The Bristol Approach to Healthy Eating

A guide on how to maintain a healthy, balanced diet whilst living with cancer

Developed by Penny Brohn Cancer Care, the Bristol Approach is a unique combination of physical, emotional and spiritual support using complementary therapies and self-help techniques to help you live well with and beyond cancer.

The healthy eating information in this booklet has been developed to support the general health and wellbeing of those with cancer. The recommendations can also be used by those wishing to reduce their risk of developing cancer. Although this approach to healthy eating is suitable for many people with cancer, those with special dietary needs or eating problems should seek further nutritional advice from a nutritionally qualified health professional. These guidelines are informed by current evidence relating to nutrition and cancer, including the landmark 2007 World Cancer Research Fund report: Food, Nutrition, Physical Activity and the Prevention of Cancer: a Global Perspective. In addition to research evidence, the guidelines are based on the experience of staff at Penny Brohn Cancer Care, who have been using nutrition to support those with cancer for around 30 years.

If you are interested in reading about the supportive research and the reasoning behind the dietary suggestions, you will find this information on the Penny Brohn Cancer Care website, www.pennybrohncancercare.org
What are the benefits of healthy eating for those with a cancer diagnosis?

Research indicates that healthy eating can be beneficial for people living with cancer. Studies show that benefits may include a reduction in symptoms and treatment side effects, and improved quality of life. Healthy eating can also help prevent other conditions that cancer survivors may be prone to such as obesity, diabetes, heart disease and osteoporosis. Another important benefit is enhanced psychological and emotional wellbeing. This can be due to the person with cancer having an increased sense of control over the recovery process, this in turn leads to a reduction in stress.

Poor diet can lead to imbalance and disease

Experts suggest that lifestyle factors, including the food we eat, have a major role to play in the development of cancer. When we eat an unsuitable diet, such as one low in essential nutrients and high in sugar and unhealthy fats, for a prolonged period our body can become unbalanced at a biochemical level. For example, our blood sugar can rise above normal levels, followed by over-excretion of insulin and accelerated production of unhealthy triglycerides. Eventually changes such as these may result in chronic disease. The reason that healthy eating is so supportive to those at risk of, or living with chronic diseases like cancer is that it helps to prevent or correct these types of biochemical imbalances.

Overview of the Bristol Approach to healthy eating

The Bristol Approach to healthy eating has at its core the belief that people are healthiest when they follow a diet composed of foods in their most natural state. In cultures that consume diets containing minimal amounts of processed and refined foods, the incidence of chronic, degenerative diseases tend to be much lower than in the West. The Bristol Approach to healthy eating aims to encourage people to eat a whole food diet that is based on fresh, unprocessed foods.

In keeping with this view point is the recommendation that people choose certified organic produce where possible. Organic foods have the double advantage of having lower levels of potentially harmful chemical residues and, according to recent research, they may have higher levels of beneficial nutrients. Organic foods tend to be more expensive than conventional produce and not so widely available. For this reason it is important to stress that it is preferable to eat an abundance and wide variety of whole foods, whether organic or not, rather than limiting the food range due to the cost or availability of organic produce. It is also important to be aware that not all organic standards are equal. The largest UK certification body, the Soil Association has some of the strictest standards and we would recommend choosing Soil Association certified produce whenever possible.
The Bristol Approach to Healthy Eating Plate

The Bristol Approach to healthy eating recommends a diet that is based primarily on plant foods. These include vegetables and fruit, whole grains, pulses, nuts, seeds, herbs and spices. A smaller amount of animal products are also recommended alongside the plant foods.

This diagram gives an indication of the types of foods we recommend to include in a typical meal and some guidance on relative proportions. We suggest that vegetables make up a large part of the meal with other plant foods often used, but in smaller amounts. Protein foods should be used at each meal, either in the form of animal products or pulses. Fats should also feature in the form of vegetable oils, nuts and seeds or butter. Finally the herbs and spices should not be forgotten; with their powerful health enhancing properties their inclusion at each meal is recommended.

- **Herbs and spices:** garlic, ginger, chilli, turmeric, rosemary, thyme plus many others
- **Fats:** nuts and seeds, cold-pressed vegetable oils, butter
- **Protein foods:** pulses (beans and lentils), meat, fish, eggs and dairy products. Please note that dairy products are optional (see page 5 for further details).
- **Starchy carbohydrates:** potatoes and whole grains such as brown rice, quinoa and whole grain bread
- **Vegetables and fruit:** an array of brightly coloured vegetables and fruit such as tomatoes, broccoli, beetroot, watercress and berries
## Dietary recommendations

### Foods to eat in abundance

These are the foods that we recommend you eat on a daily basis. For some we suggest including them several times a day.

#### Vegetables and fruit

Vegetables and fruit contain many compounds that support health including fibre, vitamins, minerals, and other nutrients found in plants called phytonutrients. Many phytonutrients display antioxidant and anti-inflammatory properties. A large number of studies show that vegetables and fruit can help to protect against cancer.

**Recommendation:** aim for eight to ten portions of fresh vegetables and fruit per day with at least two thirds of your intake being vegetables. Choose a variety of vegetables and fruit in an array of colours. The UK government recommendations of at least five portions of vegetables and fruit per day are lower than some other countries. We have chosen to recommend a higher amount due to the strength of evidence of their benefit regarding the prevention of cancer. A simple way to estimate your portion size is to work out the amount of vegetable or fruit that would fit into your cupped hand.

#### Whole grains

Whole grains provide the body with important nutrients, in particular fibre, the B vitamins and vitamin E, a range of minerals and essential fats. Grains that have been refined will have a large proportion of these valuable nutrients removed.

**Recommendation:** eat a variety of whole grains including some that are more unusual such as quinoa, millet, barley, buckwheat and rye as well as the more common wheat, rice and oats.

#### Pulses

The pulses, also known as legumes, include beans, lentils and peas. Pulses have a relatively high protein content compared to other plant foods. They are also good sources of fibre, vitamins, minerals and phytonutrients including the phytoestrogens. Phytoestrogens, when obtained from a variety of plant foods and as part of a balanced diet, may have positive benefits for the body such as regulating certain hormones.

**Recommendation:** use a variety of pulses that are either cooked or sprouted. Minimise beans if your digestive system is delicate.

#### Protein foods

Protein has many vital roles in the body including support of the repair functions. It is important that people recovering from illness obtain sufficient protein from the diet.

**Recommendation:** be sure to include some protein at each meal. The amount of animal products a person requires depends on the nutritional needs of an individual. On average, we would recommend animal products 5-6 times a week. A vegetarian diet can be healthy for some people but plant sources of protein must be consumed regularly.

Animal products are good sources of protein and those we particularly recommend are white meat, fish and eggs. Plant sources of protein include the pulses, nuts, seeds and high-protein grains such as quinoa.

#### Healthy fats

Sources of healthy fats, including the essential omega 3 and omega 6 fats, include vegetable oils (ideally choose extra virgin or cold pressed as heavy processing damages oils), nuts and seeds, and green leafy vegetables. Recommended oils include olive oil and other nut and seed oils. Animal products also contain healthy fats and oily fish in particular, is a good source of the essential omega 3 fats.

**Recommendation:** saturated and unsaturated fats are both important for good health. However, saturated fats found in meat and high fat dairy products should play less of a role in the diet than sources of unsaturated fats such as vegetable oils, nuts and seeds and oily fish. Of the omega 3 and omega 6 essential fats, omega 3 is often deficient in the diet and therefore rich sources, such as oily fish, should be emphasised. Oils can become damaged when heated at high temperatures, therefore it is suggested that oils are heated to a minimal extent.

A special note about butter: although butter is high in saturated fats, it is far superior to any type of margarine, low-fat spread or spreadable butter, some of which contain damaged fats. Use a moderate spreading of butter.

#### Herbs and spices

Herbs and spices are a rich source of phytonutrients with powerful health-enhancing properties including antioxidant and anti-inflammatory activity.

**Recommendation:** include a variety of herbs and spices in the diet on a daily basis. Examples include garlic, ginger, chilli, turmeric, rosemary and thyme. Use fresh or dried herbs in salads or in cooked dishes. Herbal teas are also recommended.

#### Water

To optimise health it is important to stay well hydrated and drinking water regularly throughout the day is the best way to do this.

**Recommendation:** an average adult requires 1.5-2 litres of fluid per day, this figure is likely to be higher if you are very physically active or the weather is hot. Include water, herbal teas and fresh vegetable juices to make up your fluid intake. Minimise fruit juice, sugary drinks, caffeinated drinks and alcohol. If you wish to purify your water you can buy simple jug filters or filter systems to be plumbed in.
Dietary recommendations

Foods to eat in moderate amounts

The foods in this category are those that we would generally recommend no more than once or twice a week.

**Red meat**

There is some evidence that a high intake of red meat can increase the risk of certain cancers. However, unprocessed red meat consumed in moderate amounts does not pose a health risk. Red meat has many beneficial nutrients including the B vitamins and certain minerals. The essential nutrient iron is particularly well absorbed from red meat.

**Recommendation:** have only small portions of red meat, approximately the amount that would fit in the palm of your hand. Choose organic meat products if you are able.

**Dairy products**

Milk and milk products are a source of protein, healthy fats and a range of vitamins and minerals. However, despite the benefits, the suitability of dairy products for those with cancer has been questioned. Studies indicate that dairy products may increase the risk of certain cancers, particularly prostate. However they may reduce the risk of others, in particular, cancers of the large bowel. At this time there is very little research examining the effects of dairy products on the health of cancer survivors.

Apart from the possible link between milk products and cancer, some people find that dairy foods can upset their digestion. This may be a particular problem following chemotherapy treatment.

**Recommendation:** for those with prostate cancer, or those who experience digestive disturbance with milk, we would advise minimising the intake of dairy products. A dairy-free diet can provide plenty of calcium to support bone health as long as green leafy vegetables, pulses, nuts and seeds and whole grains are eaten regularly.

**Caffeine**

Caffeine is found in certain drinks such as tea (the black, green and white varieties) and coffee. It is also found in some foods such as chocolate. Caffeine can increase the body’s production of stress hormones and for this reason it is not recommended in large quantities.

**Recommendation:** if possible choose herbal teas and cereal-based coffees that are caffeine-free. If you drink caffeinated tea and coffee, keep intake to no more than one or two cups per day. It is particularly important to minimise caffeine intake during times of stress.

**Soya products**

The soya bean features in traditional Asian diets, for example in the form of tofu, miso or tempeh. In Western cultures the soya bean is only a relatively recent addition to the diet although its presence is quite widespread due to its inclusion in many processed foods. Also, soya products such as milk and yoghurt have become popular alternatives to dairy foods. The soya bean, like certain other plant foods, contains phytoestrogens. However, soya also contains less favourable compounds that can interfere with nutrient absorption, often termed ‘anti-nutrients’.

**Recommendation:** if you include soya in your diet choose the traditional soya foods such as tofu, miso and tempeh which tend to contain lower levels of the anti-nutrients.
Dietary recommendations

Foods to eat in minimal amounts

The foods in this category have little or no benefit for health and are best kept to a minimum or avoided completely.

Refined grains and sugars

Grain products that have been refined such as white flour and rice have lost a lot of their nutritional value. Removal of the fibrous portion of the grain results in the starches being rapidly converted to sugar in the body. Consumption of refined grains and sugars leads to a rapid rise in blood sugar which results in unhealthy changes in the body.

Recommendation: avoid refined grains and sugary foods as much as possible. Use fruit as the main sweetness in your diet. You can use fresh or dried fruit to make puddings, cakes and biscuits. Honey and syrups have a similar impact on blood sugar as any other sugar and are best used sparingly.

Damaged fats

Polyunsaturated fats that have been heavily processed, for example those found in commercial crisps, chips, mayonnaise, cakes, biscuits and pastries, have often been damaged. One group of damaged fats are the trans fats which have recently been shown to damage health and consequently are used less in the manufacture of processed foods. Other damaged fats are likely to undermine health in similar ways.

Recommendation: avoid processed, fatty foods as much as possible. Instead prepare cakes, biscuits and pastry products at home using vegetable oils, such as olive and coconut oil, and butter.

Processed meats

Processed meats are those that have been preserved by smoking, curing or salting, or by the addition of preservatives. Examples include heavily processed burgers and sausages, salami and other smoked or cured meats. Evidence suggests a high intake of these foods can increase the risk of certain cancers.

Recommendation: minimise processed meats. If you have them as an occasional treat, choose organic products if possible.

Alcohol

Some alcoholic drinks such as red wine contain compounds with beneficial properties such as antioxidant activity. However, alcohol itself offers very little benefit to the body, apart from its relaxation effects, and can place stress on the liver as well as undermining general health. Research evidence clearly shows that alcohol can increase the risk of certain cancers.

Recommendation: if you choose to drink alcohol, ideally keep it for special occasions and celebrations. Those having alcohol more regularly should not exceed one to two drinks a week. Antioxidant compounds similar to those in red wine and other alcoholic drinks can be obtained by eating a diet rich in fresh vegetables and fruit.

Barbequed or griddled foods

There is research evidence indicating that a diet containing large amounts of barbequed or griddled foods may increase the risk of certain cancers. However, there is no risk to health in eating occasional barbequed or griddled foods.

Recommendation: it is recommended that generally you cook foods, meat in particular, without close contact to the flame.

Salt

Salt provides the body with essential minerals, primarily sodium and chloride. However, many people consume too much salt which can upset the delicate balance of minerals in the body. Much of the salt people consume comes from processed foods and a whole food diet based on fresh, unprocessed foods is a naturally low-salt diet.

Recommendation: if you use salt add only a little during cooking to enhance flavour. Use herbs and spices, garlic, onions, dried mushrooms, dried tomatoes and lemon juice as alternative flavour enhancers. When using salt choose rock or sea salt rather than table salt as these natural products contain a wider range of beneficial minerals.

Summary of the dietary recommendations

<table>
<thead>
<tr>
<th>Foods to eat in abundance</th>
<th>Foods to eat in moderate amounts</th>
<th>Foods to eat in minimal amounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vegetables and fruit</td>
<td>Red meat</td>
<td>Refined grains and sugars</td>
</tr>
<tr>
<td>Whole grains</td>
<td>Dairy products</td>
<td>Damaged fats</td>
</tr>
<tr>
<td>Pulses</td>
<td>Caffeine</td>
<td>Processed meats</td>
</tr>
<tr>
<td>Protein foods</td>
<td>Soya products</td>
<td>Barbequed or griddled foods</td>
</tr>
<tr>
<td>Healthy fats</td>
<td></td>
<td>Salt</td>
</tr>
<tr>
<td>Herbs and spices</td>
<td></td>
<td>Alcohol</td>
</tr>
<tr>
<td>Water</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

06 Penny Brohn Cancer Care A registered charity no. 284881 © Penny Brohn Cancer Care 2010 – All rights reserved
The wealth of nutritional information readily available in books, magazines and on the Internet has led many people to become confused about healthy eating as much of the information is contradictory.

It is important to be clear that you are unlikely to discover the perfect diet for you written in any book, magazine or on the Internet. That is because we are all individual and accordingly have unique dietary needs. These needs depend on a number of things including: our nutritional requirements influenced by our genetic profile and our environment; our medical condition and current treatment programme; our lifestyle and stress patterns; our food likes and dislikes.

To determine the diet that best suits you take information from written material if you wish but always combine it with what you know yourself regarding the foods that makes you feel good. Ideally also seek support from a nutritionally qualified health professional.

Once you have found the diet that feels right for you be prepared to adapt it as time goes on. It is important to realise that your dietary needs will never be static but will change as your health, lifestyle and perhaps even your mood alters.

Any general dietary recommendations should be taken as guidance only, including those in this document. We suggest you read the information in these pages and, if the recommendations appeal to you, incorporate them into your life following the guidelines in the next section.

### Finding the right diet for you

Begin your dietary changes by increasing your intake of fresh vegetables and fruit. Follow this with an increase of the whole grains, pulses, nuts and seeds so that plant foods form the bulk of your diet.

A good way to ensure you are eating a variety of vegetables and fruit is to aim for a rainbow of coloured foods.

Juicing is a great way of boosting your intake of vegetables and fruit. Nutrients in fresh juices are easily absorbed and therefore juicing is particularly useful for those with poor digestion. To avoid high levels of fruit sugars, use mainly vegetables with a little fruit to sweeten. A fresh juice will contain less fibre than whole vegetables and fruit and will therefore count as only one daily portion.

If you are unable to obtain organic vegetables or fruit, use the conventional variety but wash them carefully with water. Adding a little vinegar to the washing water may help to remove surface chemicals.

If possible, cook in bulk and then freeze individual portions for when you are busy or don’t feel well enough to cook. In these situations vegetables and fruit that are frozen when bought can also be used.

Main meals can take a little planning, especially if you are cooking for a family. Ensure that you have a few good healthy eating cookbooks to inspire you.

Grow your own sprouts from pulses (lentils, peas and beans) and seeds. It is cheap and easy to do, and the sprouts are highly nutritious. They can be eaten raw or lightly steamed or stir-fried.

### Hints and tips

- Step-by-step changes – it is best to make dietary changes in a step-wise fashion and at a pace that suits you, as too many changes of once can be overwhelming and stressful. Many people find that initial changes bring positive benefits which motivate them to continue modifying their diet and lifestyle.

- Experiment – in order to discover the diet that best suits you we would encourage you to be adventurous and experiment with new foods. Also experiment with food combinations, portion sizes and the time of day that you eat.

- Get support – if you have friends or family offering their support ask them to lend a hand with your meals. For those who are good at cooking hand them some recipes and ask that they prepare meals which you can freeze and use at a later date. Also seek advice from those around you who are familiar with healthy cooking.

- Discuss with a health professional – if possible discuss the dietary changes you intend to make with a nutritionally qualified health professional. If you are planning to make radical alterations to your diet we recommended that you inform your doctor beforehand.

- Making dietary changes

- It is important to be clear that you are unlikely to discover the perfect diet for you written in any book, magazine or on the Internet. That is because we are all individual and accordingly have unique dietary needs.
Further information and support

Penny Brohn Cancer Care is the UK’s leading provider of complementary support for people living with cancer and their loved ones. The charity gives people the practical tools needed to improve their life and help manage their fear of cancer. Funded entirely by voluntary income, Penny Brohn Cancer Care’s services are delivered through a carefully designed programme of support, which works well alongside conventional medical treatment, known as the Bristol Approach.

For further information please contact us:
Helpline: 0845 123 2310
helpline@pennybrohn.org
Available 9.30am - 5pm weekdays, outside of these hours please leave a message and we will call you back.

Finding a Nutritionally Qualified Health Professional

British Association of Nutritional Therapists.
Telephone: 08706 061284
Web: www.bant.org.uk

British Dietetic Association.
Telephone: 0121 200 8080
Web: www.bda.uk.com

Nutrition Society.
Telephone: 020 7602 0228
Web: www.nutritionsociety.org

Other sources of information

NHS National Library for Health.
Web: www.library.nhs.uk

World Cancer Research Fund.
Telephone: 020 7343 4205
Web: www.wcrf-uk.org

Supportive research

For details of the supportive research for these guidelines, please see the Penny Brohn Cancer Care website, www.pennybrohncancercare.org

© Penny Brohn Cancer Care 2010 - All rights reserved. Whilst every care is taken to provide accurate information, neither the Charity, the editor, nor the contributors undertake any liability for any error or omission. Copyright and all other intellectual property rights in all information, materials and images contained within this publication is owned by and remains the property of Penny Brohn Cancer Care. Any unauthorised copying, citing, publication or reproduction of the content of this publication is strictly prohibited and constitutes an infringement of copyright. Requests for permission to use the copyright materials in this publication should be emailed to copyrights@pennybrohn.org

Healthy weight

Scientific evidence shows that maintaining a healthy weight can support the health of those living with cancer. A plant-based diet may encourage weight loss in those who are overweight, particularly if combined with regular physical activity.

The World Cancer Research Fund recommends cancer survivors aim to do 30 minutes of physical activity a day. If you are unable to manage this start with gentle activity such as gardening or walking for a few minutes per day and build up gradually. Physical activity supports bone and muscle strength, energy levels and psychological health as well as helping to maintain healthy weight. Weight loss can be a problem for some people with cancer and in such cases extra calories, protein and other nutrients may be required. Calorie dense foods that we recommend include nuts and seeds, oily fish, avocados and coconut milk. We do not recommend foods containing damaged fats or sugar.

If you are having difficulty maintaining a healthy weight it is important to seek support from a nutritionally qualified health professional.

Physical activity supports bone and muscle strength, energy levels and psychological health as well as helping to maintain healthy weight.

The pleasure of food

While it is important to consider the nutritional aspects of your food, it is also vital to consider how much pleasure and enjoyment you get from food.

There are no such things as forbidden foods within a truly healthy eating approach and if you follow the healthy eating guidelines for 90% of the time you will be able to incorporate some treats. Most people, however, find that after following a healthy diet for a while their tastes naturally adjust and they develop a preference for wholesome foods. They usually find that their old ideas of treat foods no longer appeal in the same way.

When you allow yourself a treat be sure to feel good about it. For example, focus on the beneficial aspects of the food such as the antioxidants in coffee, red wine, or chocolate and know that the indulgence will be helping your body in some way.