

## Recipe Modification

When cooking and baking, each ingredient plays an important role in the overall quality of the finished product. When modifying recipes to create healthier alternatives, the function of that ingredient needs to be taken into consideration. The information below details the functions that fat, sugar and fibre have in recipes. The following pages provide recipe modification tips for use both at home and in OSHC settings.

### Fat

**Function:** Establish colour and texture and contribute to flavour.

One of the important roles of fat in baked recipes is to prevent the proteins in flour from mixing with the moist parts of the batter and forming long strands of gluten which can make cakes and biscuits tough, especially if overbeaten.

Saturated and trans fats are often found in animal based products and processed foods. They are associated with an increased risk of heart disease, due to the role these fats play in raising cholesterol levels. High saturated fat sources include butter, lard, dripping, copha, palm and coconut oils, some full fat dairy foods and fatty meats. Trans fats are rare, but are found in commercial baked goods and raise cholesterol levels and increase risk of heart disease.

Unsaturated fats which come mostly from plant sources such as olive, canola and peanut oils are healthier types of fat as they don't increase the risk of heart disease. All sources of fat, both saturated and unsaturated, are high in kilojoules and ideally the overall fat content of recipes should be minimised or substituted where possible.

### Sugar

**Function:** Contribute to the sweet flavour of products.

Sugar in large quantities is a major source of energy (kilojoules/ calories). Simple modifications of a recipe can decrease the sugar content of products quite considerably, whilst still maintaining flavour.

### Fibre

**Function** Important for bowel health (i.e. staying regular).

Fibre can be easily incorporated to increase the overall fibre content of recipes. When adding fibre to a recipe, more moisture may be needed to prevent products drying out.

### Portion Sizes

In recent years the portion sizes of food and therefore energy has increased quite dramatically. Excess intake of kilojoules can lead to overweight and obesity. Portion size should be taken into account if baking, as many baked goods are "treat/ occasional" type foods and therefore large portion sizes are not appropriate.

## Recipe Modification Tips:

<p><b>Butter, margarine and oils</b></p> 	<ul style="list-style-type: none"> <li>• Aim to minimise all sources of fat in recipes - especially saturated fats such as butter. Use minimal amounts of unsaturated fats - such as olive, canola or sunflower oil instead</li> <li>• For alternative spreads use cottage cheese, mustards, chutney, hommus or avocado</li> <li>• Use cooking sprays, baking paper or brush oil onto pan to prevent items from sticking rather than using butter or lots of oil</li> <li>• Use low fat cooking methods such as steaming, stir-frying or grilling to avoid need for oils</li> <li>• Experiment with salt reduced soy sauce, lemon juice, vinegars, mustards, herbs and salt reduced stocks to make healthy salad dressings</li> </ul>
<p><b>Milk /Yoghurt Cheese</b></p> 	<ul style="list-style-type: none"> <li>• Use reduced fat milk and yoghurt in recipes</li> <li>• Use small quantities of reduced fat cheese varieties in cooking, such as mozzarella and bocconcini</li> <li>• Use reduced fat cottage cheese or ricotta topped with tomato as an alternative on crackers or topped with fruit as an alternative in desserts or sweet foods</li> <li>• For baked cheese toppings on casseroles - mix oats/bran/wheat germ/crushed cornflakes with reduced fat cheese or a small portion of a strong tasting cheese such as parmesan</li> </ul>
<p><b>Cream and Sour Cream</b></p> 	<ul style="list-style-type: none"> <li>• Reduced fat evaporated milk can be whipped and used as a cream substitute; it's a good idea to chill it before whipping</li> <li>• Reduced fat ricotta cheese whipped with small amount of icing sugar is also a good cream substitute. Also mix with honey and vanilla for extra sweetness</li> <li>• Reduced fat cream cheese and reduced fat ricotta cheese are all suitable alternatives to cream cheese and sour cream</li> <li>• Substitute buttermilk and reduced fat yoghurts for sour cream</li> </ul>
<p><b>Coconut Milk</b></p> 	<ul style="list-style-type: none"> <li>• Use coconut flavoured light evaporated milk and a little corn flour (add this at the end as it tends to split if overcooked)</li> <li>• Use evaporated light milk with a little coconut essence</li> <li>• Try reduced fat yoghurt and some desiccated coconut</li> <li>• Also try reduced fat coconut milk</li> </ul>

<p><b>Cakes and Biscuits</b></p>  	<p><b>Fat:</b></p> <ul style="list-style-type: none"> <li>• When preparing biscuits, <b>use 2 tablespoons of fat per cup of flour</b>. Some recipes may ask for more than this – however it is not required</li> <li>• Use poly or monounsaturated fats (margarines and oils) for cooking rather than butter, as it is high in saturated fat</li> <li>• Pureed fruits and vegetables (e.g. Pureed apple, pumpkin, avocado and banana), reduced fat yoghurts, fruit juices and buttermilk can be used to replace some of the fat in some recipes as they add sweetness. These provide the moisture that fat normally would. Try replacing 50% of the fat in recipes with these products</li> <li>• Avoid over mixing or beating lower fat mixtures, as this tends to toughen the final product</li> </ul> <p><b>Sugar:</b></p> <ul style="list-style-type: none"> <li>• Replace ¼ of the sugar in biscuits, bars or cakes with an equal amount of skim milk powder. This reduces kilojoules, increases calcium, protein and some vitamins</li> <li>• Using pureed fruits, fruit juice, buttermilk and reduced fat vanilla yoghurt instead of sugar can reduce the amount of sugar required in the recipe</li> <li>• Try decreasing the sugar quantity by about ¼ and add flavourings such as nutmeg, cinnamon and vanilla essence as required to compensate for any reduced sweetness</li> <li>• For icing, try using ricotta cheese mixed with fruit and a small amount of icing sugar or reduced fat cream cheese</li> </ul>
<p><b>Pastries and savoury foods</b></p> 	<ul style="list-style-type: none"> <li>• Short crust and puff pastries are high in fat. As an alternative use filo pastry and brush layers with reduced fat milk rather than butter/oil before baking</li> <li>• Use bread instead of pastry for bases</li> <li>• For a pie base try cooked rice mixed with egg white or mashed potato</li> </ul>
<p><b>Legumes</b></p> 	<ul style="list-style-type: none"> <li>• Add legumes such as kidney beans and lentils to 'wet' dishes and mince dishes, as they are high in fibre</li> <li>• Mash kidney beans and incorporate into rissoles and burger patties</li> <li>• Add four-bean mix or chickpeas to salads or serve a bean salad as a side</li> <li>• Make homemade hommus from tinned chickpeas and use as a dip or spread</li> </ul>

<p><b>Sodium</b></p> 	<p>Experiment with using dried/fresh herbs and spices as a salt alternative:</p> <table border="1" data-bbox="603 443 1394 1151"> <tr> <td><b>Lamb</b></td> <td>Thyme and rosemary</td> </tr> <tr> <td><b>Pork</b></td> <td>Sage and rosemary</td> </tr> <tr> <td><b>Beef</b></td> <td>Basil, thyme and rosemary</td> </tr> <tr> <td><b>Chicken and stir fries</b></td> <td>Coriander, mint, ginger and chilli</td> </tr> <tr> <td><b>Indian dishes</b></td> <td>Cumin, coriander, garlic and ginger</td> </tr> <tr> <td><b>Potato bakes and roast potato</b></td> <td>Mixed Italian herbs and garlic</td> </tr> <tr> <td><b>Salads</b></td> <td>Oregano and basil or coriander and mint in thai style salads</td> </tr> </table> <ul style="list-style-type: none"> <li>• Look for products that are 'low salt', 'reduced salt' or have 'no added salt' when choosing commercial products</li> <li>• Sea salt, rock salt, garlic salt and chicken salt are still 'salt.'</li> </ul>	<b>Lamb</b>	Thyme and rosemary	<b>Pork</b>	Sage and rosemary	<b>Beef</b>	Basil, thyme and rosemary	<b>Chicken and stir fries</b>	Coriander, mint, ginger and chilli	<b>Indian dishes</b>	Cumin, coriander, garlic and ginger	<b>Potato bakes and roast potato</b>	Mixed Italian herbs and garlic	<b>Salads</b>	Oregano and basil or coriander and mint in thai style salads
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<p><b>Gravy and Sauces</b></p> 	<ul style="list-style-type: none"> <li>• Use apple sauce with pork and mint sauce with lamb</li> <li>• Use reduced fat yoghurt mixed with fresh herbs as an alternative to gravy</li> <li>• Make gravy using vegetable juices instead of pan juices.</li> </ul>														
<p><b>Portion Sizes</b></p> 	<ul style="list-style-type: none"> <li>• Use mini muffin trays for baking or only fill regular muffin trays to be half full. Avoid the Texas muffin pans as they are too large</li> <li>• Pre-cut slices, pies and quiches into smaller portions and store for morning teas and snacks</li> <li>• Use 1 tablespoon of mixture when making pikelets or fritters as opposed to 2 or 3 tablespoons. Freeze leftover quantities</li> <li>• Try to have more salad and vegetables on the plate than anything else</li> </ul>														