has either originated in Britain or has a relation to being in Britain or used by British citizens, this could be appealing because it can make the customer feel comfortable knowing it is from around them.

Environmentally friendly- If something is environmentally friendly it means that the product is not damaging the planet. Examples of being environmentally friendly is by recycling or using less plastic so if a company wanted to support the environment they would reduce the amounts of plastic they are using in the packaging.

Grow herbs and salad ingredients on the roof- By doing this the establishment can save money and reduce the amount of plastic from it not needing to be packaged due to it not needing to be transported. This also ensures that the ingredients are as fresh as possible because they could pick then in the morning and sell them during the day.

Legal requirements- These are the expectations that a food establishment is supposed to follow, these can range from the health and safety of the food being produced to if the business in not corrupt. If an establishment is found breaking these laws then there could be serious consequences like a fine or even time in prison.

Locally sourced- This means that the product was made or grown close to the establishment, reasons a company would prefer this is because the cost would be reduced due to it not having far to travel or even an employee could pick up the product for further deduction of the price.

Nutrients required

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| Nutrient | Where is it found? | Why is it needed? | What happens if you have too much? | What happens if you don’t get enough? |
| Complex Carbohydrates (Starches) | Potatoes, bread, pasta, rice | Provides a slow release of energy | -too much can lead to tooth decay | -weight loss, this can lead to things like anorexia |
| Simple Carbohydrates (Sugar) | Cakes, biscuits, chocolate, milk | Energy-blood levels go up | -tooth decay, is when your teeth aren’t getting the protection they need to stay strong so they begin to rot  -diabetes, is when your body cannot control glucose correctly because of the lack of insulin | -tiredness when the body doesn’t have enough energy therefore the muscles slow down and the whole body feels weaker. |
| Saturated fats | Biscuits, cakes, meat | To provide the body with energy | -obesity  -strokes, when your blood clots and makes it difficult to get blood to your brain | -brittle nails  -vitamin deficiency is an autoimmune condition that affects a person’s stomach. |
| Unsaturated fats | Oil, olive oil, oily fish | Provides a store of energy | -obesity  -strokes, when your blood clots and makes it difficult to get blood to your brain | -brittles nails  -vitamin deficiency is an autoimmune condition that affects a person’s stomach. |
| High biological value proteins | All animal sources | Amino acids help build muscle | -kidney damage- little or no urine when you try to urinate.  Swelling, especially in your legs and feet.  Not feeling like eating.  Nausea and vomiting. | -vegetarians need to ensure they eat the correct foods to get amino acids daily |
| Low biological value proteins | All plant sources | To build muscle and repair | -acids accumulate in joints | -stunted growth which is when growth is reduced |
| Vitamin A | Mangoes, carrots, cheese | Function of the skin | -Can be toxic, this means it can cause serious harm to the body | -dry skin and hair |
| Vitamin B | Vegetables, meat, marmite | To release energy from food | -illness is rare | -anaemia, which is when your body doesn’t have enough iron |
| Vitamin C | Fresh fruits, potatoes, green vegetables | Assists the healing process | -Excess is eliminated from the body | -slow wound healing |
| Vitamin D | Oily fish, eggs, cereals | Absorbs calcium | -vomiting  -skin cancer | -soft bones which makes it easier for them to break |
| Iron | Plant and animal sources, leafy vegetables | Causes the body to create red blood cells to transport oxygen around the body | -nausea  - Having too much iron in your blood leads to a number of health and organ problems | -anaemia, which is when your body doesn’t have enough iron |

Dietary needs of different groups

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| Dietary group | What nutrients do they need and where are these found? | Why do they need these/ What are the issues? |
| children | Calcium-for healthy and strong bones and teeth, they are found in dairy products  Fat-energy for insulation these are found in meats  Vitamin D- helps skin and hair comes from the sun | Without calcium it makes it easy for bones to break and teeth to chip.  Without fat your organs are not protected  Without vitamin D your skin becomes dry and your nails become brittle |
| Adults | Pregnant women should intake more calcium and iron to ensure that the fetus is protected in pregnancy and develops properly. | If a pregnant woman has low calcium and iron then the baby is at risk of fragile teeth and bones, this is an issue because without strong bones they are in danger of injury |
| Elderly | Protein, from meat, eggs is important to repair worn out body cells | This is important because if they lack essential body cells they are at serious risk of illness and disease. |
| Diabetic | If someone is diabetic then they need to limit the amount out starchy and sugary carbohydrates they intake which are found in potatoes, rice, milk and cakes | If a diabetic person intakes too much sugar then they can have life threatening effects like a coma. |
| Coeliac | They need to restrain from eating gluten (primarily cereals, some oats and wheat) | If someone with a gluten intolerance ingests gluten then they will experience anaemia (iron deficiency), weight loss and diarrhoea |

If a teenager suffers from coeliac disease then they’ll still have to consume carbohydrates although they’ll have to get it from a gluten free source. Both elderly and children have more brittle bones and teeth which makes it vital that they get a good source of calcium and protein so repair body cells. Fat is also required because without organs are not protected.

Cooking methods and effect on nutrients

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| Cooking method | What is it? | What is the effect on nutrients? |
| Boiling and poaching | Using water to make something including gravy (stews, soup, casseroles) | Should be cooked in shortest time possible and in little water to reduce vitamin loss |
| Stir frying | Very quick method of cooking, usually done over a hub and with oil | Less nutrients are being lost because the water soluble vitamins and staying due to the lack of water |
| Deep frying | Food being cooked in mass amounts of oil | Fat is added due to the amount of oil |
| Roasting | Method using the oven, using dry heat | Roasting increases fat if it drains off the food, is being roasted for a long time vitamin B can be lost |
| Grilling | Cooks foods with infra red radiation | The food looses less nutrients because the heat is coming from above so the fat heats up and drips down therefore there is less fat |

In conclusion stir frying is the healthiest way of cooking due to low nutrient loss which makes sure the meal has all the nutrients needed. However, deep frying is the most unhealthy due to the large amount of oils of the food which are adding fats which too much of can cause serious health issues.

Environmental factors

* Fairtrade- Foods that are bought directly from the farmer ensuring that they receive a reasonable price for their products, this makes sure that they aren’t underpaid and that they have a good income to support them and their families all year round.
* Free range- means that the animals were able to roam around freely and not kept in cages and given abuse. Customers prefer this so that they know the animal that sourced the product lived a happy life.
* Organic-farming without the use of unnatural chemicals or fertilizers, people want organic food because it ensures that they aren’t consuming the chemicals which could cause harm.
* Recycling/ packaging food- recycling means that you are reusing things and materials for other things, or turning food waste into compost.
* Food miles- The distance food has travelled from before sold, this can effect air pollution if it was produced far away from where it is being sold.
* Animal welfare- this means the state an animal is in, if it is in a good state of welfare then it is happy and safe.
* Red tractor- is a food standards scheme covering animal welfare, food safety, traceability and environmental protection.

Menu choice factors

How do the following affect the food you eat:

* Cost-if the food is expensive it won’t be as popular as cheaper things on the menu.
* Time- If the food takes a long time to make it isn’t suitable because people want there food as soon as possible
* Skill chef- if a chef lacks skill then they’ll be unable to make a dish to the highest standard possible
* Equipment available- if a kitchen lacks equipment then they are limited to certain dishes due to equipment being vital to most dishes.
* Season- making sure that the ingredients are accessible all year round is important because then the menu will be constantly changing throughout the year.
* Climate- if temperatures outside are warm the people will demand food to cool like down e.g. salad or if it is cold then people will want foods that will warm like up (hot meals)
* Traditions- if a restaurant provides traditional foods like Sunday dinners then it will be very popular as it is something many people are familiar with and enjoy.

Mood Board

Lasagne- If the bistro makes lasagne they could use left over vegetables for different dishes on the menu which prevents food waste. They could also source their herbs and vegetables from the vegetable garden on the roof of the Bistro this prevents food loss because left over food is being used in other places and food is grown by the establishment therefore it will cost less for the business and the ingredients will be fresher and taste better.

Chicken curry- Making sure the chicken is free range is important for an eco friendly dish, also you can get the herbs from the herb garden which is cheaper and more environmentally friendly because it recused food mileage

Stir fry- Stir Fry is an easy way to fit many nutrients into one dish, the meat will provide protein and the short time it is being cooked reduces the amount of nutrients being lost. Food mileage is also not being contributed to because the seasonal ingredients which are locally sourced on the roof.

Jacket potato-Provides carbohydrates which gives energy to the body and it is an easy, affordable dish. Also by adding tuna protein is added which helps muscle repair, this also supplies the body with minerals and vitamins which helps the body function properly. This is also an all year round food dish which means it fits perfectly with the menu and could be a permanent options. Also the most popular fillings are locally sourced which reduces food mileage.

Shepard’s pie- Is a healthy meal for families because families with small children that don’t like to eat vegetables can still eat them because they are hidden due to them being covered by gravy and mashed potato. Also it provides protein (growth and repair) from carbohydrates and meats. This is environmentally friendly because everyone will be eating it so gas isn’t wasted cooking different dishes for different people.

Fish and chips- Protein sourced from fish and is a good meal option because every family loves a takeaway. This also is sustainable because if you fish in different areas then the fish population will not decrease and there will be a good supply also the peas will supply one of your five a day. Fish and chips are also commonly served in restaurants and can be eaten outside or in.

Burger- a good source of protein for growth and repair and can easily be changed from a child’s meal to an adult’s which makes it easy for a whole family dish. Also, salad on the burger can be picked from the garden on the roof top which reduced food mileage because they are not travelling far which is reducing pollution. Also gas is being reduced because if the whole family is having it the same so it is being cooked for the same time.

Salmon and salad- Salad provides minerals and is also grown on the roof top so that food mileage is increases and it doesn’t cost the establishment money for the product or the delivery which means it can invest in things like reusable metal straws which is eco-friendly. The salmon is good for repair due to the protein which is good for children because they are growing.

A Sunday dinner- A Sunday dinner is a big meal full on nutrients which are good for the body. The vegetables provide vitamins and minerals from the roof which is organic and reduces food mileage, it also includes potatoes in many forms like mashed and roasted which provides the body with carbohydrates for a release of energy also the meat of choice will give protein for strong bones and repair.

Spaghetti Bolognese with meat balls- this easily fits the brief because the pasta release energy from the carbohydrates. The meat can provide protein for growth and repair which makes a good meal for children but also adults which means it is cheaper for the restaurant because they are buying the same ingredients and the vegetables are free because it is organically grown on the roof.

Dovetailed Plan

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| +Time | Process | Special points |
| 9:00am carrot cake cupcake | Preheat the oven to 180 degrees C (gas mark 4). Grease and flour a 23x33cm baking tin. | Grease  Flour |
| 9:05am | In a large bowl, beat together eggs, oil, caster sugar and 2 teaspoons vanilla. Mix in flour, bicarbonate of soda, baking powder, salt and cinnamon. Stir in carrots. Pour into the prepared tin. | 4 eggs  300ml (1/2 pint) vegetable oil  400g (14 oz) caster sugar  2 teaspoons vanilla extract  250g (9 oz) plain flour  2 teaspoons bicarbonate of soda  2 teaspoons baking powder  1/2 teaspoon salt  2 teaspoons ground cinnamon  350g (12 oz) grated carrots |
| 9:15am | Bake in the preheated oven for 40 to 50 minutes or until a skewer inserted into the centre of the cake comes out clean. Let cool in pan for 10 minutes, then turn out onto a wire rack and cool completely. | Skewer |
| 9:20am | Wash up |  |
| 10:05am | Take out of oven and leave to cool on cooling rack | Cooling rack so that food cools quicker |
| 10:15am | Refrigerate for 5 mins to cool further | 0-5 degrees |
| 10:20am | In a large bowl, cream together the butter and vanilla. Blend in the sugar, a quarter at a time, beating well after each addition. Beat in the milk, and continue mixing until light and fluffy. Keep icing covered until ready to decorate. | 250g butter, softened  1 teaspoon vanilla extract  600g icing sugar  2 tablespoons milk |
| 10:30am | Decorate | Piping bag |
| 10:40am | Half fill a large pan with water, add salt and bring water to boiling point.  Add rice, turn down heat so that rice is simmering  Cook until rice is absorbed most of the water and the grains are soft and swollen | 1 teaspoon salt  250gms long grain rice |
| 11:00am | Cook until rice is absorbed most of the water and the grains are soft and swollen |  |
| 11:05am | Place a colander in the bottom of a sink and tip rice from pan through the colander to drain in Rise rice with hot water to refresh it. leave to drain. |  |
| 11:07am | crumble stock cube into a jug and add 500ml boiling water. Stir well. | 500ml chicken stock (made with one stock cube) |
| 11:10am | cut chicken into chunks about 2cm square | Red chopping board  2 boneless chicken breasts |
| 11:15am | on a separate chopping board, peel and dice onion. Crush garlic | 1 clove of garlic  1 onion  Brown chopping board |
| 11:20am | fry chicken until sealed and onion and garlic until translucent | 1 teaspoon margarine  1 bay leaf |
| 11:25am | add 1tbsp plain flour and stir to coat chicken, add stock immediately | 1 level tablespoon plain flour  1 level tablespoon tomato puree |
| 11:30am | add spices and coconut milk and stir | 1 level tablespoon curry powder  ½ teaspoon coriander  150ml coconut milk |
| 11:35am | reduce heat and leave to simmer for 20min, then wash up |  |
| 11:40am | Chop a potato into cubes and put boiling water in a pan at turn to boil | Brown chopping board  1 potato |
| 11:45 am | Once water boils add potatoes and leave for 5 mins |  |
| 11:50 am | Then put into a colander and fry with curry powder | 1 teaspoon curry powder |

Contingencies

If dough sticks to the table add flour to soak up liquid

If chicken is bland then add more seasoning

If rice is dry add water so it doesn’t burn

If sauce is bland add seasoning

If naan is bland add seasoning

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| grocer | green grocer | butcher | dairy |
| 300ml (1/2 pint) vegetable oil  400g (14 oz) caster sugar  2 teaspoons vanilla extract  250g (9 oz) plain flour  2 teaspoons bicarbonate of soda  2 teaspoons baking powder  1/2 teaspoon salt  2 teaspoons ground cinnamon  150ml stock  1tsp turmeric  2tsp curry powder  rice | 350g (12 oz) grated carrots  1 onion  2 cloves of garlic  1 tbsp coconut | 250g chicken breast | 150ml natural yogurt  25g butter  or ghee, melted, plus extra 2-3 tbsp for greasing and brushing |



Deboning a chicken with a red chopping board and sharp knife

ensuring food is cooked correctly and not being burnt (getting all areas of food)

knife skills with brown chopping 



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| Proposed dishes | Nutrients included | Suitable for which dietary group | How do I know it is a good product? | Cooking methods /skills shown in making? |
| Chicken/quorn stir fry | Vitamins from the high amount of vegetables included in the dish, they way the meal is cooked prevents nutrient loss because it doesn’t need much cooking. If it includes meat then it provides protein needed for the body to grow and repair. | Stir fry is a very versatile dish because it could be made with meat or without which caters to vegetarians or vegans if needed, the amount of LBV proteins from the vegetarians which contain amino acids, however the HBV contains more which is good for growth of muscles. | It includes a wide variety vegetables in the dish which will automatically mean that the dish is beneficial to the body and does more good than bad. Stired often so the vegetables are soft and not burned makes the dish good. | Knife skills are shown when vegetables are being slices evenly so that they cook at similar rates, and using correct materials like a brown chopping board. |
| Jacket potato with beans and cheese | A high number of protein due to the fillings, the potato also gives the meal a good source of carbohydrates which is needed to give the body a good and healthy source of energy, cheese is a reliable source of HBV proteins that contain all of the amino acids the body requires. | This meal is suitable for children because it is an easy, affordable and delicious way to provide them with all the nutrients they need to grow correctly and have a healthy diet which is important as their bodies are growing and developing. | This dish is very easy to make as it only needs baking for the potatoes to make the skin crisp and you could either use a microwave or a stove to prepare the beans for the meal. | Skills shown in this are either knife skills or grating correctly and safely (dependent on how you want your cheese). Knife skills are also shown is there are salads along side the dish which will show off knife skill and the preparation used with a brown chopping board. |
| Fish and chips | These nutrients can include HPV proteins which are a good source of amino acids from the fish, the chips provide carbohydrates which is required by the body to store energy. | This meal in suitable for everyone (excluding non-meat eaters) this is due to it being effective for a delicious meal which provides them which nutrients they need for a healthy diet. | Chips can be made in many different ways, the healthiest way being baking due to deep frying containing a large amount of fatty oils which makes the meals more unhealthy. | Potatoes are slices evenly so that they can be cooked evenly (at a similar rate) on a brown chopping board, therefore this prevents having some burnt and some undercooked. |
| Spaghetti Bolognese with meatballs | This meal consists of a variety of protein sources from the mince, this is needed to allow the body to grow and repair, it provides the body which amino acids. Also, the spaghetti provides carbohydrates which is necessary for the body to be able to store energy. | This meal is suitable for children and adults due to it doing a popular dish that is widely enjoyed. This is good because it is a easy way to ensure children are getting all the nutrients they require. | The binding of the meatballs is consistent, the sauce is thick and evenly seasoned and the spaghetti is al dente. | Skills are shown in the meatball if they are a consistent size and shape, pasta making for spaghetti to be stretchy and thin. |