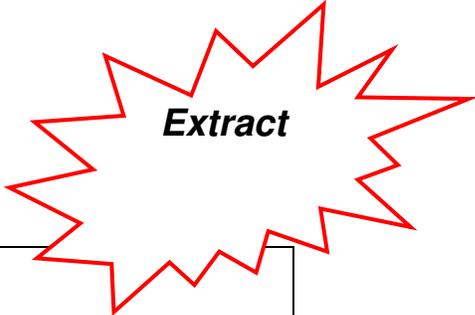


## 9. NUTRITION AND ADULTS



**Extract**

### OVERVIEW

In this module, we will cover the following topics:

- Common problems
- Diets to help deal with stress, fatigue, and sleep problems
- Special nutritional requirements of women
- Nutritional needs for adults
- How to use diet to promote a healthy immune system
- Superfoods: liquids

### INTRODUCTION

As a nutritional advisor, you need to be able to advise people on how to address a wide range of conditions through the application of dietary and nutritional principles.

This module will teach you the rudiments of adult nutrition. We'll discuss the value of food and exercise. We'll also address a range of issues experienced by individuals between the ages of about twenty and forty-five to fifty years old.

In a variety of instances nutritional advisors must serve as health care specialists for their clients. You must be involved, at the most basic level, in diet planning and education to help people live healthy lives and maintain healthy eating habits.

To maintain health, a balanced diet is essential. Diet is one of the major factors in determining overall health. A healthy diet is a balanced diet, one that contains all the food nutrients in proportion scaled to meet recommended daily requirements for each.

In other words, a balanced meal should contain all of the basic nutrients including roughages (fibre) and water.

A balanced diet should contain:

- Carbohydrates
- Fats
- Protein
- Fibre
- Water
- Minerals
- Vitamins

These are the major food nutrients needed by the body. We've looked at them in earlier modules.

It's very easy to differentiate between a person eating healthy meals and one eating unhealthy meals. Balanced diets always reflect on the body and show on the physical appearance of a person.

When an individual is nourished with proper food, the body will show evidence of healthy growth and development. The reverse is the case with a poor diet.

The eating habits of a person also reflect on body weight. With a truly balanced diet supported by moderate exercise an individual maintains a healthy weight for their body type, age, and height.

Obesity is caused by an improper diet combined with insufficient exercise. Hormonal issues such as thyroid problems or stress can also contribute to weight problems.

You can tell if a person has healthy eating habits by their appearance. If the person's eyes are bright and sparkling, if their skin is clear and their hair shiny, then chances are the person is a healthy eater.

You should take note of these points when dealing with new patients. Often when people have skin problems, eye problems or hair problems, it reveals an improper diet plan which should be corrected to avoid other health problems.

## COMMON HEALTH AND DIETARY ISSUES FOR ADULTS

As adults, many individuals have concerns about their health. These days diet is a major issue in terms of maintaining a healthy weight.

### OBESITY

Obesity in the United Kingdom and much of the developed world is a major health problem.

Obesity begets higher instances of:

- Type two diabetes
- Heart disease
- Sleep apnoea
- High blood pressure
- High cholesterol
- Certain forms of cancer
- Osteoarthritis
- Fatty liver disease

### MALNUTRITION

Just as overeating and inactivity have a negative impact upon health, it's true that poor diet in general can also lead to malnutrition; the intake of insufficient calories to sustain activity levels lowers metabolic rate and can lead to feelings of tiredness, both physical and mental.

Malnutrition in adults can also increase the risk of health problems in later life. The inadequate intake of calcium, vitamin C and vitamin D can cause problems such as osteoporosis and arthritis. Inadequate intake of iron can cause a form of anaemia.

## OTHER CONCERNS

Less severe but no less common health concerns for adults include:

- Depression
- Stress
- General fatigue

Although these types of health issues may have other underlying issues, such as, in the case of depression, bipolar disorder and in the case of stress, lack of sleep, dietary and nutritional elements can be applied to address these underlying issues.

A person suffering from fatigue might be advised to include more protein in their diet and reduce the intake of simple carbohydrates and caffeine products in order to enhance their ability to sleep through the night and also provide them with a stable energy source throughout the day.

Similarly, a person suffering from depression could be prescribed a similar type of diet, better regulating the intake of sugar as fluctuating blood sugar levels can be one instigator of mood swings related to depression.

As a nutrition and diet advisor, you would take the initiative to review a person's diet and their medical history to devise the best approach to deal with such common ailments.

### **EXERCISE 9.1**

Explain the physical signs that will show a person has healthy eating habits.

## **DIET SUGGESTIONS FOR ADULT OBESITY**

In the United Kingdom there may be more than 12 million adults and 1 million children classed as obese by 2010 if no action is taken to improve the nation's health. This information is provided by the Health Survey for England.

In the United States, the prevalence of obese and overweight individuals is bordering on becoming a major public health crisis. At present, the United States has the highest rate of obesity in the developed world with approximately 119 million US adults (64.5% of the adult population) classed as either overweight or obese. Approximately 32.2% of adults aged 20 years or above were diagnosed as being obese in 2003 to 2004.

Obesity is defined by an individual having a Body Mass Index or BMI higher than 30.

For an adult diagnosed with obesity or an overweight adult looking to lose weight, the following diet suggestions may be offered:

- **Cut portion sizes** – when you need to lose weight there's little point trying to make dramatic changes to your diet overnight. It's not so much about what you eat but how much you eat in the early stages.

As a nutritional advisor, your primary concern must be building motivation in your client. Dramatic changes amount to crash dieting and won't be sustainable.

Cutting portions is a small but effective change for the early stages, producing results that will themselves encourage your client to make more dramatic changes to their diet as they begin to enjoy the benefits of a healthier lifestyle.

- **Replace unhealthy food choices with healthier choices.** Instead of eating fried foods, which have relatively high fat content, advise your clients to eat portions of grilled or baked meat and fish and to trim all visible fat from meat.

Rather than going out to eat (and eating things like hamburgers, Chinese food, and pizza), suggest that your client try to create family cooking times or suggest meals that can be whipped up in five to ten minutes.

- **Eat fruit and vegetable servings to replace snacks and high-fat, high calorie foods.** A person recovering from obesity, on their way to reaching a healthy BMI, should be advised to cut out high-calorie foods that have little or no nutritional value such as chocolate, ice cream, sweets, biscuits, cake, etc. Obviously, these foods can be eaten sporadically but the most effective way to maintain weight loss is to re-programme yourself to avoid these foods. Control is a lot easier to maintain when the temptation is removed all together!
- **Replace juice and fizzy drinks with water.**
- **Gradually introduce a light to moderate exercise regime for your client once the initial weight loss is starting to show.** Exercise will help to sustain weight loss and control weight in the future through muscle mass.

Generally speaking, most obese adults know which foods they should cut down on, but have problems with motivation and sustained effort. Many people have a complicated relationship with food and may use food as an emotional support.

Comfort eating (and drinking) is common, in both sexes. So encouraging clients to lose weight can be challenging. Psychological techniques such as life coaching, neuro-linguistic programming (NLP) and hypnosis may provide additional support. You may want to consider training in these techniques when you have completed this course.

## **DIET SUGGESTIONS FOR ADULT STRESS AND DEPRESSION**

An overwhelming number of people are affected by stress and depression and recent concerns about the epidemic proportions of these conditions have led to increased support within the NHS. Therapies such as counselling and cognitive behavioural training are often offered instead of medication to manage these conditions.

As a nutritional advisor, treating adults and even teenagers with these types of concerns may well be a common occurrence for you. To gauge the severity of the issue, there is plenty of research available from pretty credible sources.

The Archives of General Psychiatry, published by the American Medical Association, suggest the following:

- At least one in every two people will experience a serious mood or mental health issue at some time in their life.
- One in three people will suffer from at least one serious bout of anxiety (i.e. panic disorder, obsessive-compulsive disorder, phobia, social anxiety, or post-traumatic stress disorder).
- One in four people will have some sort of impulsive-control problem (i.e. explosive outbursts or defiant behaviour).
- One in five people will suffer from serious depression or bipolar (manic-depressive) disorder.
- One in eight people will abuse alcohol or drugs.

Many types of mood disorder could be related back to food. These include:

- Anger disorders such as irritability, resentment, brooding, rudeness, aggression, road rage, and even criminal violence.
- Impulsive disorders such as some types of irrational behaviour, excessive multi-tasking, some types of addiction and adult attention-deficit hyperactivity disorder (ADHD).
- Anxiety disorders such as tension, jumpiness, worry, fear, panic attacks, post-traumatic stress disorders and obsessive compulsive behaviour.
- Depression-related disorders such as down days, various intensities of depression and bipolar (manic-depressive) disorder.

- Fatigue, tiredness and mental fuzziness such as regularly feeling tired, general mental fatigue, difficulty concentrating, poor memory, spacey feelings and overeating.

Stress and depression result from a variety of factors including pressures at work, at home, and due to commuting.

Negative moods also result from eating bad or unhealthy foods, with one study showing that approximately 80% of people with mood disorders knew that the foods they ate affected how they felt.

Poor blood glucose control has been shown to contribute to both stress and depression, not to mention a host of other mood issues.

Overconsumption of caffeinated drinks, alcohol, sweet foods and long gaps between meals are common in our frenetic rushed society. All of these factors contribute to poor blood glucose control, resulting in:

- mood swings
- fatigue
- irritability
- insomnia
- poor cognitive function

When you have low blood sugar, you may feel extremely hungry. If you don't eat, your brain starts to go haywire. You become far more primitive in terms of your brain activity and it's common for you to be aggressive, impatient, and extremely irritable. You will more than likely feel physically weak, dizzy and unstable.

Blood sugar fluctuation is perfectly normal, but extreme fluctuation, as described above, is damaging in the long-term. It is extremely common and dealing with this issue is primary to the care of individuals suffering from stress or depression.

Other contributing factors to psychological problems include essential fatty acid deficiency, particularly omega 3 fatty acids. Food allergies and intolerances may also contribute. Many people find that wheat, particularly refined wheat, may cause 'brain fog'.

Vitamin and mineral deficiencies may also contribute to low moods. The B vitamins are key to energy and mood. Anaemic individuals may also feel depressed.

### **EXERCISE 9.2**

Do some research into depression at your local library and on the internet.

Note also that junk food – widely distributed and consumed – is a major cause of the ‘modern’ malnutrition and this ‘modern’ malnutrition seriously affects mood, not just physical elements.

- About three-quarters of us do not consume the minimum daily requirement of folic acid which is only one of the key nutrients determined essential to maintain good moods.
- Almost half of us don’t consume enough vitamin C.
- About a third of us don’t consume enough B12.
- Most over the counter and prescription drugs either reduce the absorption of vital minerals and vitamins or interfere with the ways in which the body uses them, increasing the likelihood of deficiency even in those who otherwise do consume enough to meet their minimum daily requirements.

Folic acid, vitamin C, and vitamin B12 are all essential neuronutrients that help regulate mood and other brain-controlled processes.

With regard to prescription and over-the-counter drugs:

- Antacids and related drugs used in the treatment of heartburn and gastric reflux actually interfere with the body’s ability to absorb vitamin C and the various B vitamins, with effects lasting for months after the use of such drugs is discontinued.

- Oral contraceptives, analgesics and cholesterol-lowering drugs hinder a variety of normal biochemical functions, affecting both the brain and the body.

Common forms of stress include:

- Stress at work
- Stress in personal relationships
- Stress from lack of rest
- Stress from commuting

For clients suffering problems such as depression and stress, the following diet guidelines should be followed:

- **Guideline 1: Eat a little protein at each meal.** Fish, chicken, turkey, eggs, cheese, sugar-free yoghurt, and legumes.

Protein stabilises the blood, lessens appetite and reduces the amount of food you are likely to consume after eating. Stable blood sugar levels also protect against mood swings and help to control appetite, which is essential for weight loss.

- **Guideline 2: Eat a variety of high-fibre non-starchy vegetables.** Dark lettuces, spinach, tomatoes, cucumbers, mushrooms, red peppers, onions, asparagus, broccoli, carrots, cauliflower, green beans, kale, leeks, and shallots. Fibre helps stabilise blood sugar, protecting against mood swings. It also helps to move food through the digestive tract.
- **Guideline 3: Eat a variety of high-fibre non-starchy fruits.** Fresh raspberries, blueberries, apples, kiwifruits, cantaloupe, honey dew, and watermelon. Many fruits have relatively low sugar content and are high in fibre, like many good-to-eat vegetables.
- **Guideline 4: Cook with olive oil.** This type of oil is rich in oleic acid, which is an anti-inflammatory. Since stress triggers low-grade inflammatory response, this oil helps protect against this. Omega 3 fats in oily fish also have an anti-inflammatory action.

- **Guideline 5: Drink water and herbal tea.** Bottled waters, white, and green teas, plus herbal teas.

Water and one or other forms of tea are good for quenching thirst, far better than fizzy drinks, juice, or drinks with high caffeine content (i.e. coffee).

- **Guideline 6: Avoid fast-food and chain restaurants.** Everything from McDonald's to Pizza Hut.

- **Guideline 7: In all restaurants, practice defensive eating.** Stick with ethnic restaurants if possible, such as Greek, Middle Eastern, Japanese, and some Italian restaurants.

The trick is to avoid starchy foods like pasta, white rice, or potatoes, and stay away from deep-fried foods such as chips or falafel. It's also important to avoid overloading with refined foods that may raise your blood glucose levels.

- **Guideline 8: At home or the office, avoid pre-packaged microwave meals.** All brands.

Prepackaged foods invariably contain large amounts of sugars, refined carbohydrates, unhealthy fats, and other chemicals that do nothing positive for your health.

- **Guideline 9: Avoid most refined oils.** Other than olive oil, most other edible forms of oils are unhealthy when heated and should be avoided for cooking. Cold-pressed oils from other sources (walnut, sesame, sunflower etc.) are easily damaged by heat, so use as salad dressings or add after cooking.

- **Guideline 10: Avoid or strictly limit your intake of sugars and grain-based carbohydrates.** Desserts, doughnuts, pastries, bagels, breads, pastas and pizzas; even whole-grain breads and pastas should generally be avoided.

Most of these types of foods have high sugar content and thus the potential to destabilise blood sugar levels, increase the risk of diabetes, and contribute to mood and behavioural problems.

## REMINDER

Have you completed the following exercises?

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

Tick each box when you have completed the exercises. Then you can move on to the assignment that follows.

## SUMMARY

1. You understand that a person's health is directly impacted by the quality of their diet; a good diet plan produces a healthy lifestyle.
2. You recognise that a balanced diet is essential to maintain health and that diet is one of the major factors in determining overall health.
3. You know that a healthy diet is a balanced diet, meaning it should contain all the food nutrients in proportion scaled to meet recommended daily requirements.
4. You are aware that carbohydrates, fats, protein, fibre, water, minerals, and vitamins should all be featured in a healthy, balanced diet.
5. You recognise that people who eat a balanced diet typically show evidence of healthy growth and development. The reverse is the case with a poor diet.
6. You understand that body weight is also a good reflection of a person's eating habits. For example, obesity is caused by an improper, imbalanced diet combined with insufficient exercise.

## **ASSIGNMENT 9**

Joan, a 42 year old female, comes to you with complaints about stress and fatigue. Her doctor has referred her to you and forwarded her patient records indicating no significant medical history and no current evidence of illness.

Joan works as a headteacher in a large secondary school and her job can be quite busy and stressful. She finds it difficult to fit exercise and relaxation into her schedule. Her complaint is that she frequently feels exhausted, suffers from frequent headaches and the occasional dizzy spell.

Joan is also having problems with her sleep. She goes to bed quite late and often wakes up at about 4am feeling wide awake. She frequently feels tired and groggy in the mornings. The situation is starting to depress her.

You ask Joan to provide you with a two week food diary and this reveals that she has disorganised eating habits and often misses meals or grabs whatever she can eat at work.

She regularly misses breakfast, just drinking a coffee on the way to work. She eats school dinner at lunch time, but this often includes unhealthy choices such as puddings and chips.

She does not have time or energy to cook when she gets home and relies on ready meals which she eats in front of the TV. Joan also drinks several glasses of wine each night to help unwind.

What dietary and lifestyle advice would you give Joan?

When you have completed this assignment, send it to your tutor for marking. If you email your assignment, make sure you include your name and assignment number at the top of your work.

If you send the assignment by post, attach the cover sheet, which is on the following page.

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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 nutritionist.