9. HERBS IN FOOD AND NUTRITION

OVERVIEW

In this module we cover the following topics:

- Healthy diets and dietary plans
- Culinary herbs
- The nutritional value of herbs
- Beneficial use of herbs as a food supplement

OBJECTIVE

We have learnt about common ailments observed in women and children, and found how herbal medicines offer a better therapy alternative for these. We have also seen the widespread use of herbal products for skin care and personal care and so on. Those past modules identify just how versatile herbs are.

Herbs can also be used as food supplements or in cooking. These herbs will make your food healthier. Plus, they also help maintain your diet, simultaneously helping you maintain a healthier body.

On the other hand, the market is flooded with diet pills containing ‘herbals’ that claim to be effective in weight-loss. Be cautious when purchasing and endorsing these, as they are not proven and there have been reports about their harmful effects.

In this module we will discuss the use of herbs in food and nutrition. We will also distinguish between safe and proven herbal food (or dietary or nutrition) supplements and the so-called herbal diet pills, which could prove harmful.

HERBAL FOOD SUPPLEMENTS

Herbal supplements offer a good alternative to using herbs as ingredients in cooked food. Sometimes the cooking process can eliminate the natural properties within the herb. The natural powers from herbal supplements can
be made available to the body without any possibility of the properties being lost.

Your client will benefit from taking herbal supplements as they aid the body by restoring depleted resources within the body. In turn, the body will be better prepared to fight common infections, diseases and health hazards.

Herbal supplements are different to the herbal diet and food supplements. They are safe, with minimal side effects, whilst diet supplements are artificial and can produce unwanted side effects.

Many of your clients will benefit from making herbal supplements a part of their everyday diet. They will provide a good source of medical self care and can be used either as a source of preventative medicine or for treating a variety of ailments.

Your first trip to buy herbal supplements at a health store may be quite confusing as there will be a wide variety of brands and types of supplement. Take your time to decide which ones would best suit you, or your clients. A good tip is to first learn the basic types of supplements that are available to you and ascertain their key functions.

**Vitamins**

Vitamins are an essential requirement for your client’s normal metabolic functioning. They are found in small amounts in many foods.

Without a sufficient intake of vitamins, your client may be more susceptible to deficiency diseases. Clients who have a low intake of vitamin C for example may develop scurvy. Degenerative disease can also be prevented by a sufficient intake of vitamins. This is due to vitamins being antioxidants protecting tissues from cell damage.

**Minerals**

We all have a small amount of minerals present within our bodies. Minerals only make up 4% of our body weight. However, just this small amount is essential to a number of vital processes within the body. For instance, these inorganic substances are vital to bone formation, and to normal functioning of the heart and digestive system. Minerals are found in the earth’s crust and many foods.

A number of minerals have been linked to the prevention of cancer, osteoporosis, and other chronic illnesses.
**HERBS**

Herbal products are used by increasing amounts of people to help treat mild health problems and in the maintenance and attainment of good health.

Many herbs contain a number of active constituents that work in conjunction to produce therapeutic benefits.

Herbal products come from a variety of plant based sources. For example, the plant’s leaves, roots, stems, buds, barks, and flowers are all used for a variety of remedies. These herbs can be used in their natural form or in the form of:

- Capsules
- Powders
- Tinctures
- And other formulations

**NUTRITIONAL SUPPLEMENTS**

Nutritional supplements are obtained from a number of sources. For example one source of nutritional supplements is fish oils which possess the potential to fight disease.

Many nutritional supplements are found in fruits and vegetable. These nutrients are called flavonoids, lignans, indoles and carotenoids. They work to lower the risk of disease. They are also able to reduce the strength of some symptoms of common ailments.
EXERCISE 9.1

Tick the box that is next to the most appropriate answer from the options given:

Which of the following is not true for food supplements?

- Minerals are essential for a wide range of vital processes, from basic bone formation to the normal functioning of the heart and digestive system.
- Today more and more herbal supplements are being used to enhance the immune system.
- Vitamins are unrelated organic substances that occur in many foods in small amounts but are not necessary for the normal metabolic functioning of the body.
- Nutritional supplements, such as Flavonoids, lignans, indoles, and carotenoids are compounds found in fruits and vegetables that work to lower the risk of disease and may alleviate symptoms of some ailments.

The answer to this exercise can be found at the end of the module.

HEALTHY DIET AND DIET PLANS

It is difficult to determine what the ideal diet is. This is because everyone’s dietary needs change at different stages of their life, plus their dietary needs may vary due to different disease that they may be suffering. Everyone has unique genetic tendencies toward certain diseases, so food components such as salt or fats pose different risks for different people.

Additionally, when considering a client’s diet, you also have to take into account any food intolerances and allergies. Plus, factors such as culture, family background, moral beliefs and religion should be considered. Many different clients will have different ways of preparing similar foods and will have different tastes in food.

However, even though everyone has different dietary needs, there are some general principles that can be taken into account when creating a diet. The food pyramid outlines the foods that should be eaten and those that should be eaten less regularly.

There are several food pyramids that you can refer to. There are the Asian, Mediterranean and Latin American diet pyramids, the US Department of Agriculture pyramid and the Vegetarian diet pyramid.

Most follow these basic principles:
Eat more fruits, vegetables and whole grains.
Reduce saturated fat and cholesterol.
Limit sugar and salt.
Drink alcoholic beverages in moderation, if at all.
Eat moderate-sized portions.
Include physical activity in your daily routine.

If you can persuade your clients to keep to a diet containing natural whole food, pure drinking water, and a minimum of foods full of sugar and fat then they will benefit greatly. They will build stronger bones and tissues, and will have a greater ability to fight disease and pain.

**FUNCTIONAL FOODS**

There are lots of functional foods on the market, and a great number of the population eat them during a normal day. For example, many people will begin the day with toast that is enriched with folate which protects the heart. They may also drink orange juice, which contains a good source of calcium for healthy bones. Or perhaps they’ll drink some apple juice with Echinacea to help ward off a cold.

Nowadays, there are more and more foods being marketed as ‘fortified with herbs’. You should explain to your clients that some companies will use wording like this to sell the product as a gimmick. Many of these products have no proven benefit.

If functional foods continue to grow, then there is a danger that people will be less bothered about maintaining a healthy diet. They will assume that by eating functional foods containing one or two nutrients they will be living healthily. Unfortunately this will not be the case.

**HERBAL SUPPLEMENTS – DRUG INTERACTIONS**

You have to take care when using herbal supplements alongside medicinal drugs, as some will create a negative reaction.

Here is a list of some commonly known interactions for herbs that may be taken as supplements:
<table>
<thead>
<tr>
<th>HERBAL</th>
<th>DRUG</th>
<th>INTERACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Echinacea</td>
<td>Immunosuppressants Corticosteroids</td>
<td>Echinacea can stop these drugs from working properly by acting as an immune stimulant.</td>
</tr>
<tr>
<td>Ephedra</td>
<td>MAO inhibitors</td>
<td>There is a possible risk of hypertension or coma.</td>
</tr>
<tr>
<td>Garlic</td>
<td>Blood clotting agents</td>
<td>This can result in bleeding. Plus, garlic can interfere with medication that lowers blood sugar or acts as an anti-coagulant.</td>
</tr>
<tr>
<td>Ginkgo Biloba</td>
<td>Blood clotting agents</td>
<td>This can result in a risk of bleeding</td>
</tr>
<tr>
<td>Ginseng</td>
<td>Diabetic medication; Warfarin</td>
<td>This may result in hypoglycemia</td>
</tr>
<tr>
<td>Kava Kava</td>
<td>Xanax</td>
<td>This can produce sedative effects</td>
</tr>
<tr>
<td>St. John’s Wort</td>
<td>Anti-depressants; Sedatives</td>
<td>Possible risk of Serotonin Syndrome. It can also increase the effect of sedatives.</td>
</tr>
</tbody>
</table>

**EXERCISE 9.3**

What can occur if Garlic and Ginkgo Biloba are taken with drugs that are blood-clotting agents?

*The answer to this exercise can be found at the end of the module.*
REMINDER

Have you completed the following exercises?

- Exercise 9.1
- Exercise 9.2
- Exercise 9.3
- Exercise 9.4
- Exercise 9.5
- Exercise 9.6

Tick the boxes when you have completed the exercises. When you have done all the exercises you can do the assignment that follows.

SUMMARY

1. You understand the requirements of a healthy diet.
2. You know of a wide range of culinary herbs and you are aware of their benefits.
3. You have thought about the nutritional value of herbs.
4. You know about using herbs as a food supplement.
ASSIGNMENT 9

Mrs. Rock’s doctor has recommended that she seek advice from you regarding her diet. Mrs. Rock eats too much food containing carbohydrates, and often indulges in fatty foods. If she continues to eat the way she does now she may make herself ill.

She would like you to tell her how she can eat more healthily; she wants to know how she can incorporate herbs into her meals. By doing this, her doctor believes that her health will be vastly improved.

What food would you recommend to Mrs. Rock, and more importantly what herbs should she try to use when cooking.

Write your advice in the form of a short essay (around 400 words).

When you have completed the assignment send or email it to your tutor.

If you email your assignment, make sure you include your name and assignment number at the top of your work.

Well, that’s the end of the extract. If you want to know more, you’ll have to register!

We look forward to welcoming you on to the course, and helping you become a herbalist.