

## L3 Award in Adapting Exercise for Ante & Post-Natal Clients



### Case study scenario

You will need to complete the case study and programme design based on the information given to you in the case study scenario below. All stages of the 'case study' clients' pregnancy have been documented, so the programme should reflect the information outlined.

#### Client details

Age: 25

##### Ante natal lifestyle:

- works full-time in an office
- enjoys various forms of exercise but often finds it hard to maintain a regular exercise routine due to time constraints.
- evenings consist of watching television, has a busy social life at the weekends.
- non-smoker.
- eats a balanced diet, avoiding alcohol now pregnant.
- activity history: prior to pregnancy, she took part in exercise three times a week, including: a variety of group-exercise sessions, swimming about 30 lengths a session and jogging (5km). Jogging was her preferred form of exercise. She doesn't like going to the gym, doing yoga or cycling.
- current activity levels: she is only walking two to three times a week (20 minutes at a time).
- barriers and concerns: worried about how exercise will affect the baby, concerned about putting on too much weight.

##### Post natal lifestyle:

- taking 12 months maternity leave.
- evenings consist of watching television, does not go out socially at the weekends due to tiredness.
- non-smoker.
- eats a balanced diet, avoiding alcohol whilst breast feeding.
- current activity levels and needs : walking 2 to 3 times a week and needs advice on how much she can do. Wants to be able to get back to jogging as soon as she can.

**This is a step by step guide to help you complete your case study**

**Programme design for ante natal and post-natal clients (H504/0994 Level 3)**

You are required to complete the answers in the Lifestyle, Attitudes and Barriers Consultation boxes below based on the information provided about THIS client.

Ensure you read the information carefully and extract the relevant details to complete your answers

It is important you recognise the lifestyle and current activity level and intensity this client has described.

The programme you write for the first trimester **must be appropriate for THIS CLIENT** taking into account her current level of fitness and activity profile



## L3 Award in Adapting Exercise for Ante & Post-Natal Clients

### Ante natal and post natal details

First pregnancy (see attached pregnancy PAR-Q for more details)

First trimester: no complications, no morning sickness

Second trimester: starting to feel tired, but baby is developing normally

Third trimester: mild backache (due to being in the final stages of pregnancy); breasts are heavy and uncomfortable; finding it difficult getting up and down from the floor; still tires easily; baby developing normally

Childbirth: labour lasted 18 hours. Delivery was with forceps, and an episiotomy had to be performed

Post natal: first four weeks: client is breastfeeding. Stitches have been removed and healing normally. Diastasis recti check showed signs of a small separation still being present

After six to eight-week check: diastasis recti check shows everything back to normal. Client still breastfeeding.



## L3 Award in Adapting Exercise for Ante & Post-Natal Clients

### Case study scenario PAR-Q

PARmed-X for pregnancy is a guideline for health screening prior to participation in a prenatal fitness class or other exercise class.

Healthy women with uncomplicated pregnancies can integrate physical activity into their daily living and can participate without significant risks either to themselves or to their unborn child.

#### Section A: patient information

Name: Miss Ann Casestudy

Address: 123 Station Rd

Date of birth: 21.04.1987

Name of fitness professional: Miss P Trainer

#### Section B: pre-exercise health checklist

##### General health status

In the past have you experienced (tick YES or NO):

- |   |                              |  |
|---|------------------------------|--|
| 1. miscarriage in an earlier pregnancy              | YES <input type="checkbox"/> | NO <input checked="" type="checkbox"/> |
| 2. other pregnancy complications                    | YES <input type="checkbox"/> | NO <input checked="" type="checkbox"/> |
| 3. I have completed a PAR-Q within the last 30 days | YES <input type="checkbox"/> | NO <input checked="" type="checkbox"/> |

If you have answered yes to 1 or 2, please give details

Number of previous pregnancies

0

You are required to interpret the information in the PAR-Q (Sections A, B and C – see page below) to complete the section in the case study relating to the PAR-Q Analysis

## L3 Award in Adapting Exercise for Ante & Post-Natal Clients

Status of current pregnancy		
Due date: April		
1. marked fatigue	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
2. bleeding from the vagina (spotting)	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
3. unexplained faintness or dizziness	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
4. unexplained abdominal pain	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
5. sudden swelling, pain or redness in the calf of one leg	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
6. persistent headaches or problems with headaches	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
7. sudden swelling of ankles, hands or face	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
8. absence of foetal movements after sixth months	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
9. failure to gain weight after fifth month	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
If you have answered YES to any of the above questions, please give details:		
<i>I feel more tired than before I was pregnant.</i>		

Activity habits during the past month		
1. List only regular fitness/recreational activities:		
<i>Walking three times a week for approx. 20 mins - medium intensity.</i>		
2. Does your regular occupation (job/home) activity involve:		
heavy lifting	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
frequent walking/stair climbing	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
occasional walking (once an hour)	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
prolonged standing	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
mainly sitting	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
normal daily activity	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
3. Do you currently smoke tobacco?	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
4. Do you currently consume alcohol?	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>

Physical activity intentions	
What physical activity do you intend to do?	
<i>I need advice, I want to do more but I am unsure what is safe.</i>	
NOTE: pregnant women are strongly advised not to smoke or consume alcohol during pregnancy and during lactation.	

## Section C: contraindications to exercise: to be completed by your health care professional

Absolute contraindications		
Does the patient have:		
1. ruptured membranes, premature labour	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
2. persistent second or third trimester bleeding/placenta praevia	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
3. pregnancy-induced hypertension or pre-eclampsia	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
4. incompetent cervix	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
5. evidence of intrauterine growth restriction	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
6. high-order pregnancy (triplets)	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
7. uncontrolled type-1 diabetes, hypertension or thyroid disease, other serious cardiovascular, respiratory or systemic diseases	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>

Relative contraindications		
Does the patient have:		
1. history of spontaneous abortion or premature labour in previous pregnancies	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
2. mild/moderate cardiovascular or respiratory disease (eg, chronic hypertension, asthma)	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
3. anaemia or iron deficiency	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
4. malnutrition or eating disorder	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
5. twin pregnancy after 28th week	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
6. other significant medical conditions	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>

NOTE: risk may exceed benefits of regular physical activity. The decision to be physically active or not should be made with qualified medical advice.

Physical activity recommendation	
Recommended/approved: <input checked="" type="checkbox"/>	Contraindicated: <input type="checkbox"/>

I, *Ann Casestudy* (patient's name), have discussed my plans to participate in physical activity during my current pregnancy with my health care provider and I have obtained his/her approval to begin participation.

Signed: *A Casestudy* (patient's signature)

Name of health care provider: *Dr Foster*

Health care provider's signature: *Dr Foster*

## L3 Award in Adapting Exercise for Ante & Post-Natal Clients

### Lifestyle, attitudes and barriers consultation

#### Case study

Give a brief overview of the client's current lifestyle

#### Client's physical activity levels

	Prior to pregnancy	Currently (before recommended programme)	Post natal recommendations
Frequency			
Intensity			
Time			
Type			

#### Client's activity preferences

Likes	Dislikes

Summarise the client's attitude and motivation to exercise

All answers within this section should relate to both the ante and post-natal periods.

Ensure you provide detailed answers that cover all information gathered in the profile.

## L3 Award in Adapting Exercise for Ante & Post-Natal Clients

Summarise the client's barriers to exercise

Perceived barriers	Actual barriers

### Medical and pregnancy history

See pregnancy PAR-Q

Based on the analysis of the client's pregnancy PAR-Q and the details given in the scenario, list any special recommendation or adaptations that may need to be considered when developing the client's programme.

PAR-Q analysis	Considerations for programme

### Goals and needs

Based on the information given in the lifestyle and medical sections above, list the client's overall needs and set realistic goals for the client.

Client's needs

Client's SMART goals
During pregnancy:
Post pregnancy:

See Section 8 in the manual; Screening and gathering information.

Barriers to exercise- Read the information in the manual and then apply this to the client. What information can you extract from the profile to complete this section?

You will need to include perceived and actual barriers for both ante and post-natal phases.

Check for any positive responses on the PAR-Q

Include information for the ante and post-natal phases looking at all aspects of the PAR-Q and lifestyle information.

Consider information in the client profile relating to her wants and needs. Apply the information you have learnt on course to expand in this area. What may the client benefit from to prepare her for labour? What is important to the client from the ante-natal perspective?

For both stages consider a pelvic floor goal and a physical activity goal, ensuring that both are very specific (FITT principles can be used here)

'Pelvic floor exercises 3 times a day' or 'get back to jogging' are not SMART as they are not specific enough nor time bound.

Whilst monitoring weight gain is a good strategy, the client could be very disappointed if she gains more than expected despite exercising and eating well, due to water retention or size of the baby. For this reason weight related goals should be avoided.

### L3 Award in Adapting Exercise for Ante & Post-Natal Clients

You are required to design a single session for the **case study client** who is currently in the first trimester of the pregnancy. The session that you design should be a general exercise session taking into account the clients likes and dislikes.

A full gym based session or full yoga session would not be appropriate as the client has stated she does not like going to the gym or doing yoga.

**NOTE:** You are required to use the information learnt during your pre-requisite course (Gym, PT, Yoga, Pilates) and the information learnt during your Adapting Exercise for the Ante/Post Natal Client and APPLY your knowledge to create a general exercise session. You can include some yoga postures if this is your area of speciality but these must not be held for long periods and need to be modified to allow for the growing baby, back care and relaxin. The focus of this case study is to ensure you have the knowledge and ability to adapt exercises in line with best practice for a general exercise session.

You will then need to add adaptations for the second and third trimester and post-natal period.

These adaptations should include;

- Changes in duration and intensity of exercise
- Changes in position for the exercise
- Adaptations of the exercise to suit the trimester (you may need to provide a different exercise)
- Changes in equipment or environment.
- You must ensure that you consider the anatomical effects of pregnancy for the client and show consideration to this when making adaptations.
- You must design a session that contains the following components; Warm up (mobility, pulse raiser, preparatory stretches) CV, muscular fitness, pelvic floor, stretch and relaxation.
- Provide enough information in the programme card to enable another trainer to deliver it, without having to make assumptions.
- Provide clear and detailed teaching points for all exercises in the first instance and for each adaptation also. For example
  - 'Hamstring stretch' is not sufficient. How will the client perform the exercise (seated/standing/lying)? What have you taken into consideration (posture/form/technique). How long will the client hold the stretch for?

**Ensure you follow the guidance in your manual or reputable resources when programming your exercises and session overall.  
See sections 9-16 in the manual**

### Warm Up

Include mobility, pulse raiser and preparatory stretches covering a whole body approach. Note stretching in the warm up should help to promote relaxation and reduce tension.

- Use the appropriate RPE and exercise timings for an ante and post-natal warm up.
- Focus on a gradual increase of intensity with considerations for the different trimesters and their implications.
- Detailed pregnancy specific teaching points need to be included for all exercises in the first trimester and adaptations for each exercise for 2<sup>nd</sup>, 3<sup>rd</sup> trimester and post-natal period.

### Ante natal and post natal programme: warm-up

Component duration:

Resources required:

This session is based on the client in the case study and covers the first trimester of pregnancy and highlights the changes that would be made during the second and third trimesters and the post natal period after the 6 to 8 week check.

First trimester exercise, intensity and duration	Pregnancy-specific teaching points	Adaptations for second trimester	Adaptations for third trimester	Post natal adaptations
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>



**CV Component**

- Select exercises/approaches specific to meet the client’s needs taking into account the information provided, including likes and dislikes.
- Provide an explanation of the session if it is integrated with the muscular fitness component (circuit, outdoor, ETM etc.)
- Use the RPE scale to identify intensity during each section of the CV component (re-warm, main, warm down) for each trimester and the post-natal period.
- Include exercises suitable for the first, second, third trimester and post-natal period.
- Demonstrate an understanding of the FITT principles
- Postnatal adaptations – use relevant exercises, include FITT principles.
- Consider the environment, walking, hill walking, stair climbing as well as repetitive whole body movements such as step touch can be included.
- Aim to have adaptations in each column, all exercises can be adapted or changed to suit the ante and post-natal client.

**See Section 11 Cardiovascular (aerobic) training Section in the manual**

Ante natal and post natal programme:  
CV component

Component duration:

Resources required:

First trimester exercise, intensity and duration	Pregnancy-specific teaching points	Adaptations for second trimester	Adaptations for third trimester	Post natal adaptations

### Muscular Fitness Component

- Include at least 4 exercises.
- Must be based on a whole-body approach and be relevant to the needs of the client during each trimester
- Include functional exercises and exercises to support the clients changing needs of the body throughout each trimester. For example;
  - Consider muscle imbalances (muscles which become weak and lengthened, muscles which become tight)
  - Change in centre of gravity
  - Loss of co-ordination
  - Carpal tunnel syndrome
- Include FITT principles (weight used or strength of band, repetitions, sets, timings, equipment)
- Provide specific teaching points for all exercises and their safe adaptations.

**See Section 12 Muscular strength and endurance section in the manual**

### Ante natal and post natal programme: muscular fitness component

Component duration:

Resources required:

First trimester exercise, intensity and duration	Pregnancy-specific teaching points	Adaptations for second trimester	Adaptations for third trimester	Post natal adaptations

### Pelvic Floor, Stretch and Relaxation Component

- Provide clear teaching points on pelvic floor exercises and how these will change throughout pregnancy and post-natal period.
- Include the two types of pelvic floor contractions and detail number of repetitions and sets.
- It is important to recognise that the local stabilisers need to be the underlying foundation to support weak abdominal global muscles.
- Include descriptive core exercises that are suitable for the client, even in the first trimester. Focus on the **relevant** abdominal muscles.
- Include detailed stretches using anatomical language and suitable timings/ positions for a relaxing post workout stretch. These should differ from your preparatory stretches in position.
- Ensure you link stretches to the muscles used in the session and those related to the pregnant body.
- Include a short relaxation element, with a full description. Consider the changes to client position in the different trimesters.

**See Sections 12 and 13 in your Manual**

### Ante natal and post natal programme: pelvic floor, stretch and relaxation component

Component duration:

Resources required:

First trimester exercise, intensity and duration	Pregnancy-specific teaching points	Adaptations for second trimester	Adaptations for third trimester	Post natal adaptations

**Activities of Daily Living:** This should be based on the clients' daily activities and their lifestyle, refer to the client profile.

- Consider day to day chores, parking further away from office/shops,
- Include posture reinforcement and pelvic floor exercises with details of repetitions and sets.
- Show how these will adapt as the pregnancy progresses.
- Identify how the client can increase their overall activity safely in all stages of pregnancy.
- In the post-natal period consider activities which can be done with the baby.

Ante natal and post natal programme: activities of daily living (ADLs)

First trimester exercise, intensity and duration	Pregnancy-specific teaching points	Adaptations for second Trimester	Adaptations for third trimester	Post natal adaptations

Post natal only: give details of appropriate activities for the following stages:

Immediately after birth (first six weeks)

Post natal progression (activity advice for eight weeks onwards)

## Case study and programme design: checklist

The learner:	Outcome
1. gave exercises/physical activities for all the components of physical fitness	
2. gave exercises/physical activities for the components: warm up, main session and cool down	
3. gave exercises/physical activities that were appropriate to the client's needs	
4. gave exercises/physical activities that were appropriate for the ante natal period	
5. gave exercises/physical activities that were appropriate for the post natal period	
6. gave exercises/physical activities that were consistent with accepted good practice	
7. described a range of safe and effective exercises/physical activities for each component of the session	
8. applied the principles of training to the programme design for the ante natal period	

### Top Tips

- Ensure you read the client profile fully before answering the questions.
- Read the questions and ensure you have answered them fully for both ante and post-natal periods.
- Give explanations for any changes made throughout the programme. If you haven't made any adaptations between the different stages include why – for example, 'same as Trimester 1' is not sufficient, you should explain why you are keeping it the same.
- Make sure you read over the assessment criteria (above) to ensure you have provided the assessor with the appropriate information.
- Use the manual for guidance and credible resources to enable you to complete the work.

**Your work must be your own. Do not share your work or copy from other students.**