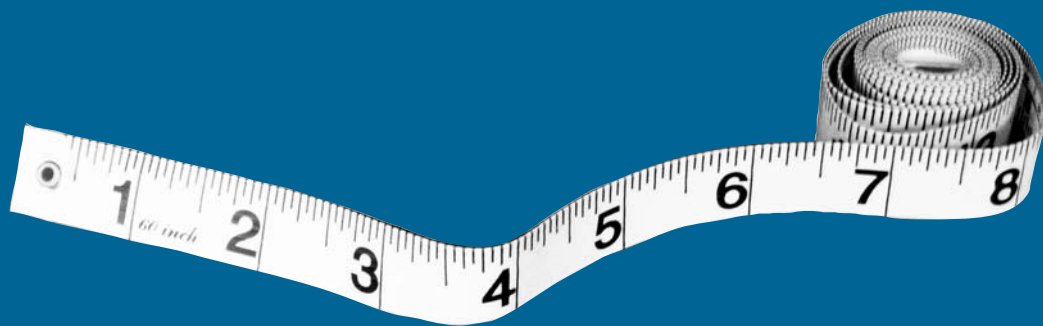


North Central
London
Adult Obesity
Care Pathway
and Resource Pack
for the Management
of Overweight
and Obesity



Prevalence of overweight and obesity has trebled since the 1980s, and over half of all adults are either overweight or obese



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The Adult Obesity Care Pathway has been developed in partnership with the five boroughs (Barnet, Camden, Enfield, Haringey and Islington) in the North Central London sector.

The obesity care pathway is the recommended care pathway for the management of overweight or obese adult patients. It has been developed to act as an appropriate tool to help guide health professionals who come into contact with patients of varying levels of overweight and obesity. It is related to the referral criteria specific to each Primary Care Trust and is in line with the latest evidence based practice published by The National Institute for Health and Clinical Excellence (NICE) in December 2006.

The pathway is supported by an electronic obesity template, which will be sent to each general practice for uploading onto their database.

The Obesity Care Pathway is the recommended care pathway for the management of overweight or obese adults

IDENTIFICATION

1. Opportunistic
2. Existing Disease
3. Health Screening
4. Seeking Advice

Health Professional

GP, Practice Nurse, Dietitian, Health Visitor, Pharmacist, Health Care Assistant

Consider using electronic obesity template

ASSESSMENT

1. Height & Weight - BMI
BMI = weight (kg) / height (m²)
For Asian adults, risk factors may be of concern at lower BMI.
2. Waist Circumference
3. Patient History
4. Raise the issue of weight (DH)
5. Assess readiness and motivation to change

Classification	BMI (kg/m ²)	Waist Circumference		Co-morbidities present
Healthy weight	18.5-24.9	Low Men < 94cm Women < 80cm	High Men > 94cm Women > 80cm	Type 2 diabetes Hypertension Cardiovascular Disease Dyslipidaemia Osteoarthritis Sleep Apnoea
Overweight	25.0-29.9			
Obesity I	30.0-34.9			
Obesity II	35.0-39.9			
Obesity III	> 40.0			

General Advice on losing weight, healthy eating and physical activity (DH - *Why Weight Matters* card). Offer follow-up appointment.

Diet and physical activity

Diet and physical activity; consider drugs

Diet and physical activity; consider drugs; consider surgery

1ST LINE ADVICE

Lifestyle Assessment by health professional to increase physical activity and healthy eating using behavioural change techniques.

ASSESS

Discuss current lifestyle, diet and levels of physical activity.

ADVISE

Advise on dietary, physical activity and lifestyle modifications
Your Weight, Your Health booklet (DH)

AGREE

Establish individual goals and a realistic weight management plan (5-10% weight loss)

Negotiate the most effective method of managing weight loss/maintenance.

ASSIST/ARRANGE

Signpost to local physical activity and healthy eating initiatives. Refer to other health professionals and any relevant programmes.



Pathway

FOLLOW UP

Monitor weight loss: suggested minimum is 3 and 6 months, or more often if is patient wanting active support.

Unsuccessful weight loss
< 5% at 3 months

Repeat 1st Line Advice and reassess at 6 months

Successful weight loss
> 5% at 3 months
> 10% at 6 months

Maintenance phase with 3/12 monthly reassessments

2ND LINE ADVICE

Unsuccessful weight loss after 6 months but motivated to change.

Dietitian Assessment

- Provide a comprehensive assessment.
- Monitor weight loss
- Use referral forms if unsuccessful weight loss and recommending pharmacotherapy.

3RD LINE ADVICE

GP Assessment

Pharmacotherapy

Orlistat

- >30kg/m²
- >28kg/m² plus co-morbidity
- Continue treatment if 5% weight loss at 3 months.
- Advise patient to register with the Motivation Advice, Proactive Support (MAP) programme.

Sibutramine

- >30kg/m²
 - >27kg/m² plus co-morbidity
 - Continue treatment if 5% weight loss at 3 months.
 - All patients should have controlled blood pressure (145/95 or below) and have no history of coronary artery disease, arrhythmias, congestive heart failure or stroke.
 - Advise patient to register with the online support programme 'Change for Life'.
- Rimonabant**
(not assessed by NICE)
- A newer drug and much less is known about its effectiveness.
 - Problems with adherence due to side effects.

4TH LINE ADVICE

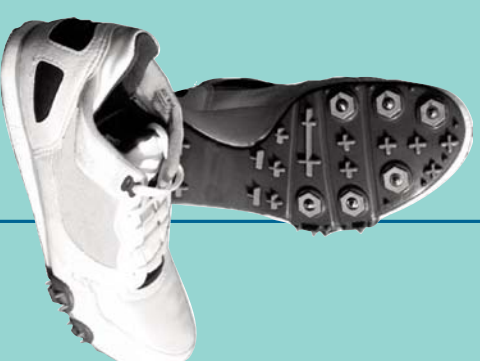
Bariatric Surgery

(main provider - Whittington Hospital)

- For patients:
> 40kg/m²
35-40 kg/m² plus co-morbidity
- Further assessment in hospital including a psychology assessment.

MAINTENANCE

Ongoing monitoring of weight should take place to ensure that patients are supported and referred back into the pathway should they have a relapse in weight management.



Obesity is a complex disease and there are increasing demands being placed on primary care to identify and treat patients

This stage can be undertaken by a number of different health professionals: GP, practice nurse, health care assistant, health visitor, dietitian or pharmacist.

Prevalence of overweight and obesity has trebled since the 1980s, and over half of all adults are either overweight or obese (Health Survey for England, 1995-2003). This equates to approximately 24 million adults, a high proportion of these will not have been identified and classified as overweight or obese.

Obesity is a complex disease and there are increasing demands being placed on primary care to identify and treat patients. General practice is however, where most obese and overweight individuals will come into contact with health services and it is therefore, the ideal opportunity to identify and manage obesity. In addition, general practices are encouraged to maintain an obesity database of all patients recorded as obese. Collecting data on the heights and weights (BMI) of patients within a practice allows the magnitude of the problem of obesity to be assessed within individual practices.

Identification may occur under one of four categories:

- **Opportunistic**
- **Existing Disease** (e.g. type 2 diabetes, coronary heart disease, hypertension)
- **Health Screening**
- **Patient Seeking Advice**

This stage needs to be handled carefully because many patients who are overweight or obese are sensitive about their weight.

Classification

The best way to assess obesity and overweight and associated health risks in a patient is to use a combination of Body Mass Index, waist circumference, and patient history (co-morbidities). Table 1 assists with the accurate classification of patients and can be completed once BMI and waist circumference have been measured and patient history/co-morbidities have been assessed.

1. **Body Mass Index (BMI)** is used to measure the degree of overweight and obesity. The BMI is calculated by dividing a patient's weight in kilograms by the square of their height in metres.

$$\text{BMI} = \frac{\text{weight (kg)}}{\text{height (m}^2\text{)}}$$

- Classification of Body Mass Index is outlined in Table 1.
- All patients should have their BMI recorded and changes monitored over time.
- Increasing weight in **Asian adults** is associated with a higher risk. Risk factors, therefore, may be of concern at lower BMIs.
- Clinical judgment is required when classifying **muscular patients** because BMI may overestimate the degree of fatness in these patients.



2. **Waist Circumference**

The World Health Organisation guidance recommends that waist circumference be measured using the midpoint between the lowest rib and top of the right iliac crest. The tape measure should sit snugly but not compress the skin. This is categorised as either high or low and different cut-off values are used for men and women.

LOW

Men <94cm

Women <80cm

HIGH

Men >94cm

Women >80cm

There are a number of other methods for identifying patients who are overweight and obese, for example, bioimpedance, densitometry and waist to hip ratio. Bioimpedance estimates total body water crudely, as a component of lean body mass. Therefore, estimation of fat mass using this technique is relatively weak. Densitometry measures total body fat using principles of water displacement. This technique requires underwater weighing facilities, takes time, is expensive, cannot be used routinely and is unable to indicate body fat distribution. Waist to hip ratio was initially introduced because it was believed to predict fat distribution more accurately than waist

circumference. This, however, has been disproved and waist circumference is the preferred anthropometric measurement. Therefore, the three methods discussed above are not recommended for assessing overweight and obesity; health professionals are advised to use BMI and waist circumference which are well validated and relatively easy for health professionals to complete.

3. Patient History and Co-morbidities

A patient history (including family history) is required to assess whether any co-morbidities are currently present or whether further tests may be required for diagnosis in certain patients. NICE

Table 1: Classification of Adults

Classification	BMI (kg/m ²)	Waist Circumference		Co-morbidities present
		Low Men < 94cm Women < 80cm	High Men > 94cm Women > 80cm	
Healthy weight	18.5-24.9			Type 2 diabetes Hypertension Cardiovascular Disease Dyslipidaemia Osteoarthritis Sleep Apnoea
Overweight	25.0-29.9			
Obesity I	30.0-34.9			
Obesity II	35.0-39.9			
Obesity III	> 40.0			
General Advice on losing weight, healthy eating and physical activity (DH - <i>Why Weight Matters</i> card). Offer follow-up appointment.				
Diet and physical activity				
Diet and physical activity; consider drugs				
Diet and physical activity; consider drugs; consider surgery				

states that the following co-morbidities should be recorded:

- type 2 diabetes
- hypertension
- cardiovascular disease
- dyslipidaemia
- osteoarthritis
- sleep apnoea

The electronic obesity template is a helpful tool when completing the assessment stage with a patient.

Raising the Issue of Weight

Consider using the 'Raising the Issue of Weight in Adults' card from the *Your Weight, Your Health series, DH 2006* (Appendix 1) which provides helpful samples of dialogue for initiating a conversation about the patient's weight.

Assess Readiness and Motivation to Change

The Transtheoretical (Stages of Change) Model (Prochaska and DiClemente, 1982) attempts to describe readiness to change and suggests that people move through a series of stages when attempting to change their behaviour.

The stages are outlined below:

PRECONTEMPLATION

Not intending to make any changes
(patient not interested in losing weight)

CONTEMPLATION

Considering a change
(patient is thinking about trying to lose weight)

PREPARATION

Making small changes
(patient is making small changes/
developed a plan of action)

ACTION

Actively engaging in change
(patient is making changes to their lifestyle
to try and lose weight)

MAINTENANCE

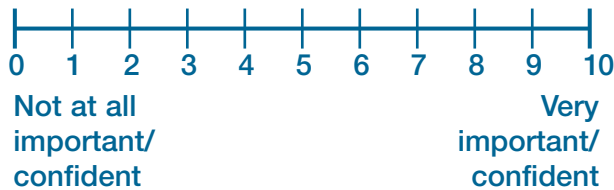
Sustaining change over time
(patient has lost weight and is maintaining this)

The model has gained widespread popularity and has intuitive appeal to many practitioners. However, although it provides a useful framework for thinking about behaviour change, it has been criticised for being deficient in providing insight into how to negotiate/influence behaviour change.

Readiness can be understood and roughly assessed by enquiring about the importance of change to the patient and the degree of confidence the patient has in his/her ability to do so.

A useful strategy to do this is to use the 'Ruler' to:-

- Clarify and enhance importance
- Increase confidence



On a scale of 0-10, how important is it to you to become more physically active?

On a scale of 0-10, how confident are you that you could make a change if you wanted to?

Clarify and Enhance Importance

- What makes it that important?
- What would have to happen for it to become much more important for you to change?
- Why are you at a X (e.g. 4) and not at a Y (e.g. 3) (lower number)?
- What would it take to raise your score to a Z (e.g. 5)?
- What concerns do you have about ... (current behaviour)?
- What are the good things and not so good things about ... (current behaviour)?

Increase Confidence

- What makes you that confident?
- If you decided to change your current behaviour (e.g. increase your levels of physical activity), what options might you consider?

- Is there anything you found helpful in any previous attempts to change your current behaviour?
- Why are you at a X (e.g. 4) and not at a Y (e.g. 3) (lower number)?
- What would it take to raise your score to a Z (e.g. 5)?
- How can I help you get there?

4 Combinations

(Miller and Rollnick, 2002)

1. **Low importance, low confidence:**
Least ready to change, see change as unimportant, and have little confidence they could successfully make the change if they tried.
2. **Low importance, high confidence:**
Not ready to change and see change as relatively unimportant. Believe they could make the change if they tried.
3. **High importance, low confidence:**
High degree of importance, making them more ready and willing to change than people in groups 1 & 2 but low confidence gets in the way of them making the change.
4. **High importance, high confidence:**
Most ready to change, view change as very important, high degree of confidence that they can successfully make the change if they tried.

The above can help you to assess where you need to focus your work, i.e. increasing confidence, importance or both.

The aim of first-line advice is to help a patient to:

- reduce calorie intake
- increase physical activity while reducing sedentary behaviours; and
- increase self-awareness about day-to-day behaviours that affect intake and activity levels.

(DH, *Your Weight, Your Health*, 2006)

Assess

1. Assess dietary consumption using a record of the patient's food and fluid intake. This can be done in any form which is easy for the patient to report back and discuss with you their food and fluid intake (see Appendix 2).
2. Assess physical activity levels using the General Practice Physical Activity Questionnaire (GP PAQ) (see Appendix 3).

The GP Physical Activity Questionnaire (GP PAQ)

- The GP PAQ is used to measure a patients (aged 16+) physical activity levels.
- It takes 30 seconds for a patient to complete
- It takes between 1-2 minutes for the health practitioner to input data into an excel sheet and analyse result

It should be recorded and updated:

- Every year for patients at risk of CVD
- Every five years for all other patients

The questionnaire looks at how active the patient's daily life is (see appendix 3 for the questionnaire). An algorithm is then used to create a score from their answers.

Essentially it classifies patients as:

Sedentary	0 hours per week
Moderately Inactive	Less than 1 hour per week
Moderately Active	More than 1 hour per week, less than 3
Active	3 or more hours per week

Please note, walking, housework, childcare, gardening and DIY are in the questionnaire. However, it is very important to note that these are **not** included in the result.

If your patient does not score an "active" rating but has answered the walking, housework, childcare, gardening and DIY category, please talk to them about whether this activity is **moderate** (in minimum of 10 minute blocks). Use your training to judge whether this level of activity is sufficient.

If you are convinced that their activity does classify as moderate, add this to the notes in your EMIS template so that you can refer back to it on your next appointment. If someone does not score an active rating (after you have talked to them about walking), you should discuss their activity levels using behavioural change techniques.

The GP PAQ and excel spreadsheet can be downloaded at the Department of Health website www.dh.gov.uk

Advise

1. Discuss general healthy eating recommendations taking into consideration what they are eating and drinking at present. Consider using The Eat Well Plate model (below).



2. Discuss physical activity – promote 5 X 30mins (to gradually build up to accumulate 30mins of moderate physical activity on 5 or more days a week).
3. Providing *Your Weight, Your Health* booklet (DH) which combines information on healthy eating and physical activity. Consider providing relevant leaflets from the British Heart Foundation range e.g. physical activity for weight loss.

Agree

Agree **SMART** goals in *partnership* with your patient:

Specific	"I will partake in 30 minutes of brisk walking 3 times a week".
Measurable	"I will eat 3 portions of fruit/vegetables every day".
Achievable	Negotiate goals that can be accomplished, e.g. losing 0.5kg per week.
Relevant	Goals should meet the patient's expectations, e.g. if the patient enjoys walking, a goal based around walking would be relevant.
Timely	Negotiate a time-frame for achieving the goal that is specific and realistic. This could be an interim goal working towards a achieving a main goal.

The goals may be specific to healthy eating and/or physical activity.

Agree a target weight loss. Very small levels of weight loss produce health benefits but significant changes result after a 5-10% weight loss. This can be achieved over 3 to 6 months, representing a loss of 0.5-1.0kg per week.

Assist/Arrange

1. Signpost to local physical activity and healthy eating initiatives.
2. Provide information on electronic and paper resources.
3. Arrange referrals to other health professionals (e.g. dietician) and other programmes (e.g. 'Active for Life' physical activity referral scheme).

'Active for Life' Physical Activity Referral Scheme

See Appendix 4. This scheme is currently running in some wards but will be extended gradually across the Borough from April 2008.

Suitable for patients who:

- Lead sedentary lifestyles and are not physically active but indicate a desire to increase activity levels



- Do **NOT** require continuous one-to-one attention
- Have **NOT** been on the scheme before
- Live in Haringey or registered with a Haringey GP

Must be classified as inactive/moderately inactive using the GP PAQ and have one of the following conditions:

- Type II diabetes
- Hypertension
- Obesity (BMI >30)
- Cerebrovascular accident
- Peripheral Vascular Disease
- Established CHD
- Severe mental illness eg. bi-polar, schizophrenia

Group Health Walks Programme - 'Walk Your Way to Health'

Short walks in local parks and neighbourhoods lead by trained volunteer Walk Leaders. All walks are free and all abilities are catered for.

For more information about the 'Active for Life' and 'Walk Your Way to Health' programmes contact the Team Administrator on 020 8442 6786.

Weight loss needs to be monitored and recorded over time: the suggested minimum is 3-6 months but more often if the patient wants or requires active support.

3-month Review

>5% = successful weight loss -

Continue with the ongoing treatment and support.

<5% = unsuccessful weight loss -

Reassess motivation and readiness to change, and identify any problems which may have impacted on the lack of success so far. Repeat first line support if the patient is still ready to change.

1. Repeat first line advice - explore information and support the patient to increase their own knowledge around diet and physical activity.
2. Identify any problem areas - explore and work through them in partnership with the patient, moving towards a balanced healthier lifestyle.
3. Revise SMART goals.

Weight loss needs to be monitored and recorded over time

6-month Review

Repeat as at 3 months.

>5% = successful weight loss -

Action as at 3 months or consider moving patient to maintenance phase.

<5% = unsuccessful weight loss -

Reassess patient's motivation to change and consider referral to a dietitian for a more comprehensive assessment.

(See Appendix 6 Dietetic Referral Form)

Dietitian Assessment

- The dietitian will provide a more comprehensive lifestyle assessment.
- All patients must have seen a dietitian prior to being prescribed pharmacotherapy or being referred for bariatric surgery.
- Dietitians should follow the care package of dietetic care.

For more information regarding accessing the Nutrition and Dietetic Service contact the Administration Manager on 020 8442 6476.

GP Assessment

The GP acts as the gatekeeper for further treatment for patients if they have been unsuccessful in their attempts to lose weight and need additional assistance with weight loss as directed by the dietitian.

For example, certain patients may be referred by the dietician to the GP for consideration for pharmacotherapy/ bariatric surgery.

Pharmacotherapy

- Patients should be encouraged to attempt diet, physical activity and behaviour change before prescribing drugs.
- Drug therapy should always be considered as an addition, rather than an alternative, to lifestyle intervention.

Orlistat, Sibutramine and Rimonabant are all licensed for use in England.

Patients should be encouraged to attempt diet, physical activity and behaviour change before prescribing drugs

Orlistat

Orlistat inhibits the action of pancreatic lipase enzyme in the gastrointestinal system and must therefore be taken in conjunction with a low-fat eating plan.

Confirm patient meets the specified criteria prior to prescribing the pharmacotherapy:

- Aged between 18-75 years.
- Have a BMI of $>30\text{kg/m}^2$ or $>28\text{kg/m}^2$ plus comorbidity.
- Monitor weight loss and continue treatment if 5% weight loss at 3-months.

Advise a patient to register with Motivation, Advice, Proactive Support (MAP) programme:
0800 731 7138
www.xenicalmap.co.uk

Sibutramine

Sibutramine is a satiety enhancer and should be taken in conjunction with healthy eating.

Confirm patient meets the specified criteria prior to prescribing the pharmacotherapy:

- Aged between 18-65 years.
- Have a BMI of $>30\text{kg/m}^2$ or $>27\text{kg/m}^2$ plus comorbidity.
- All patients should have controlled blood pressure (145/95 or below) and have no history or coronary artery disease, arrhythmias, congestive heart failure or stroke.
- Monitor weight loss and continue treatment if 5% weight loss at 3-months.

Advise a patient to register with the online support 'Change for Life' programme:
www.changeforlifeonline.com

Patients are eligible for the 'Change for Life' programme pack. Health professionals can obtain copies of the pack from Abbott Laboratories (01628 644 9392).

Monitoring requirements for Sibutramine:

- Check the patient's blood pressure every 2 weeks for the first 3 months.
- After 12 weeks on Sibutramine, patients should only continue taking the drug if they have lost at least 5% of their body weight since the start of the treatment.
- Patients should show a 2kg weight loss after 4 weeks on Sibutramine. If they do not, you can increase the dosage from 10mg a day to 15mg a day.
- The Sibutramine licence recommends that treatment should not continue beyond 12 months.

Rimonabant

Unlike Orlistat and Sibutramine, NICE have not yet reported on Rimonabant.

- A newer drug and much less is known about its effectiveness.
- Problems with adherence due to side effects have been reported.

Bariatric Surgery

Bariatric surgery is generally only considered for patients who have tried all other interventions, for example, healthy eating and physical activity, and pharmacotherapy.

Bariatric surgery reduces gastric size and thus may result in malabsorption of ingested food. Patients will need to make lifestyle changes after surgery and will therefore continue to require dietetic support.

Surgery can be considered for patients who meet the following criteria:

- Have a BMI >40kg/m² or a BMI of 35-40kg/m² plus comorbidity
- Have been assessed by a multidisciplinary team
- Are well-informed and motivated
- Have an acceptable level of surgical risk.

The Whittington Hospital is our main provider for bariatric surgery. Applications for bariatric surgery will be assessed on an individual basis.

Ongoing monitoring of weight should take place and this will ensure that patients are referred back into the pathway should they have a relapse in weight maintenance. Consider setting goals to help them adhere to changes made in the weight loss phase.

Resources

- **Your Weight, Your Health - Raising the Issue of Weight in Adults (DH)**
A card to assist health professionals with raising the issue of weight with patients.
- **Your Weight, Your Health – How to Take Control of Your Weight (DH)**
A booklet for patients who are ready to think about losing weight.
- **Your Weight, Your Health – Why Weight Matters card (DH)**
For patients who are not yet committed to losing weight. This card discusses the risks associated with overweight, the benefits of modest weight loss, and practical tips for people to consider.

The Your Weight, Your Health series can be ordered from DH publications.

The DH 'Your Weight, Your Health' publications are available free of charge: you can place an order by post, telephone, fax or email (quote the title and reference number).

Write to:

DH Publications Order
PO Box 777
London SE1 6XH
Telephone: 0870 155 54 55
Fax: 0162 372 45 24
Email: dh@prolog.uk.com

Publications:

- Raising the Issue of Weight in Adults – ordering code 274543
- Why Weight Matters card – ordering code 274538
- Your Weight Your Health: how to take control of your weight – ordering code 274537

www.bdaweightwise.com

A website by registered dietitians giving advice on healthy eating.

British Heart Foundation (BHF) Physical Activity Leaflets

The BHF have produced a series of patient physical activity leaflets for specific conditions.

- Physical activity and weight loss (G99)
- Physical activity and high blood pressure (G101)
- Physical activity and angina (G98)
- Physical activity after a heart attack (G100)
- Physical activity and diabetes (G102)

They can be ordered from the BHF:-

BHF order line: 0870 600 6566 or online at www.bhf.org.uk

www.bdaweightwise.com

A website by registered dietitians giving advice on healthy eating.

Useful PCT Contacts

Haringey Nutrition and Dietetics
Department
General Number: 020 8442 6476

Haringey Public Health Directorate
General Number: 020 8442 6786

References

1. National Institute for Health and Clinical Excellence (2006). Obesity: the prevention, identification, assessment and management of overweight and obesity in adults and children.
2. National Institute for Health and Clinical Excellence (2006). Four commonly used methods to increase physical activity: brief interventions in primary care, exercise referral schemes, pedometers and community-based exercise programmes for walking and cycling.

Appendix

1. Raise issue of weight (DH)
2. Food Diary
3. General Practice Physical Activity Questionnaire (GP PAQ)
4. Physical Activity Scheme Referral Form
5. CHD GP Exercise Referral Form
6. Dietetic Referral Form



Raising the Issue of Weight in Adults

1 RAISE THE ISSUE OF WEIGHT

If BMI is ≥ 25 and there are no contraindications to raising the issue of weight, initiate a dialogue: 'We have your weight and height measurements here. We can look at whether you are overweight. Can we have a chat about this?'

2 IS THE PATIENT OVERWEIGHT/OBESE?

BMI (kg/m ²)	Weight classification
<18.5	Underweight
18.5–24.9	Healthy weight
≥ 25 –29.9	Overweight
≥ 30	Obese

Using the patient's current weight and height measurements, plot their BMI with them and use this to tell them what category of weight status they are.

'We use a measure called BMI to assess whether people are the right weight for their height. Using your measurements, we can see that your BMI is in the [overweight or obese] category [show the patient where they lie on a BMI chart]. When weight goes into the [overweight or obese] category, this can seriously affect your health.'

WAIST CIRCUMFERENCE	
Increased disease risk	
Men	Women
≥ 40 inches (≥ 102 cm)	≥ 35 inches (≥ 88 cm)
Asian men	Asian women
≥ 90 cm	≥ 80 cm

Waist circumference can be used in cases where BMI, in isolation, may be inappropriate (eg in some ethnic groups) and to give feedback on central adiposity. In Asians, it is estimated that there is increased disease risk at ≥ 90 cm for males and ≥ 80 cm for females.

Measure midway between the lowest rib and the top of the right iliac crest. The tape measure should sit snugly around the waist but not compress the skin.

3 EXPLAIN WHY EXCESS WEIGHT COULD BE A PROBLEM

If patient has a BMI ≥ 25 and obesity-related condition(s):

'Your weight is likely to be affecting your [co-morbidity/condition]. The extra weight is also putting you at greater risk of diabetes, heart disease and cancer.'

If patient has BMI ≥ 30 and no co-morbidities:

'Your weight is likely to affect your health in the future. You will be at greater risk of developing diabetes, heart disease and cancer.'

If patient has BMI ≥ 25 and no co-morbidities:

'Any increase in weight is likely to affect your health in the future.'

4 EXPLAIN THAT FURTHER WEIGHT GAIN IS UNDESIRABLE

'It will be good for your health if you do not put on any more weight. Gaining more weight will put your health at greater risk.'

5 MAKE PATIENT AWARE OF THE BENEFITS OF MODEST WEIGHT/WAIST LOSS

'Losing 5–10% of weight [calculate this for the patient in kilos or pounds] at a rate of around 1–2lb (0.5–1kg) per week should improve your health. This could be your initial goal.'

If patient has co-morbidities:

'Losing weight will also improve your [co-morbidity].'

Note that reductions in waist circumference can lower disease risk. This may be a more sensitive measure of lifestyle change than BMI.

6 AGREE NEXT STEPS

Provide patient literature and:

- **If overweight without co-morbidities:** agree to monitor weight.
- **If obese or overweight with co-morbidities:** arrange follow-up consultation.
- **If severely obese with co-morbidities:** consider referral to secondary care.
- **If patient is not ready to lose weight:** agree to raise the issue again (eg in six months).

Appendix 1

BACKGROUND INFORMATION

Raising the issue of weight

Many people are unaware of the extent of their weight problem. Around 30% of men and 10% of women who are overweight believe themselves to be a healthy weight.¹ There is evidence that people become more motivated to lose weight if advised to do so by a health professional.²

Health consequences of excess weight

The table below summarises the health risks of being overweight or obese.³ In addition, obesity is estimated to reduce life expectancy by between 3 and 14 years. Many patients will be unaware of the impact of weight on health.

Greatly increased risk
<ul style="list-style-type: none"> • type 2 diabetes • gall bladder disease • dyslipidaemia • insulin resistance • breathlessness • sleep apnoea
Moderately increased risk
<ul style="list-style-type: none"> • cardiovascular disease • hypertension • osteoarthritis (knees) • hyperuricaemia and gout
Slightly increased risk
<ul style="list-style-type: none"> • some cancers (colon, prostate, post-menopausal breast and endometrial) • reproductive hormone abnormalities • polycystic ovary syndrome • impaired fertility • low back pain • anaesthetic complications

Benefits of modest weight loss⁴

Patients may be unaware that a small amount of weight loss can improve their health.

Condition	Health benefits of modest (10%) weight loss
Mortality	<ul style="list-style-type: none"> • 20–25% fall in overall mortality • 30–40% fall in diabetes-related deaths • 40–50% fall in obesity-related cancer deaths
Diabetes	<ul style="list-style-type: none"> • up to a 50% fall in fasting blood glucose • over 50% reduction in risk of developing diabetes
Lipids	<ul style="list-style-type: none"> • 10% fall in total cholesterol, 15% in LDL, and 30% in TG, 8% increase in HDL
Blood pressure	<ul style="list-style-type: none"> • 10 mmHg fall in diastolic and systolic pressures

Realistic goals for modest weight/waist loss (adapted from Australian guidelines)⁵

Duration	Weight change	Waist circumference change
Short term	2–4kg a month	1–2cm a month
Medium term	5–10% of initial weight	5% after six weeks
Long term	10–20% of initial weight	aim to be <88cm (females) aim to be <102cm (males)

Patients may have unrealistic weight loss goals.

The need to offer support for behaviour change

The success of smoking cessation interventions shows that, in addition to raising a health issue, health professionals need to offer practical advice and support. Rollnick et al suggest some ways to do this within the primary care setting. Providing a list of available options in the local area may also be helpful.⁶

Importance of continued monitoring of weight

Weight monitoring can be a helpful way of maintaining motivation to lose weight. Patients should be encouraged to monitor their weight regularly.⁷ Interventions for smoking cessation have found that behaviour change is more successful when follow-ups are included in the programme.⁸

¹Wardle J and Johnson F (2002) Weight and dieting: examining levels of weight concern in British adults. *Int J Obes* 26: 1144–9.

²Galuska DA et al (1999) Are health care professionals advising obese patients to lose weight? *JAMA* 282: 1576–8.

³Jebb S and Steer T (2003) Tackling the Weight of the Nation. Medical Research Council.

⁴Department of Health (2002) Prodigy Guidance on Obesity. Crown Copyright.

⁵NHMRC (2003) Clinical practice guidelines for the management of overweight and obesity in adults. Commonwealth of Australia.

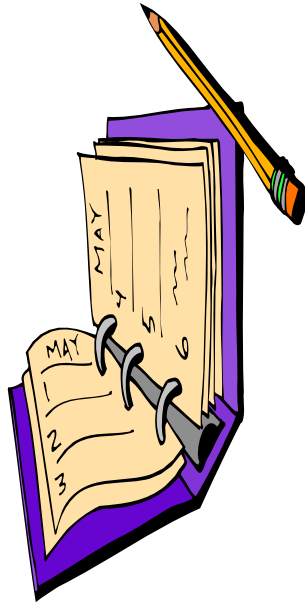
⁶Rollnick S et al (2005) Consultations about changing behaviour. *BMJ* 331: 961–3.

⁷O'Neil PM and Brown JD (2005) Weighing the evidence: Benefits of regular weight monitoring for weight control. *J Nutr Educ Behav* 37: 319–22.

⁸Lancaster T and Stead LF (2004) Physician advice for smoking cessation. *Cochrane Database of Systematic Reviews*, 4.

SEVEN – DAY

FOOD RECORD DIARY



Name: D.O.B:

Surgery: Dietitian:

Please aim to complete the diary for 7 seven days before your appointment with the dietitian.

- Please give an idea of how much you eat and drink. Use household measures such as teaspoons, tablespoons, mugs, cups
- Remember to include all food and drink consumed inside and outside of your home, including snacks.
- Include details of how food was cooked and the name of any 'brand foods' used, e.g. yoghurt, chicken with skin on, Flora proactive, Muller Light.
- **Remember to bring this diary with you when you come and see the dietitian.**

Date:		
TIME	FOOD / DRINK	AMOUNT
MORNING		
MID AM		
LUNCH		
MID PM		
EVENING MEAL		
SNACKS		

Appendix 3



General Practice Physical Activity Questionnaire

Date Name

1. Please tell us the type and amount of physical activity involved in your work.

		Please mark one box only
a	I am not in employment (e.g. retired, retired for health reasons, unemployed, full-time carer etc.)	
b	I spend most of my time at work sitting (such as in an office)	
c	I spend most of my time at work standing or walking. However, my work does not require much intense physical effort (e.g. shop assistant, hairdresser, security guard, childminder, etc.)	
d	My work involves definite physical effort including handling of heavy objects and use of tools (e.g. plumber, electrician, carpenter, cleaner, hospital nurse, gardener, postal delivery workers etc.)	
e	My work involves vigorous physical activity including handling of very heavy objects (e.g. scaffolder, construction worker, refuse collector, etc.)	

2. During the *last week*, how many hours did you spend on each of the following activities?
Please answer whether you are in employment or not

Please mark one box only on each row

		None	Some but less than 1 hour	1 hour but less than 3 hours	3 hours or more
a	Physical exercise such as swimming, jogging, aerobics, football, tennis, gym workout etc.				
b	Cycling, including cycling to work and during leisure time				
c	Walking, including walking to work, shopping, for pleasure etc.				
d	Housework/Childcare				
e	Gardening/DIY				

3. How would you describe your usual walking pace? Please mark one box only.

Slow pace (i.e. less than 3 mph)	<input type="checkbox"/>	Steady average pace	<input type="checkbox"/>
Brisk pace	<input type="checkbox"/>	Fast pace (i.e. over 4mph)	<input type="checkbox"/>

Appendix 4



PHYSICAL ACTIVITY REFERRAL SCHEME REFERRAL FORM



Please do not refer patients with the following contraindications: B/P \geq 180/100 * Resting tachycardia \geq 100 bpm
 Uncontrolled atrial/ventricular arrhythmias * Unstable or acute heart failure * Febrile illness * Unstable angina
 Unstable/untreated congestive cardiac failure * Chest pains/shortness of breath at low levels of activity* uncontrolled pathologies
 Active pericarditis or myocarditis * Uncontrolled acute systemic illness * acute mental illness/in crisis

FOR PATIENTS WITH ESTABLISHED CHD - USE CHD FORM TO REFER

Patient's details: FULL NAME: ADDRESS: POSTCODE: TEL NO: DATE OF BIRTH: <i>male / female</i> <i>delete as applicable</i>	Referrers' details: <i>(or practice stamp)</i> GP <input type="checkbox"/> Practice Nurse <input type="checkbox"/> FULL NAME: ADDRESS: POSTCODE: TEL NO: FAX: EMAIL:
---	--

GPPAQ INACTIVE MODERATELY INACTIVE

Please tick which area your patient lives in

Noel Park Bruce Grove Northumberland Park

REFERRAL REASON:

DIABETES TYPE II HYPERTENSION HYPERLIPIDEMIA
 OBESE BMI > 30 SEVERE MENTAL ILLNESS CVA
(eg. Schizophrenia, please refer to manual for classification)

Other medical conditions/additional information: *Please mention any mobility issues or exercise limitations*

Current medication: *Please list all medications continue on separate sheet if necessary*

Baseline measurements:

B/P	Height:	BMI:	Any planned procedures/tests:
Pulse rate:	Weight:	Blood Sugar: HbA1c <i>If diabetic</i>	

Patient consent: Patient understands they are taking part in a physical activity scheme <input type="checkbox"/> Patient has agreed to have their information passed on to the Active for Life Team <input type="checkbox"/> Patient has been informed that they will be invited to participate in a research project <input type="checkbox"/> Patient's Signature:	Language spoken: English <input type="checkbox"/> Other: <input type="checkbox"/> <i>Please give name and number of relative or friend who can translate</i> Name: _____ Tel: _____	Please return form to: Project Administrator Physical Activity Referral Scheme Public Health Directorate, Block A1 St Ann's Hospital, St Ann's Road London, N15 3TH Tel: 0208 442 6786
--	--	---

Referrer's signature: _____ **Date:** _____

CHD GP EXERCISE REFERRAL FORM



To be completed by the Referring Doctor or designated health professional

Please print clearly

Patient Details

Name: _____
 Address: _____

 Postcode: _____ D.O.B. _____ Age: _____
 Telephone Home: _____
 Telephone Work: _____

Referrer's Details

Name & Profession: _____
 Surgery / Department: _____
 Address: _____

 Postcode: _____
 Telephone: _____

Cardiac History

✓ if applicable

MI: Date: _____ Heart Failure: ICD: Pacemaker:
 Angioplasty / Stent: Date: _____ Other Event/s: _____ Date: _____
 CABG: Date: _____
 Current Angina: At Rest: On Exertion: GTN: Current Dyspnoea: Arrhythmias:

✓ if prescribed

Current Medication

(attach prescription list if available)

Aspirin <input type="checkbox"/>	Beta blocker <input type="checkbox"/>	Ace Inhibitor <input type="checkbox"/>	Statin <input type="checkbox"/>
Clopidogrel <input type="checkbox"/>	Warfarin <input type="checkbox"/>	Diuretic <input type="checkbox"/>	Nitrate <input type="checkbox"/>
Anti-arrhythmic <input type="checkbox"/>	Calcium channel blocker <input type="checkbox"/>	GTN <input type="checkbox"/>	Other: _____

Investigations (if available)

ETT: Yes No Date: _____ LV Function: _____
 Result: _____ Good Moderate Poor

Current Status - CHD Risk Factors

Resting BP _____ Resting Heart Rate _____ BMI _____ Stable Type 1/Type 2 Diabetes
 Raised Cholesterol Physically Inactive Smoker Excess Alcohol Stress

Past Medical History

✓ if applicable, please supply dates & details as far as possible

COAD / Asthma Epilepsy Hypertension Claudication
 CVA / Neuro. Problems Ortho/musc. skeletal problems Details: _____
 Other considerations: _____

IMPORTANT NOTICE

- The patient exhibits no contraindication to exercise (as indicated on the protocol)
- The patient is clinically stable
- The patient is compliant with medication
- The patient is awaiting / not awaiting further medical or surgical treatment (see protocol)

REFERRER'S SIGNATURE: _____
 Print Name: _____ Date: _____
 GP's signature (if different from above): _____
 Print Name: _____ Date: _____

PATIENT INFORMED CONSENT

I agree for the above information to be passed onto the Exercise Instructor. I understand that I am responsible for monitoring my own responses during exercise and will inform the instructor of any new or unusual symptoms. I will also inform the instructor of any changes in my medication, the results of any investigations or treatment.

PATIENT SIGNATURE: _____
 Print Name: _____ Date: _____

REFERRAL FORM TO THE SPECIALIST PRIMARY CARE DIETITIANS

Please note that if this form is not completed in full it will be sent back to the referrer, as this will be deemed as a clinical risk

DATE OF REFERRAL	
PATIENTS NAME	
NHS NUMBER-This must be completed	
ADDRESS AND POSTCODE	
PATIENTS TELEPHONE NUMBER	
DATE OF BIRTH	
DOES THIS PATIENT REQUIRE A HOME VISIT	Yes 1 No 1 If yes, why is it clinically essential?
MEDICAL CONDITION(S) REQUIRING REFERRAL	
OTHER RELEVANT AND PAST MEDICAL HISTORY	
RELEVANT BIOCHEMISTRY (Written or attached to referral)	
CURRENT MEDICATION (Written or attached to referral)	
IS AN INTERPRETOR NEEDED?	Yes 1 No 1 PLEASE STATE LANGUAGE
DO YOU THINK THIS PATIENT WOULD BE SUITABLE FOR A GROUP SESSION?	Yes 1 No 1
NAME OF REFERRER-In bold -please state healthcare profession employed by Haringey TPCT	
G.P NAME AND ADDRESS (Practice stamp may be used)	
G.P SIGNATURE	
COLLABORATIVE: SE 1 SW 1 NE 1 NW1	

If you only have one clinic a month or do not currently have direct access to a Dietitian in Primary Care please send this referral to: Nutrition and Dietetic Service, H Block, St. Anns Hospital, St Anns Road, Tottenham N15 3TH

Tel: 020 8442 6476 / Fax: 020 8442 6476

Please leave all other referrals at the surgery to be triaged by the Dietitian.

Appendix 6

SPECIALIST PRIMARY CARE DIETETIC SERVICE REFERRAL PROTOCOL

How to access our service:

WE DO NOT ACCEPT SELF REFERRALS FROM PATIENTS

CLINICAL REFERRALS IN WRITING TO

- The Dietitian at your own surgery (Dietitian to triage referrals)
- For practices who only have 1 clinic per month or for those who do not currently have direct access to Primary Care Dietetic service to send referrals to Nutrition and Dietetic Service, St. Anns, H Block, St Anns Road, Tottenham N15 3TH Tel: 020 8 442 6476 / Fax: 020 8 442 6476
- Computer referrals will be accepted at present but cannot be appropriately triaged.

OTHER REQUEST, QUERIES AND ASSISTANCE

By phone, in writing or in person initially at address given above

Please note that if this form is not completed in full it will be sent back to the referrer, as this will be deemed as a clinical risk, a good referral will ensure that patients are triaged appropriately.

LIPID LOWERING

- a. Patients with persistent raised fasting cholesterol of >5mmol/l or LDL >3.0 mmol/l who have **not** responded to advice from other members of the Primary Healthcare Team
- b. Patients with a raised fasting triglyceride level > 2.0mmol/l

DIABETES

- a. Patients with persistent raised fasting glucose > 6.0 mmol/l or HbA1c% >6.5% who have not responded to initial first line advice
- b. Patients who have poorly controlled diabetes who also have complications such as renal impairment, leg ulcers, CVD and/or hypoglycaemia.

WEIGHT REDUCTION

- a. Patients with a BMI greater than 30 who has a comorbidity such as CHD, hypertension, endocrine disorders including PCOS. The patient will be offered one appointment for the specialist assessment and triaged by the Dietitian into the appropriate care pathway, e.g., behaviour change programme, weight management/physical activity groups or 1:1 intensive dietary counselling focussing on motivation, drug intervention, suitability for bariatric surgery. The patient may not automatically be seen for treatment following assessment. In this situation they will be referred back to the G.P with an explanation if they were not appropriate.

CHILDREN/ADOLESCENTS

- a. We can only provide specialist assessment and triaging for children who have complex health needs which include faltering growth, obesity, allergies and intolerance. Where appropriate treatment will be offered or patient will be referred on as necessary.

NUTRITIONAL SUPPORT

Any patients with the following should be given a priority referral

- a. Recent unplanned weight loss
- b. Post surgery, e.g., post gastrectomy, bowel resection
- c. Cancer cachexia, weight loss, poor appetite
- d. Swallowing difficulties, e.g., post CVA, dysphagia
- e. Home Enteral Feeding
- f. Disease related malnutrition, e.g., degenerative neurological disorders
- g. Please note patients requiring nutritional support for cosmetic reasons will **not** be accepted.

DIGESTIVE DISORDERS

- a. Bowel disorders/bowel disease. Priority will be given to those patients who are rapidly losing weight and/or require symptom relief from pain, diarrhoea or severe constipation.

OTHER

- a. Patients who have mental health (CPA or risk assessment must be attached as appropriate) or learning difficulties (please ensure that the key worker or carer attends with the patient) can still access Primary Care services if they fit any of the above criteria.
- b. **Domiciliary visits** can be arranged with your Dietitian for house-bound patients who have complex health needs and are at risk of hospital readmission